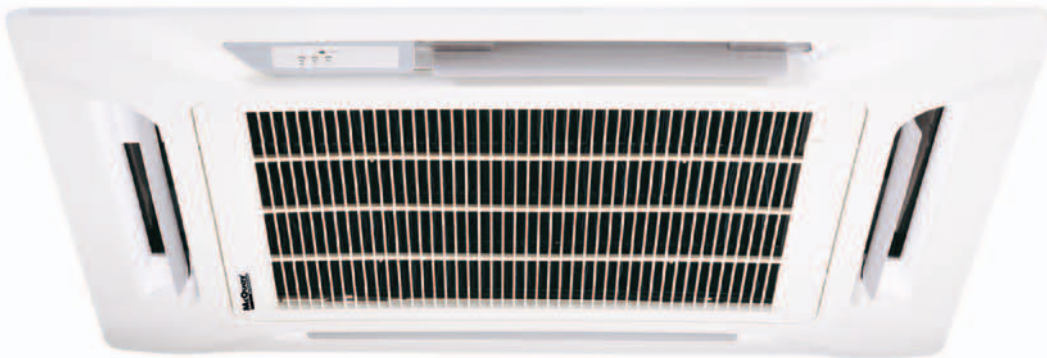


## Ceiling Cassette Split Systems

Models: MCK 020A/AR      MCK 015B/BR  
MCK 025A/AR      MCK 020B/BR  
MCK 030A/AR      MCK 025B/BR  
MCK 040A/AR  
MCK 050A/AR      MCK/M5CK 010C/CR  
MCK/M5CK 015C/CR  
MCK 020C/CR



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This manual supercedes MCK-2004

**Note:** Installation and maintenance are to be performed only by qualified personnel who are familiar with local codes and regulations, and experienced with this type of equipment.

**Caution:** Sharp edges and coil surfaces are a potential injury hazard. Avoid contact with them.

**Warning:** Moving machinery and electrical power hazards. May cause severe personal injury or death. Disconnect and lock off power before servicing equipment.

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# Special Feature

## **Ultra Slim New Stylish Design Profile**

This unit is contemporary in design and match even the most up to date interior decor. The slim, (only 20mm for C-series, 22 mm for B-series and only 28 mm for A-series) and round profile front panel of this unit adds a touch of elegance to every decor.

## **Turbo Mixed Flow Fan**

Innovative design of highly efficient turbo fan produces an even air circulation in all direction.

## **Built-In High Head Drain Pump**

The unit has a built-in high head drain pump (with 700 mm drain head) to provide and ensure smoothness drainage of condensate water.

## **Strong And Robust**

The unit is built from strong casing material and robust parts to ensure long lasting reliable service. The drain pan is made from the POLYSTYRENE with a plastic coating on the surface to ensure no leaking and condensation occur.

## **Friendly Serviceability**

The air filter, electrical parts, fan, fan motor and drain pump can all be inspected and replaced from the bottom of the unit by simply removing the air intake grille. The POLYSTYRENE drain pan and the heat exchanger coils can be removed from the unit easily by removing the front panel.

## **Microcomputer Remote Controller**

The incorporated microprocessor offers more accurate control and with the following extra features:

- Fan motor speed can be set at high/medium/low or automatic.
- Timer on/off - the unit can be pre-set to switch on and off automatically.
- Electronic thermostat - room temperature is precisely controlled, resulting in energy saving and increase comfort.

## **Wireless Remote Controller**

The compact wireless remote controller makes it possible to operate the air conditioner anywhere within the room.

# Specifications

## Ceiling Cassette A Series (Cooling Only - R22)

MODEL		INDOOR UNIT	MCK 020A	MCK 025A	MCK 030A	
		OUTDOOR UNIT	MLC 020B	MLC 025B	MLC 030B	MLC 030C
NOMINAL COOLING CAPACITY		W	5848	7175	8054	8493
		Btu/h	20000	24500	27500	29000
NOMINAL TOTAL POWER - 1Ø [ 3Ø ]		W	1910	2510	2900	2710 [ 3460 ]
NOMINAL TOTAL CURRENT - 1Ø [ 3Ø ]		A	8.5	11.9	14.7	13.1 [ 5.8 ]
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50			
REFRIGERANT / CONTROL			R22 / CAPILLARY TUBE (OUTDOOR)		R22 / CAP. TUBE (INDOOR)	
FAN	AIR FLOW	HIGH	cfm / L/s	740 / 349	780 / 368	880 / 415
		MEDIUM	cfm / L/s	630 / 297	660 / 311	740 / 349
		LOW	cfm / L/s	600 / 283	600 / 283	680 / 321
	FAN MOTOR		6 POLES x 35W		6 POLES x 50W	
RATED INPUT POWER	W	122	138	153		
RATED RUNNING CURRENT	A	0.53	0.61	0.67		
COIL	TUBE	MATERIAL		S.B.C.		
		DIAMETER	mm/in	9.52 / 3/8		
		THICKNESS	mm/in	0.35 / 0.014		
	FIN	MATERIAL		ALUMINIUM (SLIT)		
		THICKNESS	mm/in	0.11 / 0.0043		
		ROW		2	2	2
	FIN PER INCH		12	14	16	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.469 / 5.022				
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	335 (363) / 13.2 (14.3)			
	WIDTH	mm/in	820 (930) / 32.2 (36.6)			
	DEPTH	mm/in	820 (930) / 32.2 (36.6)			
WEIGHT (UNIT + PANEL)	kg/lb	31 + 4 / 68.3 + 8.8	32 + 4 / 70.5 + 8.8	35 + 4 / 77.2 + 8.8		
SOUND PRESSURE LEVEL (H / M / L)	dBA	42 / 39 / 37	45 / 42 / 40	49 / 45 / 43		
CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT			
	AIR DISCHARGE		4-WAY AUTOMATIC LOUVER ( UP & DOWN )			
	OPERATION		LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL			
CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4				
AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	380 (130) / 15.0 (5.1)			
	WIDTH	mm/in	920 (1020) / 36.2 (40.2)			
	DEPTH	mm/in	920 (1000) / 36.2 (39.4)			
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
COMPRESSOR	COMPRESSOR TYPE		ROTARY HERMETIC			SCROLL
	CAPACITOR - 1Ø / <3Ø>	µF	45	45	50	50 / < NIL >
	LOCK ROTOR AMPERE - 1Ø / <3Ø>	A	42	63	66	82 / < 35 >
	RATED RUNNING CURRENT - 1Ø / <3Ø>	A	7.6	10.9	13.4	11.4 / < 5.2 >
	RATED INPUT POWER - 1Ø / <3Ø>	W	1,695	2,279	2,613	2,337 / < 3,050 >
PROTECTION DEVICE		OVERLOAD PROTECTION				O/L PROTECTION & AUTO RESET H/L PRESSURE SW.
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50			
FAN TYPE / DRIVE			PROPELLER / DIRECT			
BLADE MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
FAN	DIAMETER	mm/in	406 / 16			609.6 / 24.0
	RATED RUNNING CURRENT	A	0.41	0.59	1.02	
	MOTOR OUTPUT	W	55	80	145	
	RATED INPUT POWER	W	93	134	220	
COIL	TUBE	MATERIAL		S.B.C.	S.I.G.C.	S.I.G.C.
		DIAMETER	mm/in	9.52 / 3/8		
		THICKNESS	mm/in	0.35 / 0.014	0.33 / 0.013	0.35 / 0.014
	FIN	MATERIAL		ALUMINIUM (SLIT)		
		THICKNESS	mm/in	0.127 / 0.005		
		ROW		2	2	1
	FIN PER INCH		14	16	16	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.51 / 5.53		0.87 / 9.33		
DIMENSION	HEIGHT	mm/in	646 / 25.40			850 / 33.46
	WIDTH	mm/in	840 / 33.10			1030 / 40.55
	DEPTH	mm/in	330 / 13.00			400 / 15.75
WEIGHT	kg/lb	57 / 125.7	58 / 127.9	58 / 127.9	95 / 209.4	
SOUND PRESSURE LEVEL	dBA	52	53	56	58	
CASING	MATERIAL		GALVANISED MILD STEEL			
	THICKNESS	mm/in	0.8 / 0.031			
	FINISHING		POLYESTER POWDER			
PIPE	TYPE		FLARE VALVE			
	SIZE	LIQUID / GAS	mm/in	6.35 / 1/4	9.52 / 3/8	15.88 / 5/8
PACKING DIMENSION	HEIGHT	mm/in	710 / 27.95			1000 / 39.37
	WIDTH	mm/in	957 / 37.68			1200 / 47.24
	DEPTH	mm/in	461 / 18.15			560 / 22.05
REFRIGERANT CHARGE	kg/lb	2.00 / 4.41	1.90 / 4.19	1.96 / 4.32	1.70 / 3.75	

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994(E)

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :  
COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C. - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Cooling Only - R22)

MODEL		INDOOR UNIT	MCK 040A		MCK 050A
		OUTDOOR UNIT	MLC 035C	MLC 040C	MLC 050C
NOMINAL COOLING CAPACITY		W	9958	11569	14204
		Btu/h	34000	39500	48500
NOMINAL TOTAL POWER - 1Ø [ 3Ø ]		W	3120	3330 [ 3300 ]	[ 4440 ]
NOMINAL TOTAL CURRENT - 1Ø [ 3Ø ]		A	15.1	17.6 [ 5.8 ]	[ 8.1 ]
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50		
REFRIGERANT / CONTROL			R22 / CAPILLARY TUBE (INDOOR)		
FAN	AIR FLOW	HIGH	cfm / L/s	990 / 467	1040 / 491
		MEDIUM	cfm / L/s	860 / 406	950 / 448
		LOW	cfm / L/s	760 / 359	870 / 411
	FAN MOTOR			6 POLES x 85W	6 POLES x 120W
RATED INPUT POWER		W	184		
RATED RUNNING CURRENT		A	0.80		
COIL	TUBE MATERIAL		S.I.G.C		
	TUBE DIAMETER	mm/in	7.0 / 0.28		
	TUBE THICKNESS	mm/in	0.28 / 0.011		
	FIN MATERIAL		ALUMINIUM (HYDROPHILIC)		
	FIN THICKNESS	mm/in	0.11 / 0.0043		
	FIN ROW		3	3	
	FIN PER INCH		20	20	
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.56 / 6.03		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	335 (363) / 13.2 (14.3)		
	WIDTH	mm/in	820 (930) / 32.2 (36.6)		
	DEPTH	mm/in	820 (930) / 32.2 (36.6)		
WEIGHT (UNIT + PANEL)		kg/lb	38 + 4 / 83.8 + 8.8	40 + 4 / 88.2 + 8.8	
SOUND PRESSURE LEVEL ( H / M / L )		dBA	51 / 48 / 46		
CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT		
	AIR DISCHARGE		4-WAY AUTOMATIC LOUVER ( UP & DOWN )		
	OPERATION		LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL		
CONDENSATE DRAIN SIZE		mm/in	19.05 / 3/4		
AIR FILTER			WASHABLE SARANET (OPTIONAL IONIZER FILTER)		
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	380 (130) / 15.0 (5.1)		
	WIDTH	mm/in	920 (1020) / 36.2 (40.2)		
	DEPTH	mm/in	920 (1000) / 36.2 (39.4)		
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>		
COMPRESSOR TYPE			SCROLL		
CAPACITOR - 1Ø / <3Ø>		µF	60	60 / <NIL>	<NIL>
LOCK ROTOR AMPERE - 1Ø / <3Ø>		A	97	114 / <48>	<66>
RATED RUNNING CURRENT - 1Ø / <3Ø>		A	13.3	15.8 / <5.2>	<7.4>
RATED INPUT POWER - 1Ø / <3Ø>		W	2716	2926 / <2896>	<3988>
PROTECTION DEVICE			OVERLOAD PROTECTION AND AUTO RESET HIGH/LOW PRESSURE SWITCH		
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50		
FAN TYPE / DRIVE			PROPELLER / DIRECT		
BLADE MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN		
DIAMETER		mm/in	609.6 / 24.0		
RATED RUNNING CURRENT		A	1.02		
MOTOR OUTPUT		W	145		
RATED INPUT POWER		W	220		
COIL	TUBE MATERIAL		S.B.C.		
	TUBE DIAMETER	mm/in	9.52 / 3/8		
	TUBE THICKNESS	mm/in	0.35 / 0.014		
	FIN MATERIAL		ALUMINIUM (SLIT)	ALUMINIUM (CORRUGATED)	
	FIN THICKNESS	mm/in	0.127 / 0.005		
	FIN ROW		1	2	2
	FIN PER INCH		16	14	16
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.87 / 9.33		
DIMENSION	HEIGHT	mm/in	850 / 33.46		
	WIDTH	mm/in	1030 / 40.55		
	DEPTH	mm/in	400 / 15.75		
WEIGHT		kg/lb	95 / 209.4	100 / 220.5	105 / 231.5
SOUND PRESSURE LEVEL		dBA	58		
CASING	MATERIAL		GALVANISED MILD STEEL		
	THICKNESS	mm/in	0.8 / 0.031		
	FINISHING		POLYESTER POWDER		
PIPE	TYPE		FLARE VALVE		
	SIZE				
	LIQUID	mm/in	9.52 / 3/8		
	GAS	mm/in	19.05 / 3/4		
PACKING DIMENSION	HEIGHT	mm/in	1000 / 39.37		
	WIDTH	mm/in	1200 / 47.24		
	DEPTH	mm/in	560 / 22.05		
REFRIGERANT CHARGE		kg/lb	2.00 / 4.41	2.60 / 5.73	2.60 / 5.73

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3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

# Ceiling Cassette A Series (Heat Pump - R22)

MODEL	INDOOR UNIT	MCK 020AR	MCK 025AR	MCK 030AR		
	OUTDOOR UNIT	MLC 020BR	MLC 025BR	MLC 030CR		
NOMINAL COOLING CAPACITY	W	5862	7175	8054		
	Btu/h	20000	24500	27500		
NOMINAL HEATING CAPACITY	W	5862	7327	8206		
	Btu/h	20000	25000	28000		
NOMINAL TOTAL POWER (COOLING) - 1Ø [ 3Ø ]	W	1910	2510	2900		
NOMINAL TOTAL POWER (HEATING) - 1Ø [ 3Ø ]	W	1741	2146	2767		
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]	A	8.5	11.9	14.7		
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]	A	7.7	11.0	13.7		
POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50				
REFRIGERANT / CONTROL		R22 / CAPILLARY TUBE (OUTDOOR)		R22 / CAP. TUBE (INDOOR)		
FAN	AIR FLOW	HIGH	cfm / L/s	740 / 349	780 / 368	880 / 415
		MEDIUM	cfm / L/s	630 / 297	660 / 311	740 / 349
		LOW	cfm / L/s	600 / 283	600 / 283	680 / 321
FAN MOTOR		6 POLES x 35W	6 POLES x 50W	6 POLES x 65W		
RATED INPUT POWER	W	122	138	153		
RATED RUNNING CURRENT	A	0.53	0.61	0.67		
COIL	TUBE	MATERIAL		S.B.C.		
		DIAMETER	mm/in	9.52 / 3/8		
	FIN	THICKNESS	mm/in	0.35 / 0.014		
		MATERIAL		ALUMINIUM (SLIT)		
	ROW	THICKNESS	mm/in	0.11 / 0.0043		
		FIN PER INCH		2	2	2
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	12	16	16		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	0.469 / 5.022			
	WIDTH	mm/in	335 (363) / 13.2 (14.3)			
	DEPTH	mm/in	820 (930) / 32.2 (36.6)			
WEIGHT (UNIT + PANEL)	kg/lb	31 + 4 / 68.3 + 8.8	32 + 4 / 70.5 + 8.8	35 + 4 / 77.2 + 8.8		
SOUND PRESSURE LEVEL ( H / M / L )	dBA	42 / 39 / 37	45 / 42 / 40	49 / 45 / 43		
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT				
	AIR DISCHARGE OPERATION	4 - WAY AUTOMATIC LOUVER ( UP & DOWN )				
CONDENSATE DRAIN SIZE	mm/in	LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL				
AIR FILTER		19.05 / 3/4				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	WASHABLE SARANET (OPTIONAL IONIZER FILTER)			
	WIDTH	mm/in	380 (130) / 15.0 (5.1)			
	DEPTH	mm/in	920 (1020) / 36.2 (40.2)			
		mm/in	920 (1000) / 36.2 (39.4)			
COMPRESSOR	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
	COMPRESSOR TYPE		ROTARY (RECIPROCATING) HERMETIC		SCROLL	
	CAPACITOR - 1Ø / <3Ø>	µF	45	45	50 / < NIL >	
	LOCK ROTOR AMPERE - 1Ø / <3Ø>	A	42	63	66 / <40>	
	RATED RUNNING CURRENT (COOLING) - 1Ø / <3Ø>	A	7.6	10.9	13.4	
	RATED RUNNING CURRENT (HEATING) - 1Ø / <3Ø>	A	6.8	10.0	12.4	
	RATED INPUT POWER (COOLING) - 1Ø / <3Ø>	W	1695	2279	2613	
	RATED INPUT POWER (HEATING) - 1Ø / <3Ø>	W	1526	1915	2480	
	PROTECTION DEVICE		OVERLOAD PROTECTION		OIL PROTECTION & AUTO RESET HI PRESSURE SW.	
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
FAN TYPE / DRIVE		PROPELLER / DIRECT				
BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN				
DIAMETER	mm/in	406 / 16				
RATED RUNNING CURRENT	A	0.41	0.59	1.02		
MOTOR OUTPUT	W	55	80	145		
RATED INPUT POWER	W	93	134	220		
COIL	TUBE	MATERIAL	S.B.C.	S.I.G.C.	S.I.G.C.	
		DIAMETER	mm/in	9.52 / 3/8		
	FIN	THICKNESS	mm/in	0.35 / 0.014	0.33 / 0.013	0.35 / 0.014
		MATERIAL		ALUMINIUM (SLIT)		
	ROW	THICKNESS	mm/in	0.127 / 0.005		
		FIN PER INCH		2	2	2
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	14	16	16		
DIMENSION	HEIGHT	mm/in	0.51 / 5.53			
	WIDTH	mm/in	646 / 25.40			
	DEPTH	mm/in	840 / 33.10			
WEIGHT	kg/lb	57 / 125.7	58 / 127.9	58 / 127.9		
SOUND PRESSURE LEVEL	dBA	52	53	56		
CASING	MATERIAL	GALVANISED MILD STEEL				
	THICKNESS	mm/in	0.8 / 0.031			
PIPE	TYPE	POLYESTER POWDER				
		FLARE VALVE				
PACKING DIMENSION	LIQUID	mm/in	6.35 / 1/4			
	GAS	mm/in	15.88 / 5/8			
	HEIGHT	mm/in	710 / 27.95			
	WIDTH	mm/in	957 / 37.68			
	DEPTH	mm/in	461 / 18.15			
REFRIGERANT CHARGE	kg/lb	2.00 / 4.41	1.63 / 3.59	1.80 / 3.97		
				2.15 / 4.74		

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- 2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994 (E)
- 3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
  - a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR
  - b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER  
S.I.G.C. - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Heat Pump - R22)

MODEL	INDOOR UNIT		MCK 040AR		MCK 050AR
	OUTDOOR UNIT		MLC 035CR	MLC 040CR	MLC 050CR
NOMINAL COOLING CAPACITY	W		9958	11569	14067
NOMINAL HEATING CAPACITY	Btu/h		34000	39500	48000
NOMINAL TOTAL POWER (COOLING) - 1Ø [ 3Ø ]	W		9964	12016	14654
NOMINAL TOTAL POWER (HEATING) - 1Ø [ 3Ø ]	Btu/h		34000	41000	50000
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]	W		3039	3506 [ 3476 ]	[ 4450 ]
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]	W		2980	3346 [ 3316 ]	[ 4170 ]
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]	A		15.2	17.0 [ 6.4 ]	[ 8.3 ]
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]	A		15.1	16.2 [ 5.6 ]	[ 7.9 ]
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50		
REFRIGERANT / CONTROL	R22 / CAPILLARY TUBE (INDOOR)				
FAN	AIR FLOW	HIGH	cfm / L/s	990 / 467	1040 / 491
		MEDIUM	cfm / L/s	860 / 406	950 / 448
		LOW	cfm / L/s	760 / 359	870 / 411
	FAN MOTOR			6 POLES x 85W	6 POLES x 120W
RATED INPUT POWER	W		184	232	
RATED RUNNING CURRENT	A		0.80	1.02	
COIL	TUBE	MATERIAL	S.I.G.C		
		DIAMETER	mm/in	7.0 / 0.28	
		THICKNESS	mm/in	0.28 / 0.011	
	FIN	MATERIAL	ALUMINIUM (HYDROPHILIC)		
		THICKNESS	mm/in	0.11 / 0.0043	
		ROW		3	3
FIN PER INCH		20	20		
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.469 / 5.022		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	335 (363) / 13.2 (14.3)		
	WIDTH	mm/in	820 (930) / 32.2 (36.6)		
	DEPTH	mm/in	820 (930) / 32.2 (36.6)		
WEIGHT (UNIT + PANEL)	kg/lb		38 + 4 / 83.8 + 8.8	40 + 4 / 88.2 + 8.8	
SOUND PRESSURE LEVEL ( H / M / L )	dBA		51 / 48 / 46	53 / 52 / 50	
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT			
	AIR DISCHARGE	4 - WAY AUTOMATIC LOUVER ( UP & DOWN )			
	OPERATION	LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL			
CONDENSATE DRAIN SIZE	mm/in		19.05 / 3/4		
AIR FILTER	WASHABLE SARANET (OPTIONAL IONIZER FILTER)				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	380 (130) / 15.0 (5.1)		
	WIDTH	mm/in	920 (1020) / 36.2 (40.2)		
	DEPTH	mm/in	920 (1000) / 36.2 (39.4)		
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>		
COMPRESSOR TYPE	SCROLL				
CAPACITOR - 1Ø / <3Ø>	µF		60	60 / <NIL>	<NIL>
LOCK ROTOR AMPERE - 1Ø / <3Ø>	A		97	114 / <48>	<66>
RATED RUNNING CURRENT (COOLING) - 1Ø / <3Ø>	A		13.4	15.2 / <4.6>	<7.7>
RATED RUNNING CURRENT (HEATING) - 1Ø / <3Ø>	A		13.3	14.4 / <3.8>	<7.2>
RATED INPUT POWER (COOLING) - 1Ø / <3Ø>	W		2635	3102 / <3072>	<3998>
RATED INPUT POWER (HEATING) - 1Ø / <3Ø>	W		2576	2942 / <2912>	<3718>
PROTECTION DEVICE	OVERLOAD PROTECTION & AUTO RESET HIGH PRESSURE SWITCH				
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50		
FAN TYPE / DRIVE	PROPELLER / DIRECT				
BLADE MATERIAL	GLASS REINFORCED ACRYL STYRENE RESIN				
DIAMETER	mm/in		609.6 / 24.0		
RATED RUNNING CURRENT	A		1.02		
MOTOR OUTPUT	W		145		
RATED INPUT POWER	W		220		
COIL	TUBE	MATERIAL	S.I.G.C		
		DIAMETER	mm/in	9.52 / 3/8	
		THICKNESS	mm/in	0.33 / 0.013	
	FIN	MATERIAL	ALUMINIUM (CORRUGATED)		
		THICKNESS	mm/in	0.127 / 0.005	
		ROW		2	
FIN PER INCH		16			
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.87 / 9.33		
DIMENSION	HEIGHT	mm/in	850 / 33.46		
	WIDTH	mm/in	1030 / 40.55		
	DEPTH	mm/in	400 / 15.75		
WEIGHT	kg/lb		95 / 209.4	100 / 220.5	105 / 231.5
SOUND PRESSURE LEVEL	dBA		58	58	58
CASING	MATERIAL	GALVANISED MILD STEEL			
	THICKNESS	mm/in	0.8 / 0.031		
	FINISHING	POLYESTER POWDER			
PIPE	TYPE	FLARE VALVE			
	SIZE		9.52 / 3/8		
PACKING DIMENSION	LIQUID	mm/in	19.05 / 3/4		
	GAS	mm/in	19.05 / 3/4		
	HEIGHT	mm/in	1000 / 39.37		
	WIDTH	mm/in	1200 / 47.24		
DEPTH	mm/in	560 / 22.05			
REFRIGERANT CHARGE	kg/lb		2.60 / 5.73	2.60 / 5.73	2.75 / 6.06

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994 (E)

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette B Series (Cooling Only - R22)

MODEL		INDOOR UNIT	MCK 015B	MCK 020B	MCK 025B
		OUTDOOR UNIT	MLC 015C	MLC 020B	MLC 025B
NOMINAL COOLING CAPACITY		W	3664	5569	6590
		Btu/h	12500	19000	22500
NOMINAL TOTAL POWER		W	1194	2119	2611
NOMINAL TOTAL CURRENT		A	5.4	10.2	11.8
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50		
REFRIGERANT / CONTROL			R22 / CAPILLARY TUBE (OUTDOOR)		
FAN	AIR FLOW	cfm / L/s	410 / 193	410 / 193	480 / 227
	FAN MOTOR		6 POLES	6 POLES	6 POLES
	RATED INPUT POWER	W	66	66	72
	RATED RUNNING CURRENT	A	0.29	0.29	0.32
COIL	TUBE MATERIAL		S.I.G.C		
	DIAMETER	mm/in	9.52 / 3/8		
	THICKNESS	mm/in	0.33 / 0.013		
	IN MATERIAL		ALUMINIUM (SLIT)		
	THICKNESS	mm/in	0.11 / 0.0043		
	ROW		1	2	2
	FIN PER INCH		18	14	14
	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.39 / 4.2	0.38 / 4.1	
DIMENSION ( ) - WITH PANEL		HEIGHT	mm/in 293 (345) / 11.5 (13.6)		
		WIDTH	mm/in 650 (727) / 25.6 (28.6)		
		DEPTH	mm/in 650 (727) / 25.6 (28.6)		
WEIGHT ( UNIT + PANEL)		kg/lb	30 + 3 / 66.14 + 6.61	30 + 3 / 66.14 + 6.61	31 + 3 / 68.34 + 6.61
SOUND PRESSURE LEVEL ( H / M / L )		dB	41 / 38 / 36	42 / 40 / 37	45 / 42 / 39
CONTROL		ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT		
		AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER (UP & DOWN)		
			WIRELESS OR WIRED MICROCOMPUTER REMOTE CONTROL		
CONDENSATE DRAIN SIZE		mm/in	19.05 / 3/4		
AIR FILTER			WASHABLE SARANET (OPTIONAL IONIZER FILTER)		
PACKING DIMENSION ( ) - PANEL		HEIGHT	mm(in) 360 (110) / 14.2 (4.3)		
		WIDTH	mm(in) 725 (840) / 28.5 (33.1)		
		DEPTH	mm(in) 725 (840) / 28.5 (33.1)		
COMPRESSOR	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50		
	COMPRESSOR TYPE		ROTARY HERMETIC		
	CAPACITOR	μF	35	45	45
	LOCK ROTOR AMP.	A	24	56	57
	RATED RUNNING CURRENT	A	4.8	9.5	11.1
	RATED INPUT POWER	W	1069	1960	2446
	PROTECTION DEVICE		OVERLOAD PROTECTION		
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50		
	FAN TYPE / DRIVE		PROPELLER / DIRECT		
	BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN		
FAN	DIAMETER	mm/in	406 / 16		
	RATED RUNNING CURRENT	A	0.26	0.41	
	MOTOR OUTPUT	W	35	55	
	RATED INPUT POWER	W	59	93	
COIL	TUBE MATERIAL		S.I.G.C	S.B.C	S.I.G.C
	DIAMETER	mm/in	9.52 / 3/8		
	THICKNESS	mm/in	0.33 / 0.013	0.35 / 0.014	0.33 / 0.013
	IN MATERIAL		ALUMINIUM (SLIT)		
	THICKNESS	mm/in	0.11 / 0.004	0.127 / 0.005	
	ROW		1	2	2
	FIN PER INCH		18	14	14
	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.36 / 3.94	0.51 / 5.53	
DIMENSION		HEIGHT	mm/in 540 / 21.3		
		WIDTH	mm/in 700 / 27.6		
		DEPTH	mm/in 250 / 9.8		
WEIGHT		kg/lb	32 / 70.55	57 / 125.66	58 / 127.87
SOUND PRESSURE LEVEL		dB	49	52	53
CASING		MATERIAL	EG/GI GALVANISED MILD STEEL		
		THICKNESS	mm/in 0.5-2.0 / 0.02-0.08		
		FINISHING	POLYESTER POWDER		
PIPE	TYPE		FLARE VALVE		
	SIZE	LIQUID	mm/in 6.35 / 1/4		9.52 / 3/8
		GAS	mm/in 12.70 / 1/2		15.88 / 5/8
PACKING DIMENSION		HEIGHT	mm/in 620 / 24.4		
		WIDTH	mm/in 810 / 31.9		
		DEPTH	mm/in 330 / 13.0		
REFRIGERANT CHARGE		kg/lb	0.98 / 2.16	1.93 / 4.25	1.90 / 4.19

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3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette B Series (Heat Pump - R22)

MODEL	INDOOR UNIT		MCK 015BR	MCK 020BR	MCK 025BR
	OUTDOOR UNIT		MLC 015CR	MLC 020BR	MLC 025BR
INDOOR UNIT	NOMINAL COOLING CAPACITY	W	3664	5570	7030
		Btu/h	12500	19000	24000
	NOMINAL HEATING CAPACITY	W	3517	5570	7030
		Btu/h	12000	19000	24000
	NOMINAL TOTAL POWER (COOLING)	W	1170	2119	2805
	NOMINAL TOTAL POWER (HEATING)	W	1034	1999	2625
	NOMINAL TOTAL CURRENT (COOLING)	A	5.4	10.2	13.0
	NOMINAL TOTAL CURRENT (HEATING)	A	4.7	9.9	12.3
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50		
	REFRIGERANT / CONTROL		R22 / CAPILLARY TUBE (OUTDOOR)		
FAN	AIR FLOW	cfm / L/s	410 / 193	410 / 193	480 / 227
	FAN MOTOR		6 POLES	6 POLES	6 POLES
	RATED INPUT POWER	W	66	66	72
	RATED RUNNING CURRENT	A	0.29	0.29	0.32
COIL	TUBE MATERIAL		S.I.G.C		
	DIAMETER	mm/in	9.52 / 3/8		
	THICKNESS	mm/in	0.33 / 0.013		
	FIN MATERIAL		ALUMINIUM (SLIT)		
	THICKNESS	mm/in	0.11 / 0.0043		
	ROW		1	2	2
FIN PER INCH		18	14	14	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.39/4.2		0.38/4.1	
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	293 (345) / 11.5 (13.6)		
	WIDTH	mm/in	650 (727) / 25.6 (28.6)		
	DEPTH	mm/in	650 (727) / 25.6 (28.6)		
WEIGHT ( UNIT + PANEL)	kg/lb	30 + 3 / 66.14 + 6.61	30 + 3 / 66.14 + 6.61	31 + 3 / 68.34 + 6.61	
SOUND PRESSURE LEVEL ( H / M / L )	dBA	41 / 38 / 36	42 / 40 / 37	45 / 42 / 39	
CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT		
	AIR DISCHARGE OPERATION		4 WAY AUTOMATIC LOUVER (UP & DOWN)		
			WIRELESS OR WIRED MICROCOMPUTER REMOTE CONTROL		
CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4			
AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)			
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	360 (110) / 14.2 (4.3)		
	WIDTH	mm/in	725 (840) / 28.5 (33.1)		
	DEPTH	mm/in	725 (840) / 28.5 (33.1)		
OUTDOOR UNIT	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50		
	COMPRESSOR TYPE		ROTARY HERMETIC		
	CAPACITOR	µF	35	45	45
	LOCK ROTOR AMP.	A	24	42	57
	RATED RUNNING CURRENT (COOLING)	A	4.8	9.5	12.3
	RATED RUNNING CURRENT (HEATING)	A	4.1	9.2	11.6
	RATED INPUT POWER (COOLING)	W	1069	1960	2640
	RATED INPUT POWER (HEATING)	W	909	1840	2460
	PROTECTION DEVICE		OVERLOAD PROTECTION		
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50		
FAN TYPE / DRIVE		PROPELLER / DIRECT			
BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN			
DIAMETER	mm/in	406 / 16			
RATED RUNNING CURRENT	A	0.26	0.41		
MOTOR POWER	W	35	55		
RATED INPUT POWER	W	59	93		
COIL	TUBE MATERIAL		S.I.G.C	S.B.C	S.I.G.C
	DIAMETER	mm/in	9.52 / 3/8		
	THICKNESS	mm/in	0.33 / 0.013	0.35 / 0.014	0.33 / 0.013
	FIN MATERIAL		ALUMINIUM (SLIT)		
	THICKNESS	mm/in	0.11 / 0.004	0.127 / 0.005	
	ROW		1	2	2
FIN PER INCH		18	14	14	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.36 / 3.94		0.51 / 5.53	
DIMENSION	HEIGHT	mm/in	540 / 21.3	646 / 25.4	
	WIDTH	mm/in	700 / 27.6	840 / 33.1	
	DEPTH	mm/in	250 / 9.8	330 / 13.0	
WEIGHT	kg/lb	32 / 70.55	57 / 125.66	58 / 127.87	
SOUND PRESSURE LEVEL	dBA	49	52	53	
CASING	MATERIAL		EG/GI	GALVANISED MILD STEEL	
	THICKNESS	mm/in	0.5-2.0 / 0.02-0.08	0.8 / 0.031	
	FINISHING		POLYESTER POWDER		
PIPE	TYPE		FLARE VALVE		
	SIZE		6.35 / 1/4		
	LIQUID	mm/in	12.70 / 1/2	15.88 / 5/8	9.52 / 3/8
PACKING DIMENSION	GAS	mm/in			15.88 / 5/8
	HEIGHT	mm/in	620 / 24.4	710 / 28.0	
	WIDTH	mm/in	810 / 31.9	957 / 37.7	
REFRIGERANT CHARGE	DEPTH	mm/in	330 / 13.0	461 / 18.1	
	kg/lb		0.98 / 2.16	1.93 / 4.25	1.63 / 3.59

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- 3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
  - a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR
  - b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER  
S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Cooling Only - R22)

MODEL	INDOOR UNIT	MCK 010C	MCK 015C	MCK 020C	
	OUTDOOR UNIT	MLC 010C	MLC 015C	MLC 020B	
NOMINAL COOLING CAPACITY	W	2782	3663	5720	
	Btu/h	9500	12500	19500	
NOMINAL TOTAL POWER	W	889	1188	1856	
NOMINAL TOTAL CURRENT	A	3.8	5.3	8.0	
POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
REFRIGERANT / CONTROL		R22 / CAPILLARY TUBE (OUTDOOR)			
FAN	AIR FLOW	cfm / L/s	410 / 194	450 / 212	
	FAN MOTOR		6 POLES x 16W	6 POLES x 22W	
	RATED INPUT POWER	W	56	68	
	RATED RUNNING CURRENT	A	0.24	0.3	
INDOOR UNIT	COIL	TUBE	MATERIAL	S.I.G.C	
			DIAMETER	mm/in	7.00 / 0.28
			THICKNESS	mm/in	0.28 / 0.011
		FIN	MATERIAL	ALUMINIUM (HYDROPHILIC)	
			THICKNESS	mm/in	0.11 / 0.0043
			ROW	1	2
			FIN PER INCH	20	
			FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	
				0.318 / 3.42	
		DIMENSION	HEIGHT	mm/in	250 (295) / 9.8 (11.6)
	( ) - WITH PANEL	WIDTH	mm/in	570 (640) / 22.4 (25.2)	
		DEPTH	mm/in	570 (640) / 22.4 (25.2)	
	WEIGHT ( UNIT + PANEL)	kg/lb	22 + 2 / 48.5 + 4.4	23 + 2 / 50.7 + 4.4	
	SOUND PRESSURE LEVEL	dB(A)	43	45	
			43	46	
	CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT		
		AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER ( UP & DOWN )		
			WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL		
	CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4		
	AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)		
	PACKING DIMENSION	HEIGHT	mm/in	317 (127) / 12.5 (5)	
	( ) - PANEL	WIDTH	mm/in	630 (700) / 24.8 (27.6)	
		DEPTH	mm/in	630 (700) / 24.8 (27.6)	
OUTDOOR UNIT	COMPRESSOR	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50	
		COMPRESSOR TYPE		ROTARY HERMETIC	
		CAPACITOR	μF	30	35
		LOCK ROTOR AMP.	A	19	24
		RATED RUNNING CURRENT	A	3.3	4.8
		RATED INPUT POWER	W	781	1069
		PROTECTION DEVICE		OVERLOAD PROTECTION	
		FAN TYPE / DRIVE		PROPELLER / DIRECT	
		BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN	
		DIAMETER	mm/in	406 / 16	
	RATED RUNNING CURRENT	A	0.23	0.41	
	MOTOR OUTPUT	W	35	55	
	RATED INPUT POWER	W	52	93	
INDOOR UNIT	COIL	TUBE	MATERIAL	S.I.G.C	
			DIAMETER	mm/in	9.52 / 3/8
			THICKNESS	mm/in	0.33 / 0.013
		FIN	MATERIAL	ALUMINIUM (SLIT)	
			THICKNESS	mm/in	0.11 / 0.004
			ROW	1	2
			FIN PER INCH	18	14
			FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	
				0.36 / 3.94	
		DIMENSION	HEIGHT	mm/in	540 / 21.3
		WIDTH	mm/in	700 / 27.6	
		DEPTH	mm/in	250 / 9.8	
	WEIGHT	kg/lb	33 / 72.8	35 / 77.2	
	SOUND PRESSURE LEVEL	dB(A)	46	49	
			46	52	
	CASING	MATERIAL	EG/GI		
		THICKNESS	mm/in	0.5-2.0 / 0.02-0.08	
		FINISHING	POLYESTER POWDER		
	PIPE	TYPE	FLARE VALVE		
		SIZE	6.35 / 1/4		
		LIQUID	mm/in	12.70 / 1/2	
		GAS	mm/in	15.55 / 5/8	
	PACKING DIMENSION	HEIGHT	mm/in	620 / 24.4	
		WIDTH	mm/in	810 / 31.9	
		DEPTH	mm/in	330 / 13.0	
	REFRIGERANT CHARGE	kg/lb	0.72 / 1.59	0.98 / 2.16	
			0.72 / 1.59	1.63 / 3.66	

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3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Heat Pump - R22)

MODEL	INDOOR UNIT		MCK 010CR	MCK 015CR	MCK 020CR
	OUTDOOR UNIT		MLC 010CR	MLC 015CR	MLC 020BR
NOMINAL COOLING CAPACITY	W		2780	3660	5280
	Btu/h		9500	12500	18000
NOMINAL HEATING CAPACITY	W		2780	3660	5360
	Btu/h		9500	12500	18300
NOMINAL TOTAL POWER (COOLING)	W		889	1206	1745
NOMINAL TOTAL POWER (HEATING)	W		799	1056	1779
NOMINAL TOTAL CURRENT (COOLING)	A		3.8	5.3	7.5
NOMINAL TOTAL CURRENT (HEATING)	A		3.4	4.7	7.7
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50		
REFRIGERANT / CONTROL			R22 / CAPILLARY TUBE (OUTDOOR)		
FAN	AIR FLOW	cfm / L/s	410 / 194	410 / 194	450 / 212
	FAN MOTOR		6 POLES x 16W	6 POLES x 18W	6 POLES x 22W
	RATED INPUT POWER	W	56	60	68
	RATED RUNNING CURRENT	A	0.24	0.27	0.3
COIL	TUBE MATERIAL		S.I.G.C		
	DIAMETER	mm/in	7.00 / 0.28		
	THICKNESS	mm/in	0.28 / 0.011		
	FIN MATERIAL		ALUMINIUM (HYDROPHILIC)		
	THICKNESS	mm/in	0.11 / 0.0043		
	ROW		1	2	2
FIN PER INCH		20			
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.318 / 3.42		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	250 (295) / 9.8 (11.6)		
	WIDTH	mm/in	570 (640) / 22.4 (25.2)		
	DEPTH	mm/in	570 (640) / 22.4 (25.2)		
WEIGHT ( UNIT + PANEL)	kg/lb	22 + 2 / 48.5 + 4.4	23 + 2 / 50.7 + 4.4		
SOUND PRESSURE LEVEL	dB(A)	43	45	46	
CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT		
	AIR DISCHARGE OPERATION		4 WAY AUTOMATIC LOUVER ( UP & DOWN )		
CONDENSATE DRAIN SIZE	mm/in		19.05 / 3/4		
AIR FILTER			WASHABLE SARANET (OPTIONAL IONIZER FILTER)		
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	317 (127) / 12.5 (5)		
	WIDTH	mm/in	630 (700) / 24.8 (27.6)		
	DEPTH	mm/in	630 (700) / 24.8 (27.6)		
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50		
COMPRESSOR TYPE			ROTARY HERMETIC		
CAPACITOR	μF		30	35	45
LOCK ROTOR AMP.	A		20	30	47
RATED RUNNING CURRENT (COOLING)	A		3.3	4.8	6.8
RATED RUNNING CURRENT (HEATING)	A		2.9	4.2	7.0
RATED INPUT POWER (COOLING)	W		781	1087	1584
RATED INPUT POWER (HEATING)	W		691	937	1618
PROTECTION DEVICE			OVERLOAD PROTECTION		
POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50		
FAN TYPE / DRIVE			PROPELLER / DIRECT		
BLADE MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN		
DIAMETER	mm/in		406 / 16		
RATED RUNNING CURRENT	A		0.23	0.26	0.41
MOTOR OUTPUT	W		35	35	55
RATED INPUT POWER	W		52	59	93
COIL	TUBE MATERIAL		S.I.G.C		
	DIAMETER	mm/in	9.52 / 3/8		
	THICKNESS	mm/in	0.33 / 0.0133		
	FIN MATERIAL		ALUMINIUM (SLIT)		
	THICKNESS	mm/in	0.11 / 0.004		
	ROW		1	2	2
FIN PER INCH		18			
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.36 / 3.94		
DIMENSION	HEIGHT	mm/in	540 / 21.3		
	WIDTH	mm/in	700 / 27.6		
	DEPTH	mm/in	250 / 9.8		
WEIGHT	kg/lb	33 / 72.8	35 / 77.2		
SOUND PRESSURE LEVEL	dB(A)	46	49	52	
CASING	MATERIAL		EG/GI		
	THICKNESS FINISHING	mm/in	0.5-2.0 / 0.02-0.08		
PIPE	TYPE		POLYESTER POWDER		
	SIZE		FLARE VALVE		
PACKING DIMENSION	LIQUID	mm/in	6.35 / 1/4		
	GAS	mm/in	9.52 / 3/8	12.70 / 1/2	15.55 / 5/8
	HEIGHT	mm/in	620 / 24.4		
	WIDTH	mm/in	810 / 31.9		
	DEPTH	mm/in	330 / 13.0		
DEPTH	mm/in	330 / 13.0			
REFRIGERANT CHARGE	kg/lb	0.88 / 1.94	0.8 / 1.76		1.48 / 3.26

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994 (E)
- 3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
  - a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR
  - b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

- S.B.C. - SEAMLESS BARE COPPER  
S.I.G.C. - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Cooling Only - R407C)

MODEL		INDOOR UNIT		MCK 020A	MCK 025A	MCK 030A
		OUTDOOR UNIT		M4LC 020B	M4LC 025B	M4LC 030C
NOMINAL COOLING CAPACITY		W		5363	6155	8792
		Btu/h		18300	21000	30000
NOMINAL TOTAL POWER - 1Ø [ 3Ø ]		W		2372 [ 2153 ]	2933 [ 2779 ]	2953 [ 2943 ]
NOMINAL TOTAL CURRENT - 1Ø [ 3Ø ]		A		11.0 [ 4.0 ]	13.4 [ 5.2 ]	13.1 [ 5.1 ]
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50		
REFRIGERANT / CONTROL		R407C / CAPILLARY TUBE (OUTDOOR)			R407C / CAP. TUBE (INDOOR)	
FAN	AIR FLOW	cfm / L/s		770 / 363	810 / 382	920 / 434
	FAN MOTOR			6 POLES x 35W	6 POLES x 50W	6 POLES x 65W
	RATED INPUT POWER	W		127	144	160
	RATED RUNNING CURRENT	A		0.53	0.62	0.68
COIL	TUBE MATERIAL			S.B.C.		
	DIAMETER	mm/in		9.52 / 3/8		
	THICKNESS	mm/in		0.35 / 0.014		
	FIN MATERIAL			ALUMINIUM (SLIT)		
	THICKNESS	mm/in		0.11 / 0.0043		
	ROW			2	2	2
INDOOR UNIT	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		12	14	16
	DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	0.469 / 5.022		
		WIDTH	mm/in	335 (363) / 13.2 (14.3)		
		DEPTH	mm/in	820 (930) / 32.2 (36.6)		
	WEIGHT (UNIT + PANEL)	kg/lb		820 (930) / 32.2 (36.6)		
	SOUND PRESSURE LEVEL ( H / M / L )	dBA		31 + 4 / 68.3 + 8.8	32 + 4 / 70.5 + 8.8	35 + 4 / 77.2 + 8.8
	CONTROL	ROOM TEMPERATURE		42 / 39 / 37	45 / 42 / 40	49 / 45 / 43
		AIR DISCHARGE OPERATION		MICROCOMPUTER CONTROLLED THERMOSTAT 4-WAY AUTOMATIC LOUVER ( UP & DOWN )		
				LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL		
	CONDENSATE DRAIN SIZE	mm/in		19.05 / 3/4		
AIR FILTER			CORRUGATED WASHABLE SARANET (OPTIONAL IONIZER FILTER)			
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	380 (130) / 15.0 (5.1)			
	WIDTH	mm/in	920 (1020) / 36.2 (40.2)			
	DEPTH	mm/in	920 (1000) / 36.2 (39.4)			
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >		
COMPRESSOR	COMPRESSOR TYPE			ROTARY HERMETIC		SCROLL
	CAPACITOR - 1Ø < 3Ø >	µF		45 / < NIL >	50 / < NIL >	50 / < NIL >
	LOCK ROTOR AMP - 1Ø < 3Ø >	A		54 / < 21 >	58 / < 26 >	82 / < 40 >
	RATED RUNNING CURRENT - 1Ø < 3Ø >	A		9.91 / < 3.6 >	12.5 / < 4.8 >	11.40 / < 4.5 >
	RATED INPUT POWER - 1Ø < 3Ø >	W		2112 / < 1890 >	2660 / < 2510 >	2560 / < 2550 >
	PROTECTION DEVICE			OVERLOAD PROTECTION OVERLOAD PROTECTION & AUTO RESET H/L PRESSURE SWITCH		
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50		
FAN	FAN TYPE / DRIVE			PROPELLER / DIRECT		
	BLADE MATERIAL			GLASS REINFORCE ACRYL STYRENE RESIN		
	DIAMETER	mm/in		406 / 16		609.6 / 24.0
	RATED RUNNING CURRENT	A		0.56		1.03
	MOTOR OUTPUT	W		55		145
RATED INPUT POWER	W		133		233	
COIL	TUBE MATERIAL			S.B.C.	S.I.G.C.	S.B.C.
	DIAMETER	mm/in		9.52 / 3/8		
	THICKNESS	mm/in		0.33 / 0.013		
	FIN MATERIAL			ALUMINIUM (SPLIT)		
	THICKNESS	mm/in		0.127 / 0.005		
	ROW			2		1
OUTDOOR UNIT	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		14		16
	DIMENSION	HEIGHT	mm/in	0.51 / 5.53		
		WIDTH	mm/in	646 / 25.40		
		DEPTH	mm/in	840 / 33.10		
	WEIGHT	kg/lb		330 / 13.00		
	SOUND PRESSURE LEVEL	dBA		57 / 125.7	58 / 127.9	95 / 209.4
	CASING	MATERIAL		GALVANISED MILD STEEL		
		THICKNESS	mm/in	0.8 / 0.031		
		FINISHING		POLYESTER POWDER		
	PIPE	TYPE		FLARE VALVE / AEROQUIP		FLARE VALVE
SIZE						
		LIQUID	mm/in	6.35 / 1/4		9.52 / 3/8
PACKING DIMENSION		GAS	mm/in	15.88 / 5/8		15.88 / 5/8
	HEIGHT	mm/in		710 / 27.95		1000 / 39.37
	WIDTH	mm/in		957 / 37.68		1200 / 47.24
	DEPTH	mm/in		461 / 18.15		560 / 22.05
REFRIGERANT CHARGE	kg/lb		1.65 / 3.64	1.65 / 3.64	1.75 / 3.86	

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :  
COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C. - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Cooling Only - R407C)

MODEL		INDOOR UNIT		MCK 040A		MCK 050A	
		OUTDOOR UNIT		M4LC 035C	M4LC 040C	M4LC 050C	
NOMINAL COOLING CAPACITY		W		9964	11134	14650	
		Btu/h		34000	38000	50000	
NOMINAL TOTAL POWER - 1Ø [ 3Ø ]		W		3411	3861 [ 4165 ]	[ 4803 ]	
NOMINAL TOTAL CURRENT - 1Ø [ 3Ø ]		A		15.8	18.0 [ 6.9 ]	[ 8.9 ]	
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50			
REFRIGERANT / CONTROL		R407C / CAPILLARY TUBE (INDOOR)					
FAN	AIR FLOW	cfm / L/s		990 / 467		1080 / 510	
	FAN MOTOR	6 POLES x 85W				6 POLES x 120W	
	RATED INPUT POWER	W		192	242		
	RATED RUNNING CURRENT	A		0.80	1.03		
COIL	TUBE	MATERIAL		S.I.G.C			
		DIAMETER	mm/in	7.00 / 0.28			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC)			
		THICKNESS	mm/in	0.11 / 0.0043			
		ROW		3	3		
FIN PER INCH		20	20				
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.469 / 5.022		0.469 / 5.022		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	335 (363) / 13.2 (14.3)				
	WIDTH	mm/in	820 (930) / 32.2 (36.6)				
	DEPTH	mm/in	820 (930) / 32.2 (36.6)				
WEIGHT (UNIT + PANEL)		kg/lb	38 + 4 / 83.8 + 8.8		40 + 4 / 88.2 + 8.8		
SOUND PRESSURE LEVEL ( H / M / L )		dBA	51 / 48 / 46		53 / 52 / 50		
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT					
	AIR DISCHARGE OPERATION	4-WAY AUTOMATIC LOUVER ( UP & DOWN )					
		LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL					
CONDENSATE DRAIN SIZE		mm/in	19.05 / 3/4				
AIR FILTER	CORRUGATED WASHABLE SARANET (OPTIONAL IONIZER FILTER)						
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	380 (130) / 15.0 (5.1)				
	WIDTH	mm/in	920 (1020) / 36.2 (40.2)				
	DEPTH	mm/in	920 (1000) / 36.2 (39.4)				
COMPRESSOR	POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
	COMPRESSOR TYPE	SCROLL					
	CAPACITOR- 1Ø < 3Ø >		µF	60	60 / <NIL>	< NIL >	
	LOCK ROTOR AMP - 1Ø < 3Ø >		A	97	114 / <48>	< 62 >	
	RATED RUNNING CURRENT - 1Ø < 3Ø >		A	14.00	16.20 < 6.30 >	< 8.20 >	
	RATED INPUT POWER - 1Ø < 3Ø >		W	2986	3436 < 3740 >	< 4328 >	
PROTECTION DEVICE	OVERLOAD PROTECTION & AUTO RESET H/L PRESSURE SWITCH						
FAN	POWER SOURCE	V/Ph/Hz		220 - 240 / 1 / 50			
	FAN TYPE / DRIVE	PROPELLER / DIRECT					
	BLADE MATERIAL	GLASS REINFORCE ACRYL STYRENE RESIN					
	DIAMETER		mm/in	609.6 / 24.0			
	RATED RUNNING CURRENT		A	1.03			
	MOTOR OUTPUT		W	145			
	RATED INPUT POWER		W	233			
	COIL	TUBE	MATERIAL		S.B.C.		
DIAMETER			mm/in	9.52 / 3/8			
THICKNESS			mm/in	0.36 / 0.014			
FIN		MATERIAL		ALUMINIUM (CORRUGATED)			
		THICKNESS	mm/in	0.127 / 0.005			
		ROW		2	2		2
FIN PER INCH		14	16		16		
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.87 / 9.33				
DIMENSION	HEIGHT	mm/in	850 / 33.46				
	WIDTH	mm/in	1030 / 40.53				
	DEPTH	mm/in	400 / 15.75				
WEIGHT		kg/lb	100 / 220.5	100 / 220.5	105 / 231.5		
SOUND PRESSURE LEVEL		dBA	58	58	58		
CASING	MATERIAL	GALVANISED MILD STEEL					
	THICKNESS	mm/in	1.0 - 2.3 / 0.0393 - 0.0905				
	FINISHING	POLYESTER POWDER					
PIPE	TYPE	FLARE VALVE					
	SIZE	LIQUID	mm/in	9.52 / 3/8			
		GAS	mm/in	19.05 / 3/4			
PACKING DIMENSION	HEIGHT	mm/in	1000 / 39.37				
	WIDTH	mm/in	1200 / 47.24				
	DEPTH	mm/in	560 / 22.05				
REFRIGERANT CHARGE		kg/lb	2.61 / 5.75	3.13 / 6.90	3.55 / 7.83		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW:  
COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Heat Pump - R407C)

MODEL		INDOOR UNIT		MCK 020AR	MCK 025AR	MCK 030AR
		OUTDOOR UNIT		M4LC 020BR	M4LC 025BR	M4LC 030CR
NOMINAL COOLING CAPACITY	W			5274	6008	8499
	Btu/h			18000	20500	29000
NOMINAL HEATING CAPACITY	W			5569	7034	9083
	Btu/h			19000	24000	31000
NOMINAL TOTAL POWER (COOLING) - 1Ø [ 3Ø ]		W		2262 [ 2150 ]	2848 [ 2787 ]	2817 [ 2807 ]
NOMINAL TOTAL POWER (HEATING) - 1Ø [ 3Ø ]		W		2356 [ 2060 ]	2826 [ 2677 ]	2800 [ 2781 ]
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]		A		10.6 [ 4.0 ]	13.8 [ 5.1 ]	13.2 [ 4.9 ]
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]		A		11.2 [ 3.8 ]	13.7 [ 4.8 ]	13.1 [ 4.8 ]
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50		
REFRIGERANT / CONTROL				R407C / CAPILLARY TUBE (OUTDOOR)	R407C / CAP. TUBE + TXV (OUTDOOR)	
FAN	AIR FLOW		cfm / L/s	770 / 363	810 / 382	920 / 434
	FAN MOTOR			6 POLES x 35W	6 POLES x 50W	6 POLES x 65W
	RATED INPUT POWER		W	127	144	160
	RATED RUNNING CURRENT		A	0.53	0.62	0.68
COIL	TUBE MATERIAL			S.B.C.		
	DIAMETER		mm/in	9.52 / 3/8		
	THICKNESS		mm/in	0.35 / 0.014		
	FIN MATERIAL			ALUMINIUM (SLIT)		
	THICKNESS		mm/in	0.11 / 0.0043		
	ROW			2	2	2
FIN PER INCH			12	16	16	
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.469 / 5.022	0.469 / 5.022	0.469 / 5.022	
DIMENSION ( ) - WITH PANEL	HEIGHT		mm/in	335 (363) / 13.2 (14.3)		
	WIDTH		mm/in	820 (930) / 32.2 (36.6)		
	DEPTH		mm/in	820 (930) / 32.2 (36.6)		
WEIGHT (UNIT + PANEL)		kg/lb	31 + 4 / 68.3 + 8.8	32 + 4 / 70.5 + 8.8	35 + 4 / 77.2 + 8.8	
SOUND PRESSURE LEVEL (H / M / L)		dB(A)	42 / 39 / 37	45 / 42 / 40	49 / 45 / 43	
CONTROL		ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT			
		AIR DISCHARGE	4 - WAY AUTOMATIC LOUVER ( UP & DOWN )			
		OPERATION	LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL			
CONDENSATE DRAIN SIZE		mm/in	19.05 / 3/4			
AIR FILTER			WASHABLE SARANET (OPTIONAL IONIZER FILTER)			
PACKING DIMENSION ( ) - PANEL	HEIGHT		mm/in	380 (130) / 15.0 (5.1)		
	WIDTH		mm/in	920 (1020) / 36.2 (40.2)		
	DEPTH		mm/in	920 (1000) / 36.2 (39.4)		
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
COMPRESSOR TYPE			ROTARY HERMETIC		SCROLL	
CAPACITOR - 1Ø / <3Ø>		µF	45 / < NIL >	50 / < NIL >	50 / < NIL >	
LOCK ROTOR AMPERE - 1Ø / <3Ø>		A	54 / < 21 >	58 / < 26 >	82 / < 40 >	
RATED RUNNING CURRENT (COOLING) - 1Ø / <3Ø>		A	9.5 / < 3.6 >	12.6 / < 4.8 >	11.50 / < 4.3 >	
RATED RUNNING CURRENT (HEATING) - 1Ø / <3Ø>		A	10.1 / < 3.4 >	12.5 / < 4.5 >	11.40 / < 4.2 >	
RATED INPUT POWER (COOLING) - 1Ø / <3Ø>		W	2002 / < 1890 >	2571 / < 2510 >	2424 / < 2414 >	
RATED INPUT POWER (HEATING) - 1Ø / <3Ø>		W	2096 / < 1800 >	2549 / < 2400 >	2407 / < 2388 >	
PROTECTION DEVICE			OVERLOAD PROTECTION		OVERLOAD PROTECTION & AUTO RESET HIGH PRESSURE SWITCH	
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50			
FAN TYPE / DRIVE			PROPELLER / DIRECT			
BLADE MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
FAN	DIAMETER		mm/in	406 / 16	609.6 / 24.0	
	RATED RUNNING CURRENT		A	0.56	1.03	
	MOTOR OUTPUT		W	55	145	
	RATED INPUT POWER		W	133	233	
COIL	TUBE MATERIAL			S.B.C.	S.I.G.C.	S.B.C.
	DIAMETER		mm/in	9.52 / 3/8		
	THICKNESS		mm/in	0.36 / 0.014	0.33 / 0.013	0.36 / 0.014
	FIN MATERIAL			ALUMINIUM (SLIT)		
	THICKNESS		mm/in	0.127 / 0.005		
	ROW			2	2	
FIN PER INCH			14	16		
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.51 / 5.53	0.87 / 9.33		
DIMENSION	HEIGHT		mm/in	646 / 25.40		
	WIDTH		mm/in	840 / 33.10		
	DEPTH		mm/in	330 / 13.00		
WEIGHT		kg/lb	57 / 125.7	58 / 127.9	95 / 209.4	
SOUND PRESSURE LEVEL		dB(A)	52	53	58	
CASING		MATERIAL	GALVANISED MILD STEEL			
		THICKNESS	mm/in 0.8 / 0.031			
		FINISHING	EPOXY POLYESTER POWDER			
PIPE	TYPE			FLARE VALVE / AEROQUIP		FLARE VALVE
	SIZE		LIQUID	mm/in 6.35 / 1/4	9.52 / 3/8	
		GAS	mm/in 15.88 / 5/8	15.88 / 5/8		
PACKING DIMENSION	HEIGHT		mm/in	710 / 27.95		1000 / 39.37
	WIDTH		mm/in	957 / 37.68		1200 / 47.24
	DEPTH		mm/in	461 / 18.15		560 / 22.05
REFRIGERANT CHARGE		kg/lb	1.70 / 3.75	1.65 / 3.64	2.35 / 5.18	

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

HEATING - 21.1°C DB / 15.6°C WB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C. - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette A Series (Heat Pump - R407C)

MODEL		INDOOR UNIT		MCK 040AR		MCK 050AR	
		OUTDOOR UNIT		M4LC 035CR	M4LC 040CR	M4LC 050CR	
NOMINAL COOLING CAPACITY	W			9964	11430	14068	
	Btu/h			34000	39000	48000	
NOMINAL HEATING CAPACITY	W			10551	12013	14654	
	Btu/h			36000	41000	50000	
NOMINAL TOTAL POWER (COOLING) - 1Ø [ 3Ø ]		W			3180	3881 [ 3990 ]	[ 5035 ]
NOMINAL TOTAL POWER (HEATING) - 1Ø [ 3Ø ]		W			2950	3611 [ 3705 ]	[ 4955 ]
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]		A			15.8	18.2 [ 6.8 ]	[ 9.1 ]
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]		A			14.8	16.8 [ 6.5 ]	[ 9.4 ]
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50			
REFRIGERANT / CONTROL				R407C / CAPILLARY TUBE + TXV (OUTDOOR)			
FAN	AIR FLOW	cfm / L/s		1020 / 481		1080 / 510	
	FAN MOTOR			6 POLES x 85W		6 POLES x 120W	
	RATED INPUT POWER	W			192		242
	RATED RUNNING CURRENT	A			0.8		1.03
COIL	TUBE	MATERIAL			S.I.G.C		
		DIAMETER	mm/in		7.00 / 0.28		
		THICKNESS	mm/in		0.28 / 0.011		
	FIN	MATERIAL			ALUMINIUM (HYDROPHILIC)		
		THICKNESS	mm/in		0.11 / 0.0043		
		ROW			3		3
FIN PER INCH			20		20		
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.469 / 5.022		0.469 / 5.022		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in		335 (363) / 13.2 (14.3)			
	WIDTH	mm/in		820 (930) / 32.2 (36.6)			
	DEPTH	mm/in		820 (930) / 32.2 (36.6)			
WEIGHT (UNIT + PANEL)	kg/lb		38 + 4 / 83.8 + 8.8	38 + 4 / 83.8 + 8.8	40 + 4 / 88.2 + 8.8		
SOUND PRESSURE LEVEL ( H / M / L )	dBA		51 / 48 / 46	51 / 48 / 46	53 / 52 / 50		
CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT				
	AIR DISCHARGE OPERATION		4 - WAY AUTOMATIC LOUVER ( UP & DOWN )				
			LCD WIRELESS / LED WIRED MICROCOMPUTER REMOTE CONTROL				
CONDENSATE DRAIN SIZE	mm/in		19.05 / 3/4				
AIR FILTER			WASHABLE SARANET (OPTIONAL IONIZER FILTER)				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in		380 (130) / 15.0 (5.1)			
	WIDTH	mm/in		920 (1020) / 36.2 (40.2)			
	DEPTH	mm/in		920 (1000) / 36.2 (39.4)			
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>			
COMPRESSOR TYPE				SCROLL			
CAPACITOR - 1Ø / <3Ø>		µF		60	60 / < NIL >	< NIL >	
LOCK ROTOR AMPERE - 1Ø / <3Ø>		A		97	114 / < 50 >	< 62 >	
RATED RUNNING CURRENT (COOLING) - 1Ø / <3Ø>		A		14.00	16.40 / < 6.20 >	< 8.40 >	
RATED RUNNING CURRENT (HEATING) - 1Ø / <3Ø>		A		13.00	15.00 / < 5.90 >	< 8.60 >	
RATED INPUT POWER (COOLING) - 1Ø / <3Ø>		W		2986	3456 / < 3565 >	< 4560 >	
RATED INPUT POWER (HEATING) - 1Ø / <3Ø>		W		2756	3186 / < 3280 >	< 4480 >	
PROTECTION DEVICE				OVERLOAD PROTECTION & AUTO RESET HIGH PRESSURE SWITCH			
POWER SOURCE		V/Ph/Hz		220 - 240 / 1 / 50			
FAN TYPE / DRIVE				PROPELLER / DIRECT			
BLADE MATERIAL				GLASS REINFORCED ACRYL STYRENE RESIN			
DIAMETER		mm/in		609.6 / 24.0			
RATED RUNNING CURRENT		A		1.03			
MOTOR OUTPUT		W		145			
RATED INPUT POWER		W		2.33			
COIL	TUBE	MATERIAL			S.I.G.C		
		DIAMETER	mm/in		9.52 / 3/8		
		THICKNESS	mm/in		0.33 / 0.013		
	FIN	MATERIAL			ALUMINIUM (CORRUGATED)		
		THICKNESS	mm/in		0.127 / 0.005		
		ROW			2		
FIN PER INCH			16				
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.87 / 9.33				
DIMENSION	HEIGHT	mm/in		850 / 33.46			
	WIDTH	mm/in		1029 / 40.53			
	DEPTH	mm/in		400 / 15.75			
WEIGHT	kg/lb		100 / 220.5	100 / 220.5	105 / 231.5		
SOUND PRESSURE LEVEL	dBA		58	58	58		
CASING	MATERIAL		GALVANISED MILD STEEL				
	THICKNESS		mm/in		0.8 / 0.031		
	FINISHING		EPOXY POLYESTER POWDER				
PIPE	TYPE		FLARE VALVE				
	SIZE		LIQUID		mm/in		
PACKING DIMENSION	LIQUID		mm/in		9.52 / 3/8		
	GAS		mm/in		19.05 / 3/4		
	HEIGHT		mm/in		1000 / 39.37		
	WIDTH		mm/in		1200 / 47.24		
DEPTH		mm/in		560 / 22.05			
REFRIGERANT CHARGE	kg/lb		2.61 / 5.75	3.10 / 6.83	3.35 / 8.60		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

3) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

HEATING - 21.1°C DB / 15.6°C WB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette B Series (Cooling Only - R407C)

MODEL		INDOOR UNIT	MCK 015B	MCK 020B	MCK 025B	
		OUTDOOR UNIT	M4LC 015B	M4LC 020B	M4LC 025B	
NOMINAL COOLING CAPACITY		W	3370	5275	6448	
		Btu/h	11500	18000	22000	
NOMINAL TOTAL POWER - 1Ø [ 3Ø ]		W	1497	2437 [ 1975 ]	2896 [ 2716 ]	
NOMINAL TOTAL CURRENT - 1Ø [ 3Ø ]		A	6.6	11.3 [ 3.9 ]	13.5 [ 5.1 ]	
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50			
REFRIGERANT / CONTROL			R407C / CAPILLARY TUBE (OUTDOOR)			
FAN	AIR FLOW	cfm / L/s	430 / 203	430 / 203	500 / 236	
	FAN MOTOR		6 POLES	6 POLES	6 POLES	
	RATED INPUT POWER	W	69	69	75	
	RATED RUNNING CURRENT	A	0.29	0.29	0.32	
COIL	TUBE	MATERIAL	S.I.G.C			
		DIAMETER	9.52 / 3/8			
	THICKNESS	0.33 / 0.013				
	FIN	MATERIAL	ALUMINIUM (SLIT)			
		THICKNESS	0.11 / 0.0043			
	ROW		1	2	2	
FIN PER INCH		18	14	14		
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.39 / 4.2	0.38 / 4.1			
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	293 (345) / 11.5 (13.6)			
	WIDTH	mm/in	650 (727) / 25.6 (28.6)			
	DEPTH	mm/in	650 (727) / 25.6 (28.6)			
WEIGHT ( UNIT + PANEL )	kg/lb	30 + 3 / 66.1 + 6.6	30 + 3 / 66.1 + 6.6	31 + 3 / 68.3 + 6.6		
SOUND PRESSURE LEVEL ( H / M / L )	dBA	41 / 38 / 36	42 / 40 / 37	45 / 42 / 39		
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT				
	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER (UP & DOWN)				
		WIRELESS OR WIRED MICROCOMPUTER REMOTE CONTROL				
CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4				
AIR FILTER	WASHABLE SARANET (OPTIONAL IONIZER FILTER)					
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm (in)	360 (110) / 14.2 (4.3)			
	WIDTH	mm (in)	725 (840) / 28.5 (33.1)			
	DEPTH	mm (in)	725 (840) / 28.5 (33.1)			
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
COMPRESSOR TYPE			ROTARY HERMETIC			
CAPACITOR - 1Ø / <3Ø>		µF	30	45 / < NIL >	50 / < NIL >	
LOCK ROTOR AMP. - 1Ø / <3Ø>		A	32	58 / < 21 >	58 / < 26 >	
RATED RUNNING CURRENT - 1Ø / <3Ø>		A	6.0	10.4 / < 3.6 >	12.6 / < 4.8 >	
RATED INPUT POWER - 1Ø / <3Ø>		W	1366	2235 / < 1893 >	2688 / < 2508 >	
PROTECTION DEVICE			OVERLOAD PROTECTION			
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50			
FAN TYPE / DRIVE			PROPELLER / DIRECT			
BLADE MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
FAN	DIAMETER	mm/in	355 / 14	406 / 16		
	RATED RUNNING CURRENT	A	0.28	0.56		
	MOTOR OUTPUT	W	30	55		
	RATED INPUT POWER	W	62	133		
COIL	TUBE	MATERIAL	S.I.G.C	S.B.C	S.I.G.C	
		DIAMETER	9.52 / 3/8			
	THICKNESS	0.33 / 0.013				
	FIN	MATERIAL	ALUMINIUM (SLIT)			
		THICKNESS	0.127 / 0.005			
	ROW		1	2	2	
FIN PER INCH		19	14	14		
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.32 / 3.5	0.51 / 5.53			
DIMENSION	HEIGHT	mm/in	494 / 19.4	646 / 25.4		
	WIDTH	mm/in	740 / 29.1	840 / 33.1		
	DEPTH	mm/in	270 / 10.6	330 / 13.0		
WEIGHT	kg/lb	34 / 74.96	57 / 125.66	58 / 127.87		
SOUND PRESSURE LEVEL	dBA	49	52	53		
CASING	MATERIAL	GALVANISED MILD STEEL				
	THICKNESS	mm/in	0.8 / 0.031			
	FINISHING		POLYESTER POWDER			
PIPE	TYPE		FLARE VALVE			
	SIZE	LIQUID	mm/in	6.35 / 1/4	6.35 / 1/4	9.52 / 3/8
PACKING DIMENSION	GAS	mm/in	12.70 / 1/2	15.88 / 5/8	15.88 / 5/8	
		HEIGHT	mm/in	558 / 22.0	710 / 28.0	
		WIDTH	mm/in	851 / 33.5	957 / 37.7	
DEPTH	mm/in	401 / 15.8	461 / 18.1			
REFRIGERANT CHARGE	kg/lb	0.90 / 1.98	1.70 / 3.75	1.70 / 3.75		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :  
COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette B Series (Heat Pump - R407C)

MODEL	INDOOR UNIT	MCK 015BR	MCK 020BR	MCK 025BR	
	OUTDOOR UNIT	M4LC 015BR	M4LC 020BR	M4LC 025BR	
NOMINAL COOLING CAPACITY	W	3370	5275	6448	
	Btu/h	11500	18000	22000	
NOMINAL HEATING CAPACITY	W	3224	5862	6448	
	Btu/h	11000	20000	22000	
NOMINAL TOTAL POWER (COOLING) - 1Ø [ 3Ø ]	W	1497	2437 [ 2095 ]	2896 [ 2716 ]	
NOMINAL TOTAL POWER (HEATING) - 1Ø [ 3Ø ]	W	1207	2177 [ 2002 ]	2706 [ 2608 ]	
NOMINAL TOTAL CURRENT (COOLING) - 1Ø [ 3Ø ]	A	6.6	11.3 [ 3.9 ]	13.5 [ 5.1 ]	
NOMINAL TOTAL CURRENT (HEATING) - 1Ø [ 3Ø ]	A	5.5	11.0 [ 3.7 ]	12.7 [ 4.8 ]	
POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
REFRIGERANT / CONTROL		R407C / CAP. TUBE (OUTDOOR)			
FAN	AIR FLOW	cfm / L/s	430 / 103	430 / 203	500 / 236
	FAN MOTOR		6 POLES	6 POLES	6 POLES
	RATED INPUT POWER	W	69	69	75
	RATED RUNNING CURRENT	A	0.29	0.29	0.32
COIL	TUBE MATERIAL		S.I.G.C		
	TUBE DIAMETER	mm/in	9.52 / 3/8		
	TUBE THICKNESS	mm/in	0.33 / 0.013		
	FIN MATERIAL		ALUMINIUM (SLIT)		
	FIN THICKNESS	mm/in	0.11 / 0.0043		
	FIN ROW		1	2	2
FIN PER INCH		18	14	14	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.39 / 4.2	0.38 / 4.1		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	293 (345) / 11.5 (13.6)		
	WIDTH	mm/in	650 (727) / 25.6 (28.6)		
	DEPTH	mm/in	650 (727) / 25.6 (28.6)		
WEIGHT ( UNIT + PANEL )	kg/lb	30 + 3 / 66.1 + 6.6	30 + 3 / 66.1 + 6.6	31 + 3 / 68.3 + 6.6	
SOUND PRESSURE LEVEL ( H / M / L )	dB(A)	41 / 38 / 36	42 / 40 / 37	45 / 42 / 39	
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT			
	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER (UP & DOWN) WIRELESS OR WIRED MICROCOMPUTER REMOTE CONTROL			
CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4			
AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)			
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm (in)	360 (110) / 14.2 (4.3)		
	WIDTH	mm (in)	725 (840) / 28.5 (33.1)		
	DEPTH	mm (in)	725 (840) / 28.5 (33.1)		
POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >			
COMPRESSOR TYPE		ROTARY HERMETIC			
CAPACITOR - 1Ø / <3Ø>	µF	30	45 / < NIL >	50 / < NIL >	
LOCK ROTOR AMP. - 1Ø / <3Ø>	A	32	58 / < 21 >	58 / < 26 >	
RATED RUNNING CURRENT (COOLING) - 1Ø / <3Ø>	A	6.0	10.4 / < 3.6 >	12.6 / < 4.8 >	
RATED RUNNING CURRENT (HEATING) - 1Ø / <3Ø>	A	4.9	10.1 / < 3.4 >	11.8 / < 4.5 >	
RATED INPUT POWER (COOLING) - 1Ø / <3Ø>	W	1366	2235 / < 1893 >	2688 / < 2508 >	
RATED INPUT POWER (HEATING) - 1Ø / <3Ø>	W	1076	2095 / < 1800 >	2498 / < 2400 >	
PROTECTION DEVICE		OVERLOAD PROTECTION			
POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
FAN TYPE / DRIVE		PROPELLER / DIRECT			
BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN			
DIAMETER	mm/in	355 / 14	406 / 16		
RATED RUNNING CURRENT	A	0.28	0.56		
MOTOR OUTPUT	W	30	55		
RATED INPUT POWER	W	62	133		
COIL	TUBE MATERIAL		S.I.G.C	S.B.C	S.I.G.C
	TUBE DIAMETER	mm/in	9.52 / 3/8		
	TUBE THICKNESS	mm/in	0.33 / 0.013	0.35 / 0.014	0.33 / 0.013
	FIN MATERIAL		ALUMINIUM (SLIT)		
	FIN THICKNESS	mm/in	0.127 / 0.005		
	FIN ROW		1	2	2
FIN PER INCH		19	14	14	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.32 / 3.5	0.51 / 5.53		
DIMENSION	HEIGHT	mm/in	494 / 19.4	646 / 25.4	
	WIDTH	mm/in	740 / 29.1	840 / 33.1	
	DEPTH	mm/in	270 / 10.6	330 / 13.0	
WEIGHT	kg/lb	34 / 74.96	57 / 125.66	58 / 127.87	
SOUND PRESSURE LEVEL	dB(A)	49	52	53	
CASING	MATERIAL		GALVANISED MILD STEEL		
	THICKNESS	mm/in	0.8 / 0.031		
PIPE	FINISHING		POLYESTER POWDER		
	TYPE		FLARE VALVE		
PACKING DIMENSION	SIZE	mm/in	6.35 / 1/4	9.52 / 3/8	
	LIQUID	mm/in	12.70 / 1/2	15.88 / 5/8	
	GAS	mm/in	558 / 22.0	710 / 28.0	
DIMENSION	HEIGHT	mm/in	851 / 33.5	957 / 37.7	
	WIDTH	mm/in	401 / 15.8	461 / 18.1	
	DEPTH	mm/in	401 / 15.8	461 / 18.1	
REFRIGERANT CHARGE	kg/lb	0.90 / 1.98	1.70 / 3.75	1.65 / 3.64	

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ARI 210/240-94

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :  
COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Cooling Only - R407C)

MODEL		INDOOR UNIT	MCK 010C	MCK 015C	MCK 020C
		OUTDOOR UNIT	M4LC 010B	M4LC 015B	M4LC 020B
NOMINAL COOLING CAPACITY		W	2695	3515	5272
		Btu/h	9200	12000	18000
NOMINAL TOTAL POWER 1Ø (3Ø)		W	968	1445	2347 [ 1997 ]
NOMINAL TOTAL CURRENT 1Ø (3Ø)		A	4.3	6.3	10.8 [ 3.9 ]
POWER SOURCE		V/Ph/Hz	220 - 240 / 1 / 50		
REFRIGERANT / CONTROL			R407C / CAPILLARY TUBE (OUTDOOR)		
FAN	AIR FLOW	cfm / L/s	410 / 194	410 / 194	450 / 212
	FAN MOTOR		6 POLES x 16W	6 POLES x 18W	6 POLES x 22W
	RATED INPUT POWER	W	56	60	68
	RATED RUNNING CURRENT	A	0.24	0.27	0.30
COIL	TUBE	MATERIAL	S.I.G.C		
		DIAMETER	7.00 / 0.28		
		THICKNESS	0.28 / 0.011		
	FIN	MATERIAL	ALUMINIUM (HYDROPHILLIC)		
		THICKNESS	0.11 / 0.0043		
		ROW	1	2	
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.318 / 3.42			
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	250 (295) / 9.8 (11.6)		
	WIDTH	mm/in	570 (640) / 22.4 (25.2)		
	DEPTH	mm/in	570 (640) / 22.4 (25.2)		
WEIGHT ( UNIT + PANEL )	kg/lb	22 + 2 / 49 + 4.4	23 + 2 / 51 + 4.4		
SOUND PRESSURE LEVEL	dBA	43	45	46	
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT			
	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER ( UP & DOWN ) WIRELESS OR LED WIRED MICROCOMPUTER REMOTE CONTROL			
CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4			
AIR FILTER	WASHABLE SARANET (OPTIONAL IONIZER FILTER)				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm(in)	317 (127) / 12.5 (5)		
	WIDTH	mm(in)	630 (700) / 24.8 (27.6)		
	DEPTH	mm(in)	630 (700) / 24.8 (27.6)		
COMPRESSOR	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / < 380 - 415 / 3 / 50 >		
	COMPRESSOR TYPE	ROTARY HERMETIC			
	CAPACITOR - 1Ø / <3Ø>	µF	30	30	45 / <NIL>
	LOCK ROTOR AMP. - 1Ø / <3Ø>	A	20	32	54 / <21>
	RATED RUNNING CURRENT - 1Ø / <3Ø>	A	3.8	5.7	10.1 / <3.7>
	RATED INPUT POWER - 1Ø / <3Ø>	W	862	1323	2186 / <1836>
PROTECTION DEVICE	OVERLOAD PROTECTION				
FAN	FAN TYPE / DRIVE	PROPELLER / DIRECT			
	BLADE MATERIAL	GLASS REINFORCED ACRYL STYRENE RESIN			
	DIAMETER	mm/in	355 / 14		406 / 16
	RATED RUNNING CURRENT	A	0.21	0.28	0.41
	MOTOR OUTPUT	W	20	25	55
	RATED INPUT POWER	W	50	62	93
COIL	TUBE	MATERIAL	S.I.G.C		S.B.C
		DIAMETER	9.52 / 3/8		
		THICKNESS	0.33 / 0.013		
	FIN	MATERIAL	ALUMINIUM (SLIT)		
		THICKNESS	0.127 / 0.005		
		ROW	1	2	
	FIN PER INCH	18	19	14	
	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.32 / 3.50		0.51 / 5.53
DIMENSION	HEIGHT	mm/in	494 / 19.4		
	WIDTH	mm/in	740 / 29.1		
	DEPTH	mm/in	270 / 10.6		
WEIGHT	kg/lb	31 / 68	34 / 75	57 / 126	
SOUND PRESSURE LEVEL	dBA	48	49	52	
CASING	MATERIAL	GALVANISED MILD STEEL			
	THICKNESS	mm/in	0.8 / 0.031		
PIPE	FINISHING	POLYESTER POWDER			
	TYPE	FLARE VALVE			
PACKING DIMENSION	SIZE	LIQUID	6.35 / 1/4		
		GAS	9.52 / 3/8		
	HEIGHT	mm/in	588 / 22.0		710 / 28.0
	WIDTH	mm/in	851 / 33.5		957 / 37.7
DEPTH	mm/in	401 / 15.8		461 / 18.1	
REFRIGERANT CHARGE	kg/lb	0.78 / 1.72	0.93 / 2.05	1.70 / 3.75	

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.  
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994(E)  
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :  
a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER  
S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Heat Pump - R407C)

MODEL		INDOOR UNIT	MCK 010CR	MCK 015CR	MCK 020CR	
		OUTDOOR UNIT	M4LC 010BR	M4LC 015BR	M4LC 020BR	
COOLING CAPACITY	W		2695	3368	5272	
	Btu/h		9200	11500	18000	
HEATING CAPACITY	W		2695	3222	5418	
	Btu/h		9500	11000	18500	
NOMINAL TOTAL POWER (COOLING)		W	933	1442	2324	
NOMINAL TOTAL POWER (HEATING)		W	833	1161	2189	
NOMINAL TOTAL CURRENT (COOLING)		A	4.1	6.3	10.8	
NOMINAL TOTAL CURRENT (HEATING)		A	3.7	5.3	9.9	
POWER SOURCE		V/Ph/Hz	230 / 1 / 50			
REFRIGERANT / CONTROL			R407C / CAPILLARY TUBE (OUTDOOR)			
FAN	AIR FLOW	cfm / L/s	410 / 194	410 / 194	450 / 212	
	FAN MOTOR		6 POLES x 16W	6 POLES x 18W	6 POLES x 22W	
	RATED INPUT POWER	W	56	60	68	
	RATED RUNNING CURRENT	A	0.24	0.27	0.3	
COIL	TUBE MATERIAL		S.I.G.C			
	DIAMETER	mm/in	7.00 / 0.28			
	THICKNESS	mm/in	0.28 / 0.011			
	FIN MATERIAL		ALUMINIUM (HYDROPHILLIC)			
	THICKNESS	mm/in	0.11 / 0.0043			
	ROW		1	2		
INDOOR UNIT	FIN PER INCH		16	20		
	FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.318 / 3.42			
	DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	250 (295) / 9.8 (11.6)		
		WIDTH	mm/in	570 (640) / 22.4 (25.2)		
		DEPTH	mm/in	570 (640) / 22.4 (25.2)		
	WEIGHT ( UNIT + PANEL)	kg/lb	22 + 2 / 49 + 4.4	23 + 2 / 51 + 4.4		
	SOUND PRESSURE LEVEL	dBA	43	45	46	
	CONTROL	ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT		
		AIR DISCHARGE OPERATION		4 WAY AUTOMATIC LOUVER ( UP & DOWN ) WIRELESS OR LED WIRED MICROCOMPUTER REMOTE CONTROL		
	CONDENSATE DRAIN SIZE	mm/in	19.05 / 3/4			
AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)				
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm(in)	317 (127) / 12.5 (5)			
	WIDTH	mm(in)	630 (700) / 24.8 (27.6)			
	DEPTH	mm(in)	630 (700) / 24.8 (27.6)			
OUTDOOR UNIT	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
	COMPRESSOR TYPE		ROTARY HERMETIC			
	CAPACITOR	µF	30	30	35	
	LOCK ROTOR AMP.	A	20	32	58	
	RATED RUNNING CURRENT (COOLING)	A	3.6	5.7	10.1	
	RATED RUNNING CURRENT (HEATING)	A	3.2	4.7	9.2	
	RATED INPUT POWER (COOLING)	W	827	1320	2163	
	RATED INPUT POWER (HEATING)	W	727	1039	2028	
	PROTECTION DEVICE		OVERLOAD PROTECTION			
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50			
	FAN TYPE / DRIVE		PROPELLER / DIRECT			
	FAN	BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN		
DIAMETER		mm/in	355 / 14	406 / 16		
RATED RUNNING CURRENT		A	0.21	0.28	0.41	
MOTOR OUTPUT		W	20	25	55	
RATED INPUT POWER	W	50	62	93		
COIL	TUBE MATERIAL		S.I.G.C		S.B.C	
	DIAMETER	mm/in	9.52 / 3/8			
	THICKNESS	mm/in	0.33 / 0.013	0.35 / 0.014		
	FIN MATERIAL		ALUMINIUM (SLIT)			
	THICKNESS	mm/in	0.127 / 0.005			
	ROW		1	2		
FIN PER INCH		19	14			
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.32 / 3.5	0.51 / 5.53			
DIMENSION	HEIGHT	mm/in	494 / 19.4	646 / 25.4		
	WIDTH	mm/in	740 / 29.1	840 / 33.1		
	DEPTH	mm/in	270 / 10.6	330 / 13.0		
WEIGHT	kg/lb	31 / 68	34 / 75	57 / 126		
SOUND PRESSURE LEVEL	dBA	48	49	52		
CASING	MATERIAL		GALVANISED MILD STEEL			
	THICKNESS	mm/in	0.8 / 0.031			
	FINISHING		POLYESTER POWDER			
PIPE	TYPE		FLARE VALVE			
	SIZE		6.35 / 1/4			
PACKING DIMENSION	LIQUID	mm/in	6.35 / 1/4			
	GAS	mm/in	9.52 / 3/8	12.70 / 1/2	15.55 / 5/8	
	HEIGHT	mm/in	588 / 22.0	710 / 28.0		
	WIDTH	mm/in	851 / 33.5	957 / 37.7		
DEPTH	mm/in	401 / 15.8	461 / 18.1			
REFRIGERANT CHARGE	kg/lb	0.85 / 1.87	0.85 / 1.87	1.70 / 3.75		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994(E)

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Cooling Only - R410A)

MODEL		INDOOR UNIT		M5CK 010C		M5CK 015C		
		OUTDOOR UNIT		M5LC 010C		M5LC 015C		
NOMINAL COOLING CAPACITY		W		2782		3661		
		Btu/h		9500		12500		
NOMINAL TOTAL POWER		W		900		1300		
NOMINAL TOTAL CURRENT		A		4.0		5.8		
POWER SOURCE		V/Ph/Hz		230 / 1 / 50				
REFRIGERANT / CONTROL		R410A / CAPILLARY TUBE (OUTDOOR)						
FAN	AIR FLOW		cfm / L/s		400 / 189		410 / 194	
	FAN MOTOR		6 POLES x 16W				6 POLES x 18W	
	RATED INPUT POWER (W)		W		54		60	
	RATED RUNNING CURRENT (A)		A		0.23		0.27	
	MATERIAL		S.I.G.C					
COIL	DIAMETER		mm/in		7.00 / 0.28			
	THICKNESS		mm/in		0.28 / 0.011			
	MATERIAL		ALUMINIUM (HYDROPHILLIC)					
	THICKNESS		mm/in		0.11 / 0.0043			
	ROW				1		2	
FIN PER INCH				16		20		
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>		0.3 / 3.23		0.318 / 3.42		
DIMENSION ( ) - WITH PANEL		HEIGHT		mm/in		250 (295) / 9.8 (11.6)		
		WIDTH		mm/in		570 (640) / 22.4 (25.2)		
		DEPTH		mm/in		570 (640) / 22.4 (25.2)		
WEIGHT (UNIT + PANEL)		kg/lb		22 + 2 / 48.5 + 4.4		23 + 2 / 50.7 + 4.4		
SOUND PRESSURE LEVEL (H / M / L)		dBa		44 / 43 / 42		44 / 42 / 41		
CONTROL		ROOM TEMPERATURE		MICROCOMPUTER CONTROLLED THERMOSTAT				
		AIR DISCHARGE		4 WAY AUTOMATIC LOUVER ( UP & DOWN )				
		OPERATION		WIRELESS OR LED WIRED MICROCOMPUTER REMOTE CONTROL				
CONDENSATE DRAIN SIZE		mm/in		19.05 / 3/4				
AIR FILTER		WASHABLE SARANET (OPTIONAL IONIZER FILTER)						
PACKING DIMENSION ( ) - PANEL		HEIGHT		mm/in		317 (127) / 12.5 (5)		
		WIDTH		mm/in		630 (700) / 24.8 (27.6)		
		DEPTH		mm/in		630 (700) / 24.8 (27.6)		
POWER SOURCE		V/Ph/Hz		230 / 1 / 50				
COMPRESSOR TYPE		ROTARY HERMATIC						
CAPACITOR		μF		25		30		
LOCK ROTOR AMPERE		A		19		24		
RATED RUNNING CURRENT		A		3.5		5.3		
RATED INPUT POWER		W		794		1181		
PROTECTION DEVICE		OVERLOAD PROTECTION						
FAN TYPE / DRIVE		PROPELLER / DIRECT						
BLADE MATERIAL		GLASS REINFORCED ACRYL STYRENE RESIN						
FAN	DIAMETER		mm/in		406 / 16			
	RATED RUNNING CURRENT		A		0.23		0.26	
	MOTOR OUTPUT		W		35		35	
	RATED INPUT POWER		W		52		59	
	MATERIAL		S.I.G.C					
COIL	DIAMETER		mm/in		9.52 / 3/8			
	THICKNESS		mm/in		0.33 / 0.013			
	MATERIAL		ALUMINIUM (SLIT)					
	THICKNESS		mm/in		0.11 / 0.004			
	ROW				1		18	
FIN PER INCH				18				
FACE AREA		m <sup>2</sup> /ft <sup>2</sup>		0.36 / 3.94				
DIMENSION ( ) - WITH PANEL		HEIGHT		mm/in		540 / 21.3		
		WIDTH		mm/in		700 / 27.6		
		DEPTH		mm/in		250 / 9.8		
WEIGHT		kg/lb		33 / 72.75		35 / 77.16		
SOUND PRESSURE LEVEL		dBa		46		49		
CASING		MATERIAL		EG/GI				
		THICKNESS		mm/in		0.5-2.0 / 0.02-0.08		
		FINISHING		POLYESTER POWDER				
PIPE		TYPE		FLARE VALVE				
SIZE		LIQUID		mm/in		6.35 / 1/4		
		GAS		mm/in		9.52 / 3/8		
PACKING DIMENSION		HEIGHT		mm/in		620 / 24.4		
		WIDTH		mm/in		810 / 31.9		
		DEPTH		mm/in		330 / 13.0		
REFRIGERANT CHARGE		kg/lb		0.71 / 1.57		0.94 / 2.07		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994(E)

3) NOMINAL COOLING CAPACITY IS BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

## Ceiling Cassette C Series (Heat Pump - R410A)

MODEL		INDOOR UNIT		M5CK 010CR		M5CK 015CR	
		OUTDOOR UNIT		M5LC 010CR		M5LC 015CR	
NOMINAL COOLING CAPACITY		W		2782		3661	
		Btu/h		9500		12500	
NOMINAL HEATING CAPACITY		W		2782		3368	
		Btu/h		9500		11500	
NOMINAL TOTAL POWER (COOLING)		W		900		1300	
NOMINAL TOTAL POWER (HEATING)		W		830		1020	
NOMINAL TOTAL CURRENT (COOLING)		A		4.0		5.9	
NOMINAL TOTAL CURRENT (HEATING)		A		3.7		4.6	
POWER SOURCE		V/Ph/Hz		230 / 1 / 50			
REFRIGERANT / CONTROL		R410A / CAPILLARY TUBE (OUTDOOR)					
FAN	AIR FLOW	cfm / L/s		400 / 189		410 / 194	
	FAN MOTOR			6 POLES x 16W		6 POLES x 18W	
	RATED INPUT POWER	W		54		60	
	RATED RUNNING CURRENT	A		0.23		0.27	
COIL	TUBE	MATERIAL		S.I.G.C			
		DIAMETER	mm/in	7.00 / 0.28			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILLIC)			
		THICKNESS	mm/in	0.11 / 0.004			
		ROW		1		2	
FIN PER INCH		16		20			
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.3 / 3.23		0.318 / 3.42		
DIMENSION ( ) - WITH PANEL	HEIGHT	mm/in	250 (295) / 9.8 (11.6)				
	WIDTH	mm/in	570 (640) / 22.4 (25.2)				
	DEPTH	mm/in	570 (640) / 22.4 (25.2)				
WEIGHT (UNIT + PANEL)	kg/lb		22 + 2 / 48.5 + 4.4		23 + 2 / 50.7 + 4.4		
SOUND PRESSURE LEVEL ( H / M / L )	dBA		44 / 43 / 42		44 / 42 / 41		
CONTROL	ROOM TEMPERATURE	MICROCOMPUTER CONTROLLED THERMOSTAT					
	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER ( UP & DOWN )					
		WIRELESS OR LED WIRED MICROCOMPUTER REMOTE CONTROL					
CONDENSATE DRAIN SIZE	mm/in		19.05 / 3/4				
AIR FILTER	WASHABLE SARANET (OPTIONAL IONIZER FILTER)						
PACKING DIMENSION ( ) - PANEL	HEIGHT	mm/in	317 (127) / 12.5 (5)				
	WIDTH	mm/in	630 (700) / 24.8 (27.6)				
	DEPTH	mm/in	630 (700) / 24.8 (27.6)				
COMPRESSOR	POWER SOURCE	V/Ph/Hz		230 / 1 / 50			
	COMPRESSOR TYPE	ROTARY HERMATIC					
	CAPACITOR	μF		25		30	
	LOCK ROTOR AMPERE	A		19		24	
	RATED RUNNING CURRENT (COOLING)	A		3.5		5.4	
	RATED RUNNING CURRENT (HEATING)	A		3.2		4.1	
	RATED INPUT POWER (COOLING)	W		794		1181	
	RATED INPUT POWER (HEATING)	W		724		901	
PROTECTION DEVICE	OVERLOAD PROTECTION						
FAN TYPE / DRIVE	PROPELLER / DIRECT						
BLADE MATERIAL	GLASS REINFORCED ACRYL STYRENE RESIN						
FAN	DIAMETER	mm/in	406 / 16				
	RATED RUNNING CURRENT	A	0.23		0.26		
	MOTOR OUTPUT	W	35		35		
	RATED INPUT POWER	W	52		59		
COIL	TUBE	MATERIAL		S.I.G.C			
		DIAMETER	mm/in	9.52 / 3/8			
		THICKNESS	mm/in	0.33 / 0.013			
	FIN	MATERIAL		ALUMINIUM (SLIT)			
		THICKNESS	mm/in	0.11 / 0.004			
		ROW		1			
FIN PER INCH		18					
FACE AREA	m <sup>2</sup> /ft <sup>2</sup>		0.36 / 3.94				
DIMENSION	HEIGHT	mm/in	540 / 21.3				
	WIDTH	mm/in	700 / 27.6				
	DEPTH	mm/in	250 / 9.8				
WEIGHT	kg/lb		33 / 72.75		35 / 77.16		
SOUND PRESSURE LEVEL	dBA		46		49		
CASING	MATERIAL		EG/GI				
	THICKNESS	mm/in	0.5~2.0 / 0.02~0.08				
	FINISHING		POLYESTER POWDER				
PIPE	TYPE	FLARE VALVE					
	SIZE	LIQUID	mm/in	6.35 / 1/4			
PACKING DIMENSION	GAS	HEIGHT	mm/in	9.52 / 3/8		12.70 / 1/2	
		WIDTH	mm/in	810 / 31.9			
	DEPTH	HEIGHT	mm/in	620 / 24.4			
		WIDTH	mm/in	810 / 31.9			
DEPTH	mm/in	330 / 13.0					
REFRIGERANT CHARGE	kg/lb		0.71 / 1.57		0.94 / 2.07		

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151: 1994(E)

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

b) HEATING - 20°C DB / 15°C WB INDOOR AND 7°C DB / 6°C WB OUTDOOR

### Abbreviation

S.B.C. - SEAMLESS BARE COPPER

S.I.G.C - SEAMLESS INNER GROOVE COPPER

# Noise Level

## MCK-A/AR

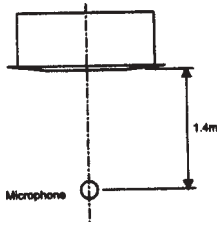
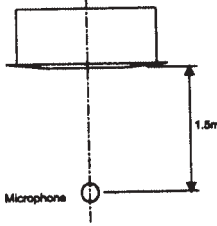
Model	Speed	1/1 Octave A-weighted Sound Pressure (dBA), ref 20mPa							Overall A(dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
MCK 020A/AR	High	46	45	40	38	32	21	14	42	37
	Medium	44	43	37	33	28	18	12	39	32
	Low	43	42	35	31	26	17	11	37	31
MCK 025A/AR	High	48	46	43	39	33	27	19	45	38
	Medium	45	43	40	35	29	21	15	42	35
	Low	43	42	38	32	27	19	14	40	33
MCK 030A/AR	High	50	48	47	43	37	35	28	49	42
	Medium	48	45	43	38	32	31	27	45	38
	Low	46	43	41	35	30	30	26	43	36
MCK 040A/AR	High	50	49	49	46	39	38	31	51	45
	Medium	48	47	47	43	36	34	25	48	42
	Low	46	45	46	41	34	30	23	46	41
MCK 050A/AR	High	54	52	51	48	43	42	34	53	47
	Medium	52	50	50	46	41	40	32	52	45
	Low	51	49	49	45	39	39	31	50	45

## MCK-B/ BR

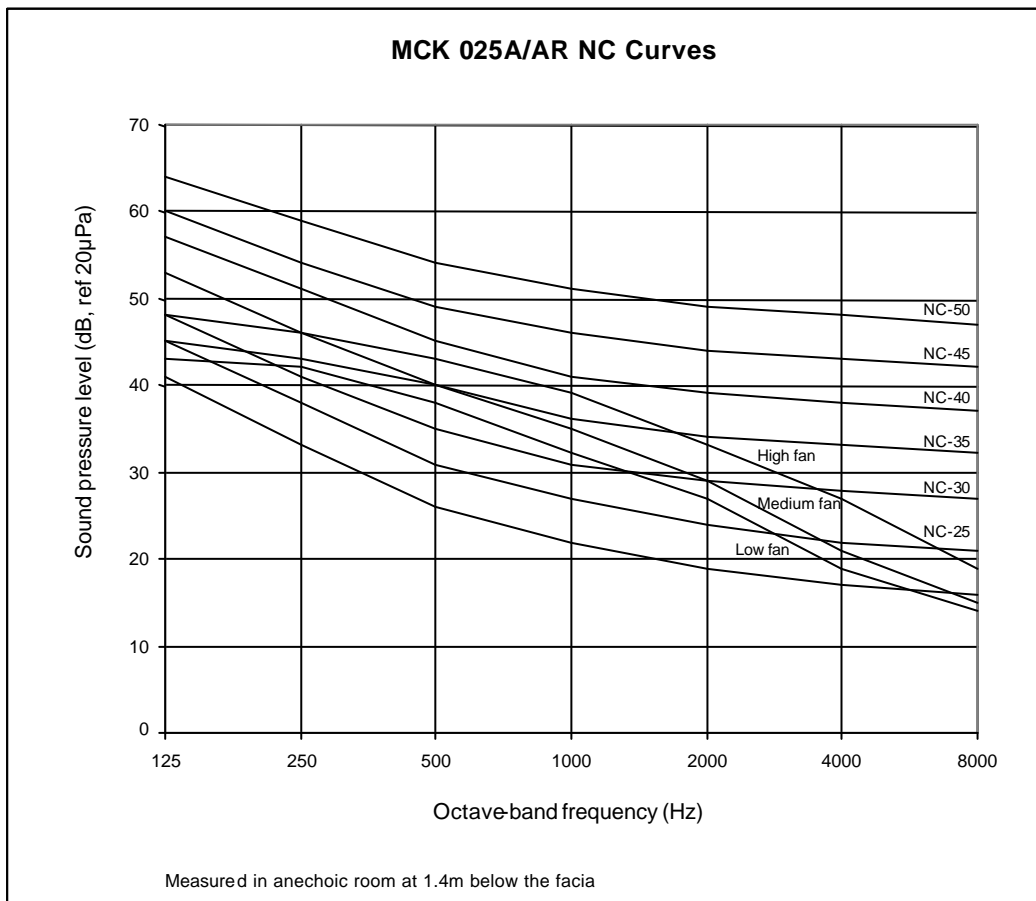
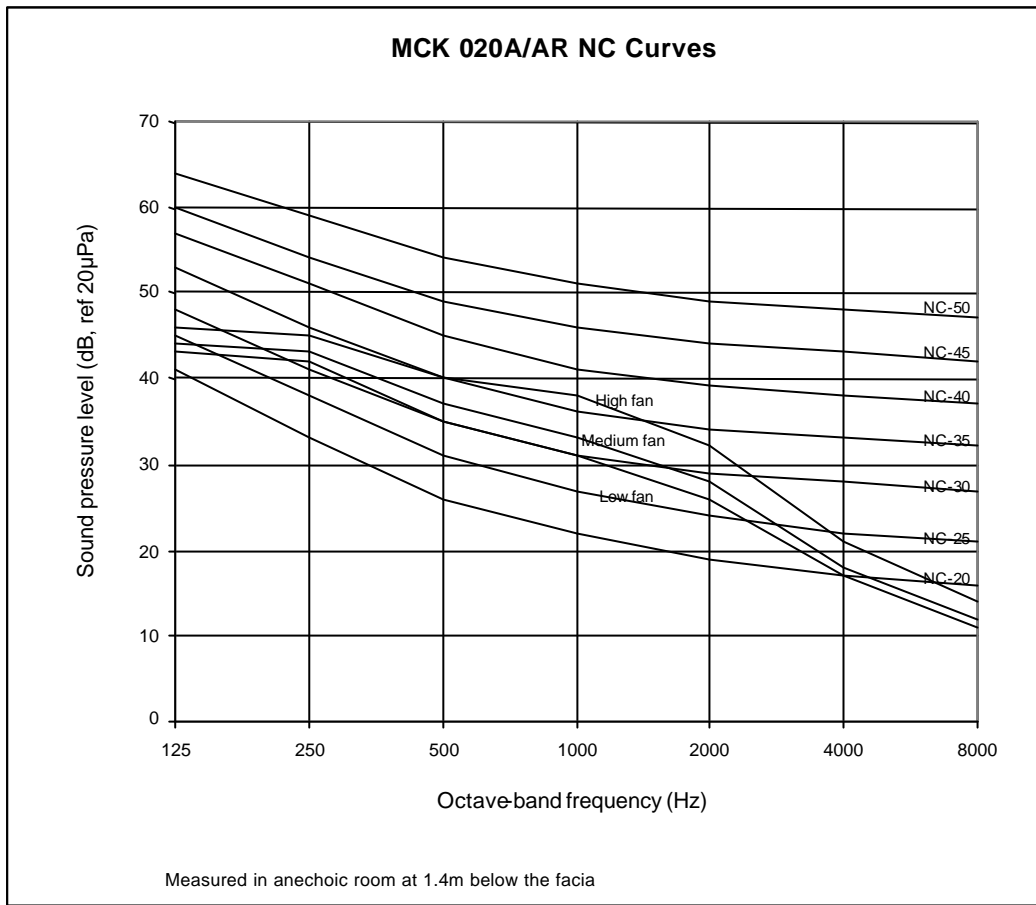
Model	Speed	1/1 Octave A-weighted Sound Pressure (dBA), ref 20mPa							Overall A(dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
MCK 015B/BR	High	41	42	42	34	30	23	13	41	37
	Medium	40	40	39	30	28	17	10	38	34
	Low	38	39	38	29	27	15	8	36	33
MCK 020B/BR	High	42	43	43	35	31	24	14	42	38
	Medium	40	42	41	34	30	23	12	40	36
	Low	39	40	38	29	28	15	9	37	33
MCK 025B/BR	High	47	45	46	38	34	28	17	45	41
	Medium	42	43	43	35	31	24	14	42	38
	Low	40	41	40	32	30	20	11	39	35

## MCK-C/CR

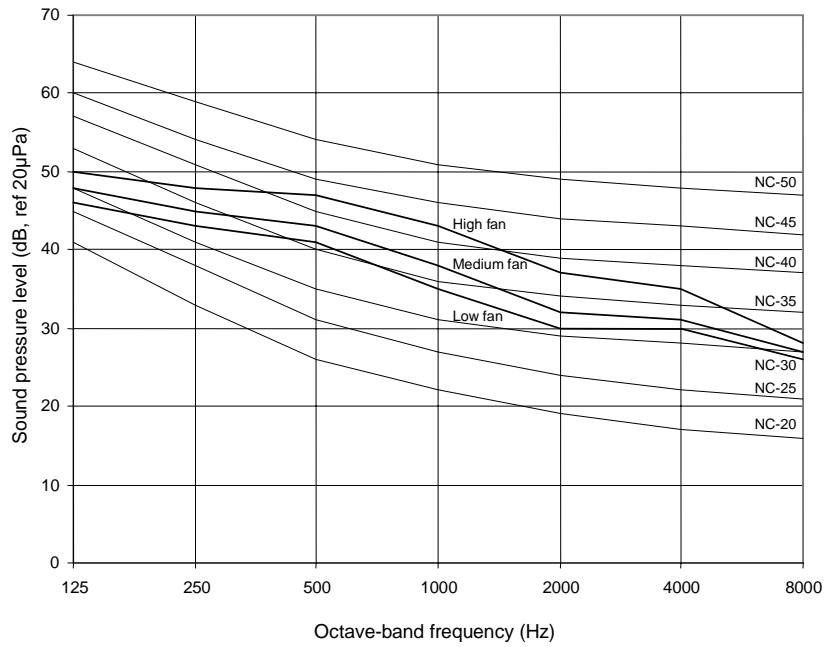
Model	Speed	1/1 Octave A-weighted Sound Pressure (dBA), ref 20mPa							Overall A(dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
MCK 010C/CR M5CK 010C/CR	High	43	46	43	40	33	30	20	44	39
	Medium	42	44	42	39	32	28	19	43	38
	Low	41	43	40	37	30	25	17	42	36
MCK 015C/CR M5CK 015C/CR	High	45	43	42	39	34	30	19	44	38
	Medium	44	42	40	38	33	28	17	42	37
	Low	43	41	39	36	31	25	16	41	35
MCK 020C/CR	High	46	46	45	42	36	38	26	47	41
	Medium	45	46	43	41	35	37	23	46	40
	Low	43	44	42	39	33	35	20	44	38

Model	Measuring location
<p>MCK 020A/AR  MCK 025A/AR  MCK 015B/BR  MCK 020B/BR  MCK 025B/BR  MCK / M5CK 010C/CR  MCK / M5CK 015C/CR  MCK 020C/CR</p>	<p>Standard : JIS C 9612</p>  <p>The diagram shows a rectangular object with a vertical dashed line through its center. A horizontal line extends from the center of the object to a microphone symbol (a circle with a vertical line through it). A vertical dimension line to the right of the microphone indicates a distance of 1.4m from the horizontal line to the microphone.</p>
<p>MCK 030A/AR  MCK 040A/AR  MCK 050A/AR</p>	<p>Standard : JIS B 8615</p>  <p>The diagram shows a rectangular object with a vertical dashed line through its center. A horizontal line extends from the center of the object to a microphone symbol (a circle with a vertical line through it). A vertical dimension line to the right of the microphone indicates a distance of 1.5m from the horizontal line to the microphone.</p>

# NC Curves

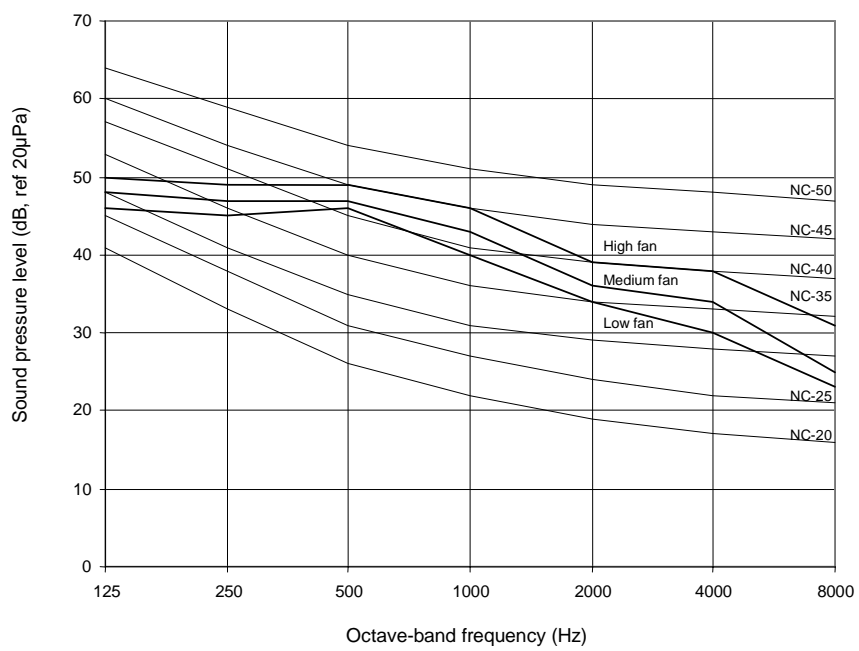


### MCK 030A/AR NC Curves



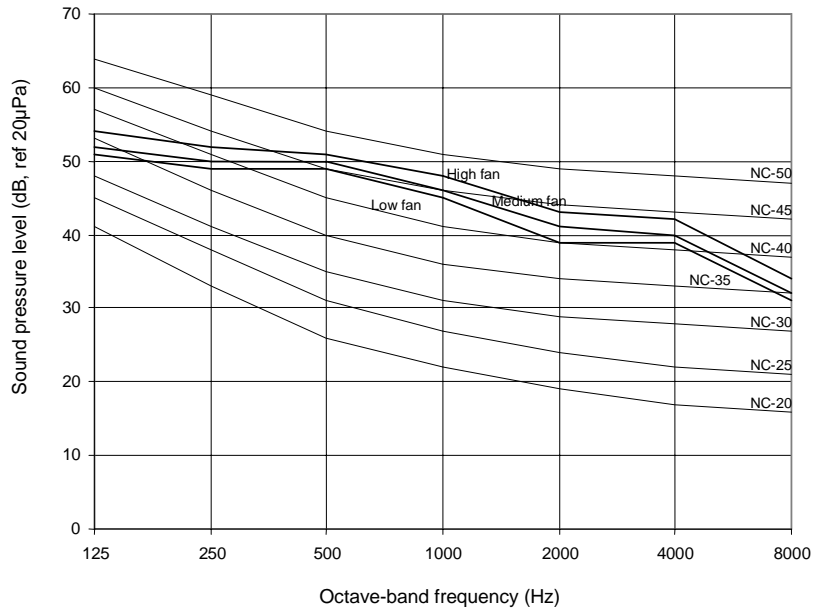
Measured in anechoic room at 1.5m below the fascia

### MCK 040A/AR NC Curves



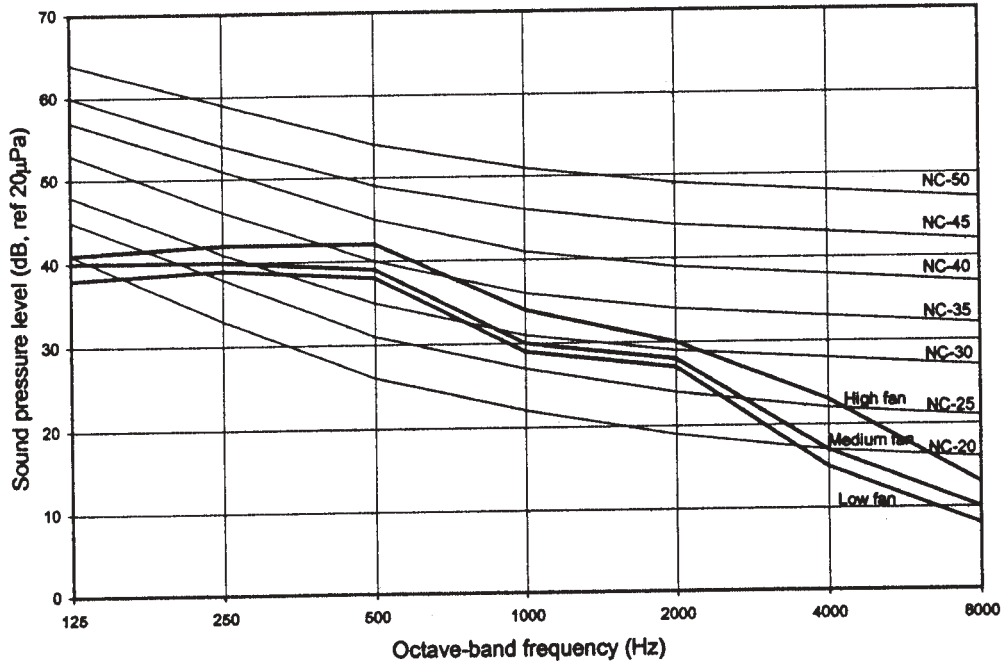
Measured in anechoic room at 1.5m below the fascia

### MCK 050A/AR NC Curves



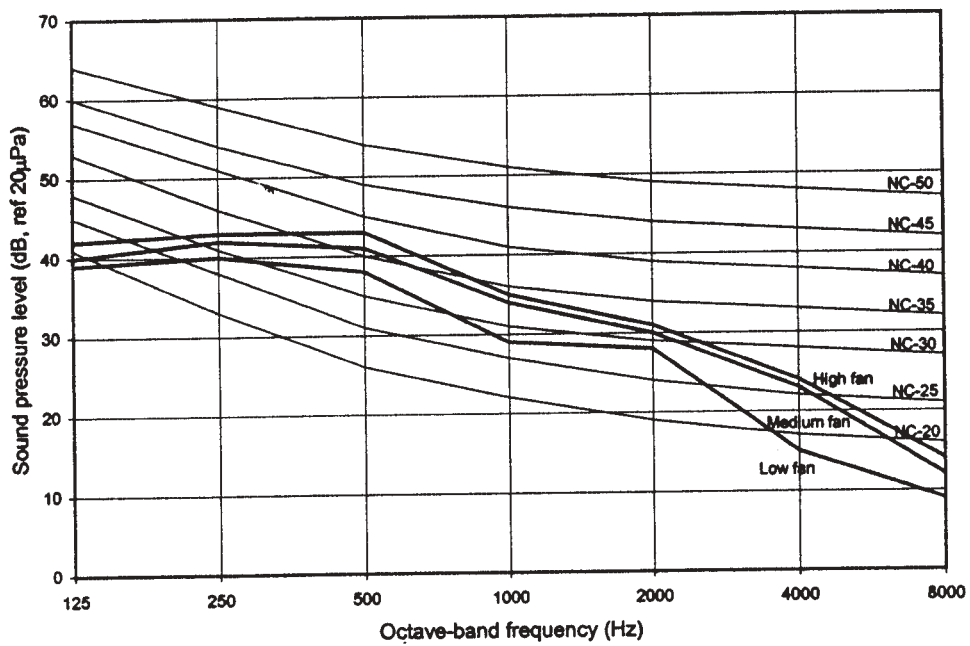
Measured in anechoic room at 1.5m below the fascia

MCK 015B/BR NC Curves



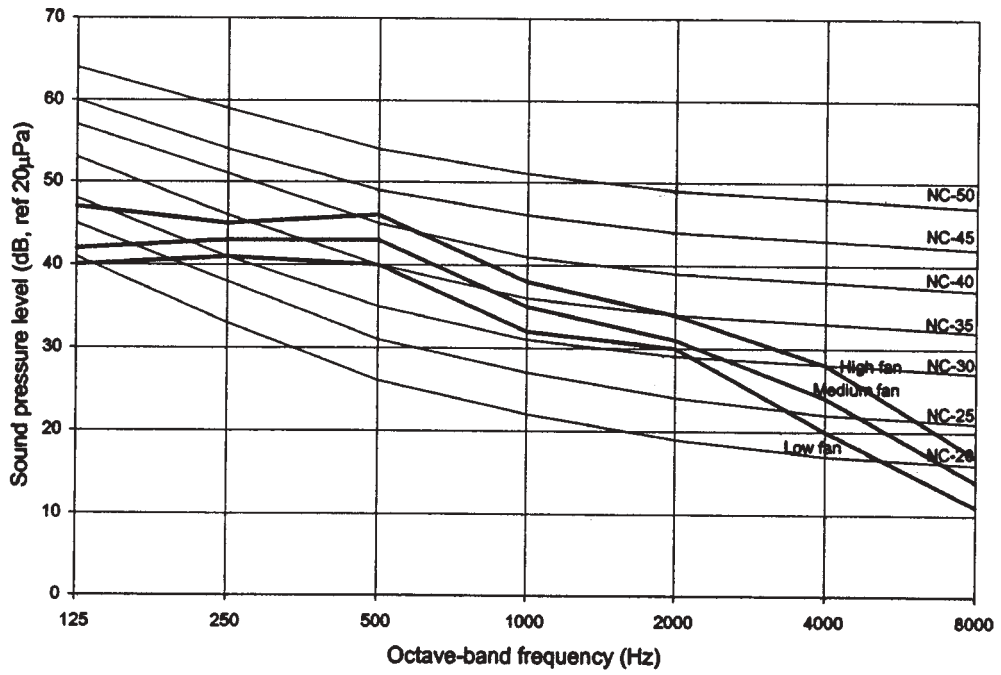
Measured in anechoic room at 1.4m below the fascia

MCK 020B/BR NC Curves



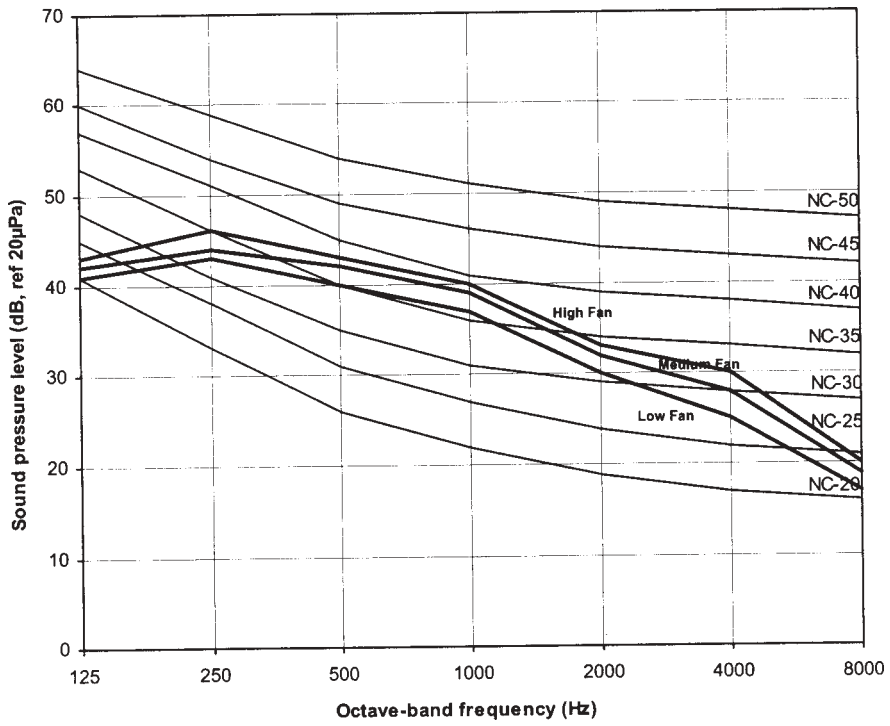
Measured in anechoic room at 1.4m below the fascia

### MCK 025B/BR NC Curves

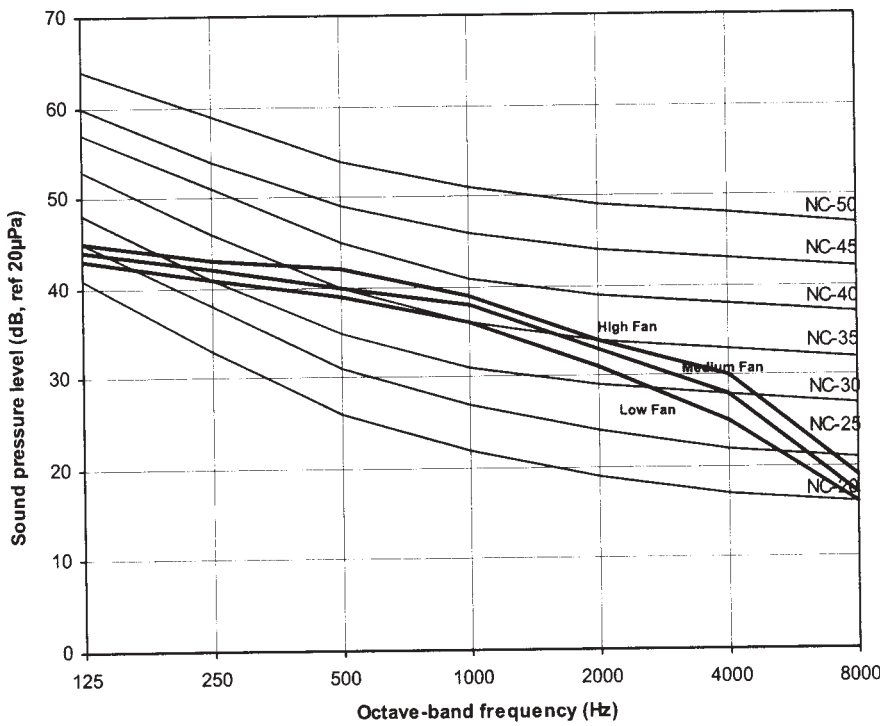


Measured in anechoic room at 1.4m below the fan

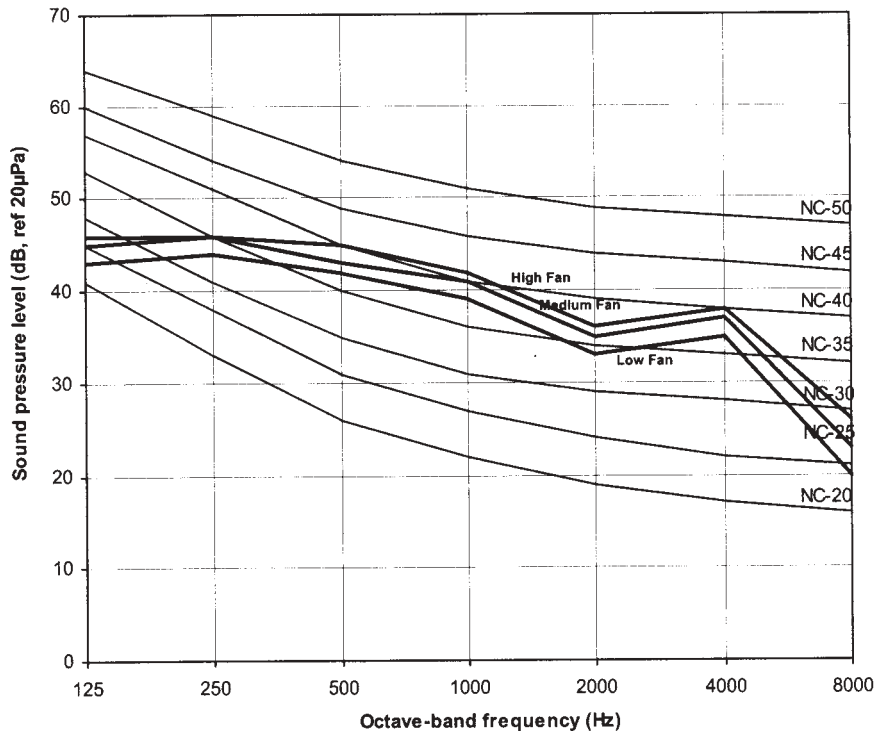
### MCK 010C/CR NC Curves



### MCK 015C/CR NC Curves



### MCK 020C/CR NC Curves

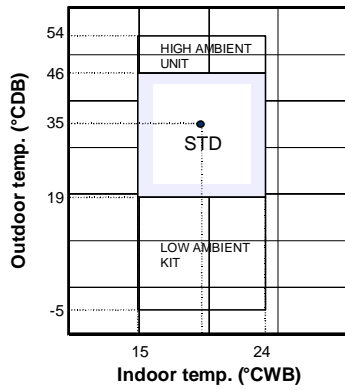


# Operating Range

Ensure the operating temperature is in allowable range.

## Cooling only

### Cooling

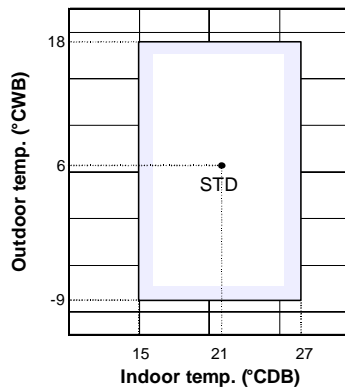


**!** **Caution :**

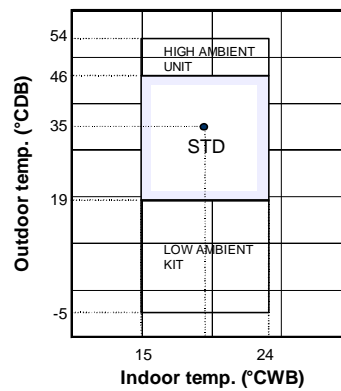
The use of your air conditioner outside the range of working temperature and humidity can result in serious failure.

## Heat pump

### Heating



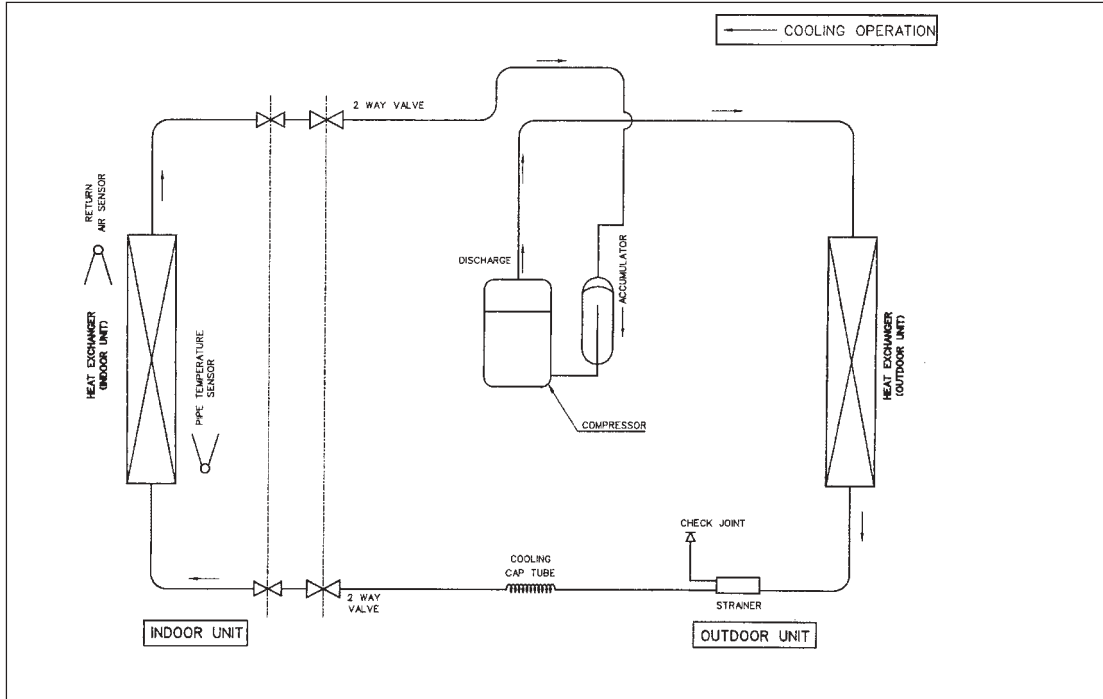
### Cooling



# Refrigerant Circuit

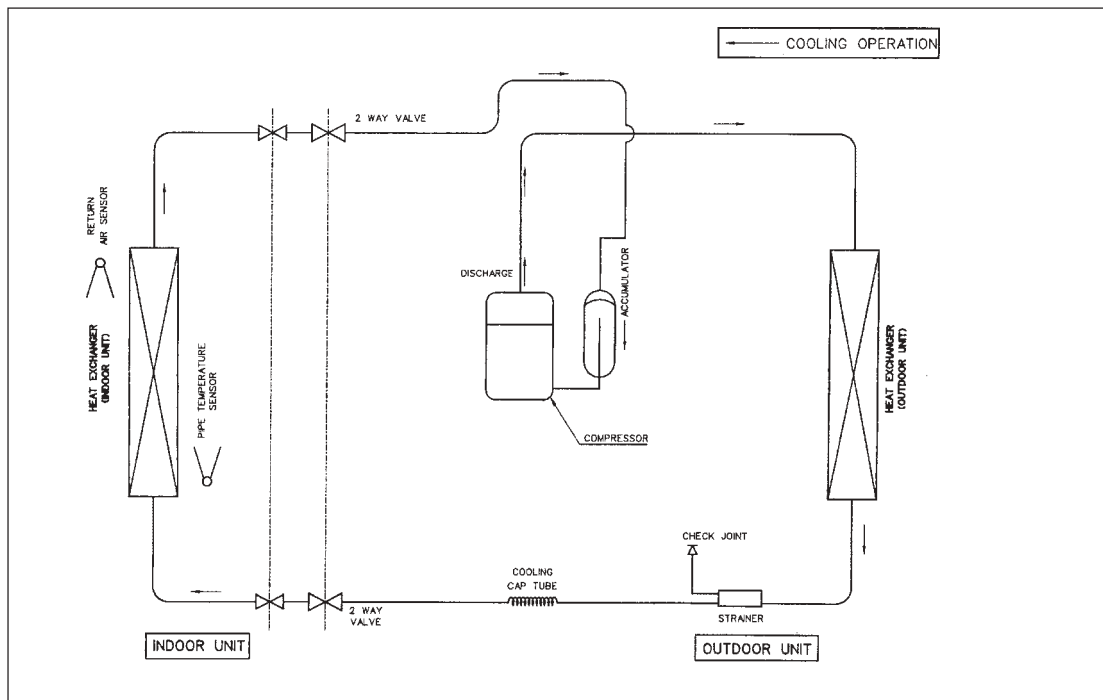
**Model : MCK 015B – MLC 015C**  
**MCK 015B – M4LC 015B**  
**MCK 020A - MLC/M4LC 020B**  
**MCK 020B – MLC/M4LC 020B**

**MCK/M5CK 010/015C - MLC/M5LC 010/015C**  
**MCK 010/ 015C - M4LC 010/ 015B**  
**MCK 020C – MLC/M4LC 020B**

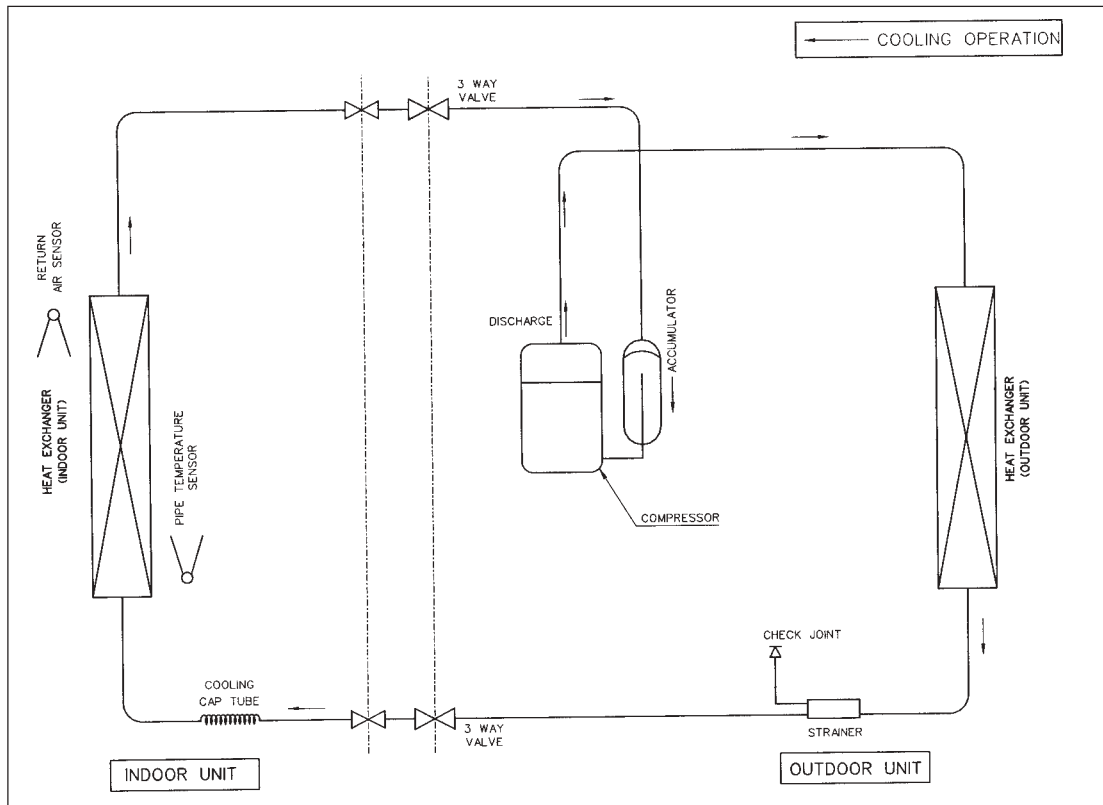


**Model : MCK 025A - MLC/ M4LC 025B**

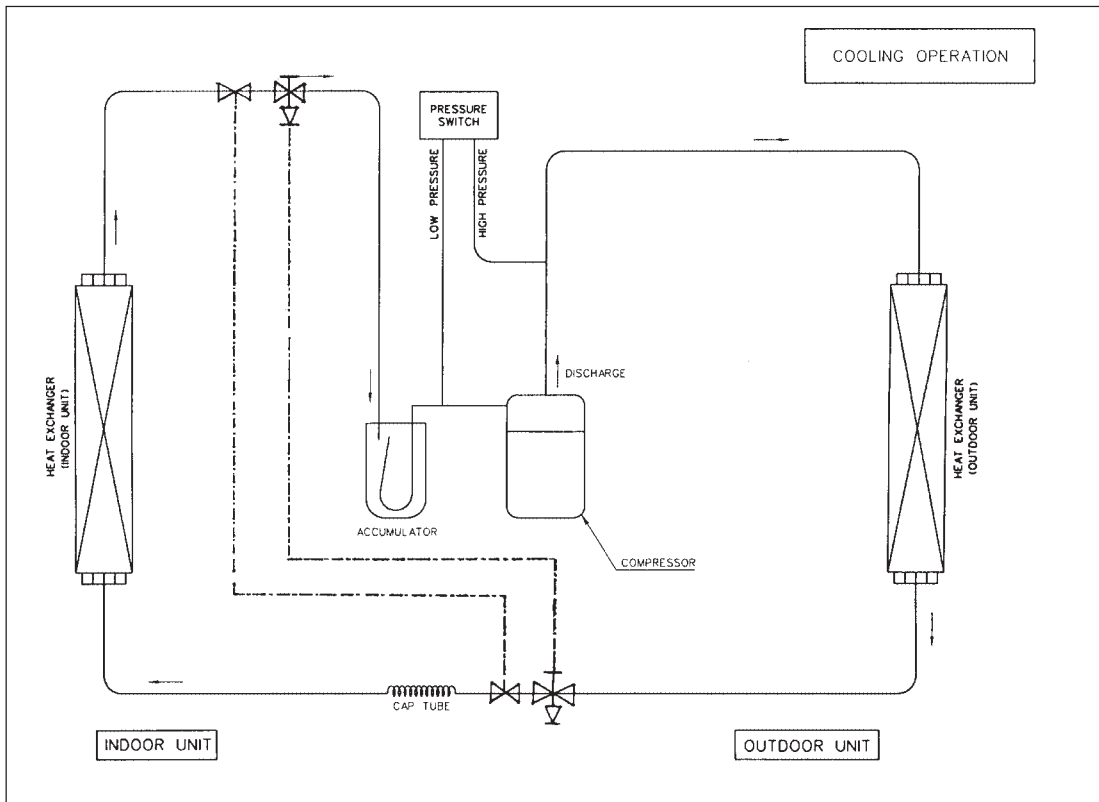
**MCK 025B - MLC/M4LC 025B**



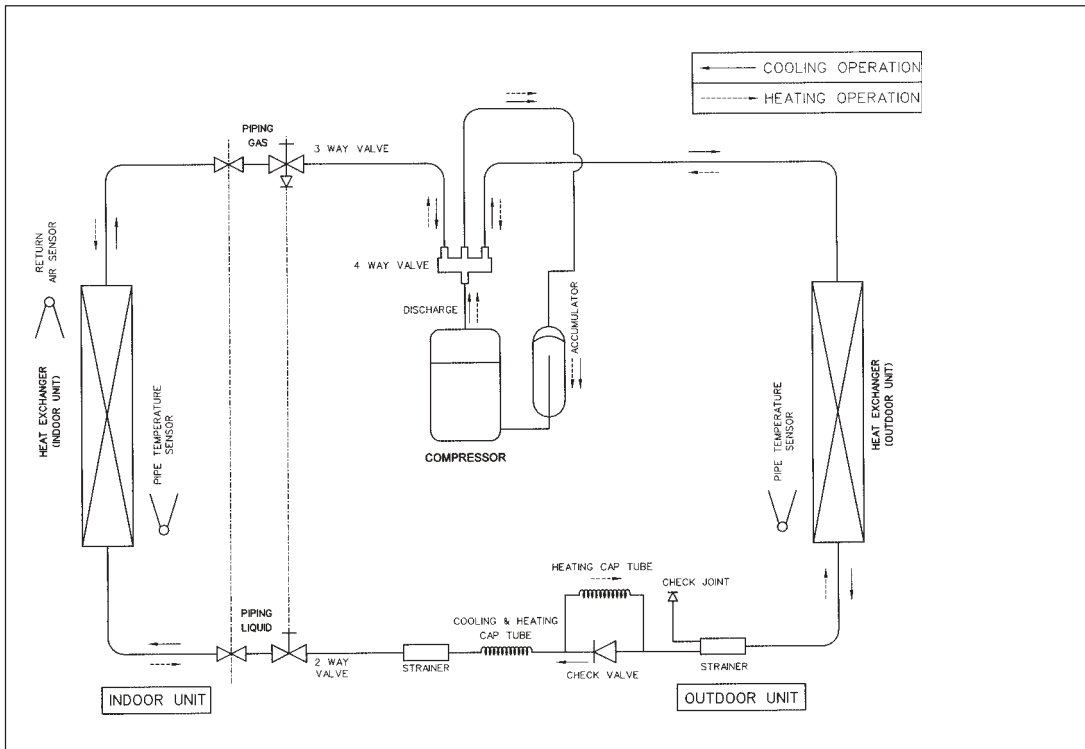
**Model : MCK 030A – MLC 030B**



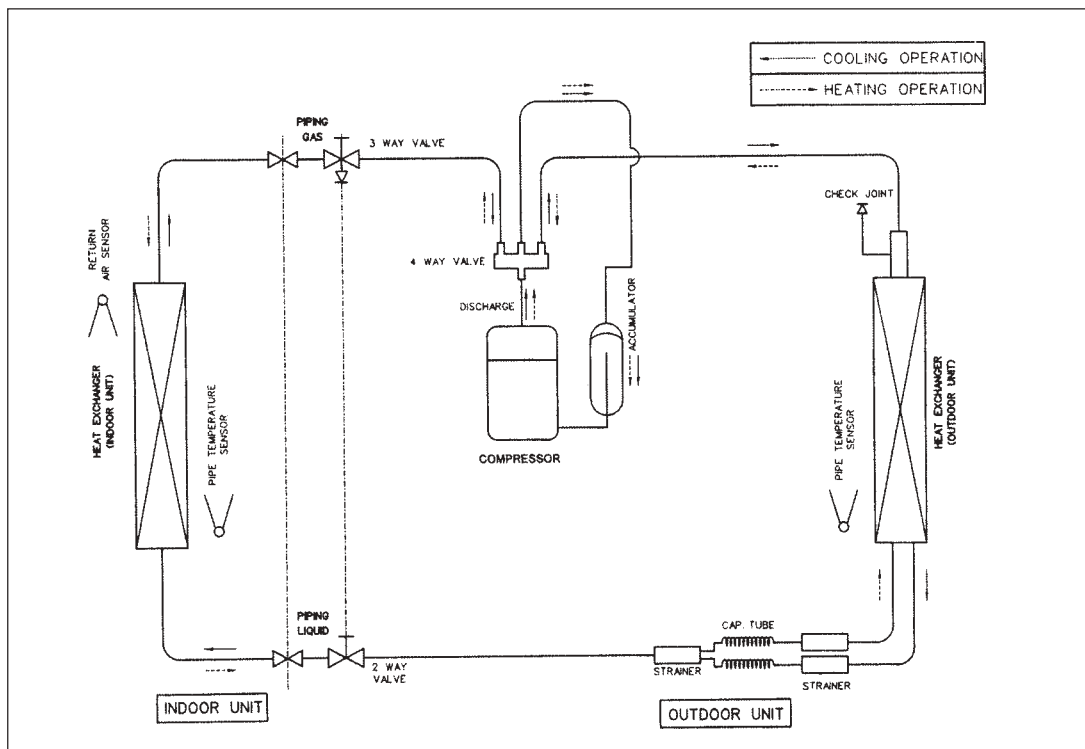
- Model : MCK 030A – MLC/M4LC 030C**
- MCK 040A – MLC/M4LC 035C**
- MCK 040A – MLC/M4LC 040C**
- MCK 050A – MLC/M4LC 050C**



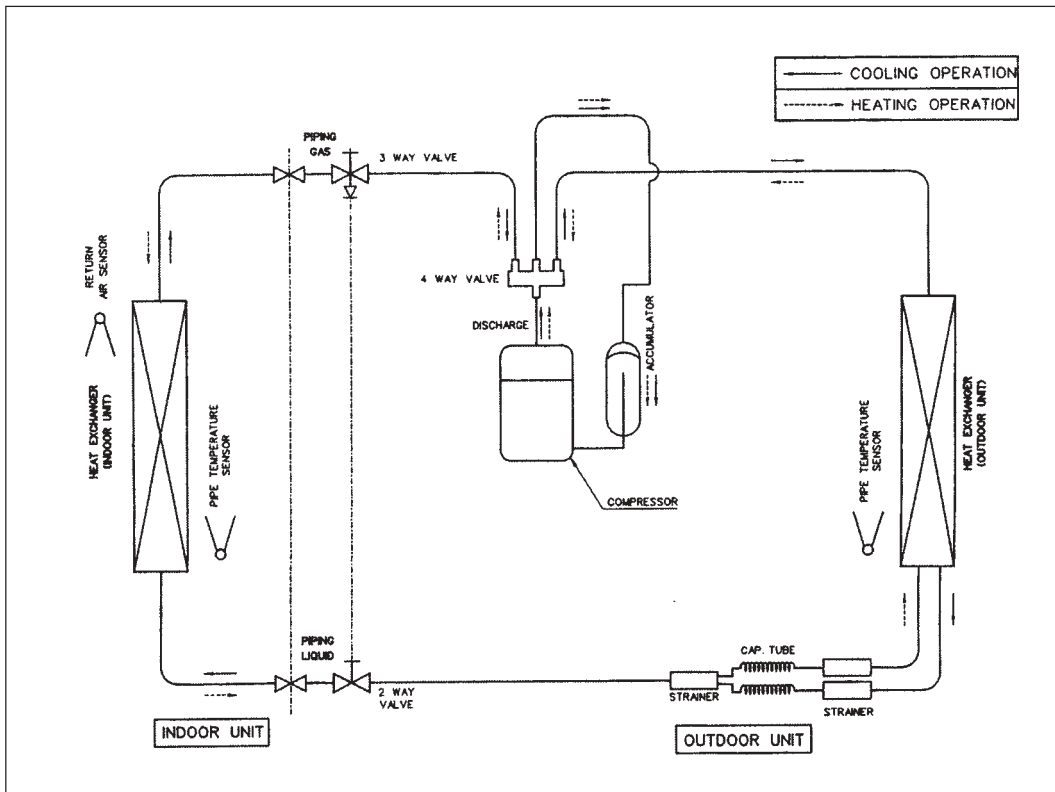
**Model : MCK/M5CK 010CR - MLC/M5LC 010CR  
MCK 010CR - M4LC 010BR**



**Model : MCK 015BR - MLC 015CR  
MCK/M5CK 015CR - MLC/M5LC 015CR**

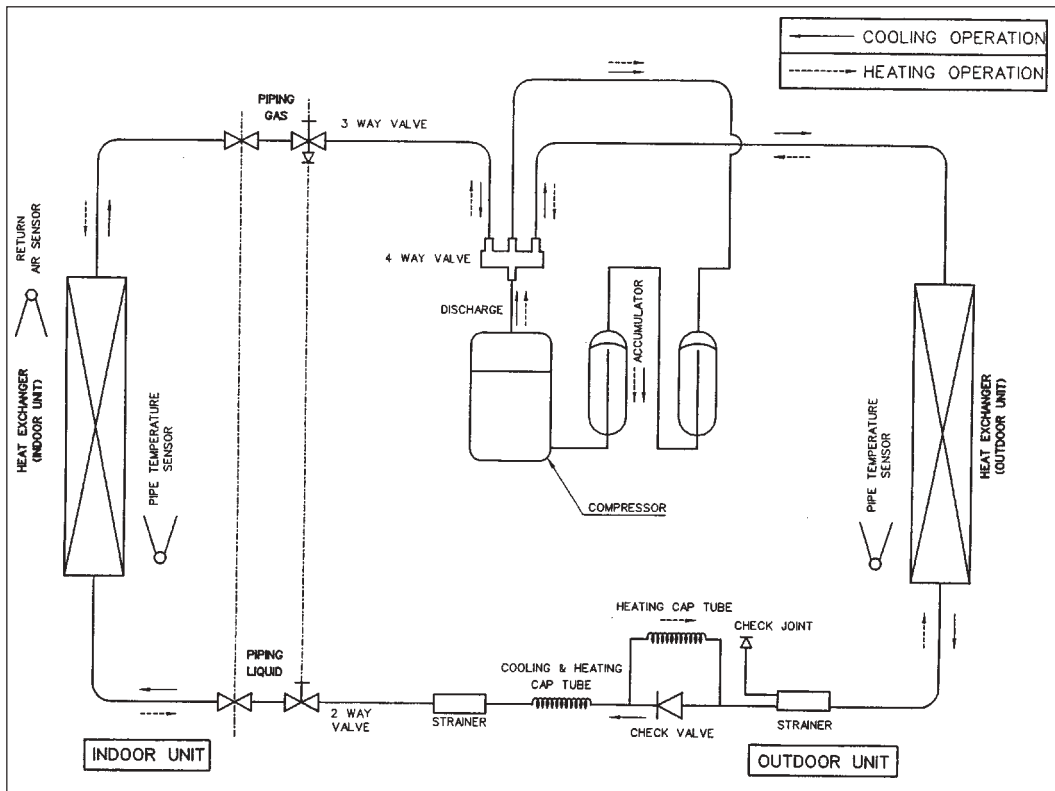


**Model : MCK 015BR - M4LC 015BR  
MCK 015CR - M4LC 015BR**



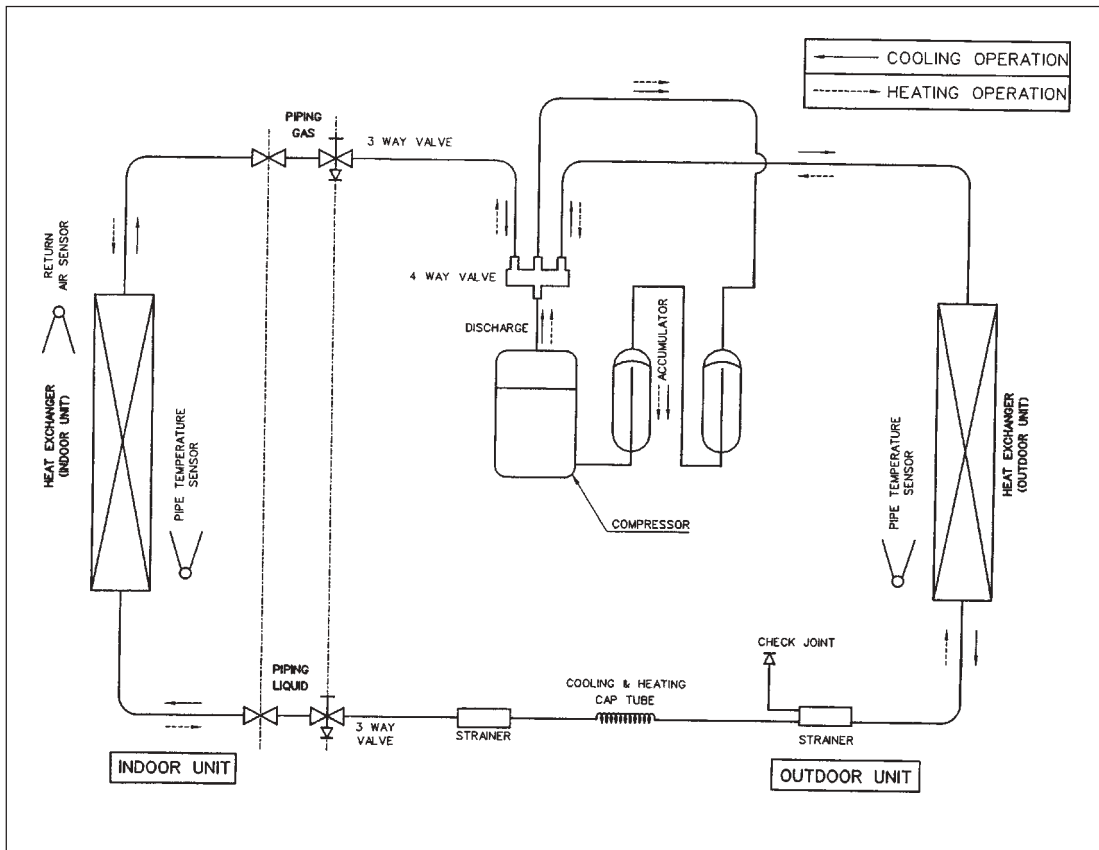
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MCK 020BR – MLC/M4LC 020BR**

**MCK 020CR – MLC/M4LC 020BR**

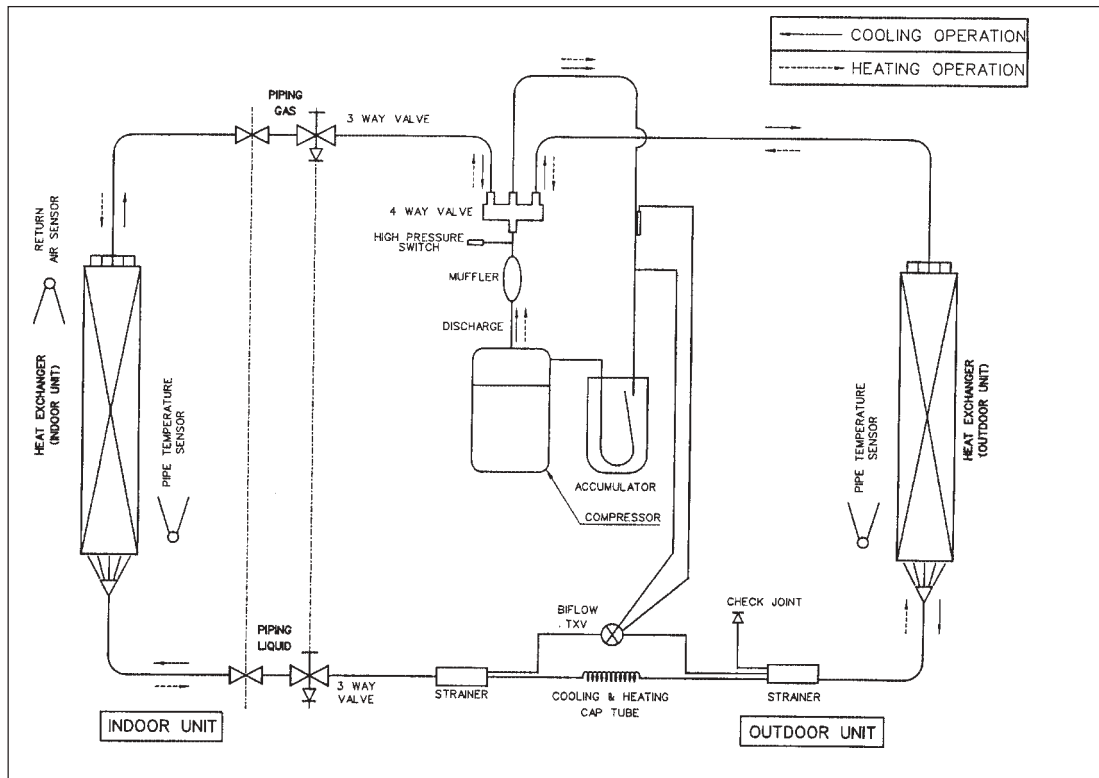


**Model : MCK 025AR – MLC/M4LC 025BR  
MCK 030AR – MLC 030BR**

**MCK 025BR – MLC/M4LC 025BR**



**Model : MCK 030AR – MLC/M4LC 030CR  
MCK 040AR – MLC/M4LC 035CR  
MCK 040AR – MLC/M4LC 040CR  
MCK 050AR – MLC/M4LC 050CR**



# Performance Table

*Interpolation and Extrapolation* method can be used to get the total capacity, TC and sensible capacity, SC at those temperatures which are not stated out in the table.

**Example:**

**Model:** MCK 0 20A / MLC 0 20B  
**Indoor Condition:** 23°C DB, 15°C WB  
**Outdoor Condition:** 37°C DB

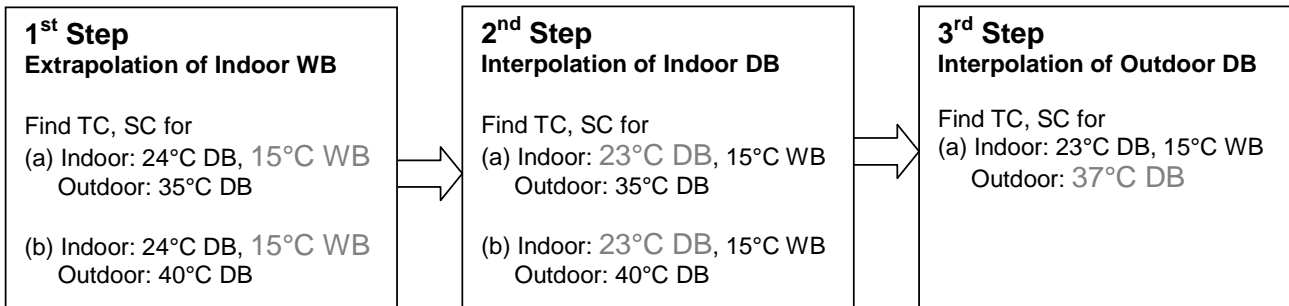
**Solution:**

**Overall**

Based on the Performance table on Pg.(39),

1. Refer to the Indoor DB column,
  - **23°C** is located between 20°C and 24°C (Thus, Interpolation need to be applied)
2. Refer to the Indoor WB column,
  - **15°C** only available in the case of Indoor DB = 20°C. (Thus, Extrapolation between 16°C WB and 17°C WB during 24°C indoor DB is required)
3. Refer to the Outdoor DB column,
  - **37°C** is located between 35°C and 40°C. (Thus, Interpolation need to be applied)

Please follow the steps below in order to get the required capacity.



**Details:**

**1<sup>st</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition: 24°C DB, 15°C WB**  
**Outdoor Condition: 35°C DB**

Indoor DB °C	Indoor WB °C	Outdoor DB, °C		
		35		
			TC (kW)	SC (kW)
			↓	↓
24	15	-----	$x_1$	$y_1$
	16		5.597	4.008
	17		5.761	3.873

Total capacity, TC

=> = 5.433kW (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 35°C Outdoor WB)\*

Sensible capacity, SC

Extrapolation Method:

$$\Rightarrow \frac{17^\circ\text{C} - 15^\circ\text{C}}{17^\circ\text{C} - 15^\circ\text{C}} = \frac{3.873\text{kW} - y_1}{3.873\text{kW} - 4.008\text{kW}}$$

=>  $y_1 = 4.143\text{kW}$

**(b) Indoor Condition: 24°C DB, 15°C WB**  
**Outdoor Condition: 40°C DB**

Indoor DB °C	Indoor WB °C	Outdoor DB, °C		
		40		
			TC (kW)	SC (kW)
			↓	↓
24	15	-----	$x_2$	$y_2$
	16		5.066	3.536
	17		5.214	3.414

Total capacity, TC

=> = 4.918kW (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 40°C Outdoor WB)\*

Sensible capacity, SC

Extrapolation Method:

$$\Rightarrow \frac{17^\circ\text{C} - 15^\circ\text{C}}{17^\circ\text{C} - 16^\circ\text{C}} = \frac{3.414\text{kW} - y_2}{3.414\text{kW} - 3.536\text{kW}}$$

=>  $y_2 = 3.658\text{kW}$

\* This is due to 2 different conditions with same WB temperature, will have the same level of enthalpy. For more details, please refer to psychrometrics chart

**2<sup>nd</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition: 23°C DB, 15°C WB**

**Outdoor Condition: 35°C DB**

Indoor DB °C	Indoor WB °C	Outdoor DB, °C	
		35	
		TC (kW)	SC (kW)
20	15	5.433	2.72
23	15	x <sub>3</sub>	y <sub>3</sub>
24	15	5.433	4.143

Total capacity, TC

=> = 5.433kW (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 35°C Outdoor WB)\*

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{24^\circ\text{C} - 20^\circ\text{C}}{24^\circ\text{C} - 23^\circ\text{C}} = \frac{4.143\text{kW} - 2.72\text{kW}}{4.143\text{kW} - y_3}$$

=> y<sub>3</sub> = 3.787kW

**(b) Indoor Condition: 23°C DB, 15°C WB**

**Outdoor Condition: 40°C DB**

Indoor DB °C	Indoor WB °C	Outdoor DB, °C	
		40	
		TC (kW)	SC (kW)
20	15	4.918	2.235
23	15	x <sub>4</sub>	y <sub>4</sub>
24	15	4.918	3.658

Total capacity, TC

=> x<sub>4</sub> = 4.918kW (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 40°C Outdoor WB)\*

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{24^\circ\text{C} - 20^\circ\text{C}}{24^\circ\text{C} - 23^\circ\text{C}} = \frac{3.685\text{kW} - 2.235\text{kW}}{3.685\text{kW} - y_1}$$

=> y<sub>4</sub> = 3.302kW

\* This is due to 2 different conditions with same WB temperature will have the same level of enthalpy. For more details, please refer to psychrometrics chart

**3<sup>rd</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition:** 23°C DB, 15°C WB

**Outdoor Condition:** 37°C DB

Indoor DB °C	Indoor WB °C	Outdoor DB, °C					
		35		37		40	
		TC (kW)	SC (kW)	TC (kW)	SC (kW)	TC (kW)	SC (kW)
23	15	5.433	3.787	x	y	4.918	3.302

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{40^{\circ}\text{C} - 35^{\circ}\text{C}}{40^{\circ}\text{C} - 37^{\circ}\text{C}} = \frac{4.918\text{kW} - 5.433\text{kW}}{4.918\text{kW} - x}$$

$$\Rightarrow x = 5.227\text{kW}$$

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{40^{\circ}\text{C} - 35^{\circ}\text{C}}{40^{\circ}\text{C} - 37^{\circ}\text{C}} = \frac{3.302\text{kW} - 3.787\text{kW}}{3.302\text{kW} - y}$$

$$\Rightarrow y = 3.593\text{kW}$$

## A Series (Cooling Only – R22)

### Model : MCK 020A / MLC 020B

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.523	3.826	6.160	3.457	5.797	3.088	5.433	2.720	4.918	2.235	4.561	1.900	4.388	1.738	4.268	1.625
	16	6.582	3.602	6.254	3.263	5.926	2.923	5.597	2.584	5.066	2.113	4.699	1.787	4.521	1.629	4.397	1.519
24	16	6.582	5.025	6.254	4.686	5.926	4.347	5.597	4.008	5.066	3.536	4.699	3.210	4.521	3.052	4.397	2.942
	17	6.642	4.801	6.348	4.492	6.055	4.182	5.761	3.873	5.214	3.414	4.836	3.097	4.653	2.943	4.526	2.836
	18	6.701	4.577	6.442	4.297	6.184	4.017	5.925	3.738	5.363	3.292	4.974	2.983	4.786	2.834	4.654	2.730
	19	6.760	4.352	6.537	4.102	6.313	3.852	6.089	3.602	5.511	3.169	5.111	2.870	4.918	2.725	4.783	2.624
	20	6.818	4.126	6.609	3.891	6.401	3.655	6.193	3.420	5.605	3.004	5.199	2.717	5.002	2.577	4.865	2.480
28	18	6.701	6.000	6.442	5.721	6.184	5.441	5.925	5.161	5.363	4.715	4.974	4.407	4.786	4.258	4.654	4.153
	19	6.760	5.776	6.537	5.526	6.313	5.276	6.089	5.026	5.511	4.593	5.111	4.293	4.918	4.148	4.783	4.047
	20	6.818	5.550	6.609	5.315	6.401	5.079	6.193	4.844	5.605	4.428	5.199	4.140	5.002	4.001	4.865	3.904
	21	6.873	5.323	6.668	5.092	6.462	4.861	6.257	4.630	5.663	4.234	5.252	3.961	5.053	3.829	4.915	3.736
	22	6.929	5.095	6.726	4.869	6.523	4.643	6.320	4.416	5.720	4.041	5.305	3.781	5.105	3.656	4.965	3.568
	23	6.984	4.868	6.784	4.646	6.584	4.424	6.384	4.203	5.778	3.848	5.359	3.602	5.156	3.483	5.015	3.400
	24	7.040	4.641	6.842	4.423	6.645	4.206	6.448	3.989	5.836	3.654	5.412	3.423	5.208	3.311	5.065	3.233
30	20	6.818	6.262	6.609	6.026	6.401	5.791	6.193	5.556	5.605	5.140	5.199	4.852	5.002	4.713	4.865	4.616
	21	6.873	6.035	6.668	5.804	6.462	5.573	6.257	5.342	5.663	4.946	5.252	4.673	5.053	4.540	4.915	4.448
	22	6.929	5.807	6.726	5.581	6.523	5.354	6.320	5.128	5.720	4.753	5.305	4.493	5.105	4.368	4.965	4.280
	23	6.984	5.580	6.784	5.358	6.584	5.136	6.384	4.914	5.778	4.559	5.359	4.314	5.156	4.195	5.015	4.112
	24	7.040	5.353	6.842	5.135	6.645	4.918	6.448	4.701	5.836	4.366	5.412	4.135	5.208	4.023	5.065	3.944
<b>HIGH AMBIENT</b>																	

### Model : MCK 025A / MLC 025B

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.860	4.002	7.359	3.636	6.857	3.271	6.356	2.905	6.160	2.725	5.847	2.436	5.697	2.298	5.593	2.203
	16	8.318	3.631	7.738	3.309	7.157	2.987	6.577	2.666	6.374	2.493	6.050	2.217	5.895	2.084	5.788	1.993
24	16	8.318	5.389	7.738	5.067	7.157	4.746	6.577	4.424	6.374	4.251	6.050	3.975	5.895	3.842	5.788	3.751
	17	8.777	5.018	8.117	4.740	7.457	4.463	6.797	4.185	6.588	4.020	6.253	3.755	6.093	3.628	5.982	3.541
	18	9.235	4.647	8.496	4.413	7.757	4.180	7.018	3.946	6.802	3.788	6.456	3.535	6.290	3.414	6.176	3.330
	19	9.694	4.275	8.875	4.086	8.057	3.896	7.239	3.707	7.016	3.556	6.659	3.315	6.488	3.199	6.370	3.120
	20	10.156	3.902	9.295	3.744	8.434	3.586	7.573	3.428	7.340	3.286	6.967	3.058	6.788	2.949	6.665	2.874
28	18	9.235	6.405	8.496	6.172	7.757	5.938	7.018	5.705	6.802	5.546	6.456	5.294	6.290	5.172	6.176	5.089
	19	9.694	6.034	8.875	5.844	8.057	5.655	7.239	5.465	7.016	5.315	6.659	5.074	6.488	4.958	6.370	4.878
	20	10.156	5.661	9.295	5.503	8.434	5.345	7.573	5.186	7.340	5.044	6.967	4.817	6.788	4.708	6.665	4.633
	21	10.622	5.287	9.743	5.152	8.863	5.016	7.984	4.881	7.738	4.748	7.345	4.536	7.156	4.434	7.026	4.364
	22	11.088	4.913	10.190	4.800	9.292	4.688	8.394	4.575	8.136	4.452	7.722	4.254	7.524	4.160	7.387	4.095
	23	11.553	4.539	10.637	4.449	9.721	4.359	8.805	4.269	8.533	4.155	8.100	3.973	7.891	3.886	7.748	3.826
	24	12.019	4.166	11.084	4.098	10.150	4.031	9.215	3.963	8.931	3.859	8.477	3.692	8.259	3.612	8.109	3.556
30	20	10.156	6.540	9.295	6.382	8.434	6.224	7.573	6.066	7.340	5.924	6.967	5.696	6.788	5.587	6.665	5.512
	21	10.622	6.166	9.743	6.031	8.863	5.895	7.984	5.760	7.738	5.627	7.345	5.415	7.156	5.313	7.026	5.243
	22	11.088	5.793	10.190	5.680	9.292	5.567	8.394	5.454	8.136	5.331	7.722	5.134	7.524	5.039	7.387	4.974
	23	11.553	5.419	10.637	5.329	9.721	5.239	8.805	5.148	8.533	5.035	8.100	4.852	7.891	4.765	7.748	4.705
	24	12.019	5.045	11.084	4.977	10.150	4.910	9.215	4.843	8.931	4.738	8.477	4.571	8.259	4.491	8.109	4.436
<b>HIGH AMBIENT</b>																	

**Model : MCK 030A / MLC 030B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.157	5.284	8.521	4.713	7.885	4.142	7.248	3.571	6.901	3.244	6.538	2.903
	16	9.229	4.789	8.619	4.304	8.009	3.819	7.400	3.333	7.045	3.018	6.674	2.688
24	16	9.229	6.730	8.619	6.244	8.009	5.759	7.400	5.273	7.045	4.958	6.674	4.628
	17	9.300	6.235	8.717	5.835	8.134	5.435	7.551	5.036	7.189	4.732	6.811	4.414
	18	9.372	5.740	8.815	5.426	8.258	5.112	7.702	4.798	7.332	4.505	6.947	4.200
	19	9.443	5.245	8.913	5.017	8.383	4.789	7.853	4.561	7.476	4.279	7.083	3.985
	20	9.515	4.747	9.011	4.574	8.507	4.402	8.004	4.230	7.620	3.964	7.219	3.687
28	18	9.372	7.680	8.815	7.366	8.258	7.052	7.702	6.738	7.332	6.446	6.947	6.140
	19	9.443	7.185	8.913	6.957	8.383	6.729	7.853	6.501	7.476	6.219	7.083	5.926
	20	9.515	6.687	9.011	6.515	8.507	6.342	8.004	6.170	7.620	5.904	7.219	5.627
	21	9.586	6.186	9.109	6.050	8.632	5.913	8.155	5.777	7.764	5.530	7.355	5.273
	22	9.658	5.685	9.207	5.585	8.756	5.484	8.305	5.384	7.907	5.156	7.491	4.918
	23	9.730	5.185	9.305	5.120	8.881	5.055	8.456	4.991	8.051	4.782	7.628	4.564
	24	9.801	4.684	9.403	4.655	9.005	4.626	8.607	4.598	8.194	4.408	7.764	4.209
30	20	9.515	7.657	9.011	7.485	8.507	7.312	8.004	7.140	7.620	6.874	7.219	6.597
	21	9.586	7.156	9.109	7.020	8.632	6.883	8.155	6.747	7.764	6.500	7.355	6.243
	22	9.658	6.656	9.207	6.555	8.756	6.454	8.305	6.354	7.907	6.126	7.491	5.888
	23	9.730	6.155	9.305	6.090	8.881	6.026	8.456	5.961	8.051	5.752	7.628	5.534
	24	9.801	5.654	9.403	5.625	9.005	5.597	8.607	5.568	8.194	5.378	7.764	5.179

**Model : MCK 030A / MLC 030C**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.852	5.733	9.188	5.144	8.525	4.556	7.861	3.967	7.484	3.613	7.091	3.243	6.784	2.956	6.443	2.635
	16	10.156	5.400	9.462	4.849	8.767	4.298	8.073	3.747	7.686	3.404	7.282	3.045	6.967	2.766	6.616	2.454
24	16	10.156	7.442	9.462	6.890	8.767	6.339	8.073	5.788	7.686	5.445	7.282	5.086	6.967	4.807	6.616	4.496
	17	10.460	7.109	9.735	6.596	9.010	6.082	8.284	5.568	7.887	5.235	7.473	4.888	7.150	4.617	6.790	4.315
	18	10.765	6.777	10.008	6.301	9.252	5.825	8.496	5.349	8.089	5.026	7.664	4.689	7.333	4.427	6.963	4.135
	19	11.069	6.445	10.282	6.006	9.495	5.567	8.708	5.129	8.290	4.817	7.855	4.491	7.515	4.238	7.137	3.955
	20	11.376	6.111	10.580	5.697	9.784	5.283	8.988	4.869	8.557	4.570	8.107	4.257	7.757	4.014	7.367	3.742
28	18	10.765	8.818	10.008	8.342	9.252	7.866	8.496	7.390	8.089	7.067	7.664	6.731	7.333	6.469	6.963	6.176
	19	11.069	8.486	10.282	8.047	9.495	7.609	8.708	7.170	8.290	6.858	7.855	6.532	7.515	6.279	7.137	5.996
	20	11.376	8.152	10.580	7.738	9.784	7.324	8.988	6.911	8.557	6.611	8.107	6.298	7.757	6.055	7.367	5.784
	21	11.684	7.817	10.894	7.420	10.104	7.022	9.314	6.625	8.867	6.339	8.401	6.041	8.038	5.809	7.634	5.550
	22	11.993	7.482	11.208	7.101	10.424	6.720	9.639	6.339	9.177	6.067	8.695	5.783	8.319	5.562	7.901	5.315
	23	12.301	7.147	11.523	6.783	10.744	6.418	9.965	6.054	9.487	5.795	8.989	5.526	8.600	5.316	8.168	5.081
	24	12.610	6.812	11.837	6.464	11.064	6.116	10.291	5.768	9.797	5.523	9.283	5.268	8.882	5.069	8.435	4.847
30	20	11.376	9.173	10.580	8.759	9.784	8.345	8.988	7.931	8.557	7.632	8.107	7.319	7.757	7.076	7.367	6.804
	21	11.684	8.838	10.894	8.440	10.104	8.043	9.314	7.646	8.867	7.360	8.401	7.061	8.038	6.829	7.634	6.570
	22	11.993	8.503	11.208	8.122	10.424	7.741	9.639	7.360	9.177	7.088	8.695	6.804	8.319	6.583	7.901	6.336
	23	12.301	8.168	11.523	7.803	10.744	7.439	9.965	7.074	9.487	6.816	8.989	6.546	8.600	6.336	8.168	6.102
	24	12.610	7.833	11.837	7.485	11.064	7.137	10.291	6.789	9.797	6.544	9.283	6.289	8.882	6.090	8.435	5.868

HIGH AMBIENT

**R22 Models  
A Series (Cooling Only)**

**Model : MCK 040A / MLC 035C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.244	7.053	10.539	6.380	9.833	5.708	9.127	5.035	8.358	4.331	7.587	3.624
	16	11.372	6.394	10.703	5.788	10.034	5.182	9.365	4.577	8.576	3.911	7.784	3.243
24	16	11.372	8.379	10.703	7.774	10.034	7.168	9.365	6.562	8.576	5.897	7.784	5.228
	17	11.500	7.720	10.868	7.181	10.236	6.643	9.603	6.104	8.794	5.477	7.982	4.847
	18	11.628	7.061	11.032	6.589	10.437	6.117	9.841	5.646	9.012	5.057	8.180	4.466
	19	11.756	6.402	11.197	5.997	10.638	5.592	10.079	5.187	9.230	4.637	8.378	4.085
	20	11.882	5.743	11.348	5.410	10.813	5.077	10.279	4.745	9.413	4.232	8.544	3.717
28	18	11.628	9.047	11.032	8.575	10.437	8.103	9.841	7.631	9.012	7.043	8.180	6.452
	19	11.756	8.387	11.197	7.983	10.638	7.578	10.079	7.173	9.230	6.623	8.378	6.071
	20	11.882	7.729	11.348	7.396	10.813	7.063	10.279	6.730	9.413	6.218	8.544	5.703
	21	12.007	7.071	11.489	6.813	10.971	6.556	10.453	6.298	9.572	5.822	8.688	5.344
	22	12.133	6.412	11.631	6.230	11.129	6.048	10.627	5.866	9.731	5.427	8.833	4.985
	23	12.258	5.754	11.772	5.648	11.286	5.541	10.800	5.434	9.890	5.031	8.977	4.626
	24	12.384	5.096	11.914	5.065	11.444	5.034	10.974	5.003	10.049	4.635	9.122	4.267
30	20	11.882	8.722	11.348	8.389	10.813	8.056	10.279	7.723	9.413	7.210	8.544	6.696
	21	12.007	8.063	11.489	7.806	10.971	7.549	10.453	7.291	9.572	6.815	8.688	6.337
	22	12.133	7.405	11.631	7.223	11.129	7.041	10.627	6.859	9.731	6.419	8.833	5.978
	23	12.258	6.747	11.772	6.641	11.286	6.534	10.800	6.427	9.890	6.024	8.977	5.619
	24	12.384	6.089	11.914	6.058	11.444	6.027	10.974	5.995	10.049	5.628	9.122	5.260

**Model : MCK 040A / MLC 040C**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.817	7.558	11.207	7.065	10.598	6.571	9.989	6.078	9.147	5.301	8.303	4.522	7.987	4.231	7.870	4.123
	16	12.346	7.069	11.692	6.636	11.037	6.203	10.383	5.770	9.508	5.020	8.630	4.266	8.303	3.985	8.181	3.881
24	16	12.346	8.943	11.692	8.510	11.037	8.077	10.383	7.644	9.508	6.893	8.630	6.140	8.303	5.859	8.181	5.755
	17	12.875	8.454	12.176	8.081	11.477	7.709	10.777	7.336	9.869	6.611	8.958	5.884	8.618	5.613	8.492	5.512
	18	13.404	7.965	12.660	7.652	11.916	7.340	11.171	7.028	10.230	6.329	9.286	5.628	8.933	5.367	8.802	5.269
	19	13.934	7.476	13.144	7.224	12.355	6.972	11.566	6.720	10.591	6.047	9.613	5.372	9.248	5.120	9.113	5.027
	20	14.463	6.983	13.633	6.761	12.802	6.539	11.971	6.317	10.963	5.679	9.950	5.038	9.573	4.798	9.432	4.709
28	18	13.404	9.838	12.660	9.526	11.916	9.214	11.171	8.902	10.230	8.203	9.286	7.502	8.933	7.240	8.802	7.143
	19	13.934	9.349	13.144	9.098	12.355	8.846	11.566	8.594	10.591	7.921	9.613	7.246	9.248	6.994	9.113	6.900
	20	14.463	8.857	13.633	8.635	12.802	8.413	11.971	8.191	10.963	7.552	9.950	6.911	9.573	6.672	9.432	6.583
	21	14.993	8.361	14.124	8.149	13.254	7.937	12.384	7.725	11.341	7.125	10.294	6.524	9.903	6.299	9.758	6.216
	22	15.523	7.866	14.615	7.664	13.706	7.461	12.798	7.259	11.719	6.698	10.637	6.136	10.233	5.926	10.083	5.848
	23	16.053	7.371	15.106	7.178	14.158	6.986	13.211	6.793	12.098	6.272	10.981	5.749	10.564	5.554	10.409	5.481
	24	16.583	6.876	15.597	6.693	14.610	6.510	13.624	6.327	12.476	5.845	11.324	5.361	10.894	5.181	10.734	5.114
30	20	14.463	9.793	13.633	9.572	12.802	9.350	11.971	9.128	10.963	8.489	9.950	7.848	9.573	7.609	9.432	7.520
	21	14.993	9.298	14.124	9.086	13.254	8.874	12.384	8.662	11.341	8.062	10.294	7.461	9.903	7.236	9.758	7.153
	22	15.523	8.803	14.615	8.601	13.706	8.398	12.798	8.196	11.719	7.635	10.637	7.073	10.233	6.863	10.083	6.785
	23	16.053	8.308	15.106	8.115	14.158	7.922	13.211	7.730	12.098	7.208	10.981	6.686	10.564	6.491	10.409	6.418
	24	16.583	7.813	15.597	7.630	14.610	7.447	13.624	7.263	12.476	6.782	11.324	6.298	10.894	6.118	10.734	6.051

HIGH AMBIENT

**Model : MCK 050A / MLC 050C**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	14.910	9.531	14.049	8.876	13.188	8.222	12.327	7.567	11.615	6.918	10.962	6.323	10.580	5.976	10.243	5.668
	16	15.714	8.772	14.739	8.192	13.765	7.612	12.790	7.031	12.051	6.413	11.373	5.847	10.978	5.516	10.627	5.223
24	16	15.714	10.958	14.739	10.378	13.765	9.798	12.790	9.217	12.051	8.599	11.373	8.033	10.978	7.702	10.627	7.409
	17	16.517	10.200	15.429	9.694	14.341	9.187	13.253	8.681	12.487	8.094	11.785	7.556	11.375	7.242	11.012	6.964
	18	17.320	9.441	16.119	9.009	14.917	8.577	13.716	8.146	12.923	7.589	12.196	7.080	11.772	6.782	11.397	6.519
	19	18.124	8.683	16.809	8.325	15.494	7.967	14.179	7.610	13.359	7.085	12.608	6.603	12.170	6.322	11.781	6.073
	20	18.932	7.923	17.545	7.629	16.158	7.334	14.771	7.040	13.917	6.548	13.134	6.097	12.677	5.834	12.273	5.600
28	18	17.320	11.627	16.119	11.195	14.917	10.763	13.716	10.331	12.923	9.775	12.196	9.266	11.772	8.968	11.397	8.704
	19	18.124	10.868	16.809	10.511	15.494	10.153	14.179	9.796	13.359	9.270	12.608	8.789	12.170	8.508	11.781	8.259
	20	18.932	10.109	17.545	9.814	16.158	9.520	14.771	9.226	13.917	8.734	13.134	8.283	12.677	8.019	12.273	7.786
	21	19.743	9.348	18.312	9.110	16.880	8.872	15.448	8.634	14.555	8.176	13.736	7.756	13.259	7.511	12.835	7.294
	22	20.555	8.587	19.078	8.406	17.602	8.224	16.125	8.043	15.193	7.619	14.338	7.230	13.840	7.003	13.398	6.803
	23	21.367	7.826	19.845	7.701	18.324	7.576	16.802	7.451	15.831	7.061	14.941	6.704	14.421	6.496	13.961	6.311
	24	22.178	7.066	20.612	6.997	19.046	6.928	17.479	6.859	16.469	6.503	15.543	6.178	15.002	5.988	14.524	5.819
30	20	18.932	11.202	17.545	10.907	16.158	10.613	14.771	10.319	13.917	9.827	13.134	9.376	12.677	9.112	12.273	8.879
	21	19.743	10.441	18.312	10.203	16.880	9.965	15.448	9.727	14.555	9.269	13.736	8.849	13.259	8.604	12.835	8.387
	22	20.555	9.680	19.078	9.499	17.602	9.317	16.125	9.135	15.193	8.712	14.338	8.323	13.840	8.096	13.398	7.896
	23	21.367	8.919	19.845	8.794	18.324	8.669	16.802	8.544	15.831	8.154	14.941	7.797	14.421	7.588	13.961	7.404
	24	22.178	8.159	20.612	8.090	19.046	8.021	17.479	7.952	16.469	7.596	15.543	7.271	15.002	7.081	14.524	6.912

**HIGH AMBIENT**

**R22 Models  
A Series (Heatpump)**

**Model : MCK 020AR / MLC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.706	4.180	6.272	3.690	5.837	3.200	5.403	2.710	4.890	2.233	4.535	1.903	4.364	1.744	4.244	1.632
	16	6.774	4.057	6.361	3.538	5.948	3.019	5.535	2.499	5.010	2.042	4.646	1.726	4.471	1.573	4.348	1.467
24	16	6.774	5.439	6.361	4.920	5.948	4.401	5.535	3.882	5.010	3.425	4.646	3.109	4.471	2.956	4.348	2.849
	17	6.842	5.316	6.451	4.767	6.059	4.219	5.667	3.671	5.130	3.234	4.757	2.932	4.577	2.785	4.452	2.683
	18	6.910	5.192	6.540	4.615	6.170	4.037	5.800	3.460	5.249	3.043	4.869	2.755	4.684	2.615	4.556	2.518
	19	6.978	5.069	6.629	4.462	6.281	3.856	5.932	3.249	5.369	2.852	4.980	2.578	4.791	2.445	4.660	2.352
	20	7.045	4.949	6.713	4.345	6.380	3.741	6.048	3.138	5.474	2.751	5.077	2.484	4.885	2.355	4.751	2.265
28	18	6.910	6.575	6.540	5.997	6.170	5.420	5.800	4.842	5.249	4.425	4.869	4.137	4.684	3.997	4.556	3.900
	19	6.978	6.451	6.629	5.845	6.281	5.238	5.932	4.631	5.369	4.234	4.980	3.960	4.791	3.827	4.660	3.734
	20	7.045	6.331	6.713	5.728	6.380	5.124	6.048	4.520	5.474	4.133	5.077	3.866	4.885	3.737	4.751	3.647
	21	7.112	6.214	6.792	5.634	6.473	5.054	6.153	4.474	5.569	4.092	5.165	3.828	4.970	3.700	4.833	3.611
	22	7.179	6.097	6.872	5.541	6.565	4.985	6.258	4.429	5.664	4.051	5.253	3.790	5.054	3.663	4.916	3.575
	23	7.246	5.980	6.952	5.448	6.657	4.916	6.363	4.383	5.759	4.010	5.341	3.752	5.139	3.627	4.998	3.540
	24	7.313	5.863	7.031	5.355	6.749	4.846	6.467	4.338	5.854	3.969	5.429	3.713	5.224	3.590	5.080	3.504
30	20	7.045	7.023	6.713	6.419	6.380	5.815	6.048	5.211	5.474	4.825	5.077	4.557	4.885	4.428	4.751	4.338
	21	7.112	6.905	6.792	6.325	6.473	5.745	6.153	5.165	5.569	4.783	5.165	4.519	4.970	4.391	4.833	4.302
	22	7.179	6.788	6.872	6.232	6.565	5.676	6.258	5.120	5.664	4.742	5.253	4.481	5.054	4.355	4.916	4.266
	23	7.246	6.671	6.952	6.139	6.657	5.607	6.363	5.074	5.759	4.701	5.341	4.443	5.139	4.318	4.998	4.231
	24	7.313	6.554	7.031	6.046	6.749	5.537	6.467	5.029	5.854	4.660	5.429	4.405	5.224	4.281	5.080	4.195
<b>HIGH AMBIENT</b>																	

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.665	2.665	3.294	3.294	3.504	3.504	5.812	5.812	7.071	7.071	7.701	7.701	8.330	8.330
17	2.564	2.564	3.246	3.246	3.473	3.473	5.736	5.736	7.008	7.008	7.632	7.632	8.256	8.256
19	2.464	2.464	3.197	3.197	3.441	3.441	5.659	5.659	6.945	6.945	7.564	7.564	8.182	8.182
21	2.363	2.363	3.148	3.148	3.410	3.410	5.583	5.583	6.882	6.882	7.495	7.495	8.108	8.108
23	2.420	2.420	3.139	3.139	3.379	3.379	5.557	5.557	6.819	6.819	7.426	7.426	8.033	8.033
25	2.477	2.477	3.130	3.130	3.347	3.347	5.531	5.531	6.756	6.756	7.358	7.358	7.959	7.959
27	2.533	2.533	3.120	3.120	3.316	3.316	5.505	5.505	6.693	6.693	7.289	7.289	7.885	7.885
<b>FROST REGION</b>														

**R22 Models  
A Series (Heatpump)**

**Model : MCK 025AR / MLC 025BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.901	4.239	7.396	3.832	6.891	3.424	6.386	3.016	6.190	2.832	5.875	2.538	5.724	2.398	5.620	2.301
	16	8.315	4.003	7.744	3.617	7.172	3.230	6.600	2.843	6.397	2.665	6.072	2.380	5.916	2.243	5.808	2.149
24	16	8.315	5.762	7.744	5.375	7.172	4.988	6.600	4.602	6.397	4.423	6.072	4.138	5.916	4.001	5.808	3.907
	17	8.730	5.525	8.091	5.160	7.453	4.795	6.814	4.429	6.604	4.256	6.268	3.980	6.107	3.847	5.996	3.755
	18	9.145	5.289	8.439	4.945	7.733	4.601	7.028	4.257	6.811	4.089	6.465	3.821	6.299	3.692	6.185	3.604
	19	9.559	5.053	8.787	4.730	8.014	4.407	7.242	4.084	7.019	3.922	6.662	3.662	6.491	3.538	6.373	3.452
	20	9.978	4.815	9.170	4.504	8.362	4.192	7.554	3.880	7.321	3.724	6.949	3.474	6.770	3.355	6.647	3.272
28	18	9.145	7.048	8.439	6.704	7.733	6.359	7.028	6.015	6.811	5.848	6.465	5.579	6.299	5.451	6.185	5.362
	19	9.559	6.811	8.787	6.489	8.014	6.166	7.242	5.843	7.019	5.680	6.662	5.421	6.491	5.296	6.373	5.210
	20	9.978	6.574	9.170	6.262	8.362	5.950	7.554	5.638	7.321	5.482	6.949	5.233	6.770	5.113	6.647	5.031
	21	10.398	6.336	9.576	6.028	8.754	5.721	7.931	5.413	7.687	5.264	7.296	5.025	7.109	4.911	6.979	4.832
	22	10.819	6.097	9.982	5.794	9.145	5.491	8.309	5.188	8.053	5.045	7.643	4.818	7.447	4.709	7.312	4.634
	23	11.240	5.859	10.389	5.560	9.537	5.261	8.686	4.962	8.418	4.827	7.991	4.611	7.785	4.507	7.644	4.435
	24	11.661	5.621	10.795	5.326	9.929	5.031	9.063	4.737	8.784	4.608	8.338	4.403	8.124	4.305	7.976	4.237
30	20	9.978	7.453	9.170	7.141	8.362	6.830	7.554	6.518	7.321	6.362	6.949	6.112	6.770	5.992	6.647	5.910
	21	10.398	7.215	9.576	6.907	8.754	6.600	7.931	6.292	7.687	6.143	7.296	5.905	7.109	5.790	6.979	5.711
	22	10.819	6.977	9.982	6.673	9.145	6.370	8.309	6.067	8.053	5.925	7.643	5.697	7.447	5.588	7.312	5.513
	23	11.240	6.738	10.389	6.439	9.537	6.140	8.686	5.841	8.418	5.706	7.991	5.490	7.785	5.386	7.644	5.315
	24	11.661	6.500	10.795	6.205	9.929	5.911	9.063	5.616	8.784	5.488	8.338	5.282	8.124	5.184	7.976	5.116
<b>HIGH AMBIENT</b>																	

**HEATING MODE**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.718	4.718	5.320	5.320	5.521	5.521	7.732	7.732	8.938	8.938	9.541	9.541	10.143	10.143
17	4.659	4.659	5.269	5.269	5.472	5.472	7.597	7.597	8.858	8.858	9.455	9.455	10.053	10.053
19	4.601	4.601	5.217	5.217	5.422	5.422	7.462	7.462	8.778	8.778	9.370	9.370	9.963	9.963
21	4.543	4.543	5.165	5.165	5.373	5.373	7.327	7.327	8.698	8.698	9.285	9.285	9.872	9.872
23	4.517	4.517	5.122	5.122	5.323	5.323	7.327	7.327	8.619	8.619	9.200	9.200	9.782	9.782
25	4.491	4.491	5.078	5.078	5.274	5.274	7.328	7.328	8.539	8.539	9.115	9.115	9.691	9.691
27	4.466	4.466	5.035	5.035	5.224	5.224	7.328	7.328	8.459	8.459	9.030	9.030	9.601	9.601
<b>FROST REGION</b>														

**R22 Models  
A Series (Heatpump)**

**Model : MCK 030AR / MLC 030BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.097	5.085	8.425	4.491	7.752	3.897	7.080	3.302	6.740	2.980	6.386	2.644
	16	9.152	4.597	8.502	4.097	7.853	3.596	7.203	3.095	6.857	2.783	6.497	2.457
24	16	9.152	6.636	8.502	6.135	7.853	5.635	7.203	5.134	6.857	4.822	6.497	4.496
	17	9.207	6.148	8.580	5.741	7.953	5.334	7.325	4.927	6.974	4.625	6.608	4.309
	18	9.262	5.659	8.657	5.346	8.053	5.033	7.448	4.720	7.091	4.428	6.718	4.123
	19	9.317	5.171	8.735	4.952	8.153	4.732	7.571	4.513	7.208	4.230	6.829	3.936
	20	9.372	4.679	8.820	4.517	8.268	4.355	7.716	4.193	7.346	3.926	6.960	3.647
28	18	9.262	7.698	8.657	7.385	8.053	7.072	7.448	6.759	7.091	6.466	6.718	6.161
	19	9.317	7.210	8.735	6.990	8.153	6.771	7.571	6.552	7.208	6.269	6.829	5.974
	20	9.372	6.717	8.820	6.555	8.268	6.393	7.716	6.231	7.346	5.964	6.960	5.686
	21	9.429	6.222	8.911	6.093	8.394	5.965	7.876	5.836	7.498	5.588	7.104	5.329
	22	9.485	5.726	9.002	5.631	8.519	5.536	8.036	5.441	7.651	5.212	7.248	4.973
	23	9.541	5.231	9.093	5.169	8.644	5.107	8.196	5.045	7.803	4.835	7.393	4.616
	24	9.597	4.735	9.183	4.707	8.770	4.678	8.356	4.650	7.955	4.459	7.537	4.259
30	20	9.372	7.736	8.820	7.575	8.268	7.413	7.716	7.251	7.346	6.984	6.960	6.705
	21	9.429	7.241	8.911	7.112	8.394	6.984	7.876	6.855	7.498	6.607	7.104	6.348
	22	9.485	6.746	9.002	6.650	8.519	6.555	8.036	6.460	7.651	6.231	7.248	5.992
	23	9.541	6.250	9.093	6.188	8.644	6.126	8.196	6.065	7.803	5.855	7.393	5.635
	24	9.597	5.755	9.183	5.726	8.770	5.698	8.356	5.669	7.955	5.478	7.537	5.279

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.735	4.735	5.322	5.322	5.518	5.518	7.672	7.672	8.847	8.847	9.434	9.434	10.021	10.021
17	4.681	4.681	5.272	5.272	5.469	5.469	7.850	7.850	8.768	8.768	9.350	9.350	9.932	9.932
19	4.626	4.626	5.221	5.221	5.419	5.419	8.028	8.028	8.689	8.689	9.266	9.266	9.843	9.843
21	4.572	4.572	5.170	5.170	5.370	5.370	8.206	8.206	8.610	8.610	9.182	9.182	9.753	9.753
23	4.542	4.542	5.126	5.126	5.320	5.320	7.878	7.878	8.531	8.531	9.097	9.097	9.664	9.664
25	4.512	4.512	5.081	5.081	5.271	5.271	7.550	7.550	8.452	8.452	9.013	9.013	9.575	9.575
27	4.482	4.482	5.036	5.036	5.221	5.221	7.222	7.222	8.373	8.373	8.929	8.929	9.485	9.485
<b>FROST REGION</b>														

## R22 Models A Series (Heatpump)

### Model : MCK 030AR / MLC 030CR Cooling Mode

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.384	5.273	8.824	4.800	8.264	4.327	7.703	3.854	7.334	3.509	6.948	3.148	6.648	2.868	6.314	2.555
	16	9.688	4.882	9.109	4.470	8.530	4.058	7.951	3.645	7.569	3.310	7.172	2.960	6.862	2.688	6.516	2.384
24	16	9.688	6.881	9.109	6.468	8.530	6.056	7.951	5.644	7.569	5.308	7.172	4.958	6.862	4.686	6.516	4.382
	17	9.991	6.490	9.393	6.138	8.796	5.786	8.198	5.435	7.805	5.109	7.395	4.770	7.076	4.506	6.719	4.211
	18	10.294	6.099	9.678	5.808	9.062	5.517	8.446	5.226	8.041	4.911	7.618	4.582	7.289	4.326	6.922	4.040
	19	10.598	5.708	9.963	5.477	9.328	5.247	8.693	5.017	8.277	4.712	7.842	4.393	7.503	4.145	7.125	3.869
	20	10.902	5.313	10.255	5.113	9.608	4.914	8.961	4.714	8.531	4.423	8.083	4.120	7.734	3.884	7.344	3.620
28	18	10.294	8.097	9.678	7.806	9.062	7.515	8.446	7.224	8.041	6.909	7.618	6.580	7.289	6.324	6.922	6.038
	19	10.598	7.706	9.963	7.476	9.328	7.246	8.693	7.016	8.277	6.710	7.842	6.392	7.503	6.144	7.125	5.867
	20	10.902	7.311	10.255	7.112	9.608	6.912	8.961	6.712	8.531	6.422	8.083	6.118	7.734	5.882	7.344	5.619
	21	11.206	6.914	10.551	6.725	9.896	6.535	9.242	6.346	8.798	6.073	8.336	5.788	7.976	5.566	7.574	5.318
	22	11.511	6.517	10.848	6.338	10.185	6.158	9.522	5.979	9.066	5.724	8.589	5.457	8.218	5.249	7.805	5.018
	23	11.815	6.120	11.144	5.951	10.474	5.782	9.803	5.613	9.333	5.375	8.842	5.126	8.460	4.933	8.035	4.717
30	24	12.120	5.723	11.441	5.564	10.762	5.405	10.084	5.246	9.600	5.026	9.095	4.796	8.703	4.617	8.265	4.417
	20	10.902	8.310	10.255	8.111	9.608	7.911	8.961	7.711	8.531	7.421	8.083	7.117	7.734	6.881	7.344	6.618
	21	11.206	7.913	10.551	7.724	9.896	7.534	9.242	7.345	8.798	7.072	8.336	6.787	7.976	6.565	7.574	6.317
	22	11.511	7.516	10.848	7.337	10.185	7.158	9.522	6.978	9.066	6.723	8.589	6.456	8.218	6.248	7.805	6.017
	23	11.815	7.119	11.144	6.950	10.474	6.781	9.803	6.612	9.333	6.374	8.842	6.125	8.460	5.932	8.035	5.717
	24	12.120	6.722	11.441	6.563	10.762	6.404	10.084	6.245	9.600	6.025	9.095	5.795	8.703	5.616	8.265	5.416

HIGH AMBIENT

### Heating Mode

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	5.513	5.513	6.152	6.152	6.365	6.365	8.709	8.709	9.987	9.987	10.626	10.626	11.265	11.265
17	5.460	5.460	6.096	6.096	6.308	6.308	8.834	8.834	9.898	9.898	10.531	10.531	11.165	11.165
19	5.407	5.407	6.040	6.040	6.251	6.251	8.960	8.960	9.809	9.809	10.437	10.437	11.064	11.064
21	5.355	5.355	5.984	5.984	6.194	6.194	9.086	9.086	9.720	9.720	10.342	10.342	10.964	10.964
23	5.309	5.309	5.930	5.930	6.137	6.137	8.794	8.794	9.631	9.631	10.247	10.247	10.864	10.864
25	5.262	5.262	5.875	5.875	6.080	6.080	8.502	8.502	9.542	9.542	10.152	10.152	10.763	10.763
27	5.216	5.216	5.821	5.821	6.023	6.023	8.210	8.210	9.452	9.452	10.058	10.058	10.663	10.663

FROST REGION

**R22 Models  
A Series (Heatpump)**

**Model : MCK 040AR / MLC 035CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.168	6.950	10.477	6.334	9.786	5.718	9.095	5.102	8.404	4.486	7.575	3.746
	16	11.314	6.195	10.656	5.681	9.998	5.166	9.340	4.651	8.683	4.137	7.894	3.519
24	16	11.314	8.122	10.656	7.608	9.998	7.093	9.340	6.579	8.683	6.064	7.894	5.446
	17	11.459	7.367	10.834	6.954	10.210	6.541	9.586	6.128	8.962	5.715	8.212	5.220
	18	11.604	6.613	11.013	6.301	10.422	5.989	9.831	5.678	9.240	5.366	8.531	4.993
	19	11.749	5.858	11.191	5.648	10.634	5.438	10.076	5.228	9.519	5.018	8.850	4.766
	20	11.892	5.101	11.356	4.977	10.820	4.852	10.283	4.728	9.747	4.604	9.103	4.455
28	18	11.604	8.540	11.013	8.228	10.422	7.917	9.831	7.605	9.240	7.294	8.531	6.920
	19	11.749	7.785	11.191	7.575	10.634	7.365	10.076	7.155	9.519	6.945	8.850	6.693
	20	11.892	7.028	11.356	6.904	10.820	6.780	10.283	6.656	9.747	6.531	9.103	6.383
	21	12.035	6.270	11.512	6.221	10.988	6.172	10.464	6.124	9.941	6.075	9.313	6.016
	22	12.178	5.512	11.667	5.538	11.156	5.565	10.646	5.592	10.135	5.618	9.522	5.650
	23	12.320	4.754	11.822	4.856	11.325	4.958	10.827	5.060	10.329	5.162	9.731	5.284
	24	12.463	3.995	11.978	4.173	11.493	4.350	11.008	4.528	10.523	4.705	9.941	4.918
30	20	11.892	7.992	11.356	7.867	10.820	7.743	10.283	7.619	9.747	7.495	9.103	7.346
	21	12.035	7.234	11.512	7.185	10.988	7.136	10.464	7.087	9.941	7.039	9.313	6.980
	22	12.178	6.475	11.667	6.502	11.156	6.529	10.646	6.555	10.135	6.582	9.522	6.614
	23	12.320	5.717	11.822	5.819	11.325	5.921	10.827	6.023	10.329	6.125	9.731	6.248
	24	12.463	4.959	11.978	5.137	11.493	5.314	11.008	5.491	10.523	5.669	9.941	5.882

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.557	4.557	5.560	5.560	5.894	5.894	9.569	9.569	11.573	11.573	12.575	12.575	13.578	13.578
17	4.403	4.403	5.481	5.481	5.841	5.841	9.729	9.729	11.470	11.470	12.463	12.463	13.457	13.457
19	4.248	4.248	5.403	5.403	5.788	5.788	9.889	9.889	11.367	11.367	12.351	12.351	13.336	13.336
21	4.094	4.094	5.325	5.325	5.735	5.735	10.049	10.049	11.264	11.264	12.239	12.239	13.215	13.215
23	4.172	4.172	5.305	5.305	5.683	5.683	9.705	9.705	11.160	11.160	12.127	12.127	13.094	13.094
25	4.251	4.251	5.285	5.285	5.630	5.630	9.361	9.361	11.057	11.057	12.015	12.015	12.973	12.973
27	4.330	4.330	5.265	5.265	5.577	5.577	9.017	9.017	10.954	10.954	11.903	11.903	12.852	12.852
FROST REGION														

**R22 Models  
A Series (Heatpump)**

**Model : MCK 040AR / MLC 040CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	12.397	7.717	11.661	7.112	10.925	6.506	10.189	5.901	9.330	5.098	8.469	4.294	8.147	3.993	8.028	3.882
	16	12.916	7.273	12.123	6.729	11.330	6.185	10.538	5.641	9.650	4.861	8.759	4.078	8.426	3.786	8.303	3.677
24	16	12.916	9.434	12.123	8.890	11.330	8.346	10.538	7.802	9.650	7.022	8.759	6.239	8.426	5.947	8.303	5.838
	17	13.435	8.989	12.585	8.507	11.736	8.025	10.886	7.542	9.969	6.784	9.049	6.023	8.705	5.739	8.578	5.634
	18	13.954	8.544	13.048	8.124	12.141	7.703	11.235	7.283	10.288	6.546	9.339	5.807	8.984	5.532	8.852	5.429
	19	14.473	8.100	13.510	7.741	12.547	7.382	11.584	7.024	10.608	6.309	9.628	5.592	9.263	5.324	9.127	5.225
	20	14.995	7.651	13.996	7.319	12.998	6.988	11.999	6.656	10.988	5.972	9.974	5.286	9.595	5.030	9.454	4.935
28	18	13.954	10.705	13.048	10.285	12.141	9.864	11.235	9.444	10.288	8.707	9.339	7.968	8.984	7.692	8.852	7.590
	19	14.473	10.260	13.510	9.902	12.547	9.543	11.584	9.184	10.608	8.470	9.628	7.753	9.263	7.485	9.127	7.386
	20	14.995	9.812	13.996	9.480	12.998	9.149	11.999	8.817	10.988	8.133	9.974	7.447	9.595	7.191	9.454	7.096
	21	15.518	9.360	14.498	9.033	13.479	8.705	12.459	8.378	11.409	7.731	10.356	7.082	9.962	6.840	9.816	6.750
	22	16.041	8.908	15.000	8.585	13.959	8.262	12.918	7.938	11.830	7.329	10.738	6.717	10.330	6.488	10.179	6.404
	23	16.565	8.457	15.503	8.138	14.440	7.818	13.378	7.499	12.251	6.926	11.120	6.352	10.698	6.137	10.541	6.057
30	24	17.088	8.005	16.005	7.690	14.921	7.375	13.838	7.060	12.672	6.524	11.502	5.986	11.065	5.786	10.903	5.711
	20	14.995	10.892	13.996	10.560	12.998	10.229	11.999	9.897	10.988	9.214	9.974	8.528	9.595	8.272	9.454	8.176
	21	15.518	10.440	14.498	10.113	13.479	9.786	12.459	9.458	11.409	8.811	10.356	8.162	9.962	7.920	9.816	7.830
	22	16.041	9.989	15.000	9.665	13.959	9.342	12.918	9.019	11.830	8.409	10.738	7.797	10.330	7.569	10.179	7.484
	23	16.565	9.537	15.503	9.218	14.440	8.899	13.378	8.579	12.251	8.007	11.120	7.432	10.698	7.218	10.541	7.138
	24	17.088	9.086	16.005	8.770	14.921	8.455	13.838	8.140	12.672	7.604	11.502	7.067	11.065	6.866	10.903	6.792

**HIGH AMBIENT**

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	6.925	6.925	7.881	7.881	8.200	8.200	11.708	11.708	13.621	13.621	14.578	14.578	15.535	15.535
17	6.822	6.822	7.801	7.801	8.127	8.127	11.811	11.811	13.500	13.500	14.448	14.448	15.396	15.396
19	6.720	6.720	7.720	7.720	8.053	8.053	11.914	11.914	13.378	13.378	14.318	14.318	15.258	15.258
21	6.618	6.618	7.639	7.639	7.980	7.980	12.016	12.016	13.257	13.257	14.188	14.188	15.119	15.119
23	6.598	6.598	7.579	7.579	7.906	7.906	11.694	11.694	13.135	13.135	14.058	14.058	14.981	14.981
25	6.578	6.578	7.519	7.519	7.833	7.833	11.371	11.371	13.014	13.014	13.928	13.928	14.842	14.842
27	6.558	6.558	7.459	7.459	7.759	7.759	11.048	11.048	12.892	12.892	13.798	13.798	14.704	14.704

**FROST REGION**

**R22 Models  
A Series (Heatpump)**

**Model : MCK 050AR / MLC 050CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	14.910	9.531	14.049	8.876	13.188	8.222	12.327	7.567	11.615	6.918	10.962	6.323	10.580	5.976	10.243	5.668
	16	15.714	8.772	14.739	8.192	13.765	7.612	12.790	7.031	12.051	6.413	11.373	5.847	10.978	5.516	10.627	5.223
24	16	15.714	10.958	14.739	10.378	13.765	9.798	12.790	9.217	12.051	8.599	11.373	8.033	10.978	7.702	10.627	7.409
	17	16.517	10.200	15.429	9.694	14.341	9.187	13.253	8.681	12.487	8.094	11.785	7.556	11.375	7.242	11.012	6.964
	18	17.320	9.441	16.119	9.009	14.917	8.577	13.716	8.146	12.923	7.589	12.196	7.080	11.772	6.782	11.397	6.519
	19	18.124	8.683	16.809	8.325	15.494	7.967	14.179	7.610	13.359	7.085	12.608	6.603	12.170	6.322	11.781	6.073
	20	18.932	7.923	17.545	7.629	16.158	7.334	14.771	7.040	13.917	6.548	13.134	6.097	12.677	5.834	12.273	5.600
28	18	17.320	11.627	16.119	11.195	14.917	10.763	13.716	10.331	12.923	9.775	12.196	9.266	11.772	8.968	11.397	8.704
	19	18.124	10.868	16.809	10.511	15.494	10.153	14.179	9.796	13.359	9.270	12.608	8.789	12.170	8.508	11.781	8.259
	20	18.932	10.109	17.545	9.814	16.158	9.520	14.771	9.226	13.917	8.734	13.134	8.283	12.677	8.019	12.273	7.786
	21	19.743	9.348	18.312	9.110	16.880	8.872	15.448	8.634	14.555	8.176	13.736	7.756	13.259	7.511	12.835	7.294
	22	20.555	8.587	19.078	8.406	17.602	8.224	16.125	8.043	15.193	7.619	14.338	7.230	13.840	7.003	13.398	6.803
	23	21.367	7.826	19.845	7.701	18.324	7.576	16.802	7.451	15.831	7.061	14.941	6.704	14.421	6.496	13.961	6.311
30	24	22.178	7.066	20.612	6.997	19.046	6.928	17.479	6.859	16.469	6.503	15.543	6.178	15.002	5.988	14.524	5.819
	20	18.932	11.202	17.545	10.907	16.158	10.613	14.771	10.319	13.917	9.827	13.134	9.376	12.677	9.112	12.273	8.879
	21	19.743	10.441	18.312	10.203	16.880	9.965	15.448	9.727	14.555	9.269	13.736	8.849	13.259	8.604	12.835	8.387
	22	20.555	9.680	19.078	9.499	17.602	9.317	16.125	9.135	15.193	8.712	14.338	8.323	13.840	8.096	13.398	7.896
	23	21.367	8.919	19.845	8.794	18.324	8.669	16.802	8.544	15.831	8.154	14.941	7.797	14.421	7.588	13.961	7.404

**HIGH AMBIENT**

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	6.400	6.400	7.781	7.781	8.241	8.241	13.303	13.303	16.064	16.064	17.444	17.444	18.825	18.825
17	6.190	6.190	7.673	7.673	8.167	8.167	13.521	13.521	15.920	15.920	17.289	17.289	18.657	18.657
19	5.979	5.979	7.565	7.565	8.093	8.093	13.738	13.738	15.777	15.777	17.133	17.133	18.489	18.489
21	5.769	5.769	7.457	7.457	8.020	8.020	13.956	13.956	15.634	15.634	16.978	16.978	18.321	18.321
23	5.872	5.872	7.427	7.427	7.946	7.946	13.483	13.483	15.491	15.491	16.822	16.822	18.154	18.154
25	5.976	5.976	7.398	7.398	7.872	7.872	13.010	13.010	15.347	15.347	16.667	16.667	17.986	17.986
27	6.080	6.080	7.369	7.369	7.798	7.798	12.537	12.537	15.204	15.204	16.511	16.511	17.818	17.818

**FROST REGION**

**R407C Models  
A Series (Cooling Only)**

**Model : MCK 020A / M4LC 020B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.684	3.027	5.368	2.706	5.051	2.385	4.735	2.063	4.418	1.742	4.039	1.356
	16	5.736	2.832	5.450	2.537	5.164	2.241	4.878	1.945	4.592	1.650	4.248	1.295
24	16	5.736	4.256	5.450	3.960	5.164	3.665	4.878	3.369	4.592	3.074	4.248	2.719
	17	5.788	4.060	5.532	3.791	5.276	3.521	5.021	3.251	4.765	2.982	4.458	2.658
	18	5.839	3.865	5.614	3.621	5.389	3.377	5.163	3.133	4.938	2.890	4.668	2.597
	19	5.891	3.669	5.696	3.451	5.501	3.233	5.306	3.016	5.111	2.798	4.877	2.536
	20	5.941	3.472	5.760	3.267	5.578	3.062	5.397	2.857	5.215	2.652	4.998	2.405
28	18	5.839	5.288	5.614	5.045	5.389	4.801	5.163	4.557	4.938	4.313	4.668	4.021
	19	5.891	5.093	5.696	4.875	5.501	4.657	5.306	4.439	5.111	4.221	4.877	3.960
	20	5.941	4.896	5.760	4.691	5.578	4.486	5.397	4.280	5.215	4.075	4.998	3.829
	21	5.989	4.698	5.810	4.497	5.631	4.295	5.452	4.094	5.273	3.893	5.058	3.652
	22	6.038	4.500	5.861	4.302	5.684	4.105	5.508	3.908	5.331	3.711	5.119	3.474
	23	6.086	4.302	5.912	4.108	5.737	3.915	5.563	3.722	5.389	3.528	5.179	3.296
	24	6.135	4.104	5.963	3.914	5.791	3.725	5.619	3.536	5.447	3.346	5.240	3.119
30	20	5.941	5.608	5.760	5.403	5.578	5.197	5.397	4.992	5.215	4.787	4.998	4.541
	21	5.989	5.410	5.810	5.208	5.631	5.007	5.452	4.806	5.273	4.605	5.058	4.363
	22	6.038	5.212	5.861	5.014	5.684	4.817	5.508	4.620	5.331	4.423	5.119	4.186
	23	6.086	5.013	5.912	4.820	5.737	4.627	5.563	4.434	5.389	4.240	5.179	4.008
	24	6.135	4.815	5.963	4.626	5.791	4.437	5.619	4.247	5.447	4.058	5.240	3.831

**Model : MCK 025A / M4LC 025B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.602	2.890	6.181	2.583	5.760	2.276	5.339	1.969	4.918	1.662	4.413	1.293
	16	6.987	2.578	6.500	2.308	6.012	2.038	5.524	1.768	5.037	1.498	4.452	1.174
24	16	6.987	4.337	6.500	4.067	6.012	3.797	5.524	3.526	5.037	3.256	4.452	2.932
	17	7.372	4.025	6.818	3.792	6.264	3.559	5.710	3.326	5.156	3.092	4.491	2.813
	18	7.758	3.713	7.137	3.517	6.516	3.321	5.895	3.125	5.274	2.929	4.530	2.693
	19	8.143	3.401	7.455	3.242	6.768	3.083	6.081	2.924	5.393	2.765	4.568	2.574
	20	8.531	3.088	7.808	2.955	7.085	2.822	6.362	2.690	5.638	2.557	4.770	2.397
28	18	7.758	5.472	7.137	5.276	6.516	5.079	5.895	4.883	5.274	4.687	4.530	4.452
	19	8.143	5.160	7.455	5.001	6.768	4.842	6.081	4.682	5.393	4.523	4.568	4.332
	20	8.531	4.847	7.808	4.714	7.085	4.581	6.362	4.448	5.638	4.315	4.770	4.156
	21	8.922	4.533	8.184	4.419	7.445	4.305	6.706	4.191	5.968	4.077	5.081	3.941
	22	9.314	4.219	8.559	4.124	7.805	4.029	7.051	3.934	6.297	3.840	5.392	3.726
	23	9.705	3.905	8.935	3.829	8.165	3.753	7.396	3.678	6.626	3.602	5.703	3.511
	24	10.096	3.591	9.311	3.534	8.526	3.477	7.741	3.421	6.955	3.364	6.013	3.296
30	20	8.531	5.726	7.808	5.593	7.085	5.460	6.362	5.327	5.638	5.194	5.035	5.035
	21	8.922	5.412	8.184	5.298	7.445	5.184	6.706	5.070	5.968	4.957	5.081	4.820
	22	9.314	5.098	8.559	5.003	7.805	4.908	7.051	4.814	6.297	4.719	5.392	4.605
	23	9.705	4.784	8.935	4.708	8.165	4.632	7.396	4.557	6.626	4.481	5.703	4.390
	24	10.096	4.470	9.311	4.413	8.526	4.357	7.741	4.300	6.955	4.243	6.013	4.175

**R407C Models  
A Series (Cooling Only)**

**Model : MCK 030A / M4LC 030C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.852	5.733	9.188	5.144	8.525	4.556	7.861	3.967	7.197	3.379	6.401	2.672
	16	10.156	5.400	9.462	4.849	8.767	4.298	8.073	3.747	7.378	3.196	6.545	2.535
24	16	10.156	7.442	9.462	6.890	8.767	6.339	8.073	5.788	7.378	5.237	6.545	4.576
	17	10.460	7.109	9.735	6.596	9.010	6.082	8.284	5.568	7.559	5.055	6.689	4.439
	18	10.765	6.777	10.008	6.301	9.252	5.825	8.496	5.349	7.740	4.872	6.833	4.301
	19	11.069	6.445	10.282	6.006	9.495	5.567	8.708	5.129	7.921	4.690	6.976	4.164
	20	11.376	6.111	10.580	5.697	9.784	5.283	8.988	4.869	8.192	4.456	7.237	3.959
28	18	10.765	8.818	10.008	8.342	9.252	7.866	8.496	7.390	7.740	6.914	6.833	6.342
	19	11.069	8.486	10.282	8.047	9.495	7.609	8.708	7.170	7.921	6.731	6.976	6.205
	20	11.376	8.152	10.580	7.738	9.784	7.324	8.988	6.911	8.192	6.497	7.237	6.000
	21	11.684	7.817	10.894	7.420	10.104	7.022	9.314	6.625	8.524	6.228	7.575	5.751
	22	11.993	7.482	11.208	7.101	10.424	6.720	9.639	6.339	8.855	5.958	7.914	5.501
	23	12.301	7.147	11.523	6.783	10.744	6.418	9.965	6.054	9.186	5.689	8.252	5.252
	24	12.610	6.812	11.837	6.464	11.064	6.116	10.291	5.768	9.518	5.420	8.590	5.002
30	20	11.376	9.173	10.580	8.759	9.784	8.345	8.988	7.931	8.192	7.517	7.237	7.021
	21	11.684	8.838	10.894	8.440	10.104	8.043	9.314	7.646	8.524	7.248	7.575	6.771
	22	11.993	8.503	11.208	8.122	10.424	7.741	9.639	7.360	8.855	6.979	7.914	6.522
	23	12.301	8.168	11.523	7.803	10.744	7.439	9.965	7.074	9.186	6.710	8.252	6.272
	24	12.610	7.833	11.837	7.485	11.064	7.137	10.291	6.789	9.518	6.441	8.590	6.023

**Model : MCK 040A / M4LC 035C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.168	6.950	10.477	6.334	9.786	5.718	9.095	5.102	8.404	4.486	7.575	3.746
	16	11.314	6.195	10.656	5.681	9.998	5.166	9.340	4.651	8.683	4.137	7.894	3.519
24	16	11.314	8.122	10.656	7.608	9.998	7.093	9.340	6.579	8.683	6.064	7.894	5.446
	17	11.459	7.367	10.834	6.954	10.210	6.541	9.586	6.128	8.962	5.715	8.212	5.220
	18	11.604	6.613	11.013	6.301	10.422	5.989	9.831	5.678	9.240	5.366	8.531	4.993
	19	11.749	5.858	11.191	5.648	10.634	5.438	10.076	5.228	9.519	5.018	8.850	4.766
	20	11.892	5.101	11.356	4.977	10.820	4.852	10.283	4.728	9.747	4.604	9.103	4.455
28	18	11.604	8.540	11.013	8.228	10.422	7.917	9.831	7.605	9.240	7.294	8.531	6.920
	19	11.749	7.785	11.191	7.575	10.634	7.365	10.076	7.155	9.519	6.945	8.850	6.693
	20	11.892	7.028	11.356	6.904	10.820	6.780	10.283	6.656	9.747	6.531	9.103	6.383
	21	12.035	6.270	11.512	6.221	10.988	6.172	10.464	6.124	9.941	6.075	9.313	6.016
	22	12.178	5.512	11.667	5.538	11.156	5.565	10.646	5.592	10.135	5.618	9.522	5.650
	23	12.320	4.754	11.822	4.856	11.325	4.958	10.827	5.060	10.329	5.162	9.731	5.284
	24	12.463	3.995	11.978	4.173	11.493	4.350	11.008	4.528	10.523	4.705	9.941	4.918
30	20	11.892	7.992	11.356	7.867	10.820	7.743	10.283	7.619	9.747	7.495	9.103	7.346
	21	12.035	7.234	11.512	7.185	10.988	7.136	10.464	7.087	9.941	7.039	9.313	6.980
	22	12.178	6.475	11.667	6.502	11.156	6.529	10.646	6.555	10.135	6.582	9.522	6.614
	23	12.320	5.717	11.822	5.819	11.325	5.921	10.827	6.023	10.329	6.125	9.731	6.248
	24	12.463	4.959	11.978	5.137	11.493	5.314	11.008	5.491	10.523	5.669	9.941	5.882

**R407C Models  
A Series (Cooling Only)**

**Model : MCK 040A / M4LC 040C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.226	7.023	10.647	6.555	10.068	6.086	9.489	5.617	8.910	5.148	8.216	4.586
	16	11.729	6.559	11.107	6.147	10.485	5.736	9.864	5.325	9.242	4.913	8.496	4.420
24	16	11.729	8.432	11.107	8.021	10.485	7.610	9.864	7.198	9.242	6.787	8.496	6.293
	17	12.231	7.968	11.567	7.614	10.903	7.260	10.238	6.906	9.574	6.552	8.777	6.127
	18	12.734	7.503	12.027	7.207	11.320	6.910	10.613	6.613	9.906	6.317	9.057	5.961
	19	13.237	7.039	12.487	6.799	11.737	6.560	10.987	6.321	10.238	6.082	9.338	5.795
	20	13.740	6.571	12.951	6.360	12.162	6.149	11.373	5.938	10.584	5.728	9.637	5.475
28	18	12.734	9.377	12.027	9.080	11.320	8.784	10.613	8.487	9.906	8.191	9.057	7.835
	19	13.237	8.912	12.487	8.673	11.737	8.434	10.987	8.195	10.238	7.955	9.338	7.668
	20	13.740	8.444	12.951	8.233	12.162	8.023	11.373	7.812	10.584	7.601	9.637	7.348
	21	14.244	7.974	13.417	7.772	12.591	7.571	11.765	7.369	10.939	7.168	9.948	6.926
	22	14.747	7.503	13.884	7.311	13.021	7.119	12.158	6.926	11.295	6.734	10.259	6.503
	23	15.250	7.033	14.350	6.850	13.450	6.667	12.550	6.483	11.650	6.300	10.570	6.080
	24	15.754	6.563	14.817	6.389	13.880	6.215	12.943	6.041	12.006	5.867	10.881	5.658
30	20	13.740	9.381	12.951	9.170	12.162	8.960	11.373	8.749	10.584	8.538	9.637	8.285
	21	14.244	8.911	13.417	8.709	12.591	8.508	11.765	8.306	10.939	8.104	9.948	7.863
	22	14.747	8.440	13.884	8.248	13.021	8.056	12.158	7.863	11.295	7.671	10.259	7.440
	23	15.250	7.970	14.350	7.787	13.450	7.604	12.550	7.420	11.650	7.237	10.570	7.017
	24	15.754	7.500	14.817	7.326	13.880	7.152	12.943	6.977	12.006	6.803	10.881	6.595

**Model : MCK 050A / M4LC 050C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	14.910	9.531	14.049	8.876	13.188	8.222	12.327	7.567	11.466	6.913	10.433	6.127
	16	15.714	8.772	14.739	8.192	13.765	7.612	12.790	7.031	11.816	6.451	10.646	5.755
24	16	15.714	10.958	14.739	10.378	13.765	9.798	12.790	9.217	11.816	8.637	10.646	7.941
	17	16.517	10.200	15.429	9.694	14.341	9.187	13.253	8.681	12.165	8.175	10.860	7.568
	18	17.320	9.441	16.119	9.009	14.917	8.577	13.716	8.146	12.515	7.714	11.073	7.196
	19	18.124	8.683	16.809	8.325	15.494	7.967	14.179	7.610	12.864	7.252	11.286	6.823
	20	18.932	7.923	17.545	7.629	16.158	7.334	14.771	7.040	13.383	6.746	11.719	6.393
28	18	17.320	11.627	16.119	11.195	14.917	10.763	13.716	10.331	12.515	9.900	11.073	9.381
	19	18.124	10.868	16.809	10.511	15.494	10.153	14.179	9.796	12.864	9.438	11.286	9.009
	20	18.932	10.109	17.545	9.814	16.158	9.520	14.771	9.226	13.383	8.932	11.719	8.579
	21	19.743	9.348	18.312	9.110	16.880	8.872	15.448	8.634	14.016	8.397	12.298	8.111
	22	20.555	8.587	19.078	8.406	17.602	8.224	16.125	8.043	14.648	7.861	12.876	7.643
	23	21.367	7.826	19.845	7.701	18.324	7.576	16.802	7.451	15.281	7.325	13.455	7.175
	24	22.178	7.066	20.612	6.997	19.046	6.928	17.479	6.859	15.913	6.790	14.034	6.707
30	20	18.932	11.202	17.545	10.907	16.158	10.613	14.771	10.319	13.383	10.025	11.719	9.672
	21	19.743	10.441	18.312	10.203	16.880	9.965	15.448	9.727	14.016	9.489	12.298	9.204
	22	20.555	9.680	19.078	9.499	17.602	9.317	16.125	9.135	14.648	8.954	12.876	8.736
	23	21.367	8.919	19.845	8.794	18.324	8.669	16.802	8.544	15.281	8.418	13.455	8.268
	24	22.178	8.159	20.612	8.090	19.046	8.021	17.479	7.952	15.913	7.883	14.034	7.800

**R407C Models  
A Series (Heatpump)**

**Model : MCK 020AR / M4LC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.036	3.531	5.645	3.090	5.254	2.649	4.863	2.208	4.471	1.766	4.002	1.237
	16	6.097	3.420	5.725	2.952	5.353	2.485	4.982	2.018	4.610	1.551	4.164	0.990
24	16	6.097	4.802	5.725	4.335	5.353	3.867	4.982	3.400	4.610	2.933	4.164	2.372
	17	6.158	4.691	5.806	4.197	5.453	3.704	5.101	3.210	4.748	2.717	4.325	2.125
	18	6.219	4.580	5.886	4.060	5.553	3.540	5.220	3.021	4.887	2.501	4.487	1.877
	19	6.280	4.469	5.966	3.923	5.653	3.377	5.339	2.831	5.025	2.285	4.649	1.630
	20	6.341	4.361	6.042	3.817	5.742	3.274	5.443	2.731	5.144	2.187	4.785	1.535
28	18	6.219	5.962	5.886	5.442	5.553	4.923	5.220	4.403	4.887	3.883	4.487	3.260
	19	6.280	5.851	5.966	5.305	5.653	4.759	5.339	4.213	5.025	3.667	4.649	3.012
	20	6.341	5.743	6.042	5.200	5.742	4.656	5.443	4.113	5.144	3.569	4.785	2.917
	21	6.401	5.638	6.113	5.116	5.825	4.594	5.538	4.072	5.250	3.550	4.904	2.923
	22	6.461	5.532	6.185	5.032	5.908	4.531	5.632	4.031	5.356	3.530	5.024	2.930
	23	6.521	5.427	6.256	4.948	5.991	4.469	5.726	3.990	5.461	3.511	5.143	2.936
	24	6.582	5.322	6.328	4.864	6.074	4.406	5.821	3.949	5.567	3.491	5.263	2.942
30	20	6.434	6.434	6.042	5.891	5.742	5.347	5.443	4.804	5.144	4.260	4.785	3.608
	21	6.401	6.329	6.113	5.807	5.825	5.285	5.538	4.763	5.250	4.241	4.904	3.615
	22	6.461	6.223	6.185	5.723	5.908	5.222	5.632	4.722	5.356	4.221	5.024	3.621
	23	6.521	6.118	6.256	5.639	5.991	5.160	5.726	4.681	5.461	4.202	5.143	3.627
	24	6.582	6.013	6.328	5.555	6.074	5.098	5.821	4.640	5.567	4.183	5.263	3.633

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.532	2.532	3.130	3.130	3.329	3.329	5.522	5.522	6.718	6.718	7.316	7.316	7.914	7.914
17	2.436	2.436	3.083	3.083	3.299	3.299	5.449	5.449	6.658	6.658	7.251	7.251	7.843	7.843
19	2.341	2.341	3.037	3.037	3.269	3.269	5.376	5.376	6.598	6.598	7.185	7.185	7.773	7.773
21	2.245	2.245	2.991	2.991	3.239	3.239	5.303	5.303	6.538	6.538	7.120	7.120	7.702	7.702
23	2.299	2.299	2.982	2.982	3.210	3.210	5.279	5.279	6.478	6.478	7.055	7.055	7.632	7.632
25	2.353	2.353	2.973	2.973	3.180	3.180	5.254	5.254	6.418	6.418	6.990	6.990	7.561	7.561
27	2.407	2.407	2.964	2.964	3.150	3.150	5.230	5.230	6.358	6.358	6.925	6.925	7.491	7.491
FROST REGION														

**R407C Models  
A Series (Heatpump)**

**Model : MCK 025AR / M4LC 025BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.479	2.946	6.065	2.612	5.651	2.277	5.237	1.943	4.823	1.608	4.326	1.207
	16	6.819	2.752	6.350	2.435	5.881	2.118	5.412	1.801	4.943	1.484	4.381	1.104
24	16	6.819	4.511	6.350	4.194	5.881	3.877	5.412	3.560	4.943	3.243	4.381	2.862
	17	7.159	4.317	6.635	4.018	6.111	3.718	5.587	3.418	5.064	3.119	4.435	2.759
	18	7.499	4.123	6.920	3.841	6.341	3.559	5.763	3.277	5.184	2.995	4.490	2.656
	19	7.839	3.930	7.205	3.665	6.572	3.400	5.938	3.135	5.305	2.871	4.544	2.553
	20	8.182	3.735	7.519	3.479	6.856	3.224	6.194	2.968	5.531	2.712	4.736	2.405
28	18	7.499	5.882	6.920	5.600	6.341	5.318	5.763	5.035	5.184	4.753	4.490	4.415
	19	7.839	5.688	7.205	5.423	6.572	5.159	5.938	4.894	5.305	4.629	4.544	4.311
	20	8.182	5.494	7.519	5.238	6.856	4.982	6.194	4.726	5.531	4.471	4.736	4.164
	21	8.527	5.298	7.852	5.046	7.178	4.794	6.503	4.542	5.829	4.289	5.020	3.987
	22	8.872	5.103	8.186	4.854	7.499	4.605	6.813	4.357	6.127	4.108	5.303	3.810
	23	9.217	4.907	8.519	4.662	7.821	4.417	7.123	4.172	6.424	3.927	5.587	3.632
	24	9.562	4.712	8.852	4.470	8.142	4.229	7.432	3.987	6.722	3.745	5.870	3.455
30	20	8.182	6.373	7.519	6.117	6.856	5.861	6.194	5.606	5.531	5.350	5.043	5.043
	21	8.527	6.177	7.852	5.925	7.178	5.673	6.503	5.421	5.829	5.169	5.020	4.866
	22	8.872	5.982	8.186	5.733	7.499	5.485	6.813	5.236	6.127	4.987	5.303	4.689
	23	9.217	5.787	8.519	5.541	7.821	5.296	7.123	5.051	6.424	4.806	5.587	4.512
	24	9.562	5.591	8.852	5.350	8.142	5.108	7.432	4.866	6.722	4.624	5.870	4.334

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.529	4.529	5.108	5.108	5.301	5.301	7.423	7.423	8.580	8.580	9.159	9.159	9.738	9.738
17	4.473	4.473	5.058	5.058	5.253	5.253	7.293	7.293	8.504	8.504	9.077	9.077	9.651	9.651
19	4.417	4.417	5.008	5.008	5.206	5.206	7.164	7.164	8.427	8.427	8.996	8.996	9.564	9.564
21	4.361	4.361	4.959	4.959	5.158	5.158	7.034	7.034	8.351	8.351	8.914	8.914	9.477	9.477
23	4.336	4.336	4.917	4.917	5.110	5.110	7.034	7.034	8.274	8.274	8.832	8.832	9.391	9.391
25	4.312	4.312	4.875	4.875	5.063	5.063	7.035	7.035	8.197	8.197	8.751	8.751	9.304	9.304
27	4.287	4.287	4.833	4.833	5.015	5.015	7.035	7.035	8.121	8.121	8.669	8.669	9.217	9.217

FROST REGION

**R407C Models  
A Series (Heatpump)**

**Model : MCK 030AR / M4LC 030CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	9.072	4.986	8.530	4.529	7.988	4.071	7.446	3.614	6.905	3.156	6.254	2.608
	16	9.365	4.608	8.805	4.209	8.245	3.811	7.686	3.412	7.126	3.013	6.454	2.535
24	16	9.365	6.606	8.805	6.208	8.245	5.809	7.686	5.410	7.126	5.012	6.454	4.533
	17	9.658	6.228	9.080	5.888	8.503	5.549	7.925	5.209	7.347	4.869	6.654	4.461
	18	9.951	5.850	9.356	5.569	8.760	5.288	8.164	5.007	7.569	4.726	6.854	4.388
	19	10.244	5.472	9.631	5.250	9.017	5.028	8.404	4.805	7.790	4.583	7.054	4.316
	20	10.538	5.091	9.913	4.898	9.288	4.705	8.662	4.512	8.037	4.319	7.286	4.087
28	18	9.951	7.849	9.356	7.568	8.760	7.286	8.164	7.005	7.569	6.724	6.854	6.387
	19	10.244	7.471	9.631	7.248	9.017	7.026	8.404	6.803	7.790	6.581	7.054	6.314
	20	10.538	7.089	9.913	6.896	9.288	6.703	8.662	6.510	8.037	6.317	7.286	6.086
	21	10.833	6.705	10.200	6.522	9.567	6.339	8.934	6.156	8.300	5.973	7.541	5.753
	22	11.127	6.321	10.486	6.148	9.846	5.975	9.205	5.802	8.564	5.628	7.795	5.420
	23	11.421	5.937	10.773	5.774	10.125	5.611	9.476	5.447	8.828	5.284	8.050	5.088
	24	11.716	5.554	11.060	5.400	10.404	5.246	9.747	5.093	9.091	4.939	8.304	4.755
30	20	10.538	8.088	9.913	7.895	9.288	7.702	8.662	7.509	8.037	7.316	7.286	7.085
	21	10.833	7.704	10.200	7.521	9.567	7.338	8.934	7.155	8.300	6.972	7.541	6.752
	22	11.127	7.321	10.486	7.147	9.846	6.974	9.205	6.801	8.564	6.627	7.795	6.419
	23	11.421	6.937	10.773	6.773	10.125	6.610	9.476	6.446	8.828	6.283	8.050	6.087
	24	11.716	6.553	11.060	6.399	10.404	6.246	9.747	6.092	9.091	5.938	8.304	5.754

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	5.513	5.513	6.152	6.152	6.365	6.365	8.709	8.709	9.987	9.987	10.626	10.626	11.265	11.265
17	5.460	5.460	6.096	6.096	6.308	6.308	8.834	8.834	9.898	9.898	10.531	10.531	11.165	11.165
19	5.407	5.407	6.040	6.040	6.251	6.251	8.960	8.960	9.809	9.809	10.437	10.437	11.064	11.064
21	5.355	5.355	5.984	5.984	6.194	6.194	9.086	9.086	9.720	9.720	10.342	10.342	10.964	10.964
23	5.309	5.309	5.930	5.930	6.137	6.137	8.794	8.794	9.631	9.631	10.247	10.247	10.864	10.864
25	5.262	5.262	5.875	5.875	6.080	6.080	8.502	8.502	9.542	9.542	10.152	10.152	10.763	10.763
27	5.216	5.216	5.821	5.821	6.023	6.023	8.210	8.210	9.452	9.452	10.058	10.058	10.663	10.663
FROST REGION														

**R407C Models  
A Series (Heatpump)**

**Model : MCK 040AR / M4LC 035CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	11.168	6.950	10.477	6.334	9.786	5.718	9.095	5.102	8.404	4.486	7.575	3.746
	16	11.314	6.195	10.656	5.681	9.998	5.166	9.340	4.651	8.683	4.137	7.894	3.519
24	16	11.314	8.122	10.656	7.608	9.998	7.093	9.340	6.579	8.683	6.064	7.894	5.446
	17	11.459	7.367	10.834	6.954	10.210	6.541	9.586	6.128	8.962	5.715	8.212	5.220
	18	11.604	6.613	11.013	6.301	10.422	5.989	9.831	5.678	9.240	5.366	8.531	4.993
	19	11.749	5.858	11.191	5.648	10.634	5.438	10.076	5.228	9.519	5.018	8.850	4.766
	20	11.892	5.101	11.356	4.977	10.820	4.852	10.283	4.728	9.747	4.604	9.103	4.455
28	18	11.604	8.540	11.013	8.228	10.422	7.917	9.831	7.605	9.240	7.294	8.531	6.920
	19	11.749	7.785	11.191	7.575	10.634	7.365	10.076	7.155	9.519	6.945	8.850	6.693
	20	11.892	7.028	11.356	6.904	10.820	6.780	10.283	6.656	9.747	6.531	9.103	6.383
	21	12.035	6.270	11.512	6.221	10.988	6.172	10.464	6.124	9.941	6.075	9.313	6.016
	22	12.178	5.512	11.667	5.538	11.156	5.565	10.646	5.592	10.135	5.618	9.522	5.650
	23	12.320	4.754	11.822	4.856	11.325	4.958	10.827	5.060	10.329	5.162	9.731	5.284
30	24	12.463	3.995	11.978	4.173	11.493	4.350	11.008	4.528	10.523	4.705	9.941	4.918
	20	11.892	7.992	11.356	7.867	10.820	7.743	10.283	7.619	9.747	7.495	9.103	7.346
	21	12.035	7.234	11.512	7.185	10.988	7.136	10.464	7.087	9.941	7.039	9.313	6.980
	22	12.178	6.475	11.667	6.502	11.156	6.529	10.646	6.555	10.135	6.582	9.522	6.614
	23	12.320	5.717	11.822	5.819	11.325	5.921	10.827	6.023	10.329	6.125	9.731	6.248
	24	12.463	4.959	11.978	5.137	11.493	5.314	11.008	5.491	10.523	5.669	9.941	5.882

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.557	4.557	5.560	5.560	5.894	5.894	9.569	9.569	11.573	11.573	12.575	12.575	13.578	13.578
17	4.403	4.403	5.481	5.481	5.841	5.841	9.729	9.729	11.470	11.470	12.463	12.463	13.457	13.457
19	4.248	4.248	5.403	5.403	5.788	5.788	9.889	9.889	11.367	11.367	12.351	12.351	13.336	13.336
21	4.094	4.094	5.325	5.325	5.735	5.735	10.049	10.049	11.264	11.264	12.239	12.239	13.215	13.215
23	4.172	4.172	5.305	5.305	5.683	5.683	9.705	9.705	11.160	11.160	12.127	12.127	13.094	13.094
25	4.251	4.251	5.285	5.285	5.630	5.630	9.361	9.361	11.057	11.057	12.015	12.015	12.973	12.973
27	4.330	4.330	5.265	5.265	5.577	5.577	9.017	9.017	10.954	10.954	11.903	11.903	12.852	12.852
FROST REGION														

**R407C Models  
A Series (Heatpump)**

**Model : MCK 040AR / M4LC 040CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	12.087	7.434	11.369	6.844	10.652	6.253	9.934	5.663	9.217	5.072	8.356	4.364
	16	12.593	7.000	11.820	6.470	11.047	5.940	10.274	5.410	9.501	4.879	8.574	4.243
24	16	12.593	9.161	11.820	8.631	11.047	8.101	10.274	7.570	9.501	7.040	8.574	6.404
	17	13.099	8.728	12.271	8.258	11.443	7.788	10.614	7.317	9.786	6.847	8.792	6.283
	18	13.605	8.294	12.722	7.884	11.838	7.474	10.954	7.064	10.071	6.655	9.010	6.163
	19	14.111	7.861	13.172	7.511	12.233	7.161	11.294	6.812	10.355	6.462	9.228	6.042
	20	14.620	7.423	13.646	7.100	12.673	6.777	11.699	6.453	10.726	6.130	9.557	5.742
28	18	13.605	10.455	12.722	10.045	11.838	9.635	10.954	9.225	10.071	8.815	9.010	8.324
	19	14.111	10.021	13.172	9.672	12.233	9.322	11.294	8.972	10.355	8.623	9.228	8.203
	20	14.620	9.584	13.646	9.261	12.673	8.937	11.699	8.614	10.726	8.291	9.557	7.903
	21	15.130	9.144	14.136	8.824	13.142	8.505	12.147	8.186	11.153	7.866	9.960	7.483
	22	15.640	8.703	14.625	8.388	13.610	8.073	12.595	7.757	11.580	7.442	10.362	7.064
	23	16.151	8.263	15.115	7.952	14.079	7.640	13.043	7.329	12.008	7.018	10.765	6.644
	24	16.661	7.823	15.604	7.515	14.548	7.208	13.492	6.901	12.435	6.593	11.167	6.224
30	20	14.620	10.664	13.646	10.341	12.673	10.018	11.699	9.695	10.726	9.371	9.557	8.983
	21	15.130	10.224	14.136	9.905	13.142	9.585	12.147	9.266	11.153	8.947	9.960	8.564
	22	15.640	9.784	14.625	9.468	13.610	9.153	12.595	8.838	11.580	8.522	10.362	8.144
	23	16.151	9.343	15.115	9.032	14.079	8.721	13.043	8.409	12.008	8.098	10.765	7.724
	24	16.661	8.903	15.604	8.596	14.548	8.288	13.492	7.981	12.435	7.674	11.167	7.305

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	6.925	6.925	7.881	7.881	8.200	8.200	11.708	11.708	13.621	13.621	14.578	14.578	15.535	15.535
17	6.822	6.822	7.801	7.801	8.127	8.127	11.811	11.811	13.500	13.500	14.448	14.448	15.396	15.396
19	6.720	6.720	7.720	7.720	8.053	8.053	11.914	11.914	13.378	13.378	14.318	14.318	15.258	15.258
21	6.618	6.618	7.639	7.639	7.980	7.980	12.016	12.016	13.257	13.257	14.188	14.188	15.119	15.119
23	6.598	6.598	7.579	7.579	7.906	7.906	11.694	11.694	13.135	13.135	14.058	14.058	14.981	14.981
25	6.578	6.578	7.519	7.519	7.833	7.833	11.371	11.371	13.014	13.014	13.928	13.928	14.842	14.842
27	6.558	6.558	7.459	7.459	7.759	7.759	11.048	11.048	12.892	12.892	13.798	13.798	14.704	14.704
FROST REGION														

**R407C Models  
A Series (Heatpump)**

**Model : MCK 050AR / M4LC 050CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	14.910	9.531	14.049	8.876	13.188	8.222	12.327	7.567	11.466	6.913	10.433	6.127
	16	15.714	8.772	14.739	8.192	13.765	7.612	12.790	7.031	11.816	6.451	10.646	5.755
24	16	15.714	10.958	14.739	10.378	13.765	9.798	12.790	9.217	11.816	8.637	10.646	7.941
	17	16.517	10.200	15.429	9.694	14.341	9.187	13.253	8.681	12.165	8.175	10.860	7.568
	18	17.320	9.441	16.119	9.009	14.917	8.577	13.716	8.146	12.515	7.714	11.073	7.196
	19	18.124	8.683	16.809	8.325	15.494	7.967	14.179	7.610	12.864	7.252	11.286	6.823
	20	18.932	7.923	17.545	7.629	16.158	7.334	14.771	7.040	13.383	6.746	11.719	6.393
28	18	17.320	11.627	16.119	11.195	14.917	10.763	13.716	10.331	12.515	9.900	11.073	9.381
	19	18.124	10.868	16.809	10.511	15.494	10.153	14.179	9.796	12.864	9.438	11.286	9.009
	20	18.932	10.109	17.545	9.814	16.158	9.520	14.771	9.226	13.383	8.932	11.719	8.579
	21	19.743	9.348	18.312	9.110	16.880	8.872	15.448	8.634	14.016	8.397	12.298	8.111
	22	20.555	8.587	19.078	8.406	17.602	8.224	16.125	8.043	14.648	7.861	12.876	7.643
	23	21.367	7.826	19.845	7.701	18.324	7.576	16.802	7.451	15.281	7.325	13.455	7.175
	24	22.178	7.066	20.612	6.997	19.046	6.928	17.479	6.859	15.913	6.790	14.034	6.707
30	20	18.932	11.202	17.545	10.907	16.158	10.613	14.771	10.319	13.383	10.025	11.719	9.672
	21	19.743	10.441	18.312	10.203	16.880	9.965	15.448	9.727	14.016	9.489	12.298	9.204
	22	20.555	9.680	19.078	9.499	17.602	9.317	16.125	9.135	14.648	8.954	12.876	8.736
	23	21.367	8.919	19.845	8.794	18.324	8.669	16.802	8.544	15.281	8.418	13.455	8.268
	24	22.178	8.159	20.612	8.090	19.046	8.021	17.479	7.952	15.913	7.883	14.034	7.800

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	6.400	6.400	7.781	7.781	8.241	8.241	13.303	13.303	16.064	16.064	17.444	17.444	18.825	18.825
17	6.190	6.190	7.673	7.673	8.167	8.167	13.521	13.521	15.920	15.920	17.289	17.289	18.657	18.657
19	5.979	5.979	7.565	7.565	8.093	8.093	13.738	13.738	15.777	15.777	17.133	17.133	18.489	18.489
21	5.769	5.769	7.457	7.457	8.020	8.020	13.956	13.956	15.634	15.634	16.978	16.978	18.321	18.321
23	5.872	5.872	7.427	7.427	7.946	7.946	13.483	13.483	15.491	15.491	16.822	16.822	18.154	18.154
25	5.976	5.976	7.398	7.398	7.872	7.872	13.010	13.010	15.347	15.347	16.667	16.667	17.986	17.986
27	6.080	6.080	7.369	7.369	7.798	7.798	12.537	12.537	15.204	15.204	16.511	16.511	17.818	17.818
<b>FROST REGION</b>														

**R22 Models  
B Series (Cooling Only)**

**Model : MCK 015B / MLC 015C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.179	2.552	3.911	2.300	3.642	2.048	3.374	1.795	3.105	1.543	2.783	1.241
	16	4.218	2.334	3.965	2.111	3.711	1.888	3.457	1.665	3.203	1.442	2.899	1.175
24	16	4.218	3.136	3.965	2.913	3.711	2.690	3.457	2.467	3.203	2.244	2.899	1.977
	17	4.258	2.917	4.019	2.724	3.780	2.530	3.540	2.337	3.301	2.143	3.014	1.911
	18	4.297	2.699	4.073	2.535	3.848	2.371	3.624	2.207	3.399	2.043	3.130	1.846
	19	4.337	2.480	4.127	2.346	3.917	2.211	3.707	2.077	3.497	1.942	3.246	1.780
	20	4.376	2.261	4.177	2.150	3.977	2.038	3.778	1.926	3.578	1.815	3.339	1.681
28	18	4.297	3.501	4.073	3.337	3.848	3.173	3.624	3.009	3.399	2.845	3.130	2.648
	19	4.337	3.282	4.127	3.148	3.917	3.013	3.707	2.878	3.497	2.744	3.246	2.582
	20	4.376	3.063	4.177	2.952	3.977	2.840	3.778	2.728	3.578	2.617	3.339	2.483
	21	4.415	2.844	4.223	2.751	4.031	2.658	3.840	2.565	3.648	2.472	3.418	2.361
	22	4.453	2.624	4.269	2.550	4.085	2.476	3.902	2.402	3.718	2.328	3.497	2.239
	23	4.492	2.404	4.316	2.349	4.140	2.294	3.963	2.239	3.787	2.183	3.576	2.117
30	24	4.531	2.185	4.362	2.148	4.194	2.112	4.025	2.075	3.857	2.039	3.655	1.995
	20	4.376	3.464	4.177	3.353	3.977	3.241	3.778	3.129	3.578	3.018	3.339	2.884
	21	4.415	3.245	4.223	3.152	4.031	3.059	3.840	2.966	3.648	2.873	3.418	2.762
	22	4.453	3.025	4.269	2.951	4.085	2.877	3.902	2.803	3.718	2.729	3.497	2.640
	23	4.492	2.805	4.316	2.750	4.140	2.695	3.963	2.639	3.787	2.584	3.576	2.518
	24	4.531	2.586	4.362	2.549	4.194	2.513	4.025	2.476	3.857	2.440	3.655	2.396

**Model : MCK 020B / MLC 20B**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.802	3.642	5.523	3.419	5.245	3.197	4.967	2.974	4.496	2.545	4.170	2.249	4.012	2.105	3.902	2.005
	16	6.042	3.461	5.752	3.250	5.461	3.038	5.170	2.827	4.680	2.412	4.340	2.125	4.176	1.986	4.062	1.890
24	16	6.042	4.382	5.752	4.170	5.461	3.959	5.170	3.748	4.680	3.333	4.340	3.046	4.176	2.907	4.062	2.811
	17	6.283	4.201	5.980	4.001	5.677	3.801	5.374	3.600	4.864	3.200	4.511	2.923	4.340	2.788	4.221	2.695
	18	6.524	4.020	6.208	3.831	5.893	3.642	5.577	3.453	5.048	3.066	4.682	2.799	4.504	2.670	4.381	2.579
	19	6.765	3.839	6.436	3.661	6.108	3.484	5.780	3.306	5.232	2.933	4.852	2.675	4.669	2.551	4.541	2.464
	20	7.005	3.657	6.659	3.483	6.313	3.309	5.967	3.135	5.401	2.778	5.009	2.532	4.820	2.413	4.688	2.329
28	18	6.524	4.941	6.208	4.752	5.893	4.563	5.577	4.374	5.048	3.987	4.682	3.720	4.504	3.591	4.381	3.500
	19	6.765	4.760	6.436	4.582	6.108	4.405	5.780	4.227	5.232	3.854	4.852	3.596	4.669	3.472	4.541	3.385
	20	7.005	4.578	6.659	4.404	6.313	4.230	5.967	4.056	5.401	3.699	5.009	3.453	4.820	3.334	4.688	3.250
	21	7.244	4.396	6.878	4.220	6.511	4.045	6.144	3.869	5.561	3.531	5.157	3.296	4.962	3.183	4.826	3.104
	22	7.484	4.213	7.096	4.036	6.708	3.860	6.320	3.683	5.720	3.362	5.305	3.140	5.105	3.032	4.965	2.957
	23	7.724	4.031	7.315	3.853	6.906	3.674	6.497	3.496	5.880	3.193	5.454	2.983	5.247	2.881	5.103	2.811
30	24	7.963	3.848	7.533	3.669	7.103	3.489	6.673	3.310	6.040	3.024	5.602	2.826	5.390	2.731	5.242	2.664
	20	7.005	5.039	6.659	4.865	6.313	4.691	5.967	4.517	5.401	4.160	5.009	3.913	4.820	3.794	4.688	3.711
	21	7.244	4.856	6.878	4.681	6.511	4.505	6.144	4.330	5.561	3.991	5.157	3.757	4.962	3.643	4.826	3.564
	22	7.484	4.674	7.096	4.497	6.708	4.320	6.320	4.143	5.720	3.822	5.305	3.600	5.105	3.493	4.965	3.418
	23	7.724	4.491	7.315	4.313	6.906	4.135	6.497	3.957	5.880	3.653	5.454	3.443	5.247	3.342	5.103	3.271
	24	7.963	4.309	7.533	4.129	7.103	3.950	6.673	3.770	6.040	3.484	5.602	3.287	5.390	3.191	5.242	3.124

HIGH AMBIENT

**R22 Models  
B Series (Cooling Only)**

**Model : MCK 025B / MLC 025B**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.787	4.252	6.460	4.007	6.133	3.762	5.805	3.518	5.627	3.354	5.341	3.092	5.203	2.966	5.109	2.880
	16	7.334	4.154	6.917	3.890	6.501	3.627	6.085	3.364	5.897	3.205	5.598	2.951	5.454	2.829	5.355	2.745
24	16	7.334	5.228	6.917	4.965	6.501	4.702	6.085	4.439	5.897	4.280	5.598	4.026	5.454	3.904	5.355	3.820
	17	7.880	5.130	7.375	4.849	6.869	4.567	6.364	4.286	6.168	4.131	5.854	3.884	5.704	3.766	5.600	3.684
	18	8.427	5.032	7.832	4.732	7.238	4.432	6.643	4.132	6.438	3.982	6.111	3.743	5.954	3.628	5.846	3.549
	19	8.974	4.934	8.290	4.616	7.606	4.297	6.922	3.978	6.709	3.833	6.368	3.602	6.204	3.491	6.092	3.414
	20	9.523	4.837	8.776	4.502	8.028	4.168	7.281	3.833	7.057	3.693	6.698	3.468	6.526	3.360	6.407	3.286
28	18	8.427	6.107	7.832	5.807	7.238	5.507	6.643	5.207	6.438	5.057	6.111	4.818	5.954	4.703	5.846	4.624
	19	8.974	6.009	8.290	5.691	7.606	5.372	6.922	5.053	6.709	4.908	6.368	4.677	6.204	4.565	6.092	4.489
	20	9.523	5.912	8.776	5.577	8.028	5.242	7.281	4.908	7.057	4.767	6.698	4.543	6.526	4.435	6.407	4.361
	21	10.075	5.814	9.281	5.465	8.487	5.117	7.693	4.768	7.456	4.632	7.077	4.414	6.895	4.310	6.770	4.238
	22	10.627	5.717	9.786	5.354	8.945	4.991	8.104	4.628	7.855	4.496	7.455	4.285	7.264	4.184	7.132	4.115
	23	11.178	5.619	10.291	5.242	9.403	4.865	8.516	4.488	8.254	4.361	7.834	4.157	7.633	4.059	7.494	3.992
30	24	11.730	5.522	10.796	5.131	9.862	4.739	8.927	4.348	8.652	4.225	8.213	4.028	8.002	3.934	7.856	3.868
	20	9.523	6.449	8.776	6.114	8.028	5.780	7.281	5.445	7.057	5.305	6.698	5.080	6.526	4.973	6.407	4.898
	21	10.075	6.352	9.281	6.003	8.487	5.654	7.693	5.305	7.456	5.169	7.077	4.952	6.895	4.847	6.770	4.775
	22	10.627	6.254	9.786	5.891	8.945	5.528	8.104	5.165	7.855	5.034	7.455	4.823	7.264	4.722	7.132	4.652
	23	11.178	6.157	10.291	5.780	9.403	5.403	8.516	5.026	8.254	4.898	7.834	4.694	7.633	4.596	7.494	4.529
	24	11.730	6.059	10.796	5.668	9.862	5.277	8.927	4.886	8.652	4.762	8.213	4.566	8.002	4.471	7.856	4.406
<b>HIGH AMBIENT</b>																	

**R22 Models  
B Series (Heatpump)**

**Model : MCK 015BR / MLC 015CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.179	2.552	3.911	2.300	3.642	2.048	3.374	1.795	3.105	1.543	2.783	1.241
	16	4.218	2.334	3.965	2.111	3.711	1.888	3.457	1.665	3.203	1.442	2.899	1.175
24	16	4.218	3.136	3.965	2.913	3.711	2.690	3.457	2.467	3.203	2.244	2.899	1.977
	17	4.258	2.917	4.019	2.724	3.780	2.530	3.540	2.337	3.301	2.143	3.014	1.911
	18	4.297	2.699	4.073	2.535	3.848	2.371	3.624	2.207	3.399	2.043	3.130	1.846
	19	4.337	2.480	4.127	2.346	3.917	2.211	3.707	2.077	3.497	1.942	3.246	1.780
	20	4.376	2.261	4.177	2.150	3.977	2.038	3.778	1.926	3.578	1.815	3.339	1.681
28	18	4.297	3.501	4.073	3.337	3.848	3.173	3.624	3.009	3.399	2.845	3.130	2.648
	19	4.337	3.282	4.127	3.148	3.917	3.013	3.707	2.878	3.497	2.744	3.246	2.582
	20	4.376	3.063	4.177	2.952	3.977	2.840	3.778	2.728	3.578	2.617	3.339	2.483
	21	4.415	2.844	4.223	2.751	4.031	2.658	3.840	2.565	3.648	2.472	3.418	2.361
	22	4.453	2.624	4.269	2.550	4.085	2.476	3.902	2.402	3.718	2.328	3.497	2.239
	23	4.492	2.404	4.316	2.349	4.140	2.294	3.963	2.239	3.787	2.183	3.576	2.117
	24	4.531	2.185	4.362	2.148	4.194	2.112	4.025	2.075	3.857	2.039	3.655	1.995
30	20	4.376	3.464	4.177	3.353	3.977	3.241	3.778	3.129	3.578	3.018	3.339	2.884
	21	4.415	3.245	4.223	3.152	4.031	3.059	3.840	2.966	3.648	2.873	3.418	2.762
	22	4.453	3.025	4.269	2.951	4.085	2.877	3.902	2.803	3.718	2.729	3.497	2.640
	23	4.492	2.805	4.316	2.750	4.140	2.695	3.963	2.639	3.787	2.584	3.576	2.518
	24	4.531	2.586	4.362	2.549	4.194	2.513	4.025	2.476	3.857	2.440	3.655	2.396

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.318	1.318	1.652	1.652	1.763	1.763	2.985	2.985	3.652	3.652	3.985	3.985	4.319	4.319
17	1.263	1.263	1.626	1.626	1.747	1.747	3.107	3.107	3.619	3.619	3.950	3.950	4.280	4.280
19	1.209	1.209	1.601	1.601	1.731	1.731	3.228	3.228	3.587	3.587	3.914	3.914	4.242	4.242
21	1.154	1.154	1.575	1.575	1.715	1.715	3.350	3.350	3.554	3.554	3.879	3.879	4.203	4.203
23	1.187	1.187	1.572	1.572	1.700	1.700	3.167	3.167	3.522	3.522	3.843	3.843	4.165	4.165
25	1.221	1.221	1.568	1.568	1.684	1.684	2.984	2.984	3.489	3.489	3.808	3.808	4.126	4.126
27	1.254	1.254	1.565	1.565	1.668	1.668	2.802	2.802	3.457	3.457	3.772	3.772	4.088	4.088
FROST REGION														

**R22 Models  
B Series (Heatpump)**

**Model : MCK 020BR / MLC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.659	3.547	5.377	3.310	5.094	3.074	4.811	2.838	4.354	2.422	4.038	2.134	3.886	1.995	3.779	1.898
	16	5.775	3.283	5.511	3.081	5.247	2.879	4.983	2.677	4.510	2.277	4.183	2.000	4.025	1.866	3.914	1.772
24	16	5.775	4.204	5.511	4.002	5.247	3.800	4.983	3.598	4.510	3.198	4.183	2.921	4.025	2.787	3.914	2.693
	17	5.891	3.941	5.645	3.774	5.400	3.606	5.155	3.438	4.666	3.053	4.328	2.786	4.164	2.657	4.050	2.567
	18	6.006	3.678	5.780	3.545	5.554	3.411	5.328	3.278	4.822	2.908	4.472	2.652	4.303	2.528	4.185	2.442
	19	6.122	3.415	5.914	3.316	5.707	3.217	5.500	3.118	4.978	2.763	4.617	2.517	4.442	2.399	4.320	2.316
	20	6.235	3.150	6.030	3.070	5.826	2.990	5.621	2.911	5.087	2.575	4.718	2.343	4.540	2.231	4.415	2.153
28	18	6.006	4.599	5.780	4.466	5.554	4.332	5.328	4.199	4.822	3.829	4.472	3.573	4.303	3.449	4.185	3.363
	19	6.122	4.336	5.914	4.237	5.707	4.138	5.500	4.039	4.978	3.684	4.617	3.438	4.442	3.320	4.320	3.237
	20	6.235	4.071	6.030	3.991	5.826	3.911	5.621	3.832	5.087	3.496	4.718	3.264	4.540	3.152	4.415	3.074
	21	6.348	3.804	6.134	3.734	5.921	3.663	5.707	3.593	5.165	3.280	4.791	3.064	4.610	2.960	4.483	2.887
	22	6.460	3.538	6.238	3.477	6.016	3.416	5.794	3.355	5.244	3.065	4.863	2.864	4.679	2.767	4.551	2.699
	23	6.572	3.272	6.342	3.220	6.111	3.168	5.880	3.116	5.322	2.849	4.936	2.664	4.749	2.574	4.619	2.512
	24	6.685	3.006	6.445	2.963	6.206	2.920	5.967	2.878	5.401	2.633	5.009	2.464	4.819	2.382	4.687	2.325
30	20	6.235	4.531	6.030	4.451	5.826	4.372	5.621	4.292	5.087	3.957	4.718	3.725	4.540	3.613	4.415	3.534
	21	6.348	4.265	6.134	4.194	5.921	4.124	5.707	4.054	5.165	3.741	4.791	3.525	4.610	3.420	4.483	3.347
	22	6.460	3.999	6.238	3.937	6.016	3.876	5.794	3.815	5.244	3.525	4.863	3.325	4.679	3.227	4.551	3.160
	23	6.572	3.732	6.342	3.680	6.111	3.629	5.880	3.577	5.322	3.309	4.936	3.124	4.749	3.035	4.619	2.972
	24	6.685	3.466	6.445	3.423	6.206	3.381	5.967	3.338	5.401	3.093	5.009	2.924	4.819	2.842	4.687	2.785

**HIGH AMBIENT**

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.304	3.304	3.750	3.750	3.898	3.898	5.532	5.532	6.423	6.423	6.869	6.869	7.314	7.314
17	3.258	3.258	3.712	3.712	3.863	3.863	5.544	5.544	6.366	6.366	6.808	6.808	7.249	7.249
19	3.212	3.212	3.674	3.674	3.828	3.828	5.556	5.556	6.309	6.309	6.746	6.746	7.184	7.184
21	3.165	3.165	3.636	3.636	3.793	3.793	5.569	5.569	6.251	6.251	6.685	6.685	7.119	7.119
23	3.153	3.153	3.607	3.607	3.758	3.758	5.454	5.454	6.194	6.194	6.624	6.624	7.054	7.054
25	3.141	3.141	3.578	3.578	3.724	3.724	5.340	5.340	6.137	6.137	6.563	6.563	6.989	6.989
27	3.129	3.129	3.549	3.549	3.689	3.689	5.226	5.226	6.079	6.079	6.501	6.501	6.923	6.923

**FROST REGION**

**R22 Models  
B Series (Heatpump)**

**Model : MCK 025BR / MLC 025BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.645	4.156	6.313	3.898	5.981	3.640	5.649	3.382	5.475	3.222	5.197	2.967	5.063	2.844	4.971	2.760
	16	7.066	3.976	6.677	3.722	6.287	3.469	5.897	3.215	5.716	3.061	5.425	2.813	5.286	2.695	5.190	2.613
24	16	7.066	5.051	6.677	4.797	6.287	4.544	5.897	4.290	5.716	4.135	5.425	3.888	5.286	3.770	5.190	3.688
	17	7.488	4.871	7.040	4.622	6.593	4.372	6.145	4.123	5.956	3.974	5.653	3.735	5.508	3.620	5.408	3.542
	18	7.909	4.690	7.404	4.446	6.899	4.201	6.394	3.957	6.197	3.812	5.882	3.582	5.731	3.471	5.626	3.395
	19	8.331	4.510	7.768	4.270	7.205	4.030	6.642	3.790	6.437	3.651	6.110	3.429	5.953	3.322	5.845	3.248
	20	8.754	4.329	8.147	4.089	7.541	3.849	6.934	3.608	6.720	3.475	6.379	3.261	6.215	3.159	6.102	3.088
28	18	7.909	5.765	7.404	5.521	6.899	5.276	6.394	5.032	6.197	4.887	5.882	4.657	5.731	4.546	5.626	4.470
	19	8.331	5.585	7.768	5.345	7.205	5.105	6.642	4.865	6.437	4.726	6.110	4.503	5.953	4.397	5.845	4.323
	20	8.754	5.404	8.147	5.164	7.541	4.924	6.934	4.683	6.720	4.550	6.379	4.336	6.215	4.234	6.102	4.163
	21	9.178	5.223	8.538	4.979	7.897	4.735	7.256	4.492	7.032	4.364	6.675	4.160	6.503	4.062	6.385	3.995
	22	9.603	5.042	8.928	4.794	8.253	4.547	7.578	4.300	7.344	4.178	6.971	3.984	6.792	3.890	6.668	3.826
	23	10.027	4.860	9.318	4.610	8.609	4.359	7.899	4.108	7.656	3.992	7.267	3.807	7.080	3.718	6.952	3.657
	24	10.451	4.679	9.708	4.425	8.965	4.171	8.221	3.916	7.968	3.806	7.563	3.631	7.369	3.546	7.235	3.488
30	20	8.754	5.942	8.147	5.701	7.541	5.461	6.934	5.221	6.720	5.087	6.379	4.874	6.215	4.771	6.102	4.701
	21	9.178	5.760	8.538	5.517	7.897	5.273	7.256	5.029	7.032	4.901	6.675	4.697	6.503	4.599	6.385	4.532
	22	9.603	5.579	8.928	5.332	8.253	5.085	7.578	4.837	7.344	4.716	6.971	4.521	6.792	4.428	6.668	4.363
	23	10.027	5.398	9.318	5.147	8.609	4.896	7.899	4.645	7.656	4.530	7.267	4.345	7.080	4.256	6.952	4.195
	24	10.451	5.217	9.708	4.962	8.965	4.708	8.221	4.454	7.968	4.344	7.563	4.168	7.369	4.084	7.235	4.026

**HIGH AMBIENT**

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.829	3.829	4.268	4.268	4.414	4.414	6.023	6.023	6.901	6.901	7.340	7.340	7.779	7.779
17	3.793	3.793	4.229	4.229	4.374	4.374	6.262	6.262	6.840	6.840	7.275	7.275	7.710	7.710
19	3.758	3.758	4.190	4.190	4.335	4.335	6.502	6.502	6.778	6.778	7.209	7.209	7.640	7.640
21	3.722	3.722	4.152	4.152	4.295	4.295	6.741	6.741	6.716	6.716	7.144	7.144	7.571	7.571
23	3.689	3.689	4.114	4.114	4.256	4.256	6.379	6.379	6.655	6.655	7.078	7.078	7.502	7.502
25	3.656	3.656	4.076	4.076	4.216	4.216	6.016	6.016	6.593	6.593	7.013	7.013	7.432	7.432
27	3.622	3.622	4.038	4.038	4.176	4.176	5.654	5.654	6.532	6.532	6.947	6.947	7.363	7.363

**FROST REGION**

**R407C Models  
B Series (Cooling Only)**

**Model : MCK 015B / M4LC 015B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.833	2.160	3.563	1.931	3.294	1.701	3.025	1.472	2.755	1.242	2.432	0.967
	16	3.970	2.048	3.681	1.835	3.392	1.622	3.103	1.409	2.814	1.197	2.468	0.941
24	16	3.970	2.882	3.681	2.669	3.392	2.457	3.103	2.244	2.814	2.031	2.468	1.776
	17	4.107	2.770	3.799	2.574	3.490	2.378	3.182	2.182	2.873	1.986	2.503	1.750
	18	4.245	2.657	3.916	2.478	3.588	2.299	3.260	2.119	2.932	1.940	2.539	1.725
	19	4.382	2.545	4.034	2.382	3.687	2.220	3.339	2.057	2.991	1.894	2.574	1.699
	20	4.521	2.431	4.167	2.276	3.813	2.121	3.459	1.966	3.105	1.810	2.680	1.624
28	18	4.245	3.492	3.916	3.313	3.588	3.133	3.260	2.954	2.932	2.774	2.559	2.559
	19	4.382	3.379	4.034	3.217	3.687	3.054	3.339	2.891	2.991	2.729	2.574	2.533
	20	4.521	3.266	4.167	3.111	3.813	2.955	3.459	2.800	3.105	2.645	2.680	2.458
	21	4.661	3.152	4.309	2.998	3.958	2.843	3.607	2.689	3.255	2.535	2.834	2.350
	22	4.801	3.037	4.452	2.884	4.103	2.731	3.754	2.578	3.405	2.426	2.987	2.242
	23	4.941	2.923	4.594	2.771	4.248	2.620	3.902	2.468	3.555	2.316	3.140	2.134
	24	5.081	2.809	4.737	2.658	4.393	2.508	4.049	2.357	3.705	2.206	3.293	2.026
30	20	4.521	3.683	4.167	3.528	3.813	3.373	3.459	3.217	3.105	3.062	2.876	2.876
	21	4.661	3.569	4.309	3.415	3.958	3.261	3.607	3.106	3.255	2.952	2.834	2.767
	22	4.801	3.455	4.452	3.302	4.103	3.149	3.754	2.996	3.405	2.843	2.987	2.659
	23	4.941	3.340	4.594	3.189	4.248	3.037	3.902	2.885	3.555	2.733	3.140	2.551
	24	5.081	3.226	4.737	3.075	4.393	2.925	4.049	2.774	3.705	2.624	3.293	2.443

**Model : MCK 020B / M4LC 020B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.221	3.123	4.971	2.923	4.721	2.723	4.470	2.522	4.220	2.322	3.920	2.082
	16	5.438	2.961	5.177	2.770	4.915	2.580	4.653	2.390	4.392	2.200	4.078	1.971
24	16	5.438	3.882	5.177	3.691	4.915	3.501	4.653	3.311	4.392	3.121	4.078	2.892
	17	5.655	3.719	5.382	3.539	5.109	3.358	4.836	3.178	4.564	2.998	4.236	2.782
	18	5.871	3.556	5.587	3.386	5.303	3.216	5.019	3.046	4.735	2.876	4.394	2.672
	19	6.088	3.393	5.793	3.233	5.498	3.073	5.202	2.913	4.907	2.753	4.553	2.561
	20	6.304	3.229	5.993	3.073	5.682	2.916	5.371	2.759	5.060	2.603	4.686	2.415
28	18	5.871	4.477	5.587	4.307	5.303	4.137	5.019	3.967	4.735	3.797	4.394	3.593
	19	6.088	4.314	5.793	4.154	5.498	3.994	5.202	3.834	4.907	3.674	4.553	3.482
	20	6.304	4.150	5.993	3.994	5.682	3.837	5.371	3.680	5.060	3.524	4.686	3.336
	21	6.520	3.986	6.190	3.828	5.860	3.670	5.530	3.512	5.199	3.355	4.803	3.165
	22	6.736	3.822	6.386	3.663	6.037	3.504	5.688	3.344	5.339	3.185	4.920	2.994
	23	6.951	3.658	6.583	3.497	6.215	3.337	5.847	3.176	5.479	3.016	5.037	2.824
	24	7.167	3.493	6.780	3.332	6.393	3.170	6.006	3.009	5.619	2.847	5.154	2.653
30	20	6.304	4.611	5.993	4.454	5.682	4.297	5.371	4.141	5.060	3.984	4.686	3.796
	21	6.520	4.446	6.190	4.289	5.860	4.131	5.530	3.973	5.199	3.815	4.803	3.626
	22	6.736	4.282	6.386	4.123	6.037	3.964	5.688	3.805	5.339	3.646	4.920	3.455
	23	6.951	4.118	6.583	3.958	6.215	3.797	5.847	3.637	5.479	3.477	5.037	3.284
	24	7.167	3.954	6.780	3.792	6.393	3.631	6.006	3.469	5.619	3.307	5.154	3.114

**R407C Models  
B Series (Cooling Only)**

**Model : MCK 025B / M4LC 025B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.222	3.747	5.922	3.523	5.622	3.299	5.322	3.075	5.022	2.851	4.662	2.581
	16	6.723	3.657	6.341	3.416	5.959	3.175	5.578	2.934	5.196	2.693	4.738	2.403
24	16	6.723	4.732	6.341	4.491	5.959	4.250	5.578	4.009	5.196	3.768	4.738	3.478
	17	7.224	4.642	6.760	4.384	6.297	4.126	5.834	3.868	5.370	3.610	4.814	3.300
	18	7.725	4.553	7.180	4.277	6.635	4.002	6.090	3.727	5.544	3.452	4.890	3.122
	19	8.226	4.463	7.599	4.171	6.972	3.878	6.345	3.586	5.719	3.294	4.967	2.944
	20	8.730	4.373	8.044	4.067	7.359	3.760	6.674	3.453	5.989	3.146	5.167	2.778
28	18	7.725	5.628	7.180	5.352	6.635	5.077	6.090	4.802	5.544	4.527	4.890	4.197
	19	8.226	5.538	7.599	5.246	6.972	4.953	6.345	4.661	5.719	4.369	4.967	4.019
	20	8.730	5.448	8.044	5.141	7.359	4.835	6.674	4.528	5.989	4.221	5.167	3.853
	21	9.235	5.359	8.507	5.039	7.779	4.719	7.052	4.400	6.324	4.080	5.450	3.696
	22	9.741	5.269	8.970	4.937	8.200	4.604	7.429	4.271	6.658	3.939	5.733	3.540
	23	10.247	5.180	9.433	4.834	8.620	4.489	7.806	4.143	6.993	3.798	6.016	3.383
	24	10.752	5.091	9.896	4.732	9.040	4.374	8.183	4.015	7.327	3.656	6.300	3.226
30	20	8.730	5.986	8.044	5.679	7.359	5.372	6.674	5.065	5.989	4.759	5.167	4.391
	21	9.235	5.896	8.507	5.577	7.779	5.257	7.052	4.937	6.324	4.617	5.450	4.234
	22	9.741	5.807	8.970	5.474	8.200	5.142	7.429	4.809	6.658	4.476	5.733	4.077
	23	10.247	5.717	9.433	5.372	8.620	5.026	7.806	4.681	6.993	4.335	6.016	3.920
	24	10.752	5.628	9.896	5.270	9.040	4.911	8.183	4.552	7.327	4.194	6.300	3.764

**R407C Models  
B Series (Heatpump)**

**Model : MCK 015BR / M4LC 015BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.705	2.043	3.472	1.846	3.238	1.649	3.004	1.451	2.770	1.254	2.490	1.017
	16	3.782	1.880	3.551	1.718	3.319	1.556	3.087	1.394	2.856	1.232	2.578	1.037
24	16	3.782	2.714	3.551	2.552	3.319	2.390	3.087	2.228	2.856	2.066	2.578	1.872
	17	3.859	2.550	3.629	2.424	3.400	2.297	3.171	2.170	2.941	2.044	2.666	1.892
	18	3.936	2.387	3.708	2.295	3.481	2.204	3.254	2.113	3.027	2.021	2.754	1.912
	19	4.012	2.223	3.787	2.167	3.562	2.111	3.337	2.055	3.112	1.999	2.842	1.932
	20	4.089	2.057	3.866	2.016	3.644	1.974	3.421	1.933	3.199	1.892	2.931	1.842
28	18	3.936	3.221	3.708	3.130	3.481	3.039	3.254	2.947	3.027	2.856	2.754	2.746
	19	4.012	3.057	3.787	3.001	3.562	2.946	3.337	2.890	3.112	2.834	2.842	2.766
	20	4.089	2.891	3.866	2.850	3.644	2.809	3.421	2.768	3.199	2.726	2.931	2.677
	21	4.166	2.724	3.946	2.683	3.726	2.643	3.506	2.603	3.286	2.562	3.022	2.514
	22	4.243	2.556	4.025	2.516	3.808	2.477	3.590	2.438	3.373	2.398	3.112	2.351
	23	4.319	2.388	4.105	2.350	3.890	2.311	3.675	2.273	3.460	2.234	3.203	2.188
	24	4.396	2.220	4.184	2.183	3.972	2.145	3.760	2.108	3.548	2.070	3.293	2.026
30	20	4.089	3.309	3.866	3.267	3.644	3.226	3.421	3.185	3.199	3.143	3.094	3.094
	21	4.166	3.141	3.946	3.100	3.726	3.060	3.506	3.020	3.286	2.980	3.022	2.931
	22	4.243	2.973	4.025	2.934	3.808	2.894	3.590	2.855	3.373	2.816	3.112	2.768
	23	4.319	2.805	4.105	2.767	3.890	2.728	3.675	2.690	3.460	2.652	3.203	2.606
	24	4.396	2.637	4.184	2.600	3.972	2.563	3.760	2.525	3.548	2.488	3.293	2.443

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.690	1.690	1.943	1.943	2.027	2.027	2.954	2.954	3.460	3.460	3.713	3.713	3.965	3.965
17	1.660	1.660	1.922	1.922	2.009	2.009	3.044	3.044	3.429	3.429	3.680	3.680	3.930	3.930
19	1.631	1.631	1.901	1.901	1.991	1.991	3.134	3.134	3.398	3.398	3.646	3.646	3.895	3.895
21	1.601	1.601	1.880	1.880	1.972	1.972	3.224	3.224	3.367	3.367	3.613	3.613	3.859	3.859
23	1.601	1.601	1.866	1.866	1.954	1.954	3.075	3.075	3.336	3.336	3.580	3.580	3.824	3.824
25	1.601	1.601	1.852	1.852	1.936	1.936	2.926	2.926	3.305	3.305	3.547	3.547	3.789	3.789
27	1.601	1.601	1.839	1.839	1.918	1.918	2.777	2.777	3.275	3.275	3.514	3.514	3.753	3.753
<b>FROST REGION</b>														

**R407C Models  
B Series (Heatpump)**

**Model : MCK 020BR / M4LC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.361	3.279	5.094	3.055	4.826	2.831	4.558	2.607	4.290	2.383	3.968	2.115
	16	5.471	3.029	5.221	2.838	4.971	2.647	4.721	2.455	4.471	2.264	4.171	2.034
24	16	5.471	3.950	5.221	3.759	4.971	3.568	4.721	3.376	4.471	3.185	4.171	2.955
	17	5.581	3.701	5.348	3.542	5.116	3.383	4.884	3.225	4.652	3.066	4.373	2.875
	18	5.690	3.452	5.476	3.325	5.261	3.199	5.047	3.073	4.833	2.946	4.576	2.795
	19	5.800	3.202	5.603	3.108	5.407	3.015	5.210	2.921	5.014	2.827	4.778	2.715
	20	5.907	2.951	5.713	2.876	5.519	2.800	5.325	2.725	5.131	2.649	4.898	2.559
28	18	5.690	4.373	5.476	4.246	5.261	4.120	5.047	3.994	4.833	3.867	4.576	3.716
	19	5.800	4.123	5.603	4.029	5.407	3.936	5.210	3.842	5.014	3.748	4.778	3.636
	20	5.907	3.872	5.713	3.797	5.519	3.721	5.325	3.646	5.131	3.570	4.898	3.479
	21	6.014	3.620	5.811	3.553	5.609	3.486	5.407	3.420	5.204	3.353	4.962	3.273
	22	6.120	3.368	5.910	3.310	5.699	3.252	5.489	3.194	5.278	3.136	5.026	3.066
	23	6.227	3.115	6.008	3.066	5.789	3.017	5.571	2.968	5.352	2.919	5.090	2.860
	24	6.333	2.863	6.106	2.823	5.880	2.782	5.653	2.742	5.426	2.702	5.154	2.653
30	20	5.907	4.333	5.713	4.257	5.519	4.182	5.325	4.106	5.131	4.031	4.898	3.940
	21	6.014	4.080	5.811	4.014	5.609	3.947	5.407	3.880	5.204	3.813	4.962	3.733
	22	6.120	3.828	5.910	3.770	5.699	3.712	5.489	3.654	5.278	3.596	5.026	3.527
	23	6.227	3.576	6.008	3.527	5.789	3.478	5.571	3.428	5.352	3.379	5.090	3.320
	24	6.333	3.324	6.106	3.283	5.880	3.243	5.653	3.202	5.426	3.162	5.154	3.114

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.478	3.478	3.947	3.947	4.103	4.103	5.823	5.823	6.761	6.761	7.230	7.230	7.699	7.699
17	3.429	3.429	3.907	3.907	4.067	4.067	5.836	5.836	6.701	6.701	7.166	7.166	7.631	7.631
19	3.381	3.381	3.868	3.868	4.030	4.030	5.849	5.849	6.641	6.641	7.101	7.101	7.562	7.562
21	3.332	3.332	3.828	3.828	3.993	3.993	5.862	5.862	6.580	6.580	7.037	7.037	7.494	7.494
23	3.319	3.319	3.797	3.797	3.956	3.956	5.741	5.741	6.520	6.520	6.973	6.973	7.425	7.425
25	3.306	3.306	3.766	3.766	3.919	3.919	5.621	5.621	6.460	6.460	6.908	6.908	7.356	7.356
27	3.293	3.293	3.735	3.735	3.883	3.883	5.501	5.501	6.399	6.399	6.844	6.844	7.288	7.288
<b>FROST REGION</b>														

**R407C Models  
B Series (Heatpump)**

**Model : MCK 025BR / M4LC 025BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.356	3.897	6.038	3.650	5.721	3.403	5.404	3.156	5.086	2.909	4.705	2.613
	16	6.759	3.725	6.386	3.482	6.014	3.240	5.641	2.997	5.268	2.754	4.821	2.463
24	16	6.759	4.800	6.386	4.557	6.014	4.315	5.641	4.072	5.268	3.829	4.821	3.538
	17	7.162	4.627	6.734	4.389	6.306	4.151	5.878	3.912	5.450	3.674	4.937	3.388
	18	7.565	4.455	7.082	4.221	6.599	3.987	6.116	3.753	5.632	3.519	5.052	3.238
	19	7.969	4.283	7.430	4.053	6.891	3.823	6.353	3.594	5.814	3.364	5.168	3.089
	20	8.373	4.110	7.793	3.880	7.213	3.650	6.633	3.420	6.052	3.190	5.356	2.914
28	18	7.565	5.530	7.082	5.296	6.599	5.062	6.116	4.828	5.632	4.594	5.052	4.313
	19	7.969	5.357	7.430	5.128	6.891	4.898	6.353	4.669	5.814	4.439	5.168	4.164
	20	8.373	5.184	7.793	4.955	7.213	4.725	6.633	4.495	6.052	4.265	5.356	3.989
	21	8.779	5.011	8.166	4.778	7.553	4.545	6.940	4.311	6.327	4.078	5.592	3.798
	22	9.185	4.838	8.540	4.601	7.894	4.365	7.248	4.128	6.603	3.891	5.828	3.608
	23	9.591	4.664	8.913	4.424	8.234	4.185	7.556	3.945	6.878	3.705	6.064	3.417
	24	9.997	4.491	9.286	4.248	8.575	4.004	7.864	3.761	7.153	3.518	6.300	3.226
30	20	8.373	5.722	7.793	5.492	7.213	5.262	6.633	5.032	6.052	4.802	5.356	4.527
	21	8.779	5.548	8.166	5.315	7.553	5.082	6.940	4.849	6.327	4.616	5.592	4.336
	22	9.185	5.375	8.540	5.139	7.894	4.902	7.248	4.665	6.603	4.429	5.828	4.145
	23	9.591	5.202	8.913	4.962	8.234	4.722	7.556	4.482	6.878	4.242	6.064	3.954
	24	9.997	5.028	9.286	4.785	8.575	4.542	7.864	4.299	7.153	4.055	6.300	3.764

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.662	3.662	4.082	4.082	4.222	4.222	5.761	5.761	6.601	6.601	7.021	7.021	7.441	7.441
17	3.628	3.628	4.045	4.045	4.184	4.184	5.990	5.990	6.542	6.542	6.958	6.958	7.374	7.374
19	3.594	3.594	4.008	4.008	4.146	4.146	6.219	6.219	6.483	6.483	6.896	6.896	7.308	7.308
21	3.560	3.560	3.971	3.971	4.108	4.108	6.448	6.448	6.424	6.424	6.833	6.833	7.242	7.242
23	3.529	3.529	3.935	3.935	4.071	4.071	6.101	6.101	6.366	6.366	6.770	6.770	7.175	7.175
25	3.497	3.497	3.899	3.899	4.033	4.033	5.755	5.755	6.307	6.307	6.708	6.708	7.109	7.109
27	3.465	3.465	3.862	3.862	3.995	3.995	5.408	5.408	6.248	6.248	6.645	6.645	7.043	7.043

**FROST REGION**

**R22 Models  
C Series (Cooling Only)**

**Model : MCK 010C / MLC 010C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.180	1.885	2.961	1.698	2.741	1.511	2.522	1.324	2.302	1.138	2.039	0.913
	16	3.245	1.725	3.024	1.566	2.803	1.407	2.581	1.248	2.360	1.089	2.095	0.899
24	16	3.245	2.350	3.024	2.191	2.803	2.033	2.581	1.874	2.360	1.715	2.095	1.524
	17	3.309	2.190	3.086	2.059	2.864	1.928	2.641	1.797	2.418	1.667	2.151	1.510
	18	3.374	2.029	3.149	1.927	2.925	1.824	2.701	1.721	2.476	1.619	2.207	1.495
	19	3.438	1.869	3.212	1.794	2.986	1.720	2.760	1.645	2.535	1.570	2.264	1.481
	20	3.503	1.707	3.280	1.649	3.057	1.592	2.834	1.534	2.610	1.476	2.343	1.407
28	18	3.374	2.655	3.149	2.552	2.925	2.449	2.701	2.347	2.476	2.244	2.207	2.121
	19	3.438	2.494	3.212	2.420	2.986	2.345	2.760	2.271	2.535	2.196	2.264	2.106
	20	3.503	2.332	3.280	2.275	3.057	2.217	2.834	2.160	2.610	2.102	2.343	2.033
	21	3.568	2.170	3.351	2.121	3.133	2.073	2.916	2.025	2.698	1.977	2.437	1.920
	22	3.633	2.007	3.421	1.968	3.210	1.930	2.998	1.891	2.786	1.853	2.531	1.806
	23	3.699	1.844	3.492	1.815	3.286	1.786	3.080	1.757	2.873	1.728	2.626	1.693
30	24	3.764	1.681	3.563	1.662	3.362	1.642	3.162	1.623	2.961	1.603	2.720	1.580
	20	3.503	2.645	3.280	2.587	3.057	2.530	2.834	2.472	2.610	2.415	2.346	2.346
	21	3.568	2.482	3.351	2.434	3.133	2.386	2.916	2.338	2.698	2.290	2.437	2.232
	22	3.633	2.320	3.421	2.281	3.210	2.242	2.998	2.204	2.786	2.165	2.531	2.119
	23	3.699	2.157	3.492	2.128	3.286	2.099	3.080	2.070	2.873	2.041	2.626	2.006
	24	3.764	1.994	3.563	1.975	3.362	1.955	3.162	1.936	2.961	1.916	2.720	1.893

**Model : MCK 015C / MLC 015C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.276	2.675	3.989	2.408	3.702	2.141	3.415	1.873	3.128	1.606	2.783	1.286
	16	4.294	2.424	4.026	2.194	3.757	1.964	3.489	1.734	3.221	1.504	2.899	1.228
24	16	4.294	3.204	4.026	2.974	3.757	2.744	3.489	2.514	3.221	2.284	2.899	2.008
	17	4.311	2.954	4.062	2.761	3.812	2.568	3.563	2.375	3.314	2.182	3.014	1.951
	18	4.328	2.703	4.098	2.547	3.868	2.391	3.637	2.236	3.407	2.080	3.130	1.893
	19	4.346	2.452	4.134	2.334	3.923	2.215	3.711	2.096	3.499	1.978	3.246	1.836
	20	4.363	2.200	4.166	2.111	3.969	2.021	3.772	1.931	3.575	1.841	3.339	1.734
28	18	4.328	3.483	4.098	3.327	3.868	3.172	3.637	3.016	3.407	2.860	3.130	2.673
	19	4.346	3.232	4.134	3.114	3.923	2.995	3.711	2.877	3.499	2.758	3.246	2.616
	20	4.363	2.981	4.166	2.891	3.969	2.801	3.772	2.711	3.575	2.622	3.339	2.514
	21	4.379	2.728	4.194	2.662	4.010	2.595	3.825	2.529	3.640	2.462	3.418	2.383
	22	4.396	2.476	4.223	2.433	4.050	2.390	3.877	2.346	3.704	2.303	3.497	2.252
	23	4.412	2.223	4.251	2.204	4.091	2.184	3.930	2.164	3.769	2.144	3.576	2.120
	24	4.429	1.971	4.280	1.974	4.131	1.978	3.982	1.981	3.833	1.985	3.655	1.989
30	20	4.363	3.371	4.166	3.281	3.969	3.191	3.772	3.101	3.575	3.012	3.339	2.904
	21	4.379	3.118	4.194	3.052	4.010	2.985	3.825	2.919	3.640	2.853	3.418	2.773
	22	4.396	2.866	4.223	2.823	4.050	2.780	3.877	2.736	3.704	2.693	3.497	2.642
	23	4.412	2.613	4.251	2.594	4.091	2.574	3.930	2.554	3.769	2.534	3.576	2.510
	24	4.429	2.361	4.280	2.365	4.131	2.368	3.982	2.371	3.833	2.375	3.655	2.379

**R22 Models  
C Series (Cooling Only)**

**Model : MCK 020C - MLC 020B**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.676	3.585	5.410	3.356	5.145	3.126	4.879	2.896	4.416	2.473	4.096	2.181	3.941	2.040	3.833	1.941
	16	5.830	3.323	5.576	3.125	5.323	2.926	5.069	2.728	4.588	2.321	4.255	2.040	4.094	1.904	3.982	1.809
24	16	5.830	4.253	5.576	4.055	5.323	3.857	5.069	3.659	4.588	3.252	4.255	2.970	4.094	2.834	3.982	2.739
	17	5.984	3.990	5.743	3.824	5.501	3.657	5.259	3.490	4.760	3.099	4.415	2.829	4.248	2.698	4.131	2.607
	18	6.139	3.728	5.909	3.593	5.679	3.457	5.449	3.322	4.932	2.947	4.574	2.688	4.401	2.563	4.280	2.475
	19	6.293	3.465	6.075	3.361	5.857	3.258	5.639	3.154	5.104	2.795	4.734	2.547	4.555	2.427	4.430	2.343
	20	6.445	3.200	6.223	3.115	6.001	3.030	5.779	2.944	5.230	2.605	4.851	2.371	4.667	2.257	4.539	2.178
28	18	6.139	4.658	5.909	4.523	5.679	4.388	5.449	4.253	4.932	3.878	4.574	3.618	4.401	3.493	4.280	3.405
	19	6.293	4.395	6.075	4.292	5.857	4.188	5.639	4.085	5.104	3.726	4.734	3.477	4.555	3.357	4.430	3.273
	20	6.445	4.131	6.223	4.045	6.001	3.960	5.779	3.874	5.230	3.535	4.851	3.301	4.667	3.187	4.539	3.108
	21	6.596	3.865	6.359	3.789	6.122	3.713	5.885	3.636	5.327	3.320	4.940	3.101	4.753	2.995	4.623	2.921
	22	6.747	3.600	6.495	3.533	6.243	3.465	5.991	3.398	5.423	3.104	5.029	2.901	4.839	2.803	4.706	2.734
	23	6.899	3.334	6.632	3.276	6.365	3.218	6.098	3.160	5.519	2.889	5.119	2.701	4.925	2.610	4.790	2.547
	24	7.050	3.069	6.768	3.020	6.486	2.971	6.204	2.922	5.615	2.673	5.208	2.501	5.011	2.418	4.873	2.360
30	20	6.445	4.596	6.223	4.511	6.001	4.425	5.779	4.340	5.230	4.001	4.851	3.766	4.667	3.653	4.539	3.573
	21	6.596	4.331	6.359	4.254	6.122	4.178	5.885	4.101	5.327	3.785	4.940	3.566	4.753	3.460	4.623	3.386
	22	6.747	4.065	6.495	3.998	6.243	3.931	5.991	3.863	5.423	3.569	5.029	3.366	4.839	3.268	4.706	3.199
	23	6.899	3.800	6.632	3.741	6.365	3.683	6.098	3.625	5.519	3.354	5.119	3.166	4.925	3.076	4.790	3.012
	24	7.050	3.534	6.768	3.485	6.486	3.436	6.204	3.387	5.615	3.138	5.208	2.966	5.011	2.883	4.873	2.825
<b>HIGH AMBIENT</b>																	

**R22 Model  
C Series (Heatpump)**

**Model : MCK 010CR / MLC 010CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.180	1.885	2.961	1.698	2.741	1.511	2.522	1.324	2.302	1.138	2.039	0.913
	16	3.245	1.725	3.024	1.566	2.803	1.407	2.581	1.248	2.360	1.089	2.095	0.899
24	16	3.245	2.350	3.024	2.191	2.803	2.033	2.581	1.874	2.360	1.715	2.095	1.524
	17	3.309	2.190	3.086	2.059	2.864	1.928	2.641	1.797	2.418	1.667	2.151	1.510
	18	3.374	2.029	3.149	1.927	2.925	1.824	2.701	1.721	2.476	1.619	2.207	1.495
	19	3.438	1.869	3.212	1.794	2.986	1.720	2.760	1.645	2.535	1.570	2.264	1.481
	20	3.503	1.707	3.280	1.649	3.057	1.592	2.834	1.534	2.610	1.476	2.343	1.407
28	18	3.374	2.655	3.149	2.552	2.925	2.449	2.701	2.347	2.476	2.244	2.207	2.121
	19	3.438	2.494	3.212	2.420	2.986	2.345	2.760	2.271	2.535	2.196	2.264	2.106
	20	3.503	2.332	3.280	2.275	3.057	2.217	2.834	2.160	2.610	2.102	2.343	2.033
	21	3.568	2.170	3.351	2.121	3.133	2.073	2.916	2.025	2.698	1.977	2.437	1.920
	22	3.633	2.007	3.421	1.968	3.210	1.930	2.998	1.891	2.786	1.853	2.531	1.806
	23	3.699	1.844	3.492	1.815	3.286	1.786	3.080	1.757	2.873	1.728	2.626	1.693
	24	3.764	1.681	3.563	1.662	3.362	1.642	3.162	1.623	2.961	1.603	2.720	1.580
30	20	3.503	2.645	3.280	2.587	3.057	2.530	2.834	2.472	2.610	2.415	2.346	2.346
	21	3.568	2.482	3.351	2.434	3.133	2.386	2.916	2.338	2.698	2.290	2.437	2.232
	22	3.633	2.320	3.421	2.281	3.210	2.242	2.998	2.204	2.786	2.165	2.531	2.119
	23	3.699	2.157	3.492	2.128	3.286	2.099	3.080	2.070	2.873	2.041	2.626	2.006
	24	3.764	1.994	3.563	1.975	3.362	1.955	3.162	1.936	2.961	1.916	2.720	1.893

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.628	1.628	1.857	1.857	1.933	1.933	2.772	2.772	3.230	3.230	3.459	3.459	3.688	3.688
17	1.603	1.603	1.838	1.838	1.916	1.916	2.776	2.776	3.201	3.201	3.428	3.428	3.655	3.655
19	1.578	1.578	1.819	1.819	1.899	1.899	2.780	2.780	3.172	3.172	3.397	3.397	3.622	3.622
21	1.553	1.553	1.799	1.799	1.881	1.881	2.784	2.784	3.143	3.143	3.366	3.366	3.589	3.589
23	1.550	1.550	1.785	1.785	1.864	1.864	2.729	2.729	3.115	3.115	3.335	3.335	3.556	3.556
25	1.546	1.546	1.771	1.771	1.847	1.847	2.674	2.674	3.086	3.086	3.305	3.305	3.523	3.523
27	1.542	1.542	1.758	1.758	1.829	1.829	2.619	2.619	3.057	3.057	3.274	3.274	3.490	3.490
FROST REGION														

**R22 Models  
C Series (Heatpump)**

**Model : MCK 015CR / MLC 015CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.276	2.735	3.989	2.448	3.702	2.161	3.415	1.873	3.128	1.586	2.783	1.242
	16	4.294	2.539	4.026	2.271	3.757	2.002	3.489	1.734	3.221	1.466	2.899	1.144
24	16	4.294	3.319	4.026	3.051	3.757	2.783	3.489	2.514	3.221	2.246	2.899	1.924
	17	4.311	3.123	4.062	2.874	3.812	2.624	3.563	2.375	3.314	2.126	3.014	1.826
	18	4.328	2.927	4.098	2.697	3.868	2.466	3.637	2.236	3.407	2.005	3.130	1.728
	19	4.346	2.732	4.134	2.520	3.923	2.308	3.711	2.096	3.499	1.885	3.246	1.631
	20	4.363	2.536	4.166	2.345	3.969	2.153	3.772	1.962	3.575	1.771	3.339	1.542
28	18	4.328	3.708	4.098	3.477	3.868	3.246	3.637	3.016	3.407	2.785	3.130	2.509
	19	4.346	3.512	4.134	3.300	3.923	3.088	3.711	2.877	3.499	2.665	3.246	2.411
	20	4.363	3.316	4.166	3.125	3.969	2.934	3.772	2.742	3.575	2.551	3.339	2.322
	21	4.379	3.120	4.194	2.951	4.010	2.781	3.825	2.612	3.640	2.442	3.418	2.239
	22	4.396	2.925	4.223	2.777	4.050	2.629	3.877	2.481	3.704	2.333	3.497	2.155
	23	4.412	2.729	4.251	2.603	4.091	2.477	3.930	2.350	3.769	2.224	3.576	2.072
	24	4.429	2.534	4.280	2.429	4.131	2.324	3.982	2.219	3.833	2.115	3.655	1.989
30	20	4.363	3.706	4.166	3.515	3.969	3.324	3.772	3.133	3.575	2.941	3.339	2.712
	21	4.379	3.510	4.194	3.341	4.010	3.171	3.825	3.002	3.640	2.832	3.418	2.629
	22	4.396	3.315	4.223	3.167	4.050	3.019	3.877	2.871	3.704	2.723	3.497	2.546
	23	4.412	3.119	4.251	2.993	4.091	2.867	3.930	2.740	3.769	2.614	3.576	2.462
	24	4.429	2.924	4.280	2.819	4.131	2.714	3.982	2.610	3.833	2.505	3.655	2.379

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.532	1.532	1.842	1.842	1.946	1.946	3.082	3.082	3.701	3.701	4.011	4.011	4.321	4.321
17	1.487	1.487	1.818	1.818	1.928	1.928	3.124	3.124	3.668	3.668	3.975	3.975	4.283	4.283
19	1.441	1.441	1.793	1.793	1.911	1.911	3.167	3.167	3.635	3.635	3.940	3.940	4.244	4.244
21	1.396	1.396	1.769	1.769	1.893	1.893	3.210	3.210	3.602	3.602	3.904	3.904	4.206	4.206
23	1.415	1.415	1.761	1.761	1.876	1.876	3.108	3.108	3.569	3.569	3.868	3.868	4.167	4.167
25	1.435	1.435	1.753	1.753	1.858	1.858	3.007	3.007	3.536	3.536	3.832	3.832	4.129	4.129
27	1.455	1.455	1.744	1.744	1.841	1.841	2.906	2.906	3.503	3.503	3.797	3.797	4.090	4.090
FROST REGION														

**R22 Models  
C Series (Heatpump)**

**Model : MCK 020CR / MLC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C															
		20		25		30		35		40		46		50		54	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.232	3.173	4.988	2.956	4.744	2.738	4.500	2.521	4.073	2.128	3.778	1.856	3.635	1.725	3.535	1.633
	16	5.378	2.920	5.144	2.737	4.911	2.554	4.677	2.371	4.233	1.992	3.926	1.730	3.777	1.604	3.674	1.515
24	16	5.378	3.887	5.144	3.704	4.911	3.521	4.677	3.339	4.233	2.960	3.926	2.698	3.777	2.571	3.674	2.483
	17	5.524	3.634	5.301	3.485	5.077	3.337	4.853	3.189	4.392	2.824	4.074	2.572	3.919	2.450	3.812	2.365
	18	5.671	3.381	5.457	3.267	5.243	3.153	5.029	3.039	4.552	2.688	4.221	2.446	4.062	2.329	3.950	2.247
	19	5.817	3.127	5.613	3.048	5.409	2.968	5.205	2.889	4.711	2.552	4.369	2.320	4.204	2.208	4.089	2.129
	20	5.961	2.872	5.753	2.811	5.544	2.751	5.336	2.690	4.829	2.372	4.479	2.153	4.310	2.047	4.191	1.973
28	18	5.671	4.348	5.457	4.234	5.243	4.120	5.029	4.006	4.552	3.656	4.221	3.413	4.062	3.296	3.950	3.214
	19	5.817	4.095	5.613	4.015	5.409	3.936	5.205	3.856	4.711	3.520	4.369	3.287	4.204	3.175	4.089	3.096
	20	5.961	3.840	5.753	3.779	5.544	3.718	5.336	3.657	4.829	3.340	4.479	3.120	4.310	3.014	4.191	2.940
	21	6.104	3.583	5.881	3.531	5.659	3.478	5.436	3.425	4.920	3.130	4.563	2.926	4.391	2.827	4.270	2.758
	22	6.247	3.327	6.010	3.283	5.774	3.238	5.537	3.193	5.011	2.920	4.648	2.731	4.472	2.640	4.349	2.576
	23	6.390	3.071	6.139	3.034	5.888	2.998	5.637	2.962	5.102	2.710	4.732	2.537	4.553	2.453	4.428	2.394
	24	6.533	2.815	6.268	2.786	6.003	2.758	5.738	2.730	5.193	2.501	4.816	2.342	4.634	2.265	4.507	2.212
30	20	5.961	4.324	5.753	4.263	5.544	4.202	5.336	4.141	4.829	3.823	4.479	3.604	4.310	3.498	4.191	3.424
	21	6.104	4.067	5.881	4.014	5.659	3.962	5.436	3.909	4.920	3.614	4.563	3.409	4.391	3.311	4.270	3.242
	22	6.247	3.811	6.010	3.766	5.774	3.722	5.537	3.677	5.011	3.404	4.648	3.215	4.472	3.123	4.349	3.060
	23	6.390	3.555	6.139	3.518	5.888	3.482	5.637	3.445	5.102	3.194	4.732	3.020	4.553	2.936	4.428	2.878
	24	6.533	3.298	6.268	3.270	6.003	3.242	5.738	3.214	5.193	2.984	4.816	2.826	4.634	2.749	4.507	2.696

HIGH AMBIENT

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.641	3.641	4.090	4.090	4.240	4.240	5.888	5.888	6.786	6.786	7.236	7.236	7.685	7.685
17	3.599	3.599	4.051	4.051	4.202	4.202	5.713	5.713	6.726	6.726	7.171	7.171	7.617	7.617
19	3.558	3.558	4.012	4.012	4.164	4.164	5.538	5.538	6.665	6.665	7.107	7.107	7.548	7.548
21	3.517	3.517	3.974	3.974	4.126	4.126	5.363	5.363	6.605	6.605	7.042	7.042	7.480	7.480
23	3.493	3.493	3.939	3.939	4.088	4.088	5.439	5.439	6.544	6.544	6.978	6.978	7.411	7.411
25	3.470	3.470	3.905	3.905	4.050	4.050	5.515	5.515	6.484	6.484	6.913	6.913	7.343	7.343
27	3.446	3.446	3.870	3.870	4.012	4.012	5.591	5.591	6.423	6.423	6.849	6.849	7.274	7.274

FROST REGION

**R407C Models  
C Series (Cooling Only)**

**Model : MCK 010C / M4LC 010B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.104	1.824	2.890	1.633	2.676	1.442	2.462	1.251	2.248	1.060	1.991	0.831
	16	3.135	1.679	2.928	1.516	2.722	1.354	2.515	1.191	2.309	1.029	2.061	0.834
24	16	3.135	2.328	2.928	2.165	2.722	2.003	2.515	1.840	2.309	1.678	2.061	1.483
	17	3.165	2.183	2.966	2.049	2.768	1.915	2.569	1.781	2.370	1.647	2.131	1.486
	18	3.196	2.037	3.004	1.932	2.813	1.826	2.622	1.721	2.431	1.615	2.201	1.489
	19	3.226	1.892	3.042	1.815	2.859	1.738	2.675	1.661	2.491	1.584	2.271	1.492
	20	3.257	1.745	3.081	1.683	2.905	1.622	2.729	1.560	2.554	1.498	2.343	1.424
28	18	3.196	2.686	3.004	2.581	2.813	2.475	2.622	2.370	2.431	2.264	2.201	2.138
	19	3.226	2.541	3.042	2.464	2.859	2.387	2.675	2.310	2.491	2.233	2.271	2.141
	20	3.257	2.394	3.081	2.332	2.905	2.271	2.729	2.209	2.554	2.147	2.343	2.073
	21	3.287	2.246	3.119	2.191	2.952	2.135	2.784	2.080	2.617	2.025	2.416	1.958
	22	3.317	2.098	3.158	2.049	2.999	2.000	2.839	1.951	2.680	1.902	2.489	1.843
	23	3.348	1.950	3.197	1.908	3.045	1.865	2.894	1.822	2.743	1.780	2.561	1.729
	24	3.378	1.802	3.235	1.766	3.092	1.730	2.949	1.694	2.806	1.657	2.634	1.614
30	20	3.257	2.718	3.081	2.657	2.905	2.595	2.729	2.533	2.554	2.472	2.398	2.398
	21	3.287	2.571	3.119	2.515	2.952	2.460	2.784	2.405	2.617	2.349	2.416	2.283
	22	3.317	2.423	3.158	2.374	2.999	2.325	2.839	2.276	2.680	2.227	2.489	2.168
	23	3.348	2.275	3.197	2.232	3.045	2.189	2.894	2.147	2.743	2.104	2.561	2.053
	24	3.378	2.127	3.235	2.090	3.092	2.054	2.949	2.018	2.806	1.982	2.634	1.938

**Model : MCK 015C / M4LC 015B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.957	2.258	3.695	2.026	3.433	1.793	3.171	1.560	2.909	1.327	2.594	1.048
	16	4.023	2.071	3.765	1.869	3.507	1.668	3.250	1.466	2.992	1.264	2.682	1.022
24	16	4.023	2.919	3.765	2.718	3.507	2.516	3.250	2.314	2.992	2.113	2.682	1.871
	17	4.089	2.732	3.835	2.562	3.582	2.391	3.328	2.220	3.075	2.050	2.771	1.845
	18	4.154	2.545	3.905	2.405	3.656	2.266	3.407	2.126	3.158	1.987	2.859	1.819
	19	4.220	2.358	3.975	2.249	3.730	2.141	3.486	2.032	3.241	1.924	2.947	1.794
	20	4.285	2.169	4.046	2.079	3.807	1.990	3.568	1.900	3.329	1.810	3.042	1.703
28	18	4.154	3.393	3.905	3.254	3.656	3.114	3.407	2.975	3.158	2.835	2.859	2.668
	19	4.220	3.206	3.975	3.098	3.730	2.989	3.486	2.881	3.241	2.772	2.947	2.642
	20	4.285	3.018	4.046	2.928	3.807	2.838	3.568	2.748	3.329	2.659	3.042	2.551
	21	4.351	2.828	4.118	2.749	3.885	2.669	3.653	2.590	3.420	2.511	3.140	2.416
	22	4.417	2.638	4.191	2.570	3.964	2.501	3.737	2.432	3.511	2.364	3.239	2.281
	23	4.483	2.449	4.263	2.390	4.042	2.332	3.822	2.274	3.602	2.216	3.337	2.146
	24	4.549	2.259	4.335	2.211	4.121	2.164	3.907	2.116	3.693	2.068	3.436	2.011
30	20	4.285	3.442	4.046	3.352	3.807	3.262	3.568	3.173	3.329	3.083	3.042	2.975
	21	4.351	3.252	4.118	3.173	3.885	3.094	3.653	3.014	3.420	2.935	3.140	2.840
	22	4.417	3.062	4.191	2.994	3.964	2.925	3.737	2.856	3.511	2.788	3.239	2.705
	23	4.483	2.873	4.263	2.815	4.042	2.756	3.822	2.698	3.602	2.640	3.337	2.570
	24	4.549	2.683	4.335	2.635	4.121	2.588	3.907	2.540	3.693	2.493	3.436	2.436

**R407C Models  
C Series (Cooling Only)**

**Model : MCK 020C / M4LC 020B**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.239	3.190	4.994	2.978	4.749	2.766	4.504	2.554	4.259	2.342	3.965	2.087
	16	5.381	2.947	5.147	2.764	4.913	2.581	4.679	2.398	4.445	2.215	4.164	1.996
24	16	5.381	3.878	5.147	3.695	4.913	3.512	4.679	3.329	4.445	3.146	4.164	2.926
	17	5.524	3.635	5.301	3.481	5.078	3.327	4.855	3.174	4.632	3.020	4.364	2.835
	18	5.666	3.393	5.454	3.268	5.242	3.143	5.030	3.018	4.818	2.894	4.563	2.744
	19	5.809	3.150	5.608	3.054	5.407	2.959	5.205	2.863	5.004	2.768	4.763	2.653
	20	5.949	2.906	5.744	2.827	5.539	2.748	5.334	2.669	5.129	2.590	4.883	2.496
28	18	5.666	4.323	5.454	4.198	5.242	4.074	5.030	3.949	4.818	3.824	4.563	3.674
	19	5.809	4.080	5.608	3.985	5.407	3.889	5.205	3.794	5.004	3.698	4.763	3.583
	20	5.949	3.836	5.744	3.757	5.539	3.679	5.334	3.600	5.129	3.521	4.883	3.426
	21	6.089	3.591	5.870	3.521	5.651	3.450	5.432	3.380	5.214	3.309	4.951	3.225
	22	6.228	3.346	5.996	3.284	5.763	3.222	5.531	3.160	5.298	3.098	5.019	3.023
	23	6.368	3.101	6.121	3.048	5.875	2.994	5.629	2.940	5.382	2.886	5.086	2.822
	24	6.507	2.856	6.247	2.811	5.987	2.766	5.727	2.720	5.466	2.675	5.154	2.621
30	20	5.949	4.302	5.744	4.223	5.539	4.144	5.334	4.065	5.129	3.986	4.883	3.891
	21	6.089	4.057	5.870	3.986	5.651	3.916	5.432	3.845	5.214	3.775	4.951	3.690
	22	6.228	3.811	5.996	3.749	5.763	3.687	5.531	3.625	5.298	3.563	5.019	3.489
	23	6.368	3.566	6.121	3.513	5.875	3.459	5.629	3.405	5.382	3.352	5.086	3.287
	24	6.507	3.321	6.247	3.276	5.987	3.231	5.727	3.185	5.466	3.140	5.154	3.086

**R407C Models  
C Series (Heatpump)**

**Model : MCK 010CR / M4LC 010BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.080	1.841	2.867	1.651	2.655	1.461	2.442	1.270	2.229	1.080	1.974	0.851
	16	3.142	1.730	2.928	1.558	2.714	1.387	2.500	1.215	2.286	1.043	2.029	0.837
24	16	3.142	2.356	2.928	2.184	2.714	2.012	2.500	1.841	2.286	1.669	2.029	1.463
	17	3.205	2.244	2.989	2.091	2.773	1.938	2.558	1.785	2.342	1.632	2.083	1.449
	18	3.267	2.133	3.050	1.999	2.833	1.865	2.615	1.730	2.398	1.596	2.138	1.435
	19	3.329	2.022	3.111	1.906	2.892	1.791	2.673	1.675	2.455	1.560	2.192	1.421
	20	3.392	1.910	3.176	1.804	2.960	1.698	2.744	1.592	2.528	1.486	2.269	1.359
28	18	3.267	2.759	3.050	2.625	2.833	2.490	2.615	2.356	2.398	2.222	2.138	2.060
	19	3.329	2.648	3.111	2.532	2.892	2.416	2.673	2.301	2.455	2.185	2.192	2.046
	20	3.392	2.535	3.176	2.429	2.960	2.323	2.744	2.217	2.528	2.111	2.269	1.984
	21	3.455	2.422	3.245	2.320	3.034	2.217	2.824	2.115	2.613	2.013	2.360	1.890
	22	3.519	2.309	3.313	2.210	3.108	2.112	2.903	2.013	2.698	1.914	2.452	1.795
	23	3.582	2.196	3.382	2.101	3.182	2.006	2.982	1.910	2.783	1.815	2.543	1.701
30	24	3.645	2.083	3.451	1.992	3.256	1.900	3.062	1.808	2.868	1.716	2.634	1.606
	20	3.392	2.848	3.176	2.742	2.960	2.636	2.744	2.530	2.528	2.424	2.297	2.297
	21	3.455	2.735	3.245	2.633	3.034	2.530	2.824	2.428	2.613	2.325	2.360	2.202
	22	3.519	2.622	3.313	2.523	3.108	2.424	2.903	2.325	2.698	2.227	2.452	2.108
	23	3.582	2.509	3.382	2.414	3.182	2.319	2.982	2.223	2.783	2.128	2.543	2.014
	24	3.645	2.396	3.451	2.304	3.256	2.213	3.062	2.121	2.868	2.029	2.634	1.919

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.628	1.628	1.857	1.857	1.933	1.933	2.772	2.772	3.230	3.230	3.459	3.459	3.688	3.688
17	1.603	1.603	1.838	1.838	1.916	1.916	2.776	2.776	3.201	3.201	3.428	3.428	3.655	3.655
19	1.578	1.578	1.819	1.819	1.899	1.899	2.780	2.780	3.172	3.172	3.397	3.397	3.622	3.622
21	1.553	1.553	1.799	1.799	1.881	1.881	2.784	2.784	3.143	3.143	3.366	3.366	3.589	3.589
23	1.550	1.550	1.785	1.785	1.864	1.864	2.729	2.729	3.115	3.115	3.335	3.335	3.556	3.556
25	1.546	1.546	1.771	1.771	1.847	1.847	2.674	2.674	3.086	3.086	3.305	3.305	3.523	3.523
27	1.542	1.542	1.758	1.758	1.829	1.829	2.619	2.619	3.057	3.057	3.274	3.274	3.490	3.490
FROST REGION														

**R407C Models  
C Series (Heatpump)**

**Model : MCK 015CR / M4LC 015BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.756	2.132	3.516	1.912	3.276	1.693	3.036	1.473	2.796	1.254	2.508	0.990
	16	3.793	1.954	3.566	1.766	3.339	1.578	3.112	1.390	2.884	1.202	2.612	0.976
24	16	3.793	2.782	3.566	2.594	3.339	2.406	3.112	2.218	2.884	2.030	2.612	1.804
	17	3.831	2.605	3.617	2.448	3.402	2.291	3.188	2.134	2.973	1.978	2.716	1.789
	18	3.869	2.427	3.667	2.302	3.466	2.176	3.264	2.051	3.062	1.925	2.820	1.775
	19	3.907	2.250	3.718	2.155	3.529	2.061	3.340	1.967	3.151	1.873	2.924	1.760
	20	3.944	2.070	3.764	1.994	3.584	1.917	3.404	1.841	3.225	1.764	3.009	1.673
28	18	3.869	3.255	3.667	3.130	3.466	3.004	3.264	2.879	3.062	2.753	2.820	2.603
	19	3.907	3.077	3.718	2.983	3.529	2.889	3.340	2.795	3.151	2.701	2.924	2.588
	20	3.944	2.898	3.764	2.822	3.584	2.745	3.404	2.669	3.225	2.592	3.009	2.501
	21	3.981	2.718	3.808	2.650	3.635	2.582	3.461	2.514	3.288	2.446	3.080	2.364
	22	4.018	2.537	3.852	2.478	3.685	2.418	3.518	2.359	3.351	2.299	3.151	2.227
	23	4.055	2.357	3.895	2.306	3.735	2.255	3.575	2.203	3.414	2.152	3.222	2.091
	24	4.093	2.177	3.939	2.134	3.785	2.091	3.631	2.048	3.477	2.006	3.293	1.954
30	20	3.944	3.312	3.764	3.236	3.584	3.159	3.404	3.083	3.225	3.006	3.009	2.915
	21	3.981	3.132	3.808	3.064	3.635	2.996	3.461	2.928	3.288	2.860	3.080	2.778
	22	4.018	2.951	3.852	2.892	3.685	2.832	3.518	2.772	3.351	2.713	3.151	2.641
	23	4.055	2.771	3.895	2.720	3.735	2.669	3.575	2.617	3.414	2.566	3.222	2.505
	24	4.093	2.591	3.939	2.548	3.785	2.505	3.631	2.462	3.477	2.419	3.293	2.368

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.036	2.036	2.266	2.266	2.342	2.342	3.184	3.184	3.644	3.644	3.873	3.873	4.103	4.103
17	2.018	2.018	2.245	2.245	2.321	2.321	3.198	3.198	3.611	3.611	3.839	3.839	4.067	4.067
19	2.000	2.000	2.225	2.225	2.300	2.300	3.211	3.211	3.579	3.579	3.804	3.804	4.030	4.030
21	1.982	1.982	2.205	2.205	2.279	2.279	3.224	3.224	3.546	3.546	3.770	3.770	3.993	3.993
23	1.963	1.963	2.184	2.184	2.258	2.258	3.152	3.152	3.514	3.514	3.735	3.735	3.957	3.957
25	1.945	1.945	2.164	2.164	2.237	2.237	3.079	3.079	3.481	3.481	3.701	3.701	3.920	3.920
27	1.926	1.926	2.144	2.144	2.216	2.216	3.007	3.007	3.449	3.449	3.666	3.666	3.884	3.884
FROST REGION														

**R407C Models  
C Series (Heatpump)**

**Model : MCK 020CR / M4LC 020BR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.232	3.173	4.988	2.956	4.744	2.738	4.500	2.521	4.256	2.304	3.964	2.043
	16	5.378	2.920	5.144	2.737	4.911	2.554	4.677	2.371	4.443	2.188	4.162	1.969
24	16	5.378	3.887	5.144	3.704	4.911	3.521	4.677	3.339	4.443	3.156	4.162	2.936
	17	5.524	3.634	5.301	3.485	5.077	3.337	4.853	3.189	4.629	3.040	4.360	2.862
	18	5.671	3.381	5.457	3.267	5.243	3.153	5.029	3.039	4.815	2.925	4.558	2.788
	19	5.817	3.127	5.613	3.048	5.409	2.968	5.205	2.889	5.001	2.809	4.757	2.713
	20	5.961	2.872	5.753	2.811	5.544	2.751	5.336	2.690	5.127	2.629	4.877	2.556
28	18	5.671	4.348	5.457	4.234	5.243	4.120	5.029	4.006	4.815	3.892	4.558	3.755
	19	5.817	4.095	5.613	4.015	5.409	3.936	5.205	3.856	5.001	3.776	4.757	3.681
	20	5.961	3.840	5.753	3.779	5.544	3.718	5.336	3.657	5.127	3.596	4.877	3.523
	21	6.104	3.583	5.881	3.531	5.659	3.478	5.436	3.425	5.214	3.372	4.947	3.309
	22	6.247	3.327	6.010	3.283	5.774	3.238	5.537	3.193	5.300	3.149	5.016	3.095
	23	6.390	3.071	6.139	3.034	5.888	2.998	5.637	2.962	5.386	2.925	5.085	2.882
	24	6.533	2.815	6.268	2.786	6.003	2.758	5.738	2.730	5.472	2.702	5.154	2.668
30	20	5.961	4.324	5.753	4.263	5.544	4.202	5.336	4.141	5.127	4.080	4.877	4.007
	21	6.104	4.067	5.881	4.014	5.659	3.962	5.436	3.909	5.214	3.856	4.947	3.793
	22	6.247	3.811	6.010	3.766	5.774	3.722	5.537	3.677	5.300	3.633	5.016	3.579
	23	6.390	3.555	6.139	3.518	5.888	3.482	5.637	3.445	5.386	3.409	5.085	3.365
	24	6.533	3.298	6.268	3.270	6.003	3.242	5.738	3.214	5.472	3.186	5.154	3.152

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.681	3.681	4.135	4.135	4.286	4.286	5.952	5.952	6.861	6.861	7.315	7.315	7.769	7.769
17	3.639	3.639	4.096	4.096	4.248	4.248	5.775	5.775	6.799	6.799	7.250	7.250	7.700	7.700
19	3.597	3.597	4.056	4.056	4.209	4.209	5.599	5.599	6.738	6.738	7.184	7.184	7.631	7.631
21	3.555	3.555	4.017	4.017	4.171	4.171	5.422	5.422	6.677	6.677	7.119	7.119	7.561	7.561
23	3.531	3.531	3.982	3.982	4.133	4.133	5.499	5.499	6.616	6.616	7.054	7.054	7.492	7.492
25	3.507	3.507	3.947	3.947	4.094	4.094	5.576	5.576	6.555	6.555	6.989	6.989	7.423	7.423
27	3.483	3.483	3.913	3.913	4.056	4.056	5.652	5.652	6.493	6.493	6.924	6.924	7.354	7.354
FROST REGION														

**R410A Models  
C Series (Cooling Only)**

**Model : M5CK 010C / M5LC 010C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.339	2.107	3.079	1.847	2.824	1.592	2.568	1.337	2.313	1.082	2.007	0.776
	16	3.384	1.955	3.132	1.717	2.882	1.482	2.633	1.247	2.383	1.012	2.084	0.730
24	16	3.384	2.658	3.132	2.421	2.882	2.186	2.633	1.951	2.383	1.716	2.084	1.434
	17	3.428	2.506	3.185	2.291	2.941	2.076	2.697	1.861	2.454	1.646	2.161	1.388
	18	3.471	2.351	3.234	2.157	2.997	1.963	2.760	1.769	2.523	1.575	2.238	1.343
	19	3.512	2.197	3.269	2.030	3.027	1.862	2.784	1.694	2.571	1.514	2.315	1.297
	20	3.556	2.035	3.326	1.851	3.097	1.667	2.868	1.483	2.639	1.300	2.364	1.079
28	18	3.471	3.055	3.234	2.861	2.997	2.667	2.760	2.473	2.523	2.279	2.238	2.046
	19	3.512	2.901	3.269	2.733	3.027	2.566	2.784	2.398	2.571	2.217	2.315	2.001
	20	3.556	2.739	3.326	2.555	3.097	2.371	2.868	2.187	2.639	2.003	2.364	1.782
	21	3.597	2.578	3.369	2.383	3.142	2.188	2.914	1.993	2.686	1.798	2.413	1.564
	22	3.639	2.417	3.413	2.211	3.186	2.005	2.960	1.799	2.733	1.593	2.461	1.346
	23	3.681	2.256	3.456	2.039	3.230	1.822	3.005	1.605	2.780	1.388	2.510	1.128
	24	3.722	2.094	3.499	1.867	3.275	1.639	3.051	1.411	2.827	1.183	2.558	0.909
30	20	3.556	3.091	3.326	2.907	3.097	2.723	2.868	2.539	2.639	2.355	2.364	2.134
	21	3.597	2.930	3.369	2.735	3.142	2.540	2.914	2.345	2.686	2.150	2.413	1.916
	22	3.639	2.768	3.413	2.563	3.186	2.357	2.960	2.151	2.733	1.945	2.461	1.698
	23	3.681	2.607	3.456	2.390	3.230	2.174	3.005	1.957	2.780	1.740	2.510	1.479
	24	3.722	2.446	3.499	2.218	3.275	1.990	3.051	1.763	2.827	1.535	2.558	1.261

**Model : M5CK 015C / M5LC 015C**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.111	2.643	3.827	2.359	3.558	2.090	3.289	1.821	3.020	1.552	2.697	1.230
	16	4.203	2.477	3.920	2.220	3.645	1.969	3.369	1.719	3.094	1.469	2.763	1.168
24	16	4.203	3.316	3.920	3.058	3.645	2.808	3.369	2.558	3.094	2.307	2.763	2.007
	17	4.296	3.150	4.014	2.918	3.732	2.687	3.449	2.455	3.167	2.224	2.829	1.946
	18	4.381	2.977	4.096	2.767	3.810	2.557	3.524	2.347	3.238	2.136	2.894	1.884
	19	4.471	2.807	4.202	2.637	3.933	2.466	3.664	2.295	3.344	2.080	2.960	1.823
	20	4.553	2.622	4.258	2.412	3.964	2.202	3.670	1.992	3.375	1.782	3.022	1.530
28	18	4.381	3.816	4.096	3.605	3.810	3.395	3.524	3.185	3.238	2.975	2.894	2.723
	19	4.471	3.646	4.202	3.475	3.933	3.304	3.664	3.133	3.344	2.919	2.960	2.662
	20	4.553	3.461	4.258	3.251	3.964	3.041	3.670	2.831	3.375	2.621	3.022	2.368
	21	4.638	3.279	4.339	3.048	4.040	2.816	3.742	2.585	3.443	2.353	3.084	2.075
	22	4.723	3.098	4.420	2.845	4.117	2.592	3.814	2.339	3.511	2.086	3.147	1.782
	23	4.809	2.916	4.501	2.642	4.193	2.367	3.886	2.093	3.578	1.818	3.209	1.489
	24	4.894	2.735	4.582	2.439	4.270	2.143	3.958	1.847	3.646	1.551	3.271	1.195
30	20	4.553	3.880	4.258	3.670	3.964	3.460	3.670	3.250	3.375	3.040	3.022	2.788
	21	4.638	3.699	4.339	3.467	4.040	3.236	3.742	3.004	3.443	2.772	3.084	2.494
	22	4.723	3.517	4.420	3.264	4.117	3.011	3.814	2.758	3.511	2.505	3.147	2.201
	23	4.809	3.336	4.501	3.061	4.193	2.787	3.886	2.512	3.578	2.237	3.209	1.908
	24	4.894	3.154	4.582	2.858	4.270	2.562	3.958	2.266	3.646	1.970	3.271	1.615

**R410A Models  
C Series (Heatpump)**

**Model : M5CK 010CR / M5LC 010CR**

**Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.339	2.107	3.079	1.847	2.824	1.592	2.568	1.337	2.313	1.082	2.007	0.776
	16	3.384	1.955	3.132	1.717	2.882	1.482	2.633	1.247	2.383	1.012	2.084	0.730
24	16	3.384	2.658	3.132	2.421	2.882	2.186	2.633	1.951	2.383	1.716	2.084	1.434
	17	3.428	2.506	3.185	2.291	2.941	2.076	2.697	1.861	2.454	1.646	2.161	1.388
	18	3.471	2.351	3.234	2.157	2.997	1.963	2.760	1.769	2.523	1.575	2.238	1.343
	19	3.512	2.197	3.269	2.030	3.027	1.862	2.784	1.694	2.571	1.514	2.315	1.297
	20	3.556	2.035	3.326	1.851	3.097	1.667	2.868	1.483	2.639	1.300	2.364	1.079
28	18	3.471	3.055	3.234	2.861	2.997	2.667	2.760	2.473	2.523	2.279	2.238	2.046
	19	3.512	2.901	3.269	2.733	3.027	2.566	2.784	2.398	2.571	2.217	2.315	2.001
	20	3.556	2.739	3.326	2.555	3.097	2.371	2.868	2.187	2.639	2.003	2.364	1.782
	21	3.597	2.578	3.369	2.383	3.142	2.188	2.914	1.993	2.686	1.798	2.413	1.564
	22	3.639	2.417	3.413	2.211	3.186	2.005	2.960	1.799	2.733	1.593	2.461	1.346
	23	3.681	2.256	3.456	2.039	3.230	1.822	3.005	1.605	2.780	1.388	2.510	1.128
	24	3.722	2.094	3.499	1.867	3.275	1.639	3.051	1.411	2.827	1.183	2.558	0.909
30	20	3.556	3.091	3.326	2.907	3.097	2.723	2.868	2.539	2.639	2.355	2.364	2.134
	21	3.597	2.930	3.369	2.735	3.142	2.540	2.914	2.345	2.686	2.150	2.413	1.916
	22	3.639	2.768	3.413	2.563	3.186	2.357	2.960	2.151	2.733	1.945	2.461	1.698
	23	3.681	2.607	3.456	2.390	3.230	2.174	3.005	1.957	2.780	1.740	2.510	1.479
	24	3.722	2.446	3.499	2.218	3.275	1.990	3.051	1.763	2.827	1.535	2.558	1.261

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.683	1.683	1.905	1.905	1.979	1.979	2.793	2.793	3.236	3.236	3.458	3.458	3.680	3.680
17	1.639	1.639	1.882	1.882	1.939	1.939	2.789	2.789	3.213	3.213	3.438	3.438	3.663	3.663
19	1.595	1.595	1.858	1.858	1.899	1.899	2.786	2.786	3.190	3.190	3.418	3.418	3.645	3.645
21	1.551	1.551	1.820	1.820	1.859	1.859	2.760	2.760	3.166	3.166	3.397	3.397	3.628	3.628
23	1.507	1.507	1.766	1.766	1.818	1.818	2.713	2.713	3.143	3.143	3.377	3.377	3.610	3.610
25	1.463	1.463	1.712	1.712	1.778	1.778	2.665	2.665	3.120	3.120	3.356	3.356	3.593	3.593
27	1.418	1.418	1.658	1.658	1.738	1.738	2.617	2.617	3.096	3.096	3.336	3.336	3.576	3.576
FROST REGION														

**R410A Models  
C Series (Heatpump)**

**Model : M5CK 015CR / M5LC 015CR  
Cooling Mode**

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.111	2.643	3.827	2.359	3.558	2.090	3.289	1.821	3.020	1.552	2.697	1.230
	16	4.203	2.477	3.920	2.220	3.645	1.969	3.369	1.719	3.094	1.469	2.763	1.168
24	16	4.203	3.316	3.920	3.058	3.645	2.808	3.369	2.558	3.094	2.307	2.763	2.007
	17	4.296	3.150	4.014	2.918	3.732	2.687	3.449	2.455	3.167	2.224	2.829	1.946
	18	4.381	2.977	4.096	2.767	3.810	2.557	3.524	2.347	3.238	2.136	2.894	1.884
	19	4.471	2.807	4.202	2.637	3.933	2.466	3.664	2.295	3.344	2.080	2.960	1.823
	20	4.553	2.622	4.258	2.412	3.964	2.202	3.670	1.992	3.375	1.782	3.022	1.530
28	18	4.381	3.816	4.096	3.605	3.810	3.395	3.524	3.185	3.238	2.975	2.894	2.723
	19	4.471	3.646	4.202	3.475	3.933	3.304	3.664	3.133	3.344	2.919	2.960	2.662
	20	4.553	3.461	4.258	3.251	3.964	3.041	3.670	2.831	3.375	2.621	3.022	2.368
	21	4.638	3.279	4.339	3.048	4.040	2.816	3.742	2.585	3.443	2.353	3.084	2.075
	22	4.723	3.098	4.420	2.845	4.117	2.592	3.814	2.339	3.511	2.086	3.147	1.782
	23	4.809	2.916	4.501	2.642	4.193	2.367	3.886	2.093	3.578	1.818	3.209	1.489
30	24	4.894	2.735	4.582	2.439	4.270	2.143	3.958	1.847	3.646	1.551	3.271	1.195
	20	4.553	3.880	4.258	3.670	3.964	3.460	3.670	3.250	3.375	3.040	3.022	2.788
	21	4.638	3.699	4.339	3.467	4.040	3.236	3.742	3.004	3.443	2.772	3.084	2.494
	22	4.723	3.517	4.420	3.264	4.117	3.011	3.814	2.758	3.511	2.505	3.147	2.201
	23	4.809	3.336	4.501	3.061	4.193	2.787	3.886	2.512	3.578	2.237	3.209	1.908
	24	4.894	3.154	4.582	2.858	4.270	2.562	3.958	2.266	3.646	1.970	3.271	1.615

**Heating Mode**

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.038	2.038	2.306	2.306	2.396	2.396	3.381	3.381	3.918	3.918	4.186	4.186	4.455	4.455
17	1.984	1.984	2.286	2.286	2.336	2.336	3.377	3.377	3.830	3.830	4.094	4.094	4.357	4.357
19	1.931	1.931	2.267	2.267	2.276	2.276	3.372	3.372	3.742	3.742	4.001	4.001	4.260	4.260
21	1.877	1.877	2.214	2.214	2.216	2.216	3.305	3.305	3.654	3.654	3.908	3.908	4.162	4.162
23	1.824	1.824	2.128	2.128	2.156	2.156	3.174	3.174	3.566	3.566	3.815	3.815	4.064	4.064
25	1.770	1.770	2.042	2.042	2.096	2.096	3.043	3.043	3.478	3.478	3.722	3.722	3.966	3.966
27	1.717	1.717	1.956	1.956	2.036	2.036	2.912	2.912	3.391	3.391	3.630	3.630	3.869	3.869
<b>FROST REGION</b>														

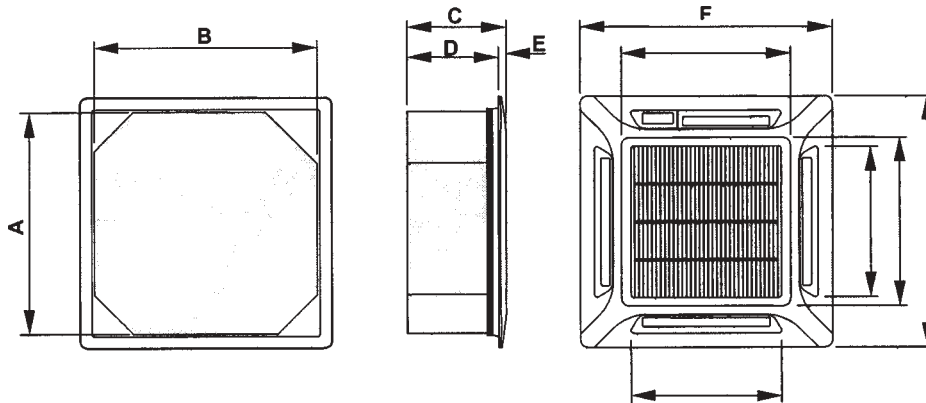
# Outlines And Dimensions

## Indoor Unit

MCK 020 / 025 / 030 / 040 / 050A/AR

MCK 015 / 020 / 025B/BR

MCK 010 / 015 / 020C/CR, M5CK 010 / 015C/CR

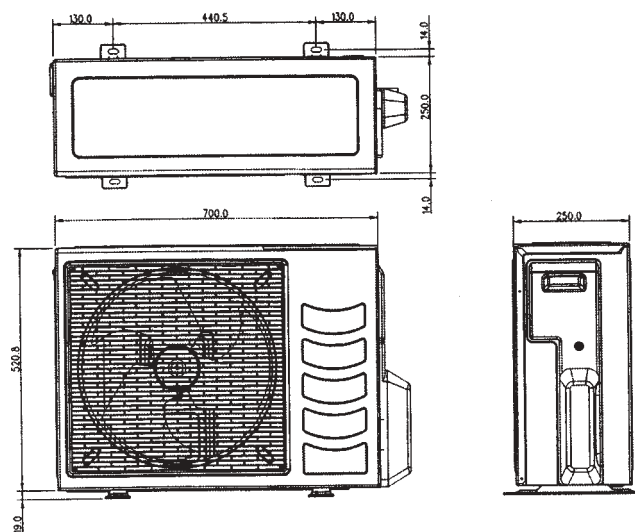


MODEL	A	B	C	D	E	F	G	H	I	J	K
MCK-A(All model)	820	820	378	350	28	930	930	626	626	555	555
MCK-B(All model)	650	650	362	340	22	727	727	489	489	444	444
MCK-C(All model)	570	570	295	275	20	640	640	408	408	364	364

Note : All Dimension in mm

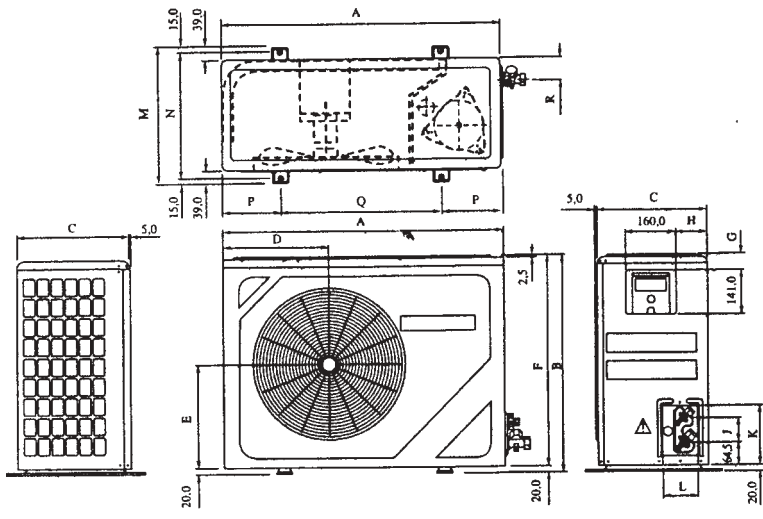
## Outdoor Unit

MLC / M5LC 010 / 015C/CR



Note : All Dimension in mm

**M4LC 010 / 015B/BR**  
**MLC / M4LC 020 / 025B/BR**

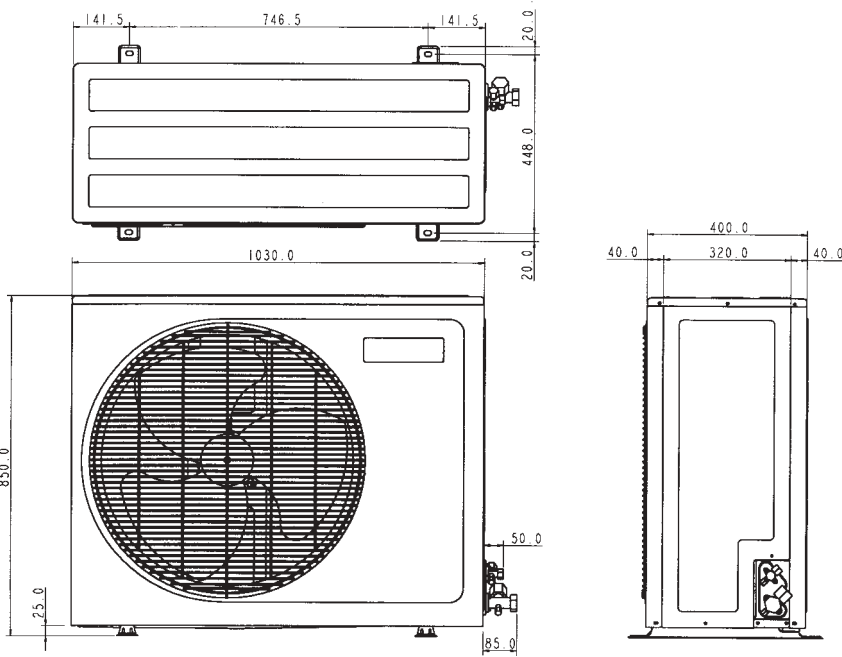


DIMENSION	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
010 / 015B/BR	740	494	270	266	233	474	52	60	54	166	92	348	318	129	482	68.5
020 / 025B/BR	840	646	330	297	309	626	46	90	64	177	106	408	378	124	492	78.5

Note : All Dimension in mm

**Outdoor Unit**

**MLC 030 / 040 / 050C/CR**  
**M4LC 030 / 035 / 040 / 050C/CR**



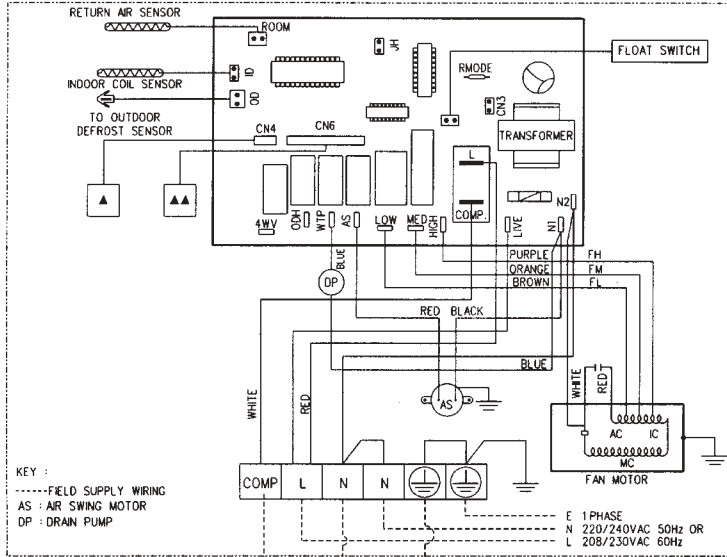
Note : All Dimension in mm

# Wiring Diagrams

## Cooling Only

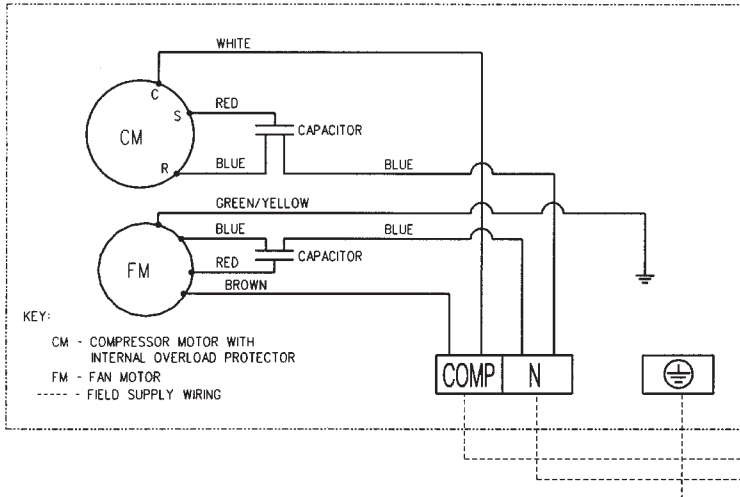
### Indoor Unit

Model : MCK 020 / 025A



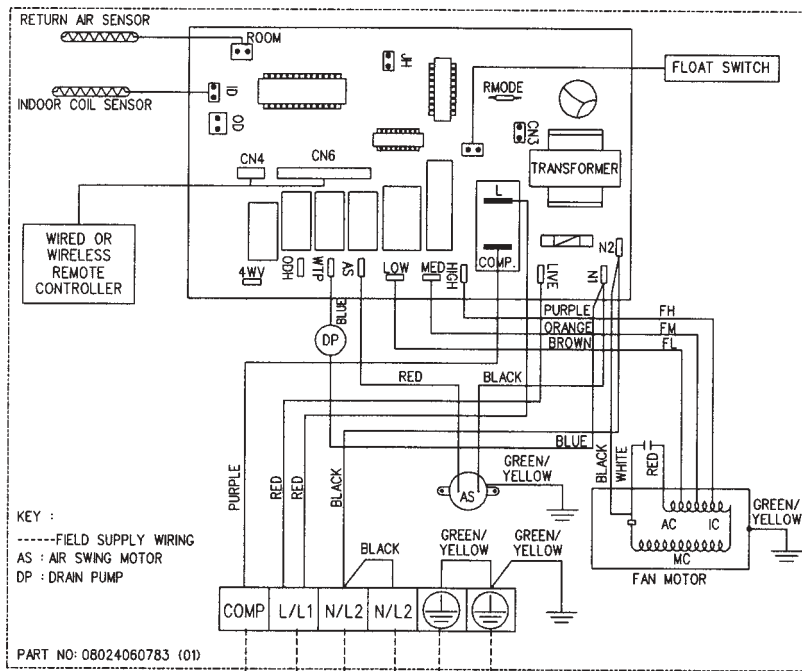
## Outdoor Unit

Model : MLC / M4LC 020 / 025B



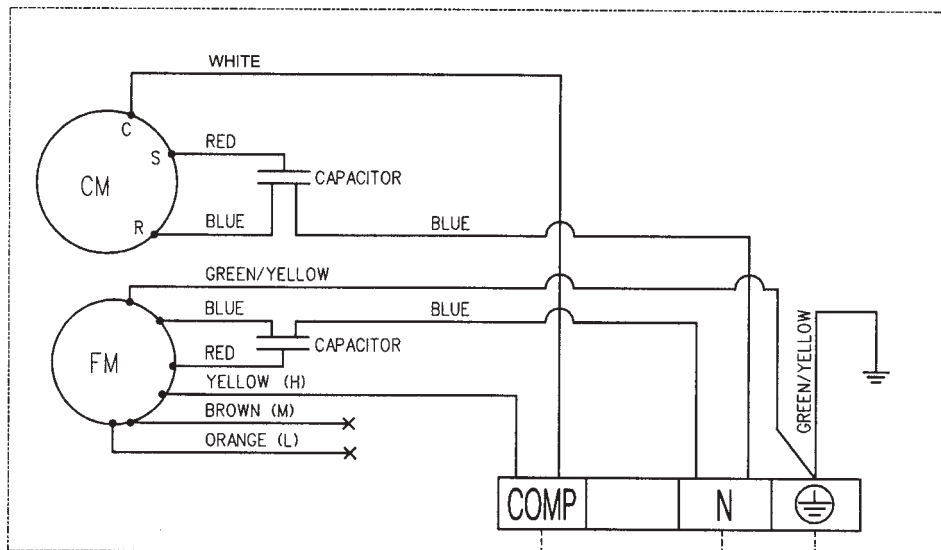
- ▲ CN4 IS CONNECTED TO WIRED HANDSET
- ▲▲ CN6 IS CONNECTED TO SENSOR & INDICATOR LIGHT OF WIRELESS HANDSET
- REMARK • EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

**Indoor Unit**  
**Model : MCK 030A**



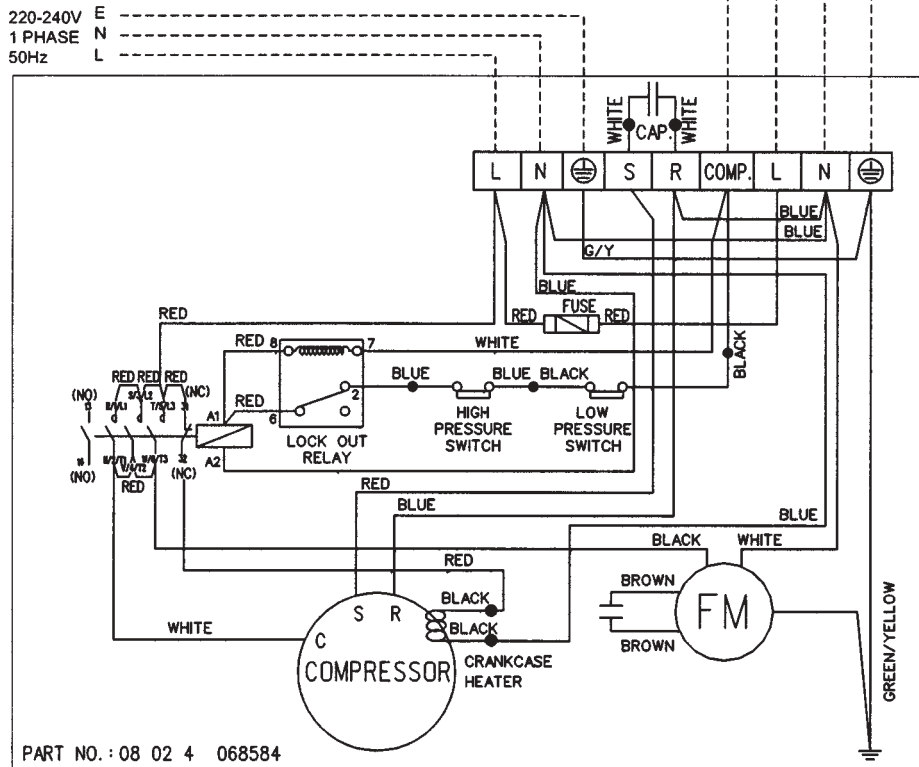
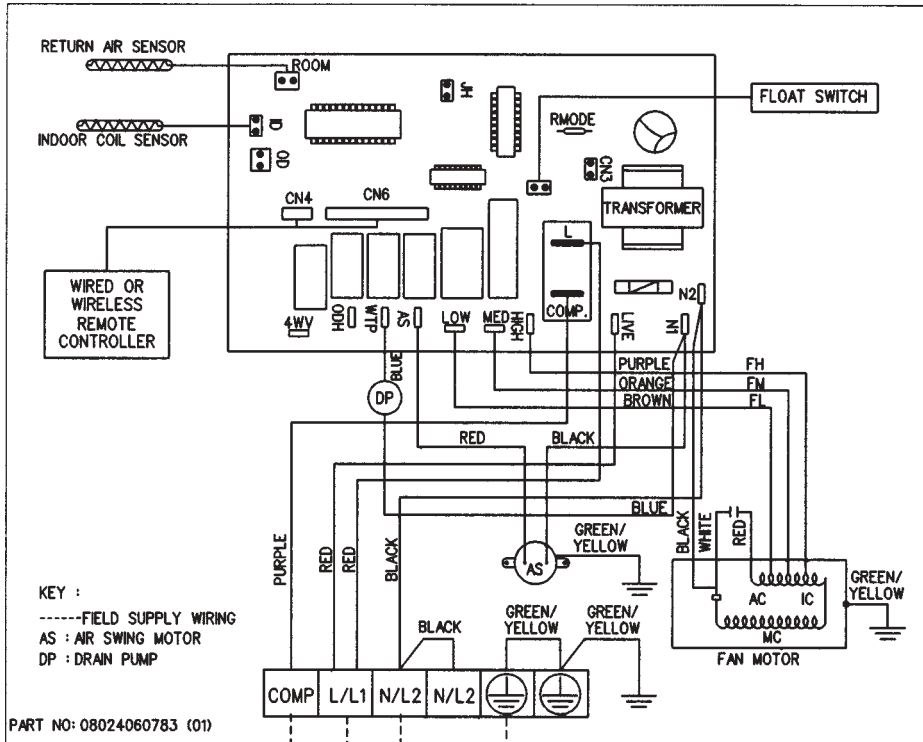
E 1PHASE  
 N 220/240VAC  
 L 50Hz

**Outdoor Unit**  
**Model : MLC 030B**



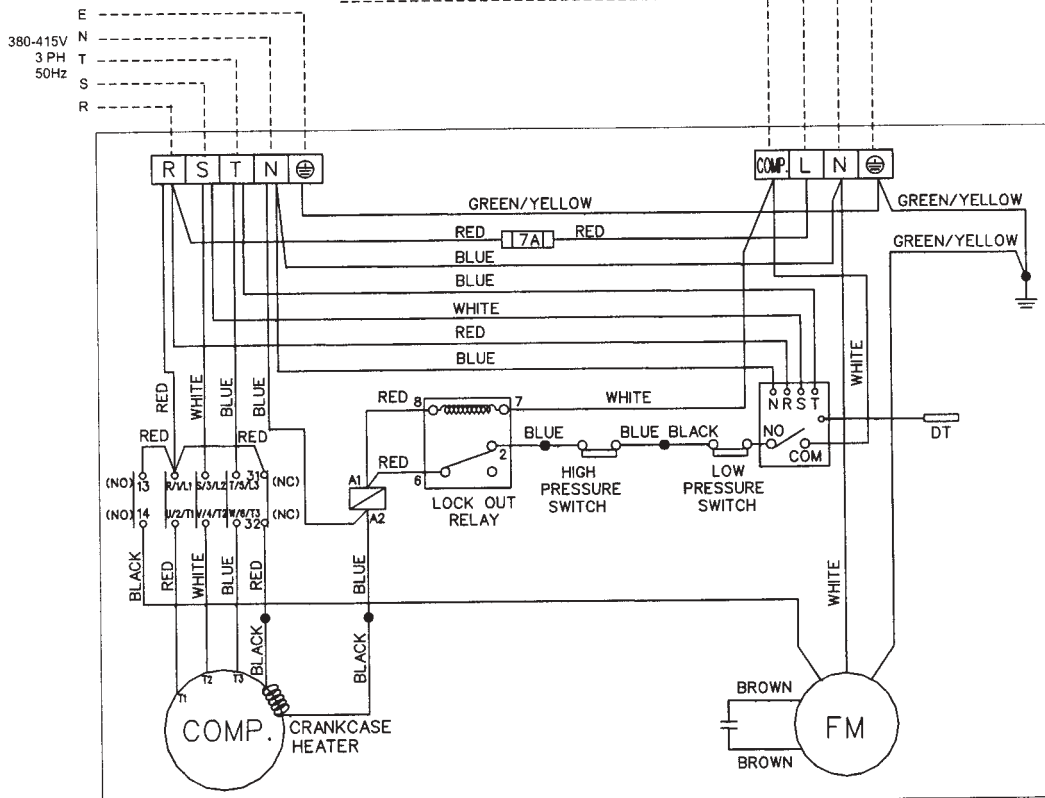
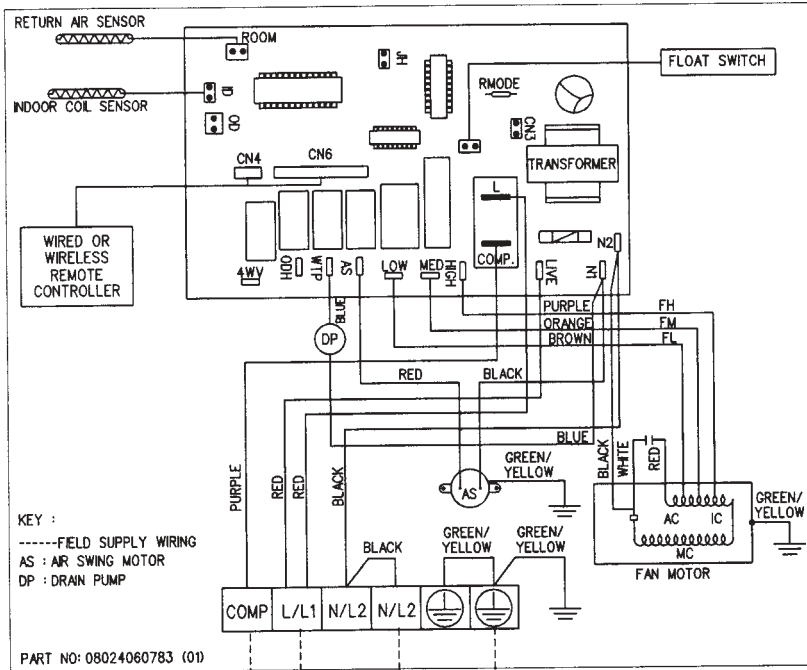
REMARK = EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME ONLY

**Indoor Unit**  
**Model : MCK 030A**



**Outdoor Unit**  
**Model : MLC / M4LC 030C**

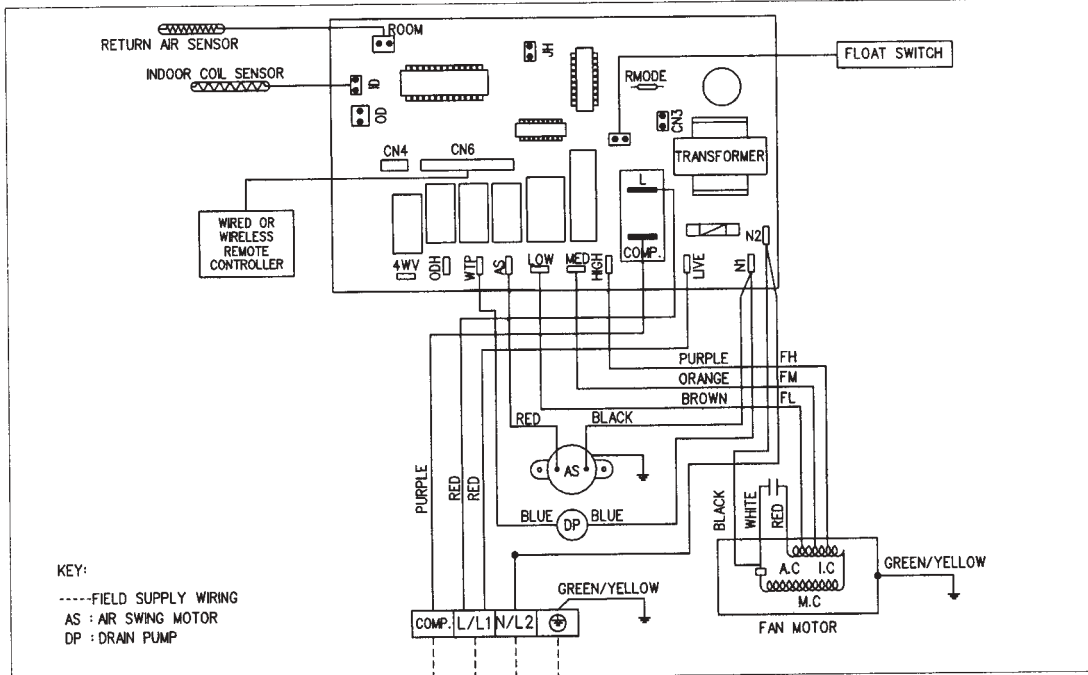
**Indoor Unit**  
**Model : MCK 030A**



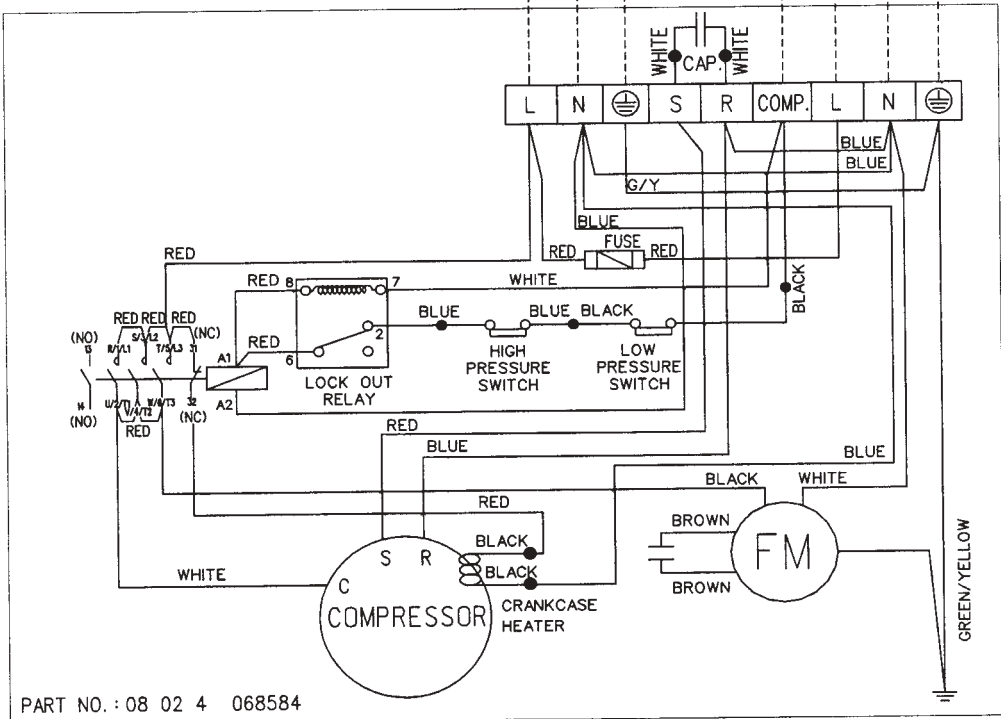
REMARK - EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

**Outdoor Unit**  
**Model : MLC / M4LC 030C**

**Indoor Unit**  
**Model : MCK 040A**



220-240V E  
 1 PH N  
 50Hz L

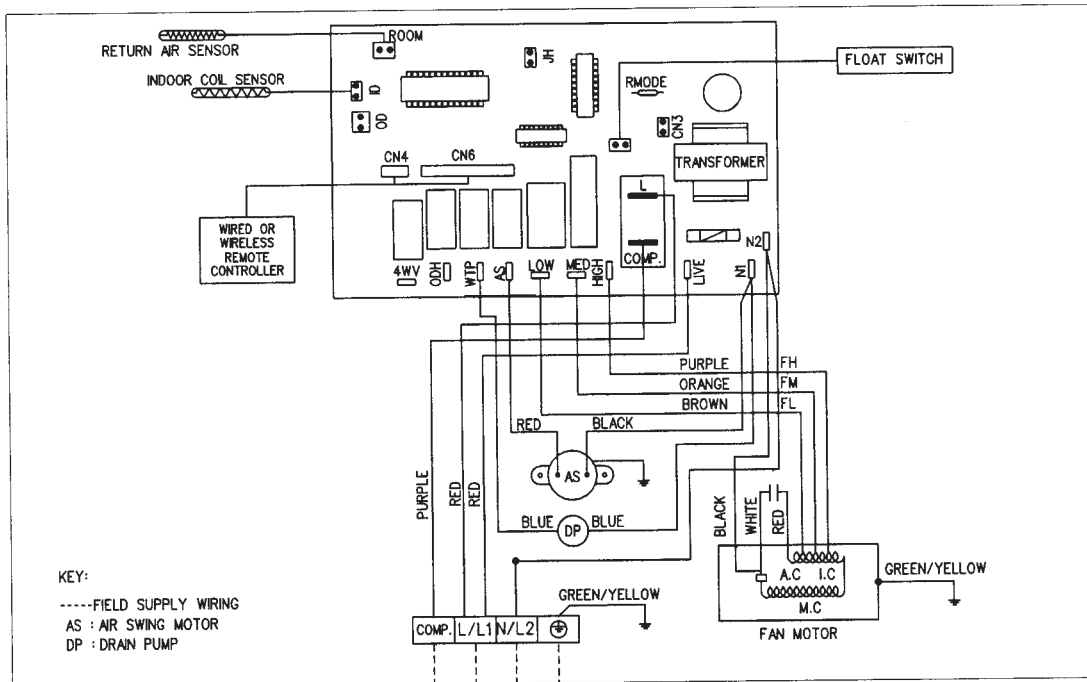


PART NO. : 08 02 4 068584

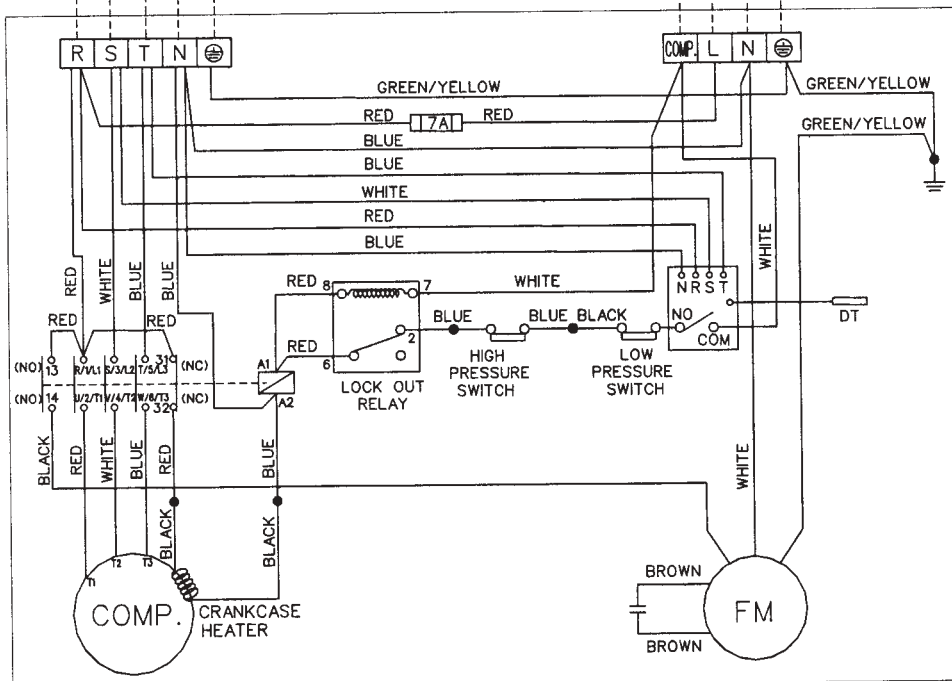
REMARK = EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME ONLY

**Outdoor Unit**  
**Model : MLC / M4LC 035 / 040C**

**Indoor Unit**  
**Model : MCK 040 / 050A**



E  
 N  
 3 PH  
 T  
 S  
 R



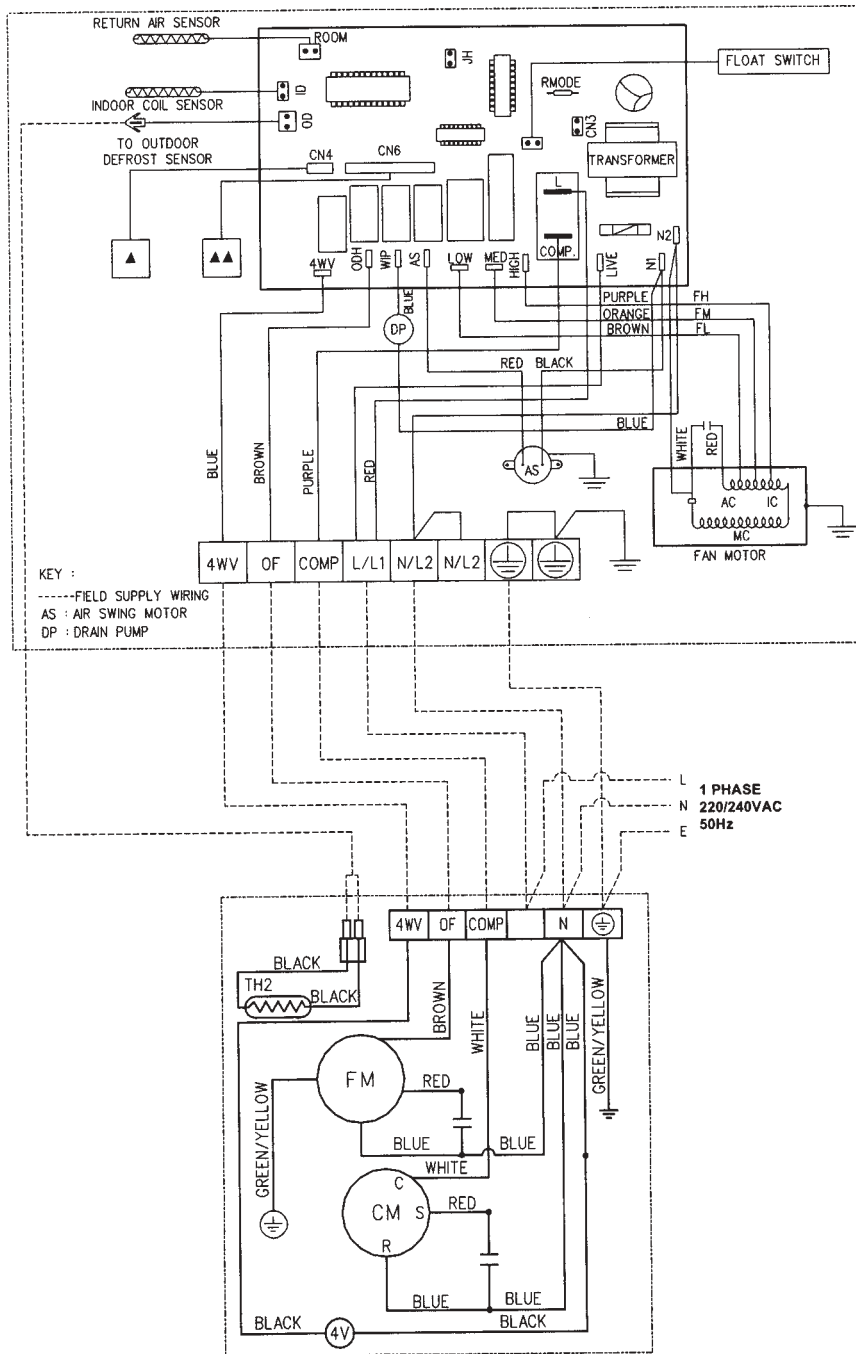
REMARK = EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

**Outdoor Unit**  
**Model : MLC / M4LC 040 / 050C**

# Heat Pump Models

## Indoor Unit

Model : MCK 020 / 025AR

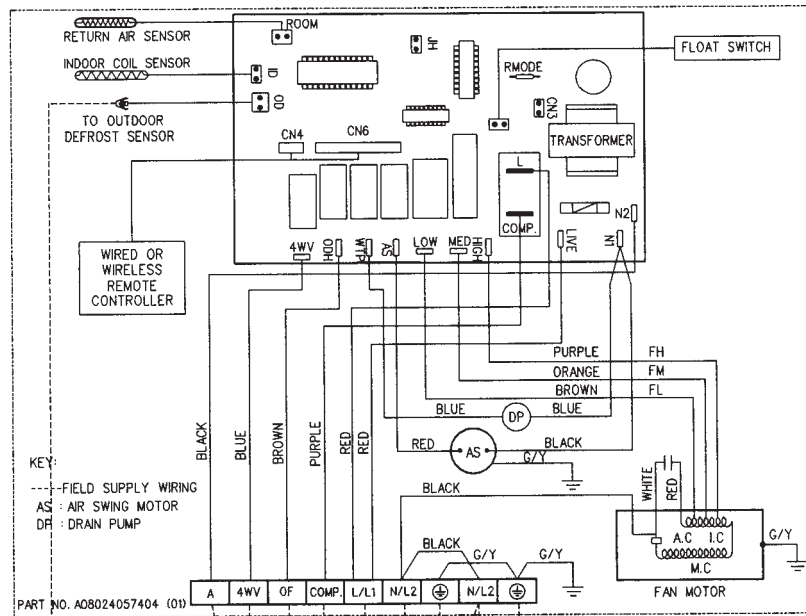


- KEY:
- FM - FAN MOTOR
  - CM - COMPRESSOR MOTOR
  - 4V - 4 WAY VALVE
  - TH2- OUTDOOR THERMISTOR
  - FIELD SUPPLY WIRING
- ▲ CN4 IS CONNECTED TO WIRED HANDSET
- ▲▲ CN6 IS CONNECTED TO IR RECEIVER & INDICATOR LIGHT OF WIRELESS HANDSET
- REMARK - EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

## Outdoor Unit

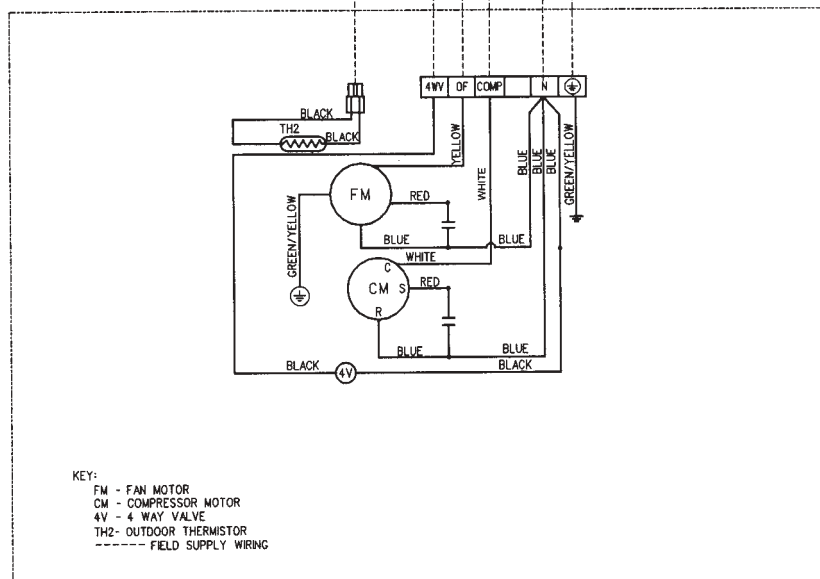
Model : MLC / M4LC 020 / 025BR

**Indoor Unit  
Model : MCK 030AR**



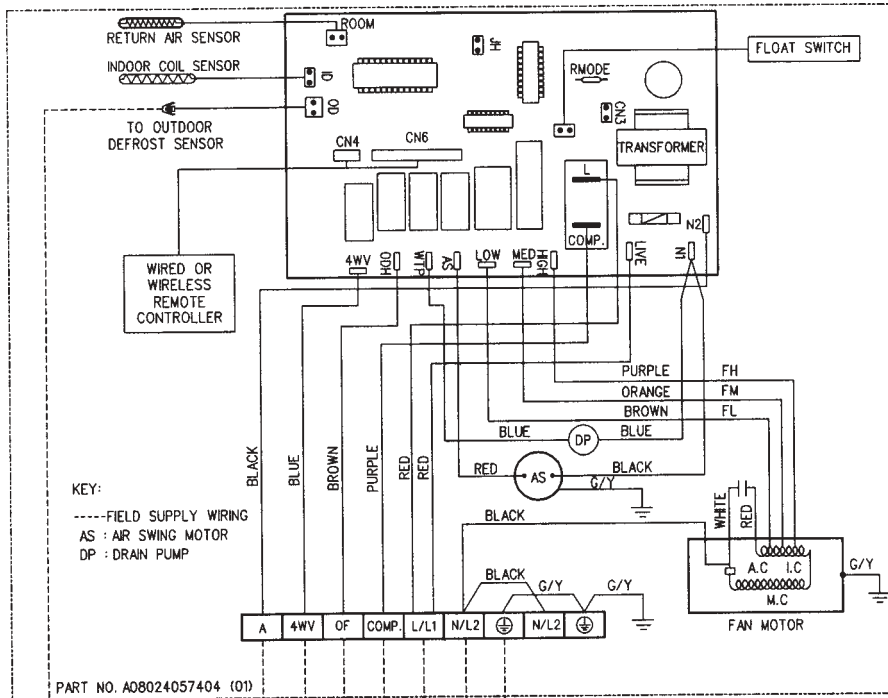
220-240V } E  
1Ph } N  
50hz } L

**Outdoor Unit  
Model : MLC 030BR**

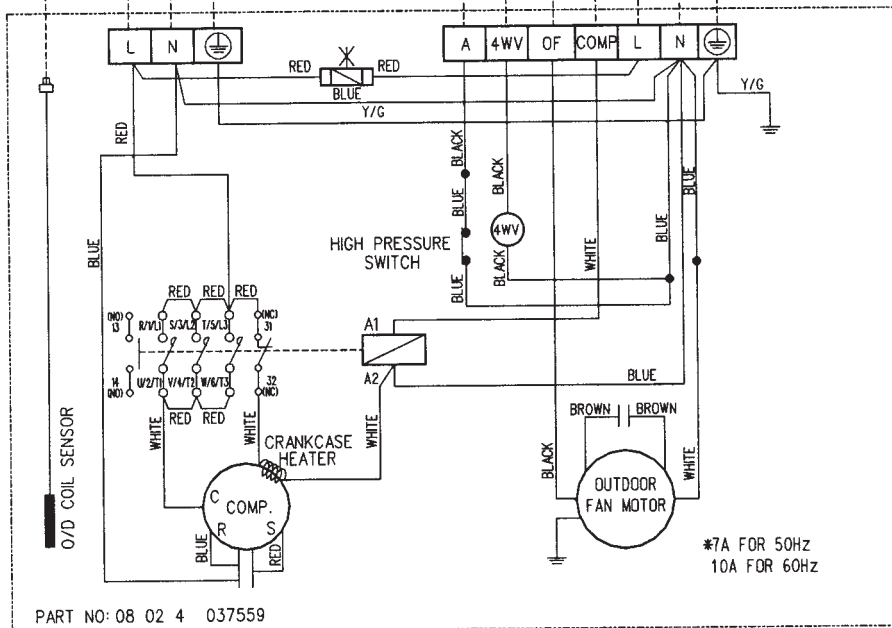


REMARK - EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

**Indoor Unit**  
**Model : MCK 030AR**

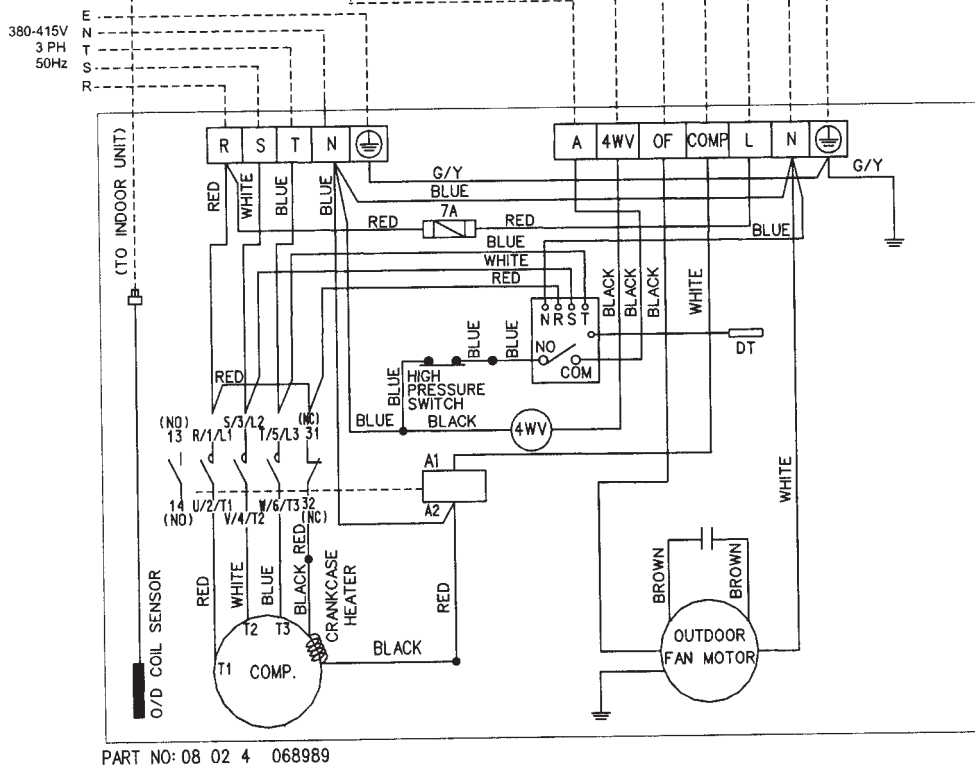
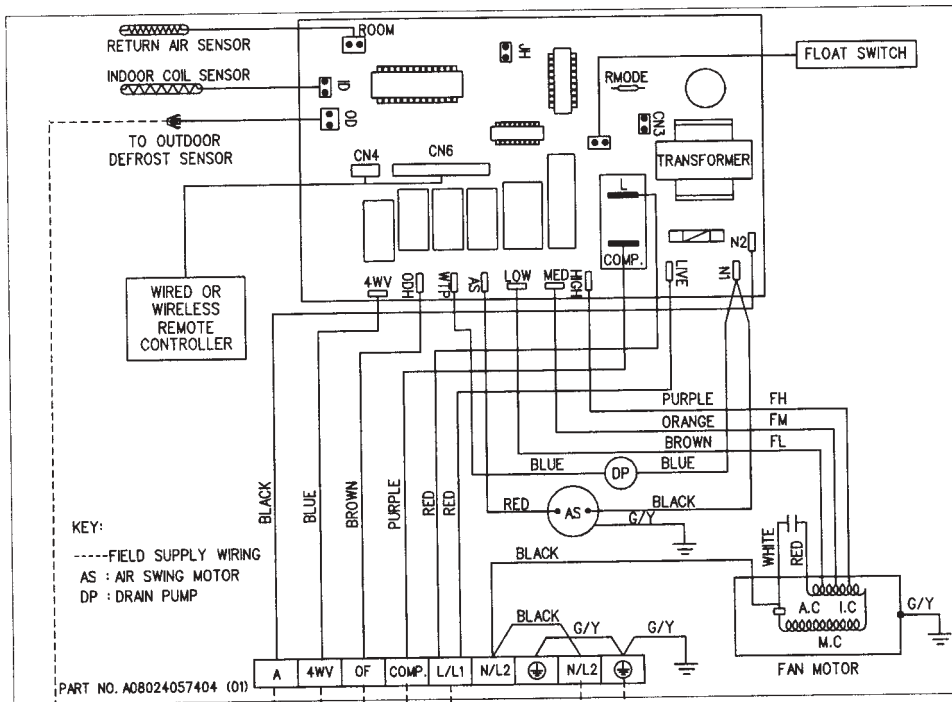


220-240V E  
 1PH N  
 50Hz L



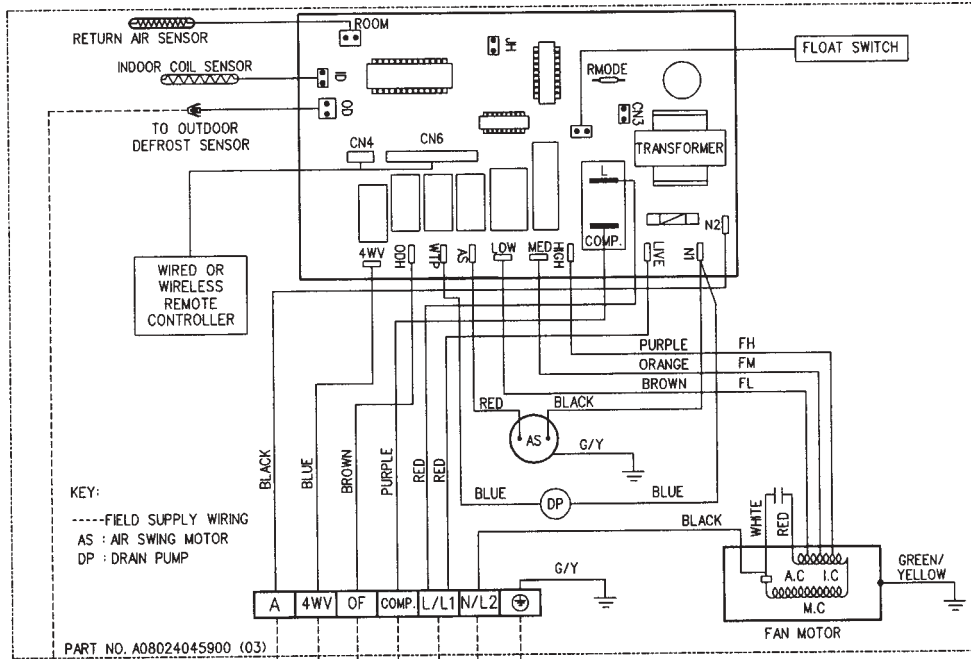
**Outdoor Unit**  
**Model : MLC / M4LC 030CR**

**Indoor Unit**  
**Model : MCK 030AR**

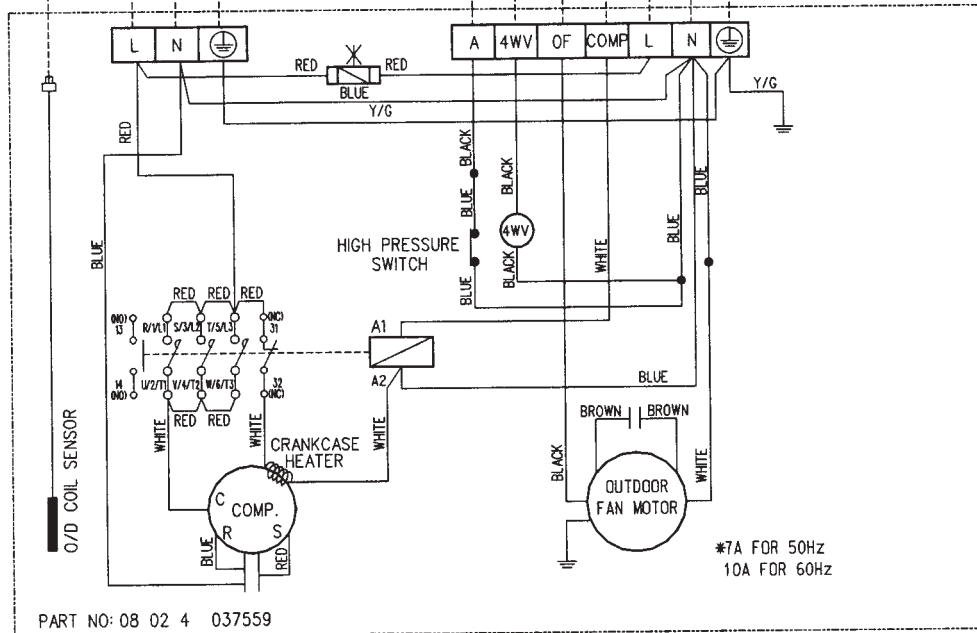


**Outdoor Unit**  
**Model : MLC / M4LC 030CR**

**Indoor Unit**  
**Model : MCK 040AR**

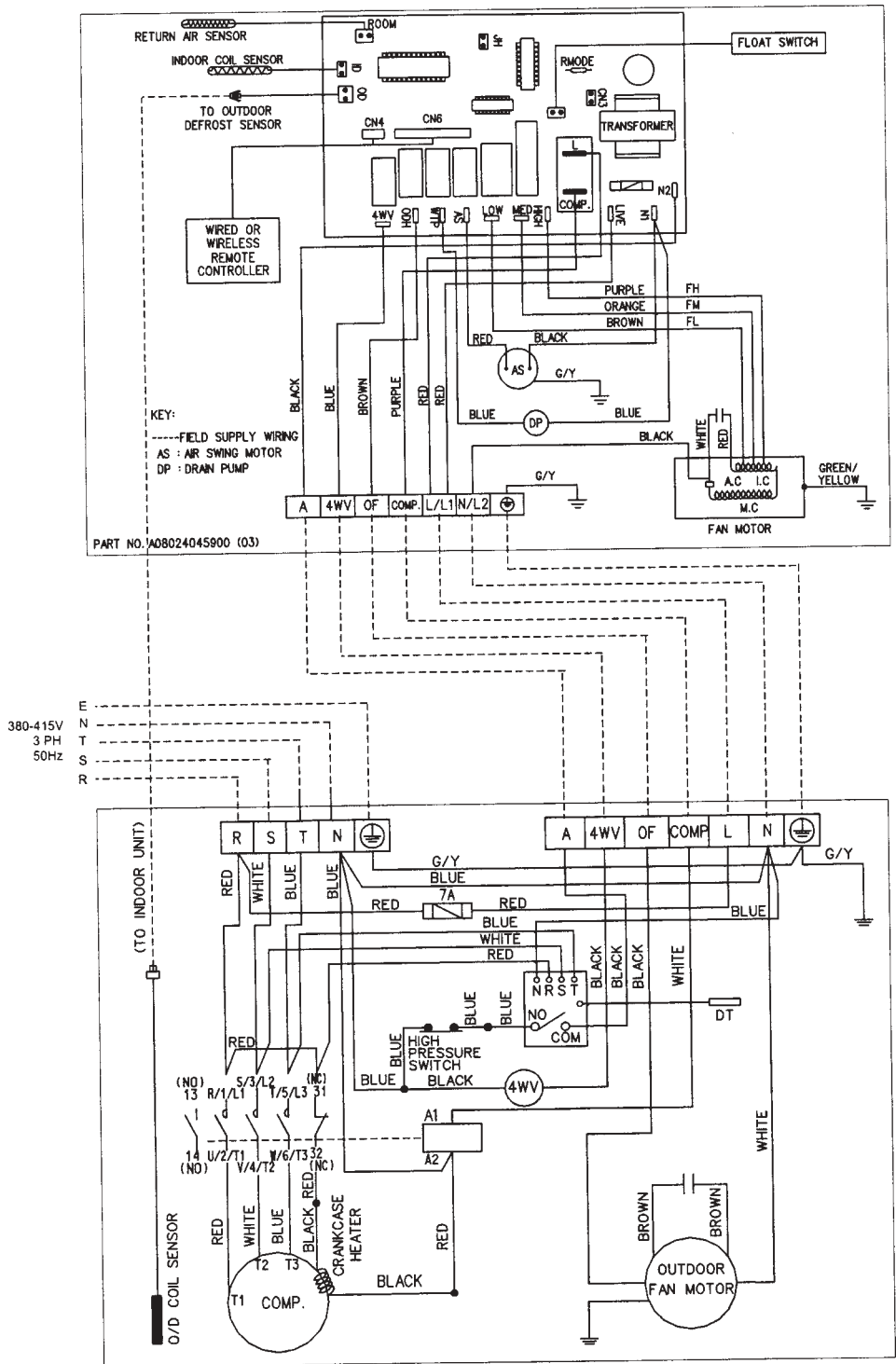


220-240V E  
 1PH N  
 50Hz L



**Outdoor Unit**  
**Model : MLC / M4LC 035 / 040CR**

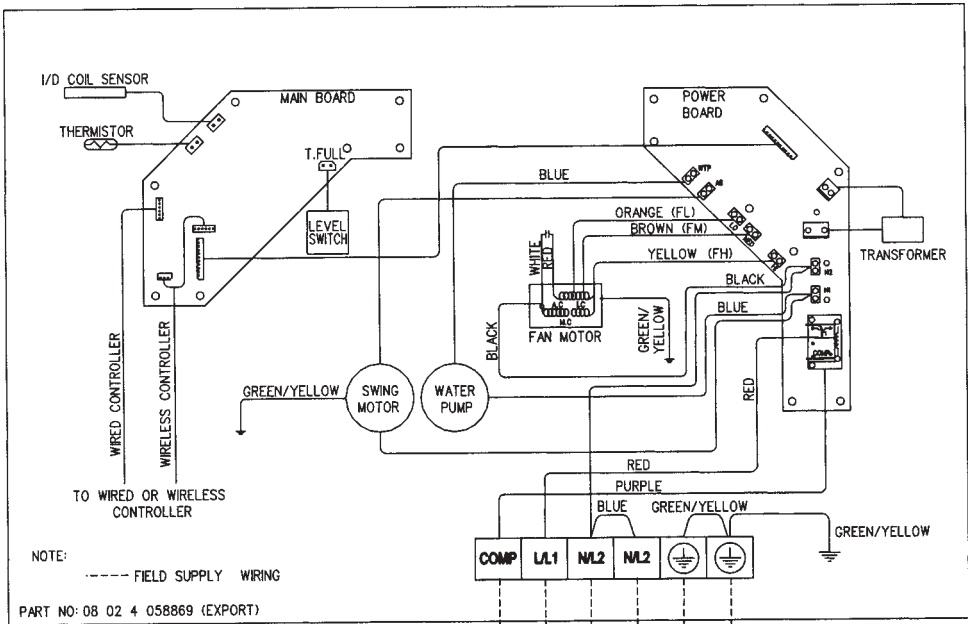
**Indoor Unit**  
**Model : MCK 040 / 050AR**



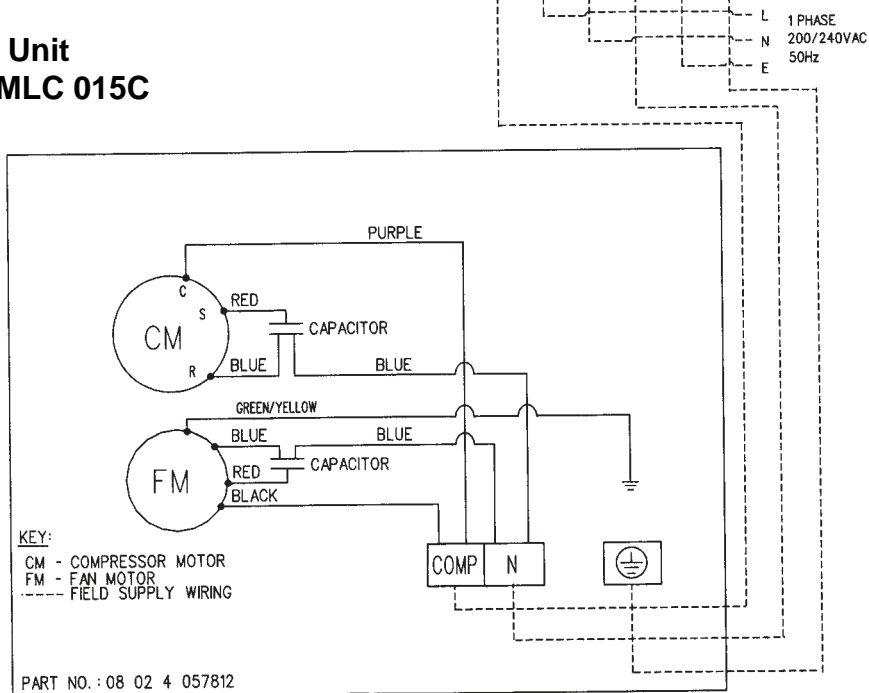
**Outdoor Unit**  
**Model : MLC / M4LC 040 / 050CR**

# Cooling Only

## Indoor Unit Model : MCK 015B

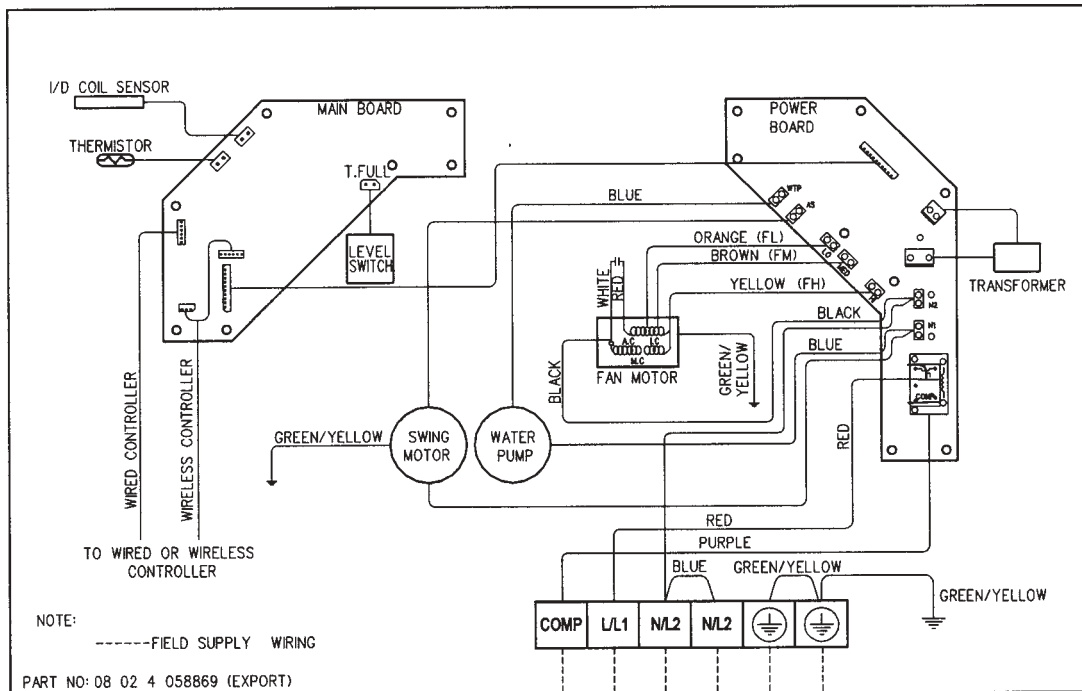


## Outdoor Unit Model : MLC 015C

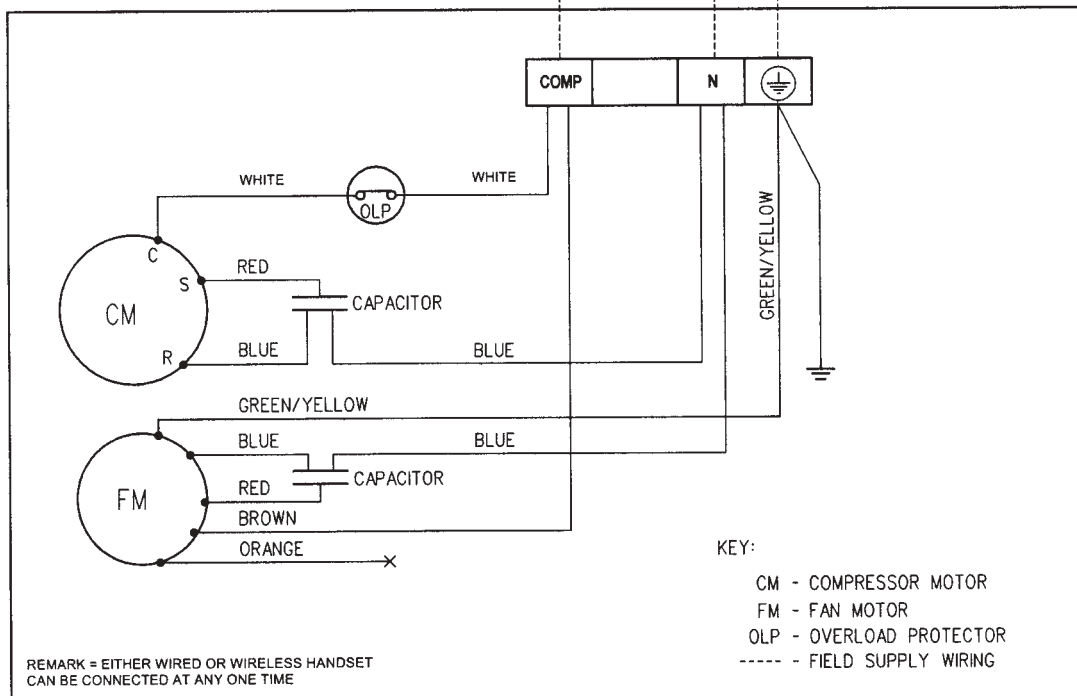


REMARK = EITHER WIRED OR WIRELESS HANDSET  
CAN BE CONNECTED AT ANY ONE TIME

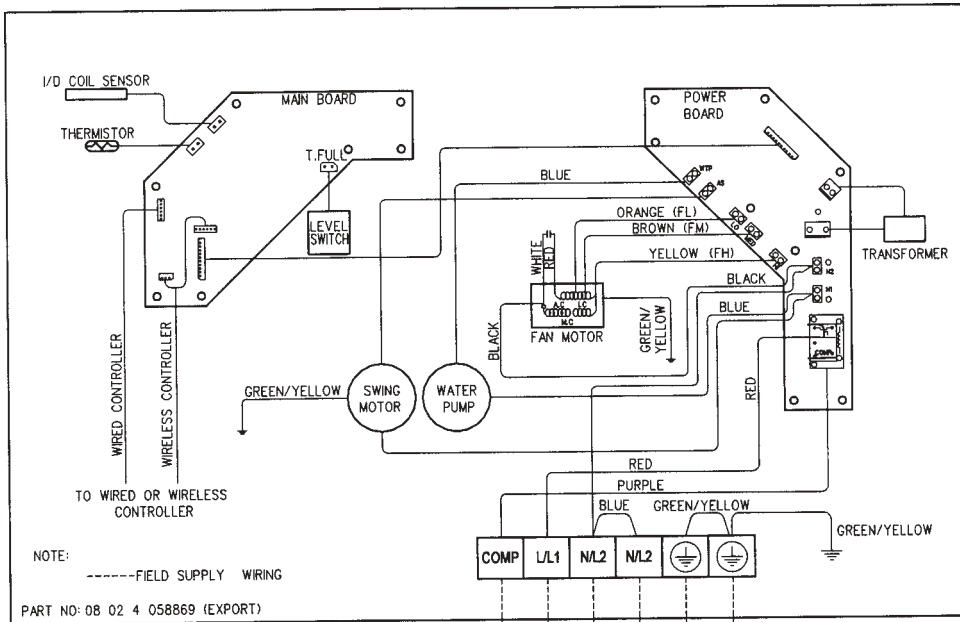
**Indoor Unit  
Model : MCK 015B**



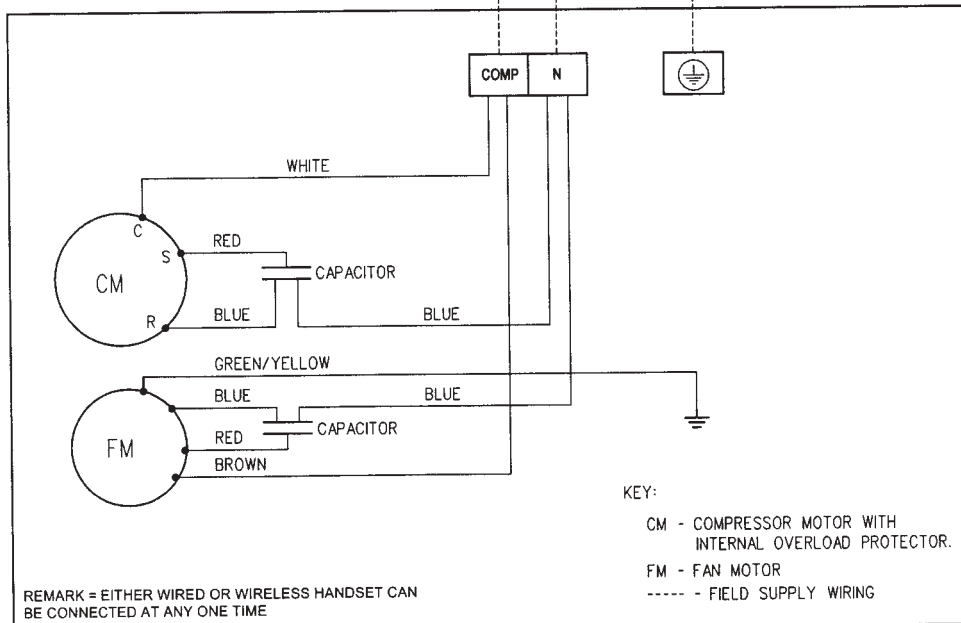
**Outdoor Unit  
Model : M4LC 015B**



**Indoor Unit**  
**Model : MCK 020 / 025B**

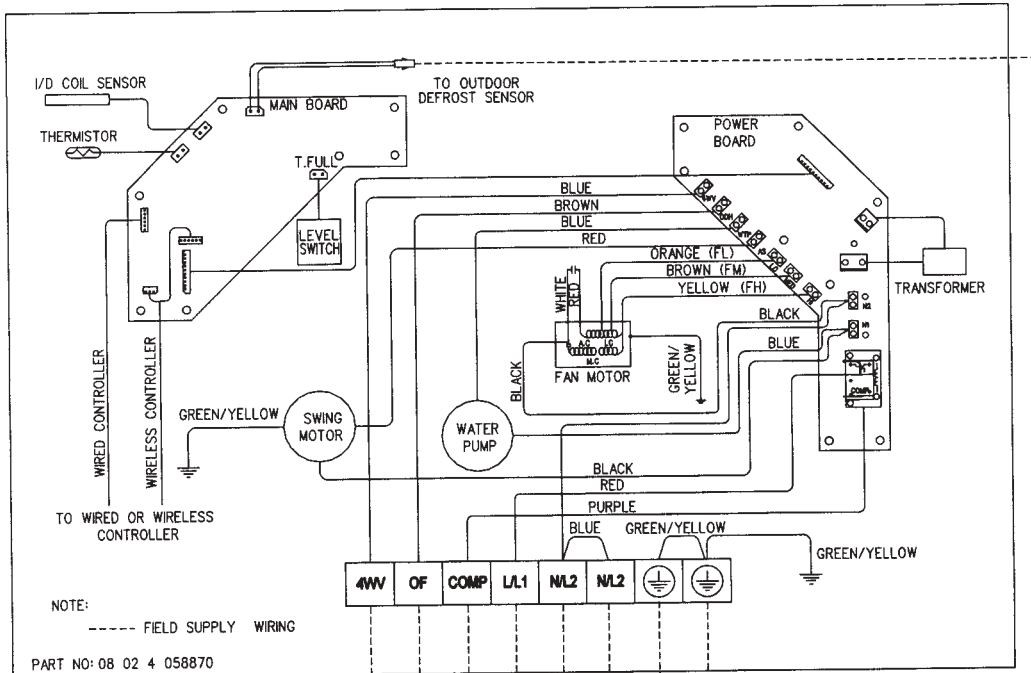


**Outdoor Unit**  
**Model : MLC / M4LC 020 / 025B**

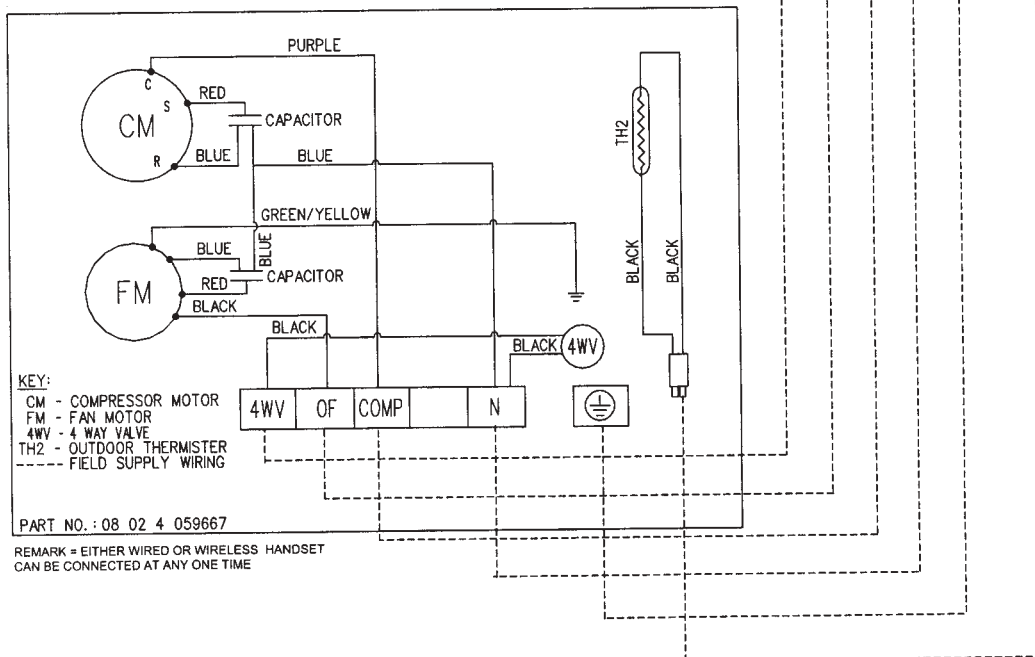


# Heat Pump

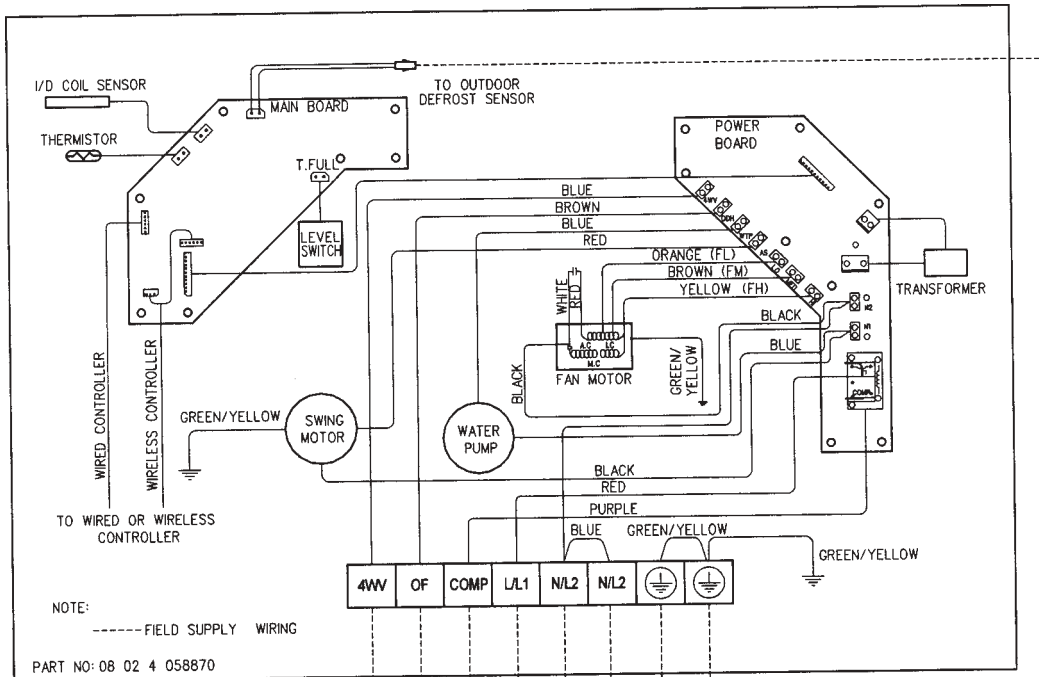
## Indoor Unit Model : MCK 015BR



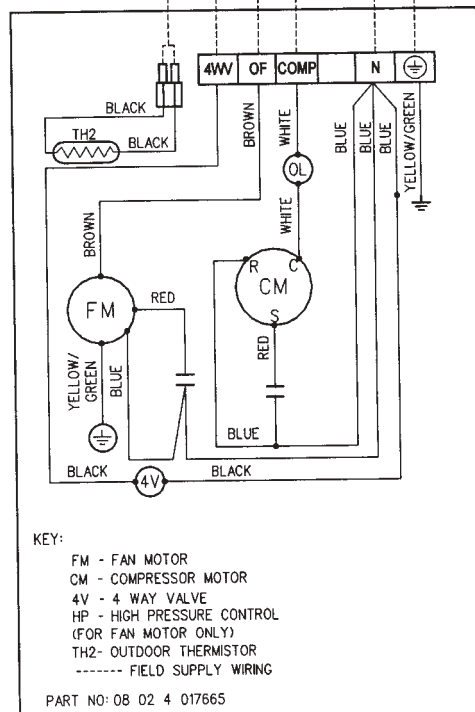
## Outdoor Unit Model : MLC 015CR



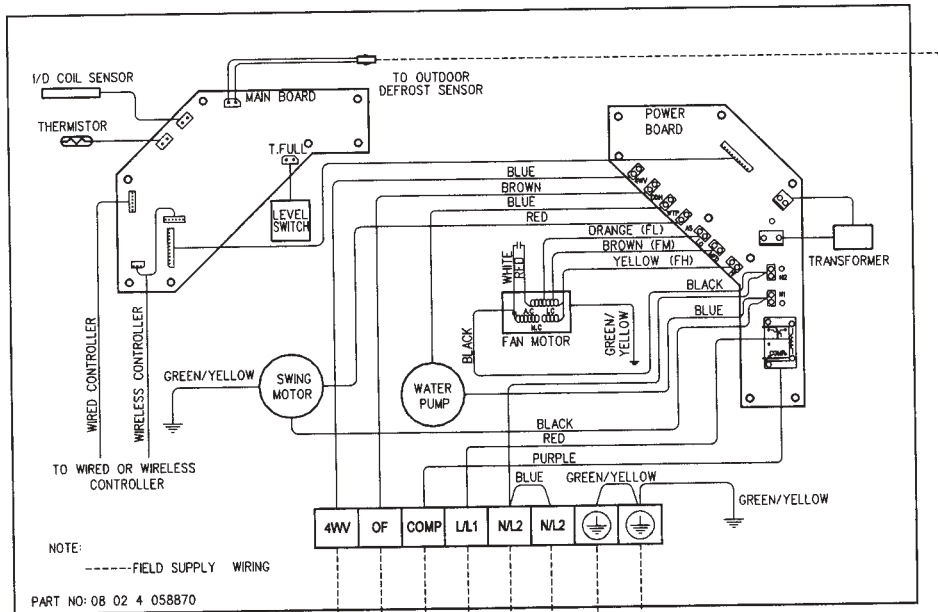
**Indoor Unit**  
**Model : MCK 015BR**



**Outdoor Unit**  
**Model : M4LC 015BR**

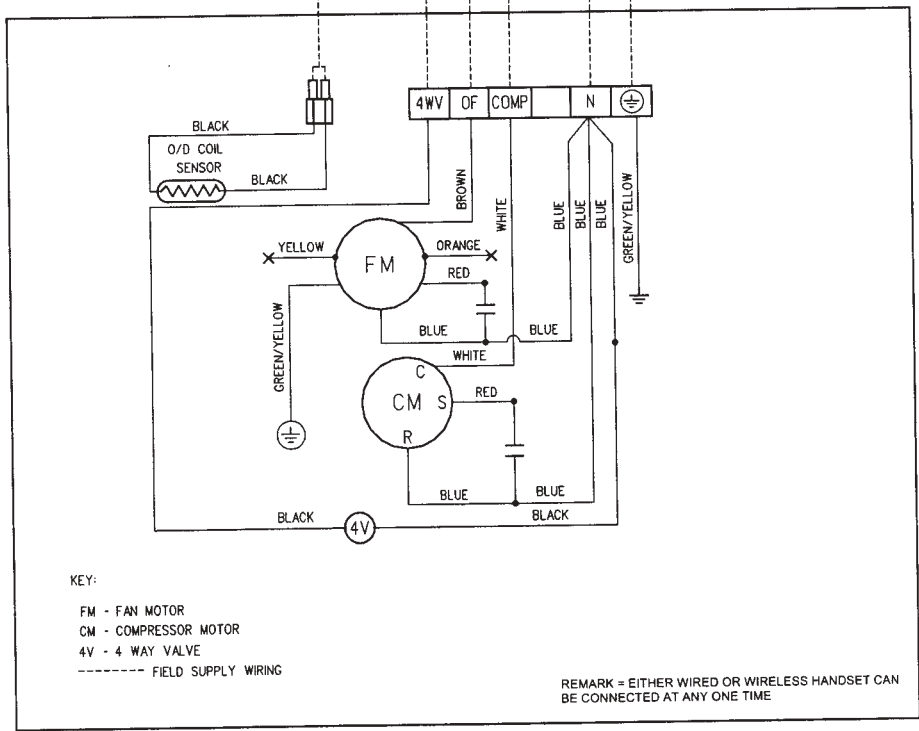


**Indoor Unit**  
**Model : MCK 020 / 025BR**



E 1 PHASE  
 N 200/240VAC  
 L 50Hz

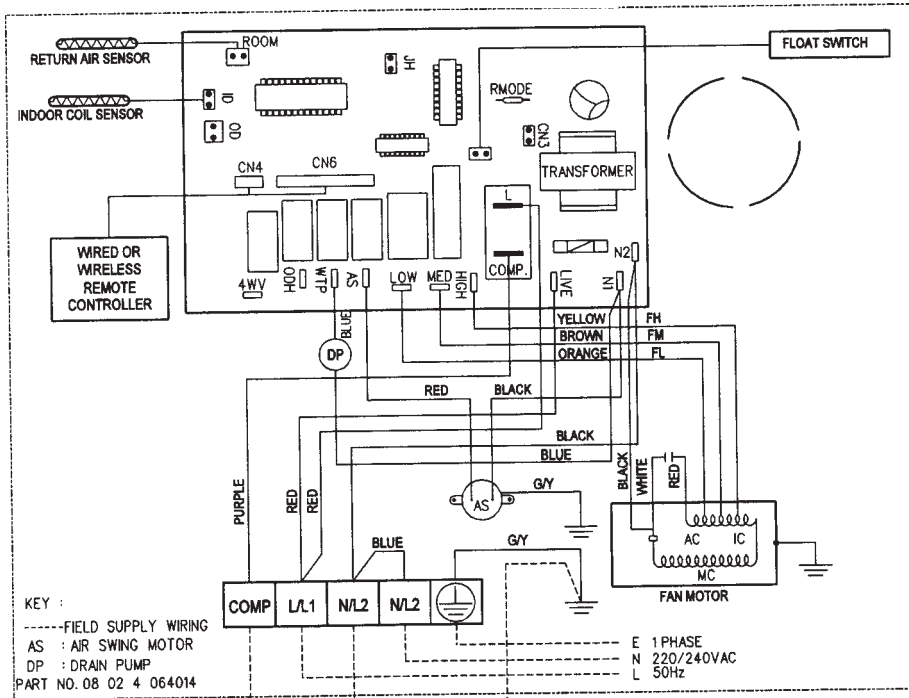
**Outdoor Unit**  
**Model : MLC / M4LC 020 / 025BR**



**Cooling Only**

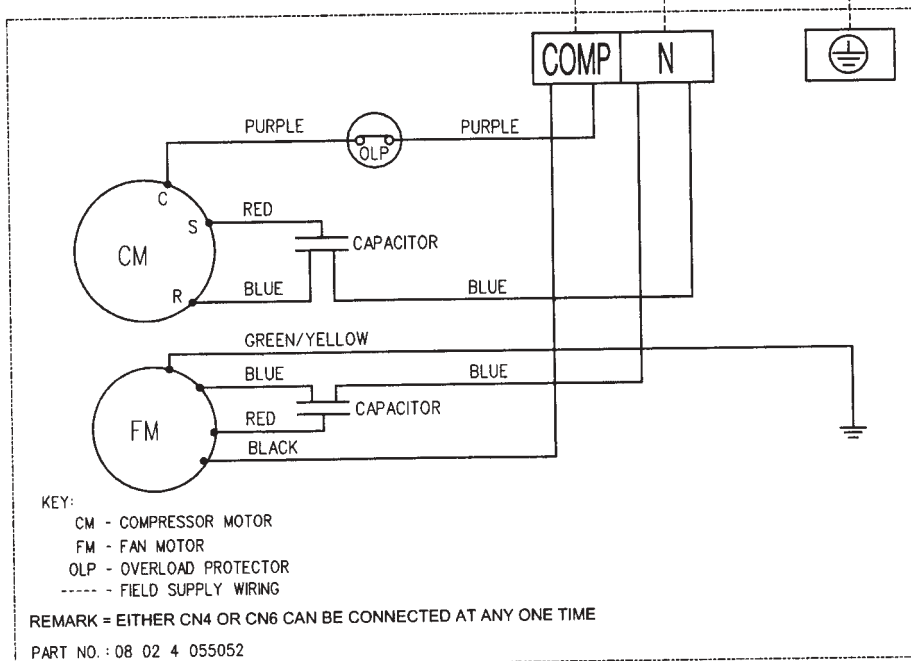
**Indoor Unit**

**Model : MCK / M5CK 010C**

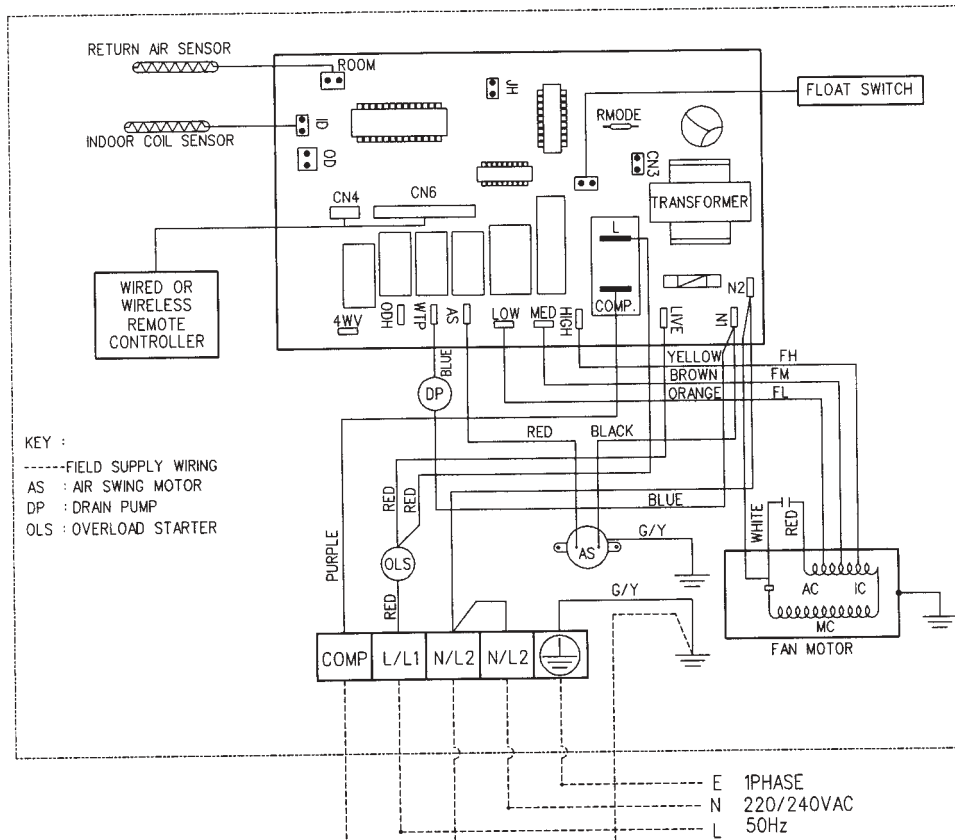


**Outdoor Unit**

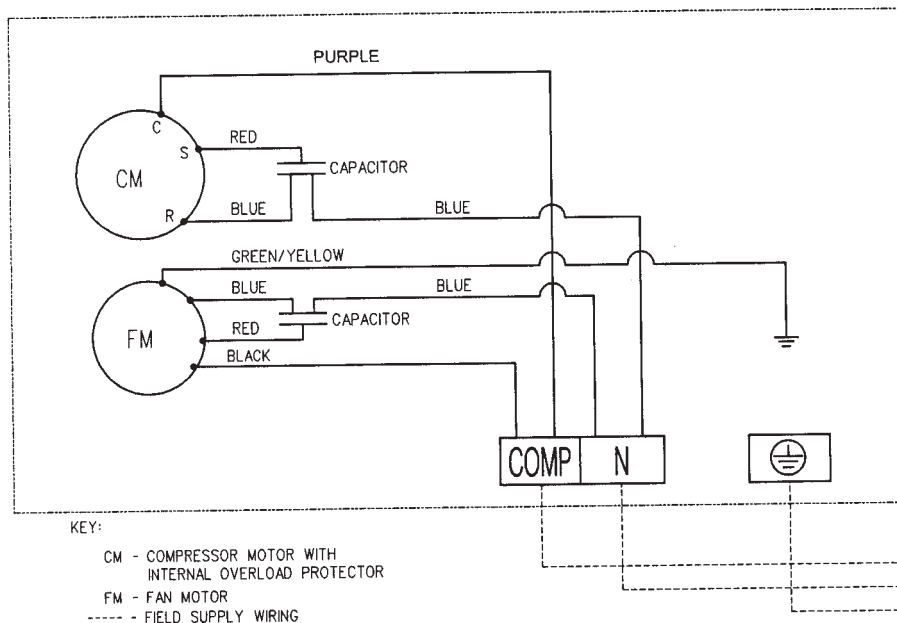
**Model : MLC / M5LC 010C**



**Indoor Unit**  
**Model : MCK / M5CK 015C**

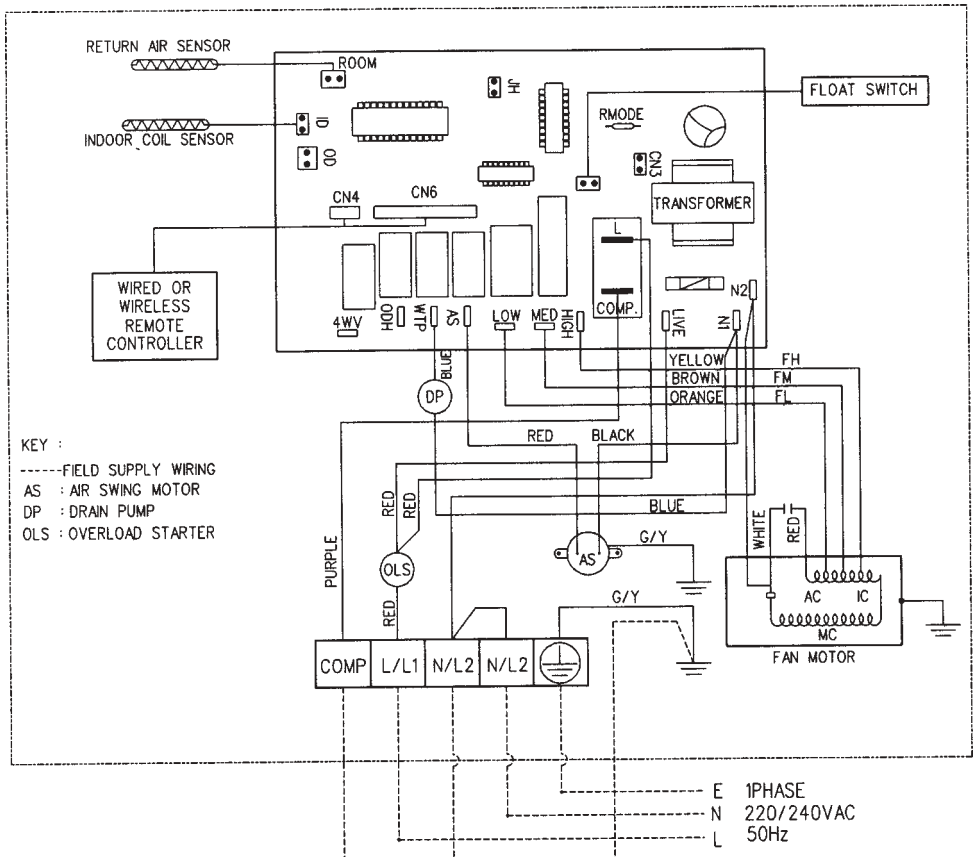


**Outdoor Unit**  
**Model : MLC/ M5LC 015C**

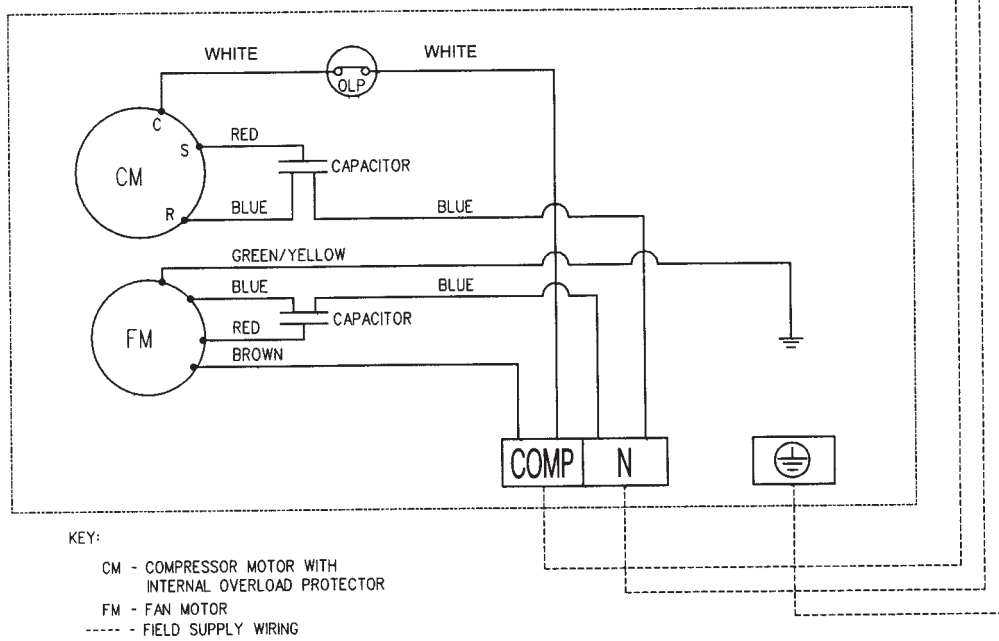


REMARK = EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

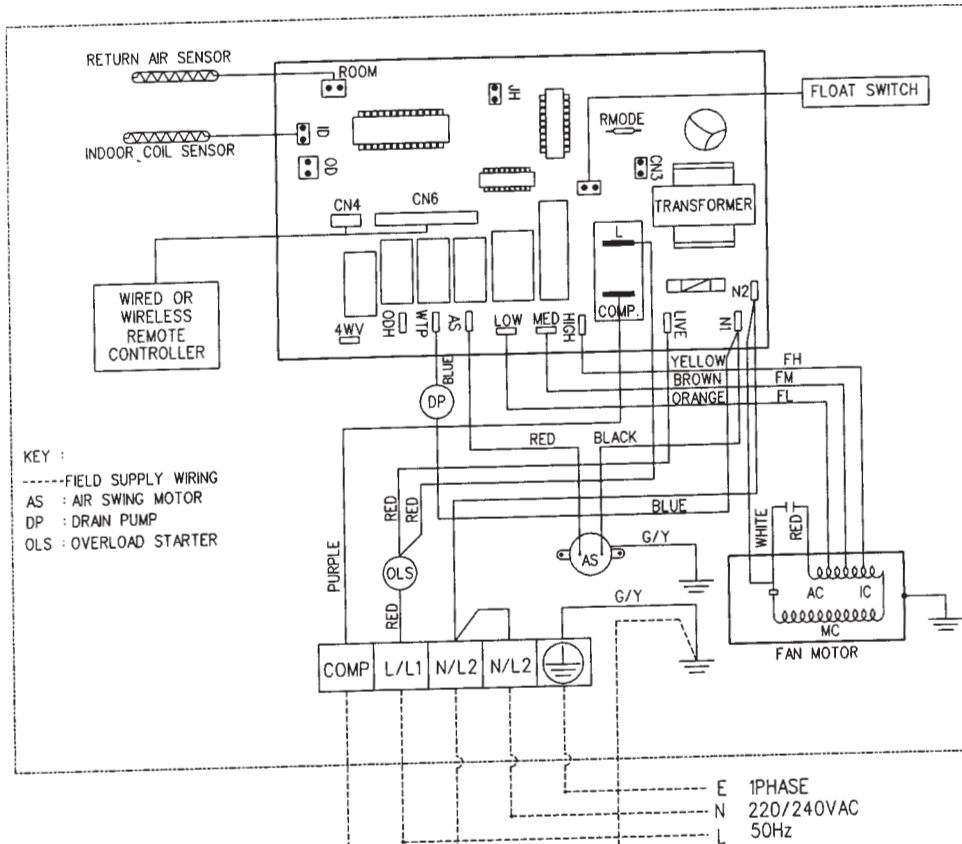
**Indoor Unit**  
**Model : MCK 010 / 015C**



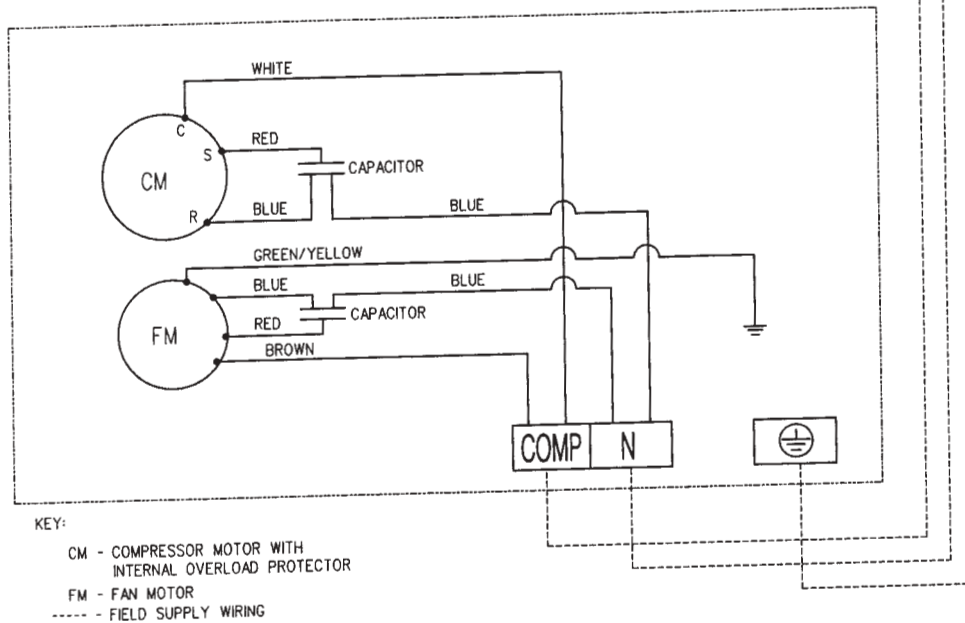
**Outdoor Unit**  
**Model : M4LC 010 / 015B**



**Indoor Unit**  
**Model : MCK 020C**



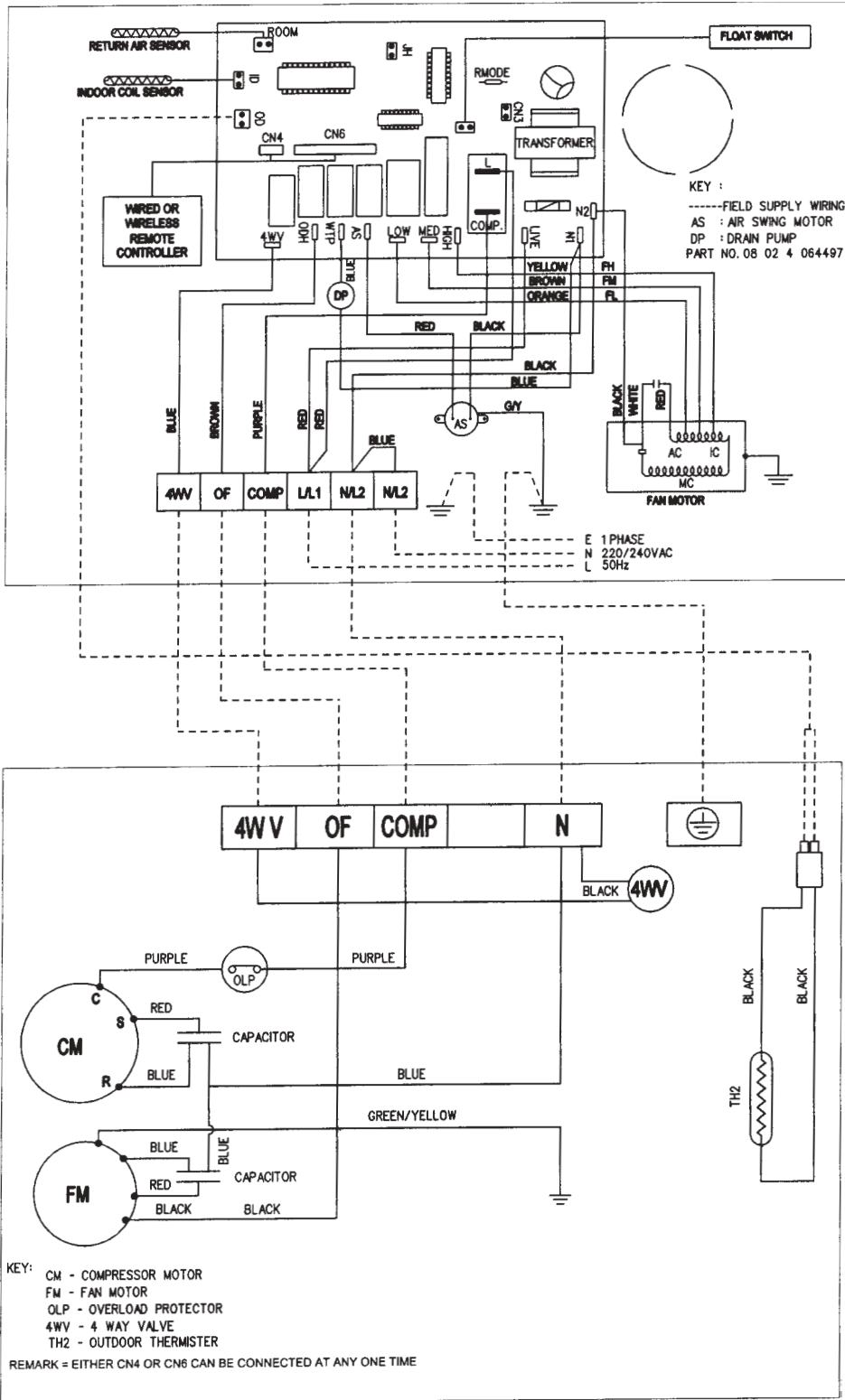
**Outdoor Unit**  
**Model : MLC / M4LC 020B**



# Heatpump

## Indoor Unit

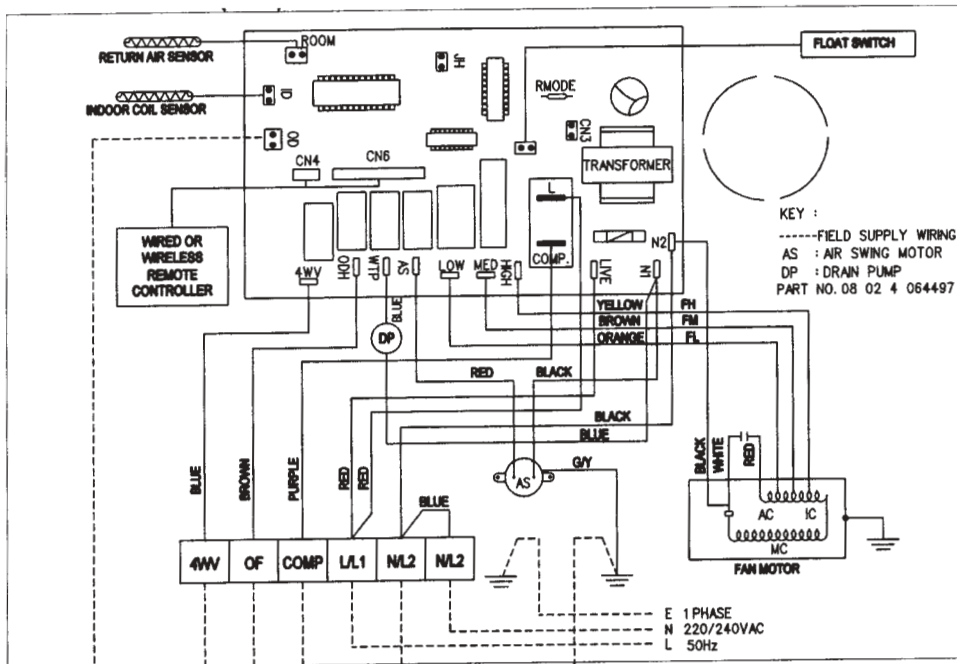
Model : MCK / M5CK 010CR



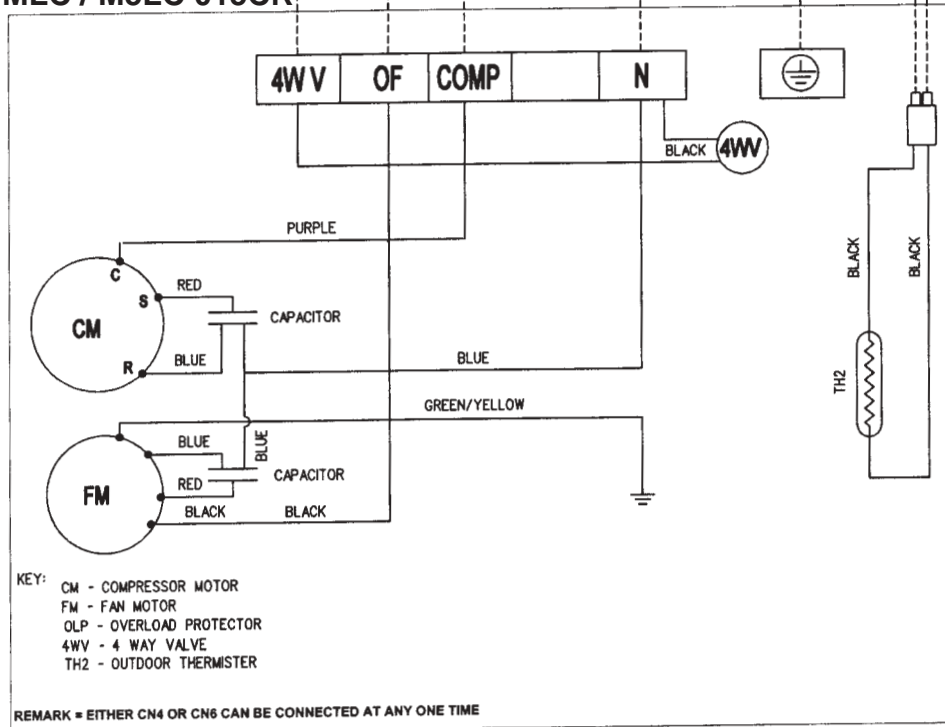
## Outdoor Unit

Model : MLC / M5LC 010CR

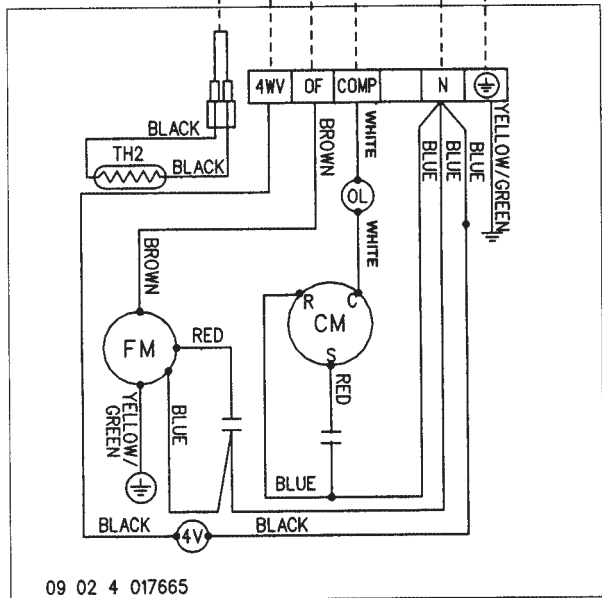
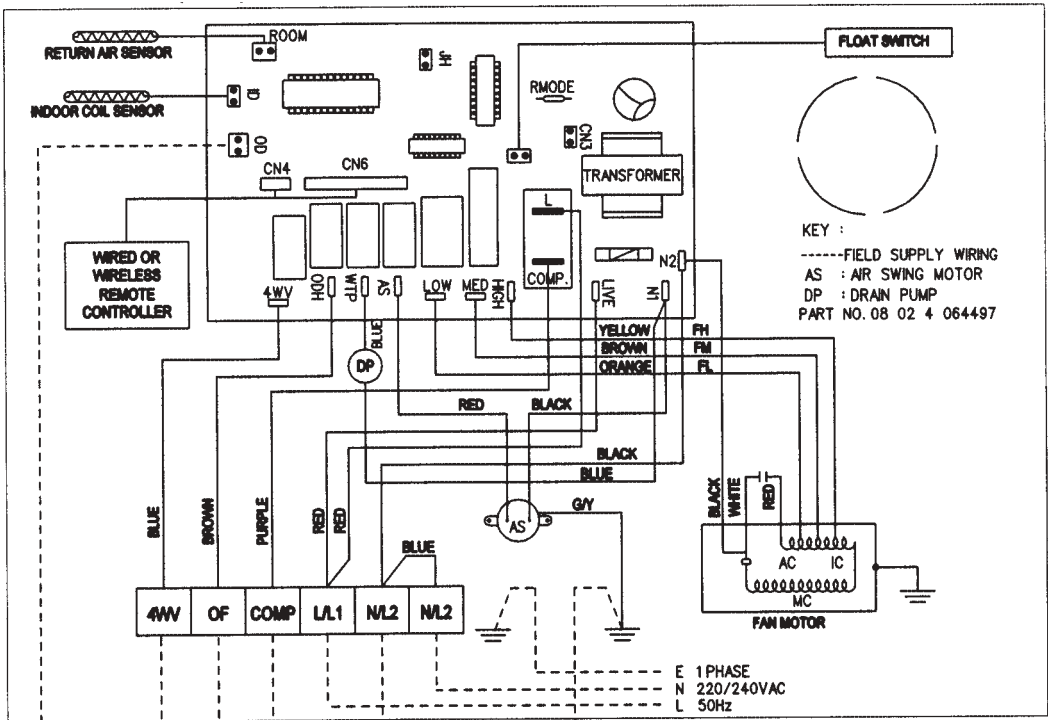
**Indoor Unit**  
**Model : MCK / M5CK 015CR**



**Outdoor Unit**  
**Model : MLC / M5LC 015CR**



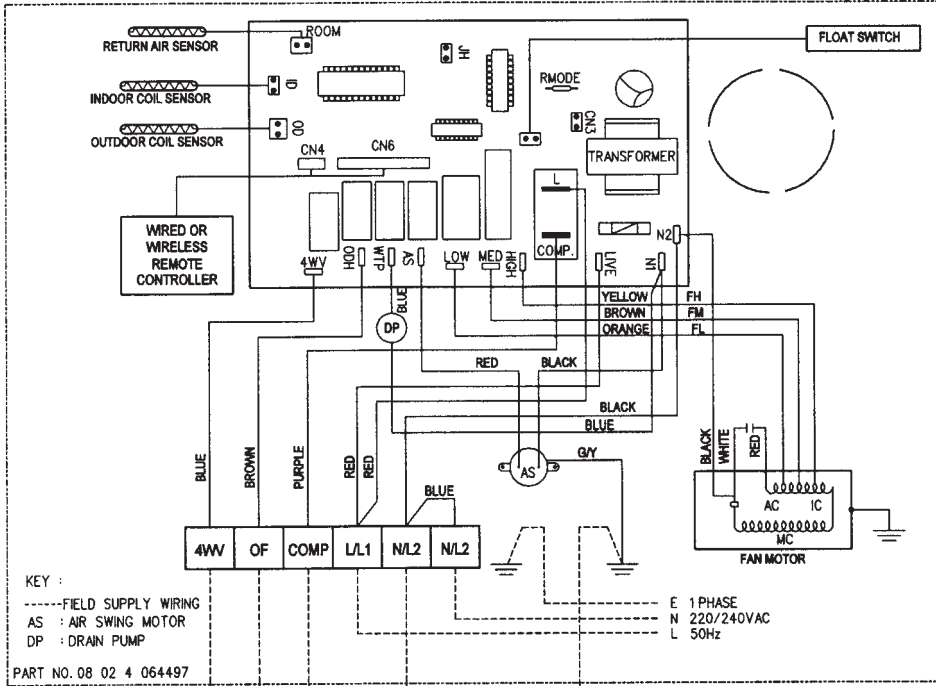
**Indoor Unit**  
**Model : MCK 010 / 015CR**



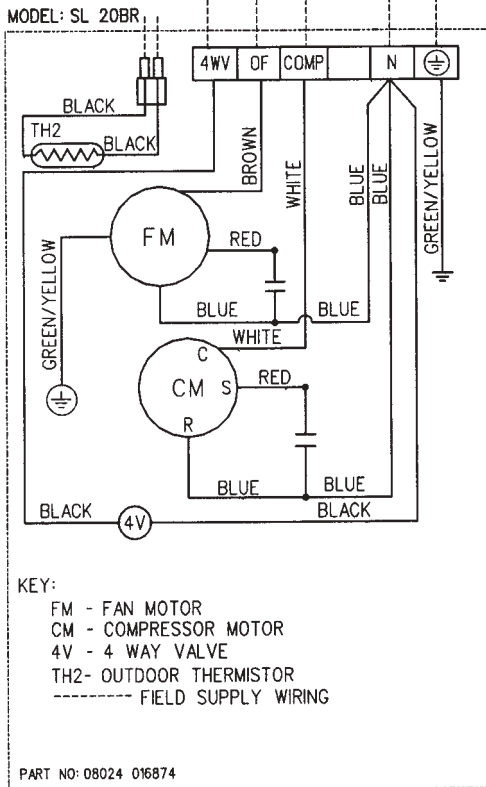
REMARK: EITHER CN4 OR CN6 CAN BE CONNECTED AT ANY ONE TIME

**Outdoor Unit**  
**Model : M4LC 010 / 015BR**

**Indoor Unit**  
**Model : MCK 020CR**



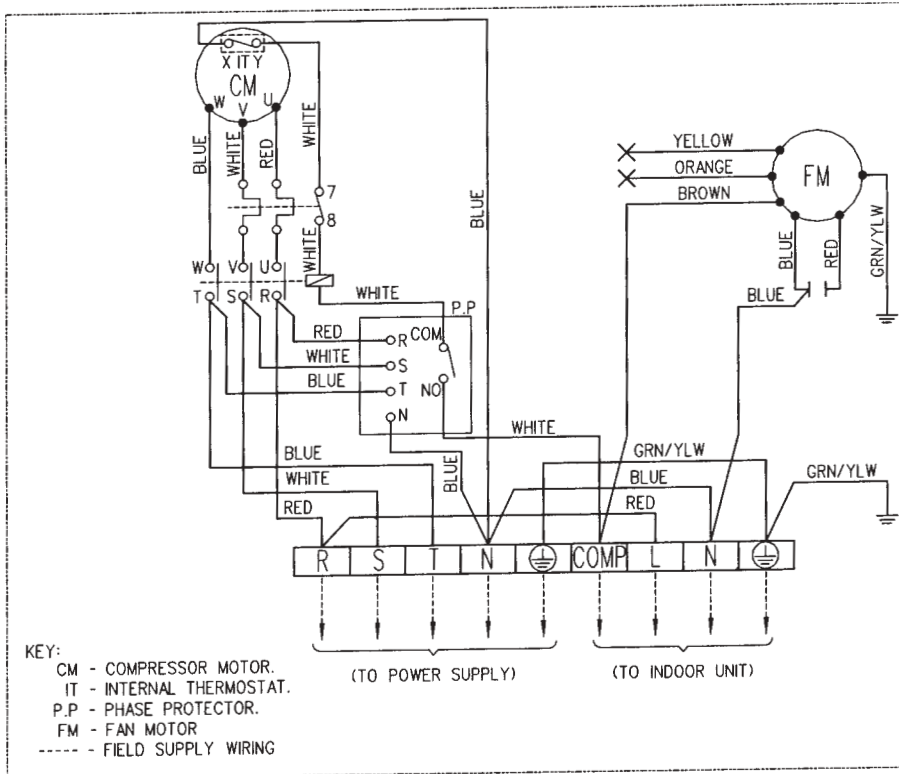
**Indoor Unit**  
**Model : MLC / M4LC 020BR**



### 3 Phase For 2 & 2.5 Hp Outdoor Unit

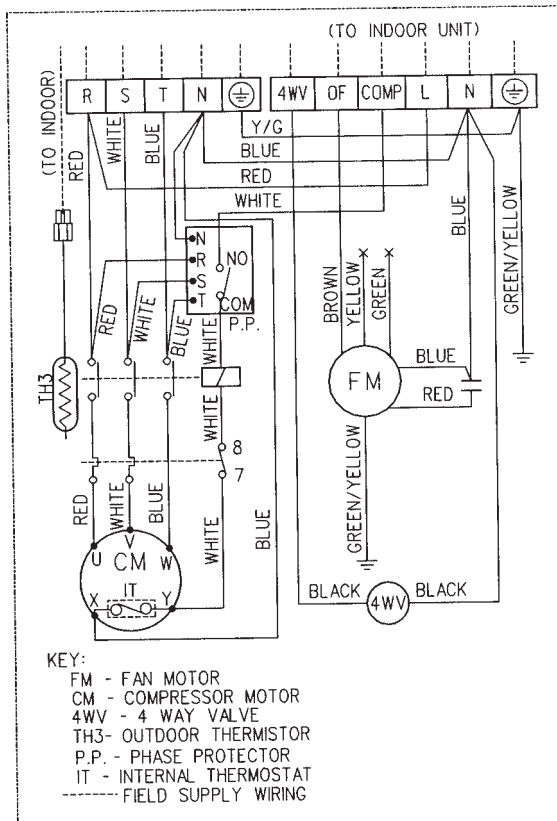
Model : M4LC 020 / 025B (Cooling Only)

3 Phase / 50 HZ / 380 ~ 415V

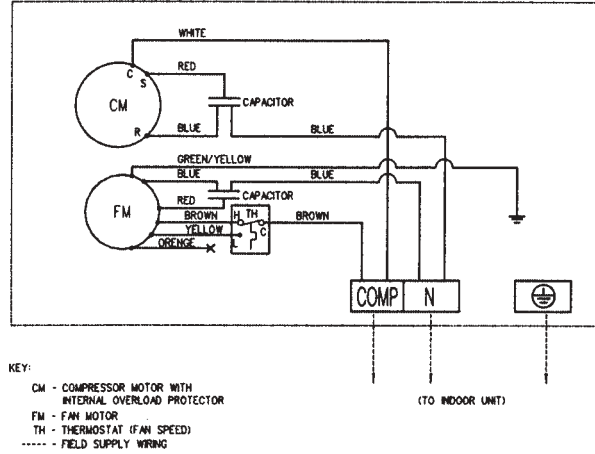


### Model : M4LC 020 / 025BR (Heat Pump)

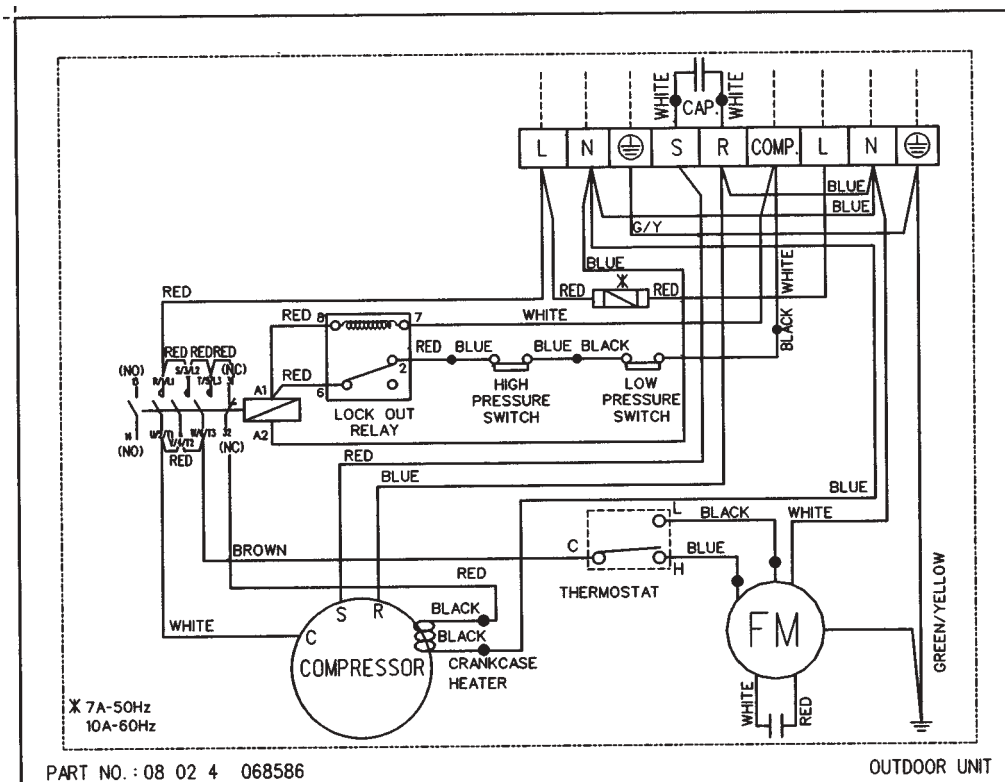
3 Phase / 50 HZ / 380 ~ 415V



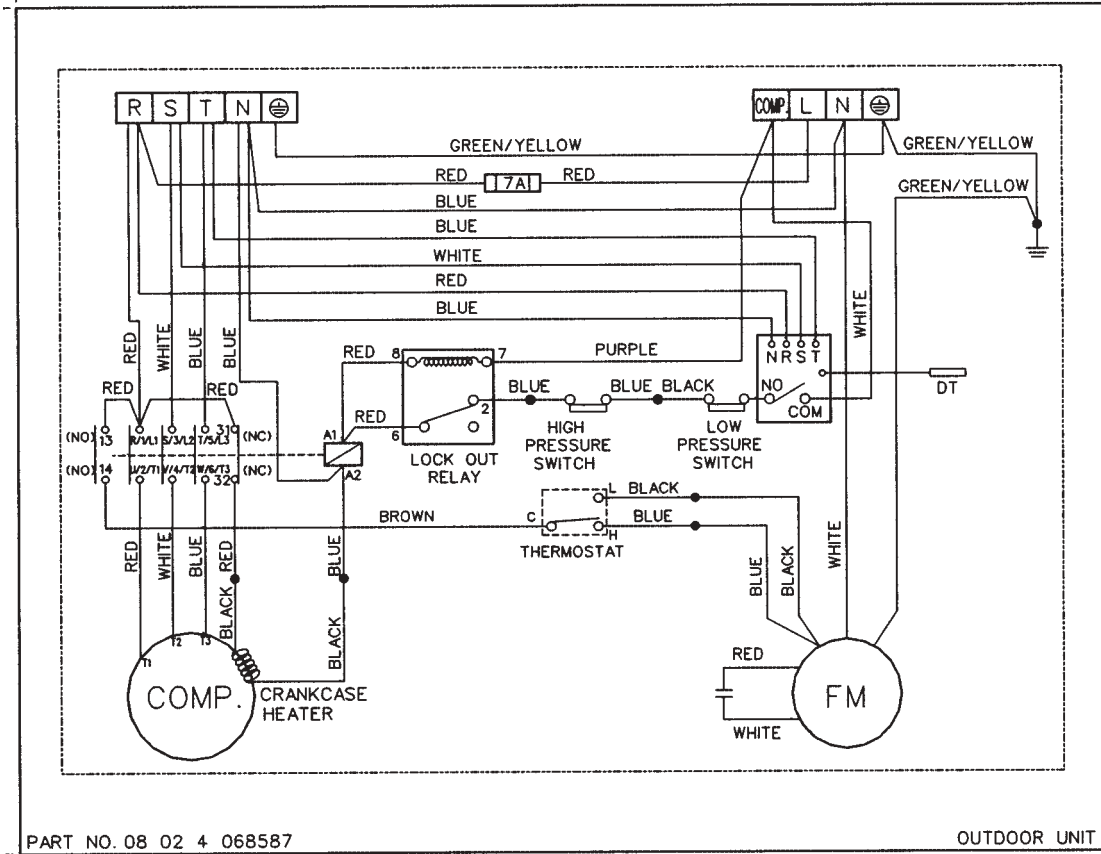
**High Ambient Unit  
Outdoor Unit  
Model : MLC 020 / 025B (Cooling Only)  
50Hz / 1 Phase / 220-240V**



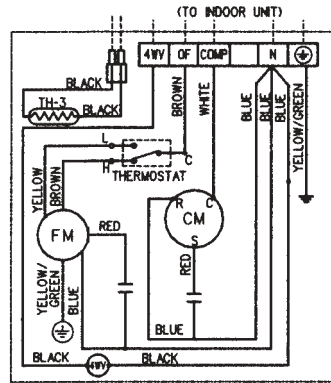
**Outdoor Unit  
Model : MLC 030C (Cooling Only)  
50Hz / 1 Phase / 220 - 240V**



**Outdoor Unit**  
**Model : MLC 040 / 050C (Cooling Only)**  
**50HZ / 30 Phase / 380 - 415V**

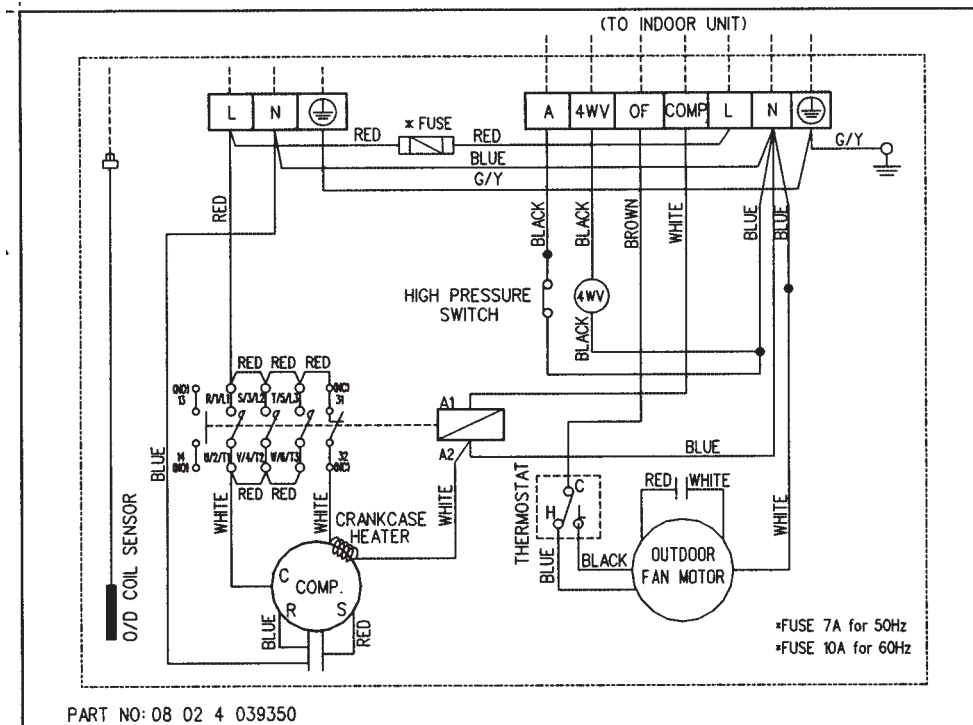


**Outdoor Unit**  
**Model : MLC 020 / 025BR (Heat Pump)**  
**50HZ / 1 Phase / 220 - 240V**

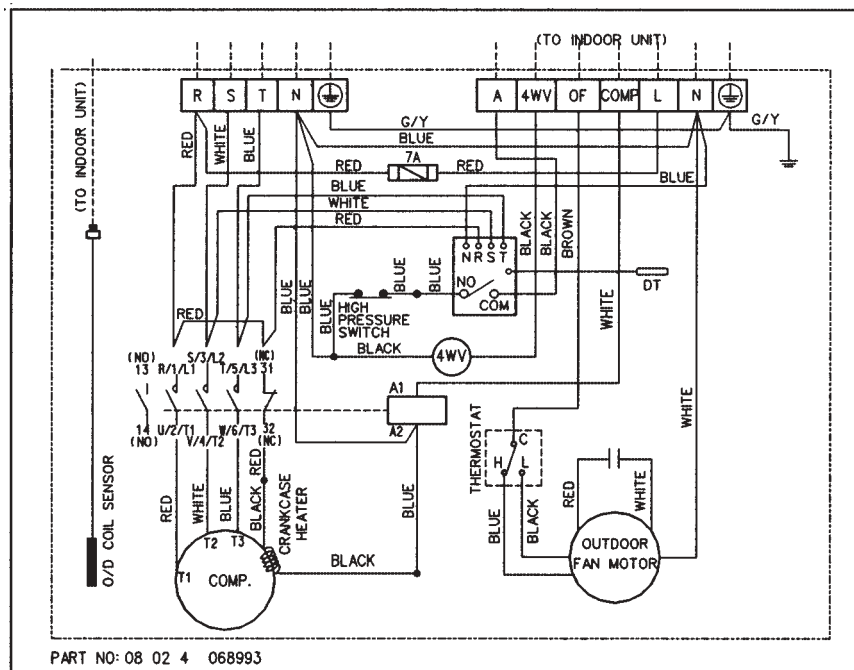


KEY:  
 FM - FAN MOTOR  
 CM - COMPRESSOR MOTOR  
 4WV - 4 WAY VALVE  
 TH3 - OUTDOOR THERMISTOR  
 ----- FIELD SUPPLY WIRING

**Outdoor Unit**  
**Model : MLC 030CR (Heat Pump)**  
**50HZ / 1 Phase / 220- 240V**

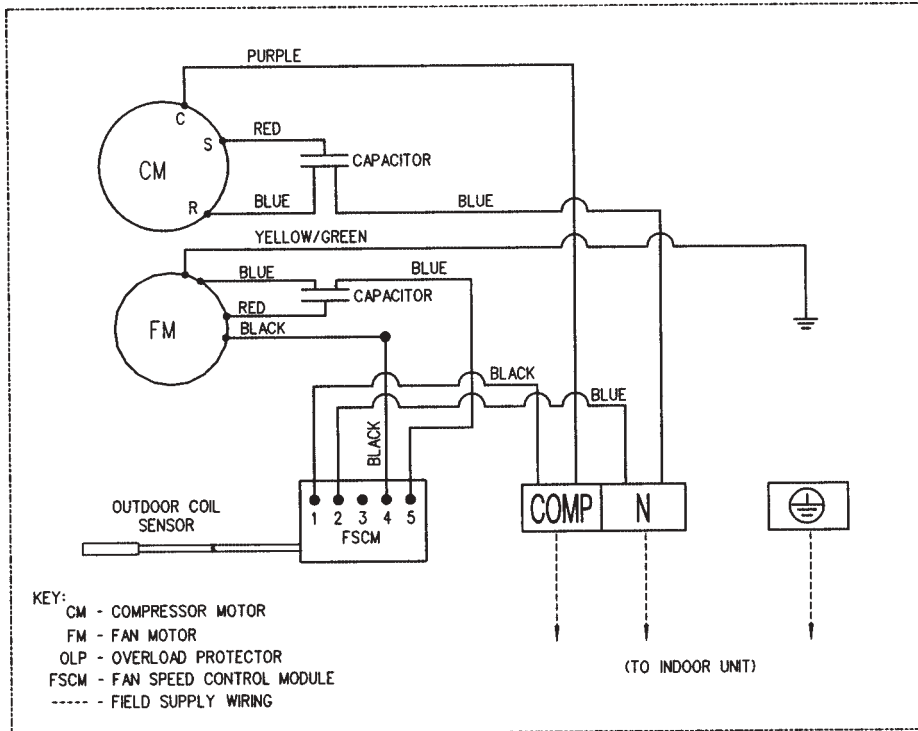


**Outdoor Unit**  
**Model : MLC 040 / 050CR (Heat Pump)**  
**50HZ / 3 Phase / 380 - 415V**

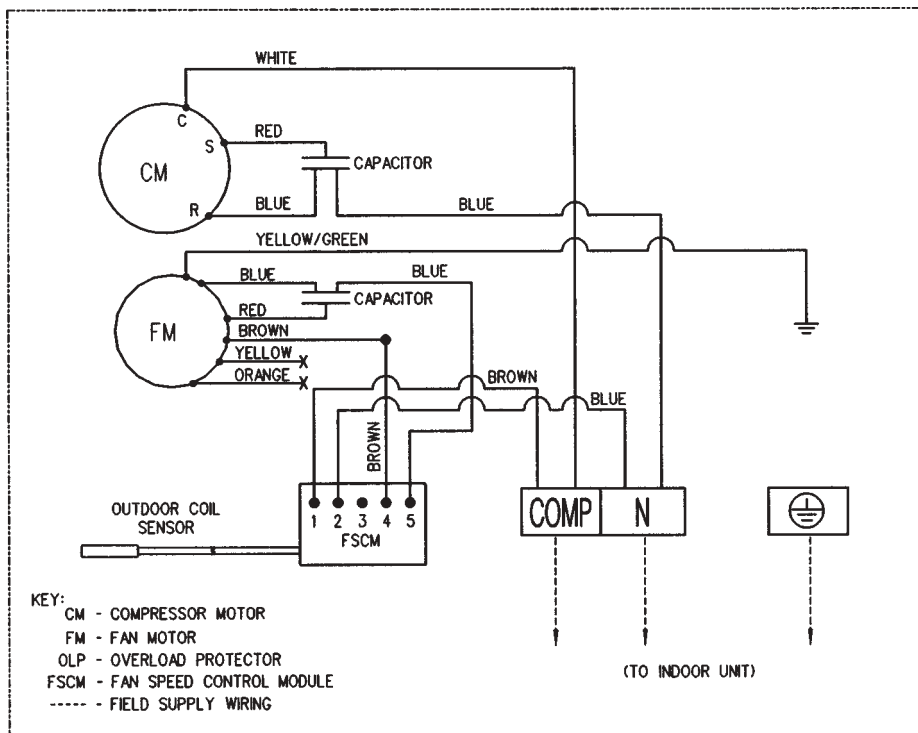




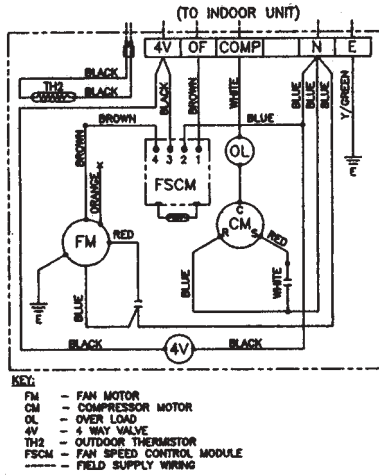
**Outdoor Unit**  
**Model : MLC 015C (Cooling Only)**  
**50HZ / 1 Phase / 220- 240V**



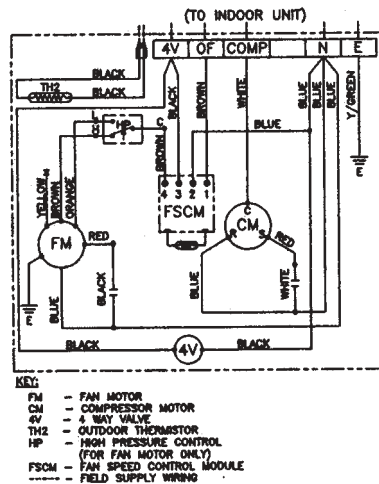
**Outdoor Unit**  
**Model : MLC 020 / 025B (Cooling Only)**  
**50HZ / 1 Phase / 220- 240V**



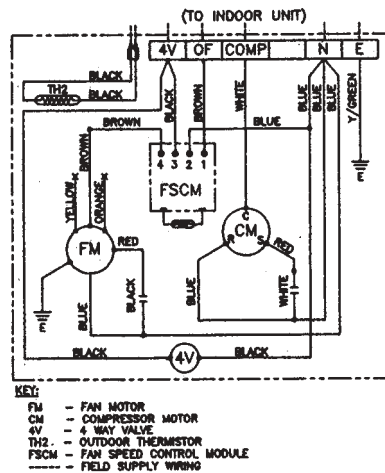
Low Ambient Unit  
 Outdoor Unit  
 Model : MLC 010 / 015BR  
 50HZ / 1 Phase / 220 - 240V



Outdoor Unit  
 Model : MLC 020BR  
 50HZ / 1 Phase / 220 - 240V



Outdoor Unit  
 Model : MLC 025BR  
 50HZ / 1 Phase / 220 - 240V



# Special Precautions For R407C

## Special precautions when dealing with refrigerant R407C unit

### 1) What Is New Refrigerant R407C?

R407C is a zeotropic refrigerant mixture which has zero ozone depletion potential and thus conformed to the Montreal Protocol regulation. It requires Polyol ester oil (POE) oil for its compressor's lubricant. Its refrigerant capacity and performance are about the same as the refrigerant R22.

### 2) Components

Mixture weight composition R32(23%), R125(25%), R134a(52%)

### 3) Characteristic

- R407C liquid and vapor components have different compositions when the fluid evaporates or condenses. Hence, when leak occurs and only vapor leaks out, the composition of the refrigerant mixture left in the system will change and subsequently affect the system performance. If just additional refrigerant is added to leaked system, system performance will drop. It is recommended that the system should be evacuated thoroughly before recharging with R407C.
- When refrigerant R407C is used, the composition will differ depending on whether it is in gaseous or liquid phase. Hence when charging R407C, ensure that only liquid is being withdrawn from the cylinder or can. This is to make certain that only original composition of R407C is being charged into the system.
- POE oil is used as lubricant for R407C compressor, which is different from the mineral oil used for R22 compressor. Extra precaution must be taken not to expose the R407C system too long to moist air.

### 4) Check List Before Installation / Servicing

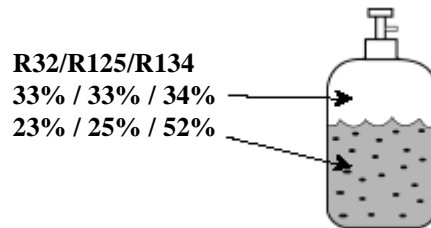
- Tubing  
Refrigerant R407C is more easily affected by dust or moisture compared with R22, make sure to temporarily cover the ends of the tubing prior to installation
- Compressor oil  
No additional charge of compressor oil is permitted.
- Refrigerant  
No other refrigerant other than R407C
- Tools  
Tools specifically for R407C only (must not be used for R22 or other refrigerant)
  - i) Manifold gauge and charging hose
  - ii) Gas leak detector
  - iii) Refrigerant cylinder/charging cylinder
  - iv) Vacuum pump c/w adapter
  - v) Flare tools
  - vi) Refrigerant recovery machine

### 5) Handling And Installation Guidelines

Like R22 system, the handling and installation of R407C system are closely similar. All precautionary measures; such as ensuring no moisture, no dirt or chips in the system, clean brazing using nitrogen, and thorough leak check and vacuuming are equally important requirements. However, due to zeotropic nature of R407C and its hydroscopic POE oil, additional precautions must be taken to ensure optimum and trouble-free system operation.

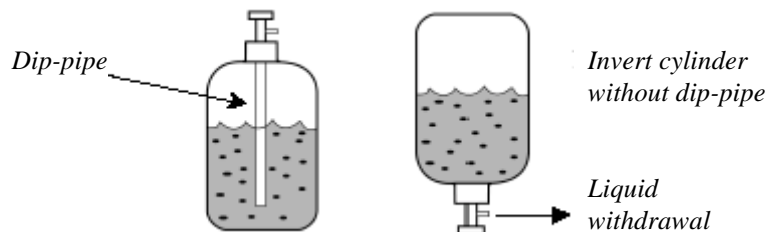
- a) Filter-dryer must be installed along the liquid line for all R407C air conditioners. This is to minimise the contamination of moisture and dirt in the refrigerant system. Filter-dryer must be of molecular sieve type. For a heat-pump system, install a two-way flow filter dryer along the liquid line.
- (b) During installation or servicing, avoid prolong exposure of the internal part of the refrigerant system to moist air. Residual POE oil in the piping and components can absorb moisture from the air.

- c) Ensure that the compressor is not exposed to open air for more than the recommended time specified by its manufacturer (typically less than 10 minutes). Remove the seal-plugs only when the compressor is about to be brazed.
- d) The system should be thoroughly vacuumed to 1.0 Pa (-700mmHg) or lower. This vacuuming level is more stringent than R22 system so as to ensure no incompressible gas and moisture in the system.
- e) When charging R407C, ensure that only liquid is being withdrawn from the cylinder or can. This is to ensure that only the original composition of R407C is being delivered into the system. The liquid composition can be different from the vapor composition.



*Composition of R407C in vapor phase is different from liquid phase.*

- f) Normally, the R407C cylinder or can is being equipped with a dip-pipe for liquid withdrawal. However, if the dip-pipe is not available, invert the cylinder or can so as to withdraw liquid from the valve at the bottom.



- f) When servicing leak, the top-up method, commonly practiced for R22 system, is not recommended for R407C system. Unlike R22 where the refrigerant is of a single component, the composition of R407C, which made-up of three different components, may have changed during the leak. Consequently, a top-up may not ensure that the R407C in the system is of original composition. This composition shift may adversely affect the system performance. It is recommended that the system should be evacuated thoroughly before recharging with R407C.

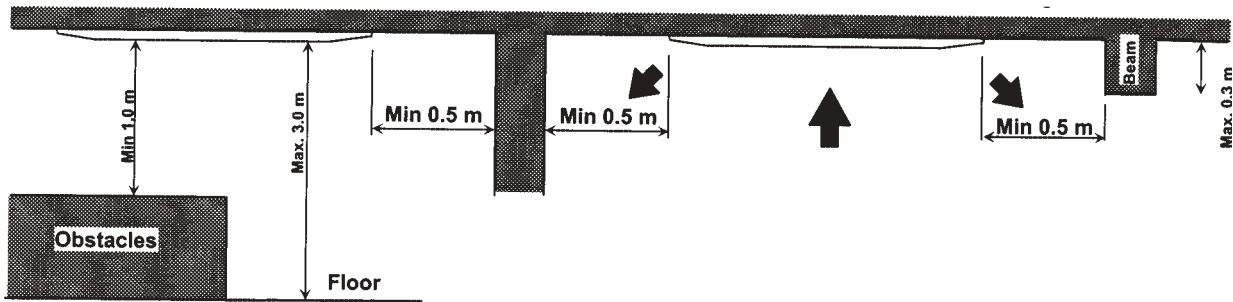
# Installation Of Indoor Unit



**Caution : Sharp edges and coil surfaces are potential injury hazard. Avoid from contact with them.**

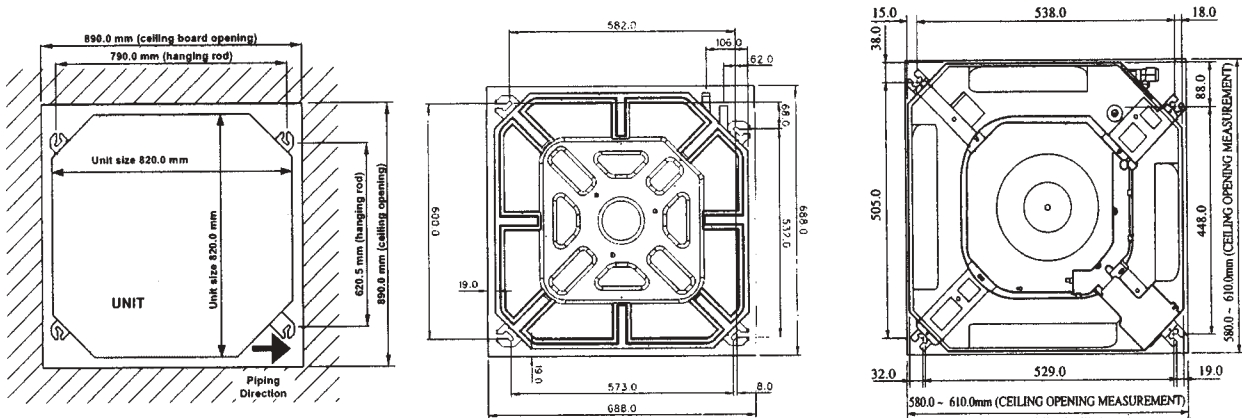
## Preliminary Site Survey

- Electrical supply and installation is to conform to local authority's (e.g. National Electrical Board) codes and regulations.
- Voltage supply fluctuation must not exceed  $\pm 10\%$  of rated voltage. Electricity supply lines must be independent of welding transformer which can cause high supply fluctuations.
- Ensure that the location is convenient for wiring, piping and drainage
- The indoor unit must be installed in such that free from any obstacles in path of cool air discharge and warm air return, and must allow spreading of air throughout the room (near the center of the room)
- Clearance must be provided for the indoor unit from the wall and obstacles as shown in the figure.



- The installation place must be strong enough to support a load of 4 times the indoor unit weight to avoid amplifying noise and vibration.
- The installation place (handing ceiling surface) must be level and the height in the ceiling is 350 mm or more.

## Unit Installation



**MCK-A**

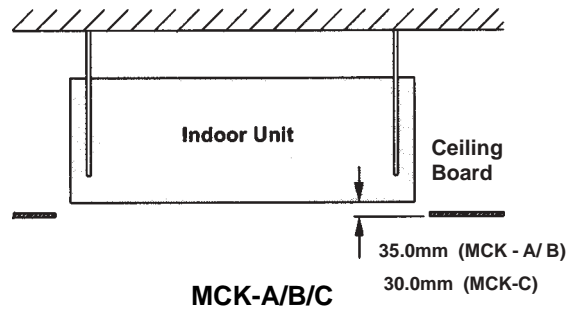
**MCK-B**

**MCK-C**

- The indoor unit must be away from heat and steam sources (avoid installing it near an entrance).
- Measure and mark the position for the hanging rod. Drill the hole for the angle nut on the ceiling and fix the hanging rod.
- The installation template is extended according to temperature and humidity. Check on dimensions in using.
- The dimensions of the installation template are same as those of the ceiling opening dimensions.
- Before ceiling laminating work is completed, be sure to fit the installation template to the indoor unit.

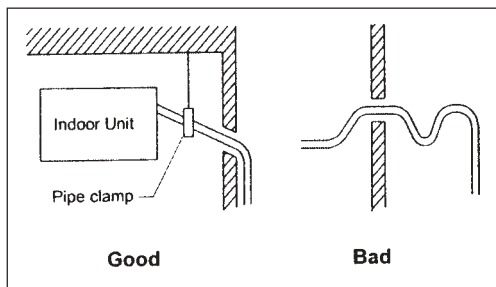
**Note: Be sure to discuss the ceiling drilling work with the installers concerned.**

## Unit Hanging



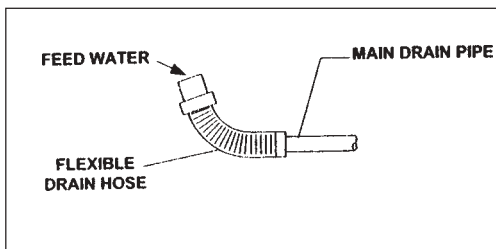
- Confirm the pitch of the hanging rod is 790.0mm X 620.5mm (MCK-A) / 600.0mm x 582.0 mm (MCK-B).
- Hold the unit and hang it on the hanging rod with the nut and washer.
- Adjust the unit height to 35.0 mm between the indoor unit bottom surface and the ceiling surface.
- Confirm with a level gauge that the unit is installed horizontally and tighten the nut and bolt to prevent unit falling and vibration.
- Open the ceiling board along the outer edge of the paper installation template.

## Drain Piping Work



- Drain pipe must be downward gradient for smooth drainage.
- Avoid the drain pipe from up and down slope to prevent reversal flow.
- During the drain piping connection, be careful not to exert extra force on the drain connector at indoor unit.
- The outside diameter of the drain connection at the flexible drain hose is 20mm.
- Be sure to provide heat insulation (polyethylene foam with thickness more than 8.0mm) on the drain piping to avoid the condensed water dripping inside the room.

## Drain Test

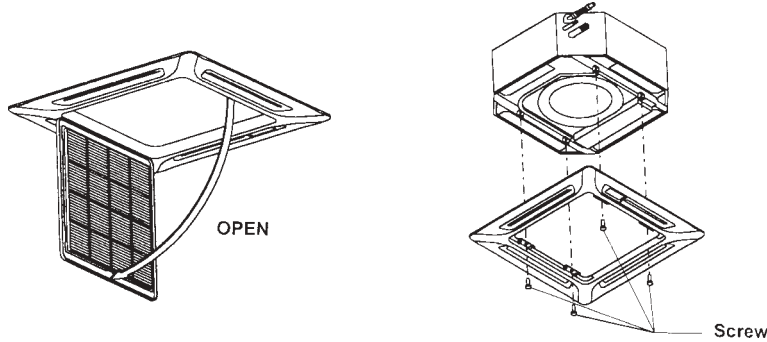


- Drain pipe must be downward gradient for smooth drainage.
- Feed water from flexible drain hose and check the piping for leakage.
- When the test is completed, connect the flexible drain hose to the drain connector on the indoor unit.

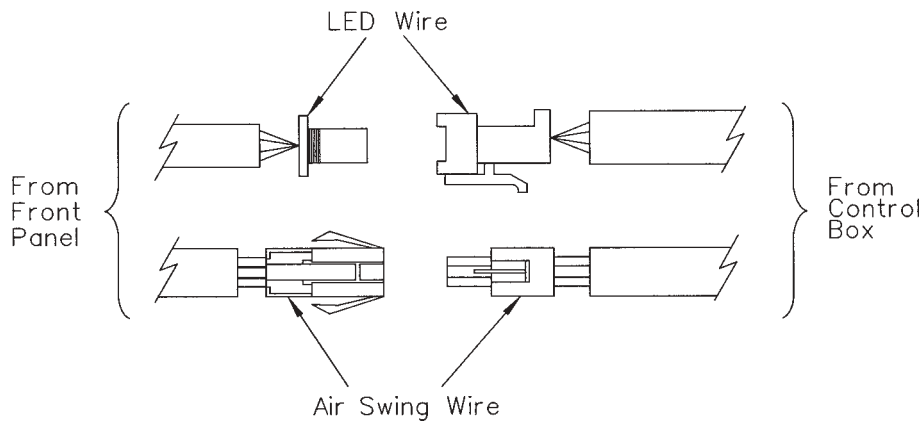
**Note: This indoor unit use drain pump for condensed water drainage. Installed the unit horizontally to prevent water leakage or condensation around the air outlet.**

## Panel Installation

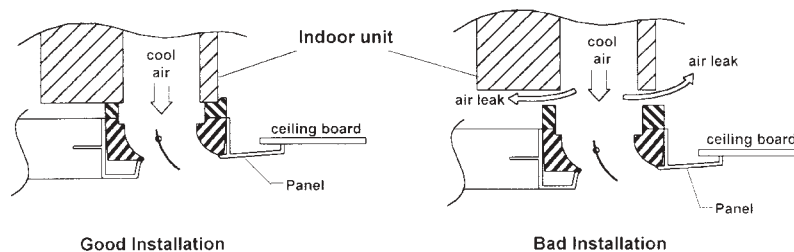
- The front panel can only be fitted in one direction, follow the piping direction. (Follow piping arrow sticker on front panel).
- Be sure to remove the installation template before installing the front panel.



- Open the air intake grille by pulling back the catchers and remove it together with filter from panel.
- Install the front frame panel onto the indoor unit by using 4 screws and tighten it completely to prevent cool air leakage.
- Connect the LED wire and air swing wire to the indoor unit (Optional).

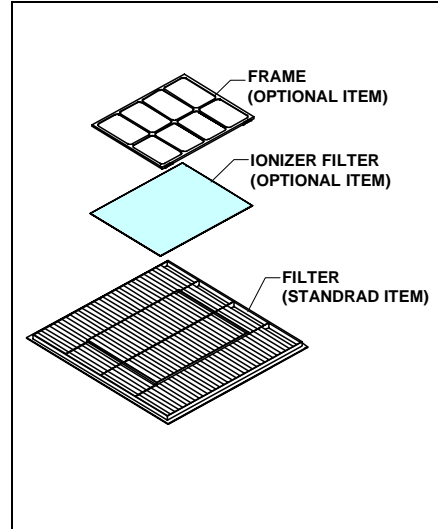


**Note: Install the front frame panel firmly to prevent cool air leakage which will cause condensation and water dripping.**



## Air Intake Grille Installation

- Before installed the air intake grille, make sure the air filter is clip properly to the air intake grille.
- Install the air intake grille together with the air filter to the front panel.
- The grille can be fit in any direction, when selecting direction, the ceiling design and grille operability should be considered.
- If the unit comes with ionizer filter (optional item), make sure to fix the ionizer filter to the air filter before installed the air intake grille.
- Fix the ionizer filter to the air filter with the black side on top and white side at bottom.
- Carefully clip on the ionizer filter frame.



## Installation Of Outdoor Unit

### Preliminary Site Survey

- A place protected from rain, direct sunlight and well-ventilated wherever practicable.
- A place capable of carrying the weight of the outdoor unit and isolating noise and vibration.
- A place where there are no obstruction of air flow into or out the unit.
- Do not put any object which may block/reduce the air flow into or out the outdoor unit.
- The location must not be susceptible to high concentration of dust, oil, salt or sulfide gas.

### Outdoor Unit Installation

Install the outdoor unit firmly and horizontally. Maintain a space clearance from the obstruction as shown in below for the purpose of servicing and air ventilation.



ALL MODELS	A	B	C	D
Minimum Distance	300mm	1000mm	300mm	500mm

**CAUTION :** If the condensing unit is operated in an atmosphere containing oils(including machine oils), salt(coastal area), sulphide gas(near hot spring, oil refinery plant), such substances may lead to failure of the unit.

# Refrigerant Piping Work

Refrigerant piping is important in particular. Refrigeration cycle of the split air conditioner is realized by the perfect piping work.

## Piping Length And Elevation

If the piping is too long, both the capacity and reliability of the unit will drop. As the number of bends increases, resistance to flow of refrigerant increases, thus lowering the cooling capacity and as a result overloading the compressor which may cause the compressor to become defective. Always choose the shortest path and follow the recommendation as tabulated below.

MODEL	Indoor	MCK 015B/BR	MCK 020A/AR MCK 020B/BR	MCK 025A/AR MCK 025B/BR	MCK 030A/AR		MCK 040A/AR		MCK 050A/AR
	Outdoor	MLC 015C/CR M4LC 015B/BR	MLC/ M4LC 020B/BR	MLC/M4LC 025B/BR	MLC 030B/BR	MLC/M4LC 030C/CR	MLC 035C/CR	MLC/M4LC 040C/CR	MLC/M4LC 050C/CR
Max. length (m)		12	15	15	15	45	45	45	45
Max. elevation (m)		5	8	8	8	25	25	25	25
Max. no of bends		10	10	10	10	10	10	10	10
Liquid pipe size		¼"	¼"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Gas pipe size		½"	5/8"	5/8"	5/8"	5/8"	¾"	¾"	¾"

Model	Indoor	MCK 010C/CR	MCK 015C/CR	MCK 020C/CR
	Outdoor	MLC 010C/CR M4LC 010B/BR	MLC 015C/CR M4LC 015B/BR	MLC/M4LC 020B/BR
Max. length (m)		12	12	15
Max. elevation (m)		5	5	8
Max. no of bends		10	10	10
Liquid pipe size		¼"	¼"	¼"
Gas pipe size		3/8"	3/8"	5/8"

Remark : The refrigerant pre-charged in the outdoor unit is for piping length up to 7.62m

## Piping Connection

Do not use contaminated or damaged copper tubing. If piping for evaporator or condenser are exposed or had been opened for 15 seconds or more, vacuum and purge with field supplied refrigerant. Generally, do not remove plastic, rubber plugs and brass nuts from valves, fittings, tubing and coils until it is ready to do the connection for suction and liquid line.

If any brazing work is required, ensure that nitrogen gas is passed through coil and joints while brazing work is being carried out. This will eliminate soot formation on the inside wall of copper tubing.

Cut the pipe stage by stage, advance the blade of pipe cutter slowly. Extra force and deep cut will cause more distortion of pipe and therefore produce extra burr.

Remove burrs from cut edges of pipes with a remover. This will avoid unevenness on the flare face which will cause gas leak.

Align the center of the piping and sufficiently tighten the flare nut with fingers. Finally, tighten the flare nut with torque wrench until the wrench clicks.

Be sure to execute heat insulation (polyurethane form with thickness more than 15 mm).

Except the outdoor unit which is pre-charged with refrigerant, the indoor unit and the refrigerant connection pipes must be purged because the air that contain moisture remaining in the refrigerant cycle may cause malfunction to the compressor.

## Additional Charge

The refrigerant is pre-charged in the outdoor unit, but additional charge of refrigerant after vacuuming is not necessary. Follow the recommendation as tabulated below.

## MCK-A SERIES

LENGTH	MODEL				
	20A/AR	25A/AR	30A/AR	40A/AR	50A/AR
10m	325/75	190/250	650/250	250	250
15m	400/150	380/500	900/500	500	500
20m	-	-	1150/750	750	750
35m	-	-	1500	1500	1500
45m	-	-	2000	2000	2000

## MCK-B SERIES

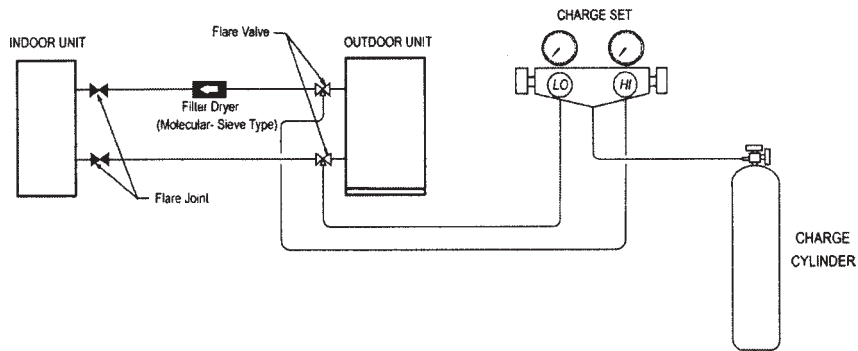
LENGTH	MODEL		
	15B/BR	20B/BR	25B/BR
10m	325/75	325/75	290/500
15m	400/150	400/150	480/750

## MCK-C SERIES

LENGTH	MODEL		
	10C/CR	15C/CR	20C/CR
10m	0	0/30	0
12m	36/55	0/80	21/0
15m	-	-	66/65

*All Refrigerant Charge is in gram*

Diagram shows typical charging method



### **CAUTION FOR R407C**

Avoid prolong exposure of an opened compressor, or the internal part of refrigerant piping to moist air. The POE oil in the compressor and piping can absorb moisture from air.

## Wiring

### Electrical Connections

Wiring regulations on wire diameters differ from country to country. Please refer to your LOCAL ELECTRICAL CODES for field wiring rules. Be sure that installation is complied with such rules and regulations.

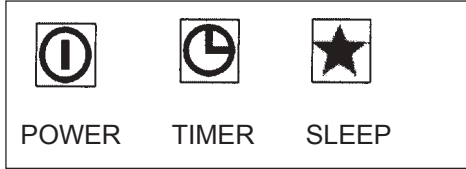
### General Precautions

- Ensure that the rated voltage of the unit corresponds to the nameplate before carrying out proper wiring according to the wiring diagram.
- Provide a power outlet to be used exclusively for each unit. A power supply disconnect and a circuit breaker for over current protection should be provided in the exclusive line.
- All wiring must be GROUNDED to prevent possible hazards due to insulation failures.
- All wiring must be firmly connected.
- All wiring must not come in contact with the hot refrigerant piping, compressor or any moving parts of fan motors.

# Indicator Lights









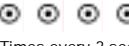
## Wireless Remote Control (Universal Board)

Cooling : LED Indicator Light Display



Heatpump : LED Indicator Light Display



 POWER	 TIMER	 SLEEP	 HEAT	Operation/ Faulty Indication
○	○			Timer on
○		○		Sleep mode on
○			○	Heat mode
 Continuously			○ / ●	Frost prevention mode
 Once every 3 second				Compressor overload
 Twice every 3 sec				Pump fault
 3 Times every 3 sec				Gas leak
 4 Times every 3 sec				Room/ indoor/ outdoor coil sensor contact Loose/ short

## Wired Remote Control (Universal Board)

Cooling / Heatpump Model

Error Code at 7 segment Display	Operation/ Faulty Indication
<b>E1</b> Blinking	Room sensor contact loose/ short
<b>E2</b> Blinking	Indoor coil sensor contact loose/ short
<b>E3</b> Blinking	Outdoor coil sensor contact loose/ short
<b>E4</b> Blinking	Compressor overload
<b>E5</b> Blinking	Gas leak
<b>E6</b> Blinking	Pump faulty
Heat LED Blinking	Outdoor defrost (for Heatpump only)

### Water Pump

The water pump will on if compressor is on during cooling cycle. The pump will remain on for at least 5 minutes after the compressor is off.

During mode change from cooling to non-cooling mode, the pump will on for minimum 5 minutes. During defrost cycle, the pump will on and will on for another 5 minutes once the defrost cycle is terminated.

### Water level Switch

This normally close switch is to detect faults in water pump system. It will confirm for 30 seconds for switch open and 60 seconds for switch close.

Once switch is confirmed open, it will force compressor to cut off. If the switch is closed within 5 minutes, the compressor is allowed to cut in. If the switch does not close for more than 5 minutes, the system will warn user regarding the fault, the compressor is not allowed to cut in. If the switch is confirmed opened twice within 30 minutes, the system assumes there are faults.

## Phase Sequencer

	LED_P (Red)	LED_R (Yellow)	LED_S (Yellow)	LED_T (Yellow)
<b>Normal Operation</b>	On	-	-	-
<b>Reverse Phase</b>	Blink	Blink	Blink	Blink
<b>S &amp; T Phase Missing</b>	Blink	-	Blink	Blink
<b>T Phase Missing</b>	Blink	-	-	Blink
<b>S Phase Missing</b>	Blink	-	Blink	-
<b>R Phase Missing</b>	-	-	-	-
<b>Overload</b>	Blink	-	-	-
<b>Sensor Missing</b>	Blink	On	On	On

Notes: 1. “ - “ means LED off.

2. When R phase missing, no LED or buzzer will indicate the error, but relay 71 (Common) and 81 (NO) will cut off.

3. The unit will check the discharge sensor availability only during power up.

4. All errors can only recover through **manually reset**.

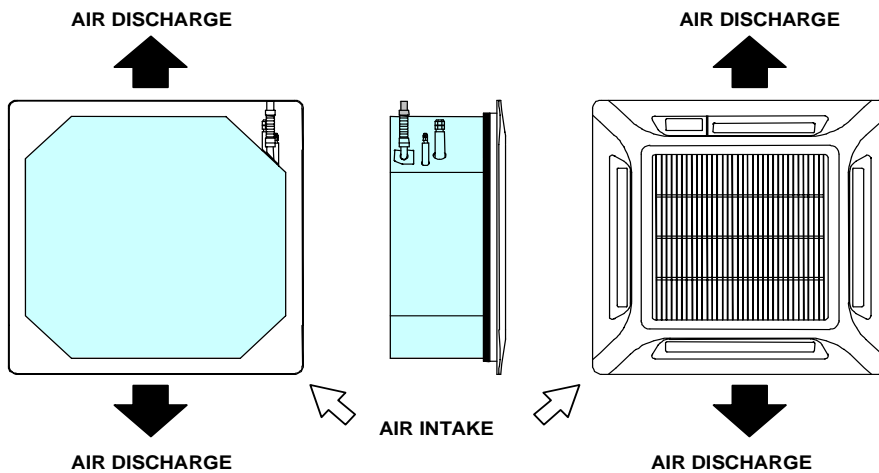
# Accessory Parts

## Fresh Air Intake For MCK-A Model

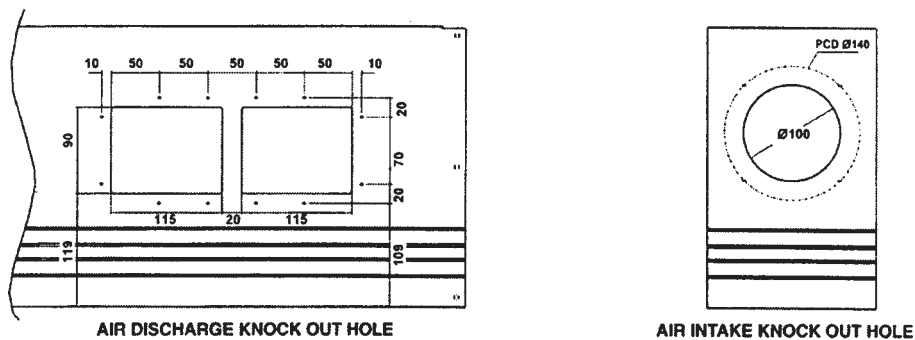
### Short Duct Specification

- The indoor unit is provided with air discharge and air intake “knock-out”. hole for duct connection. However the connection of the short duct for air discharge is possible on only one side.
- The use of short duct for air discharge will improve airflow distribution if there is an obstruction (such as alighting fixture) or in a long, narrow room or an L-shaped room. It is also used for air conditioning of two rooms simultaneously.

### Possible Direction For Air Discharge And Air Intake

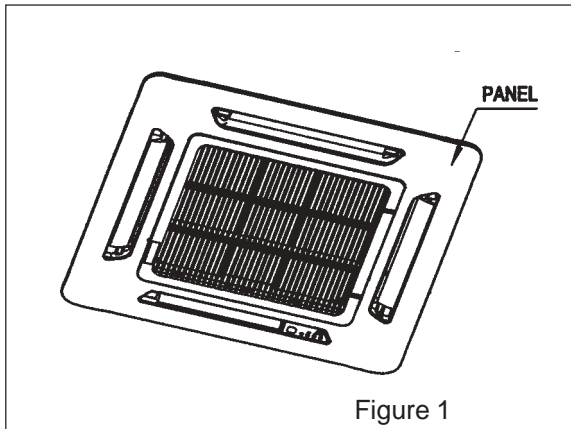


### Possible Opening Dimension For Duct Connection

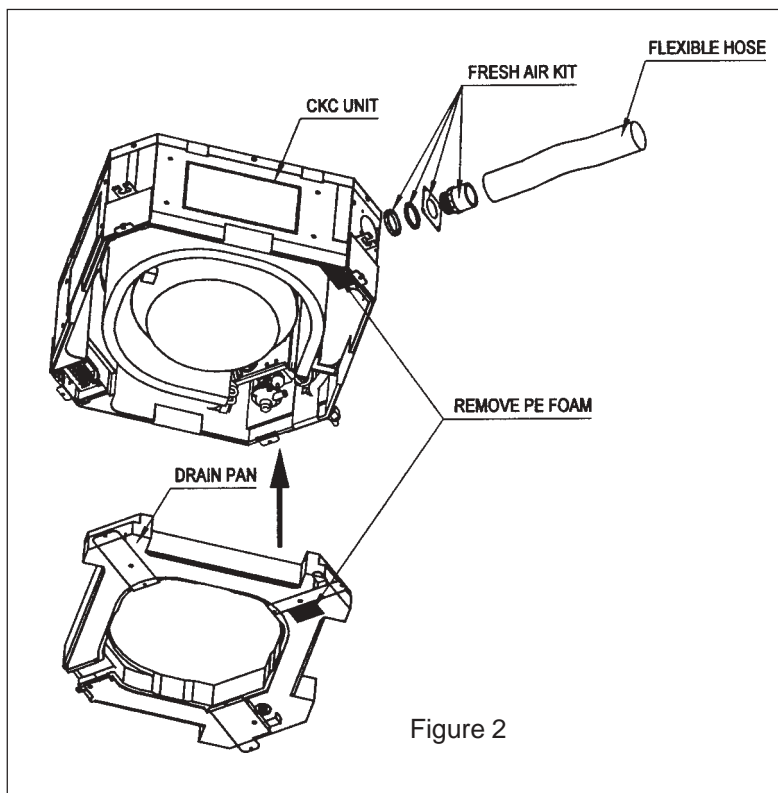


- Note :**
1. Avoid to use the short duct on which the air discharge grille can be completely closed, to prevent evaporator freezing.
  2. In order to prevent condensation forming, be sure that there is sufficient thermal insulation and no leakage of cool air when installing the short duct.
  3. Keep the introduction of fresh air intake within 20% of total air flow. Also provide a chamber and use a booster fan.

## Fresh Air Intake For MCK-C Unit



Take off the panel from the indoor unit



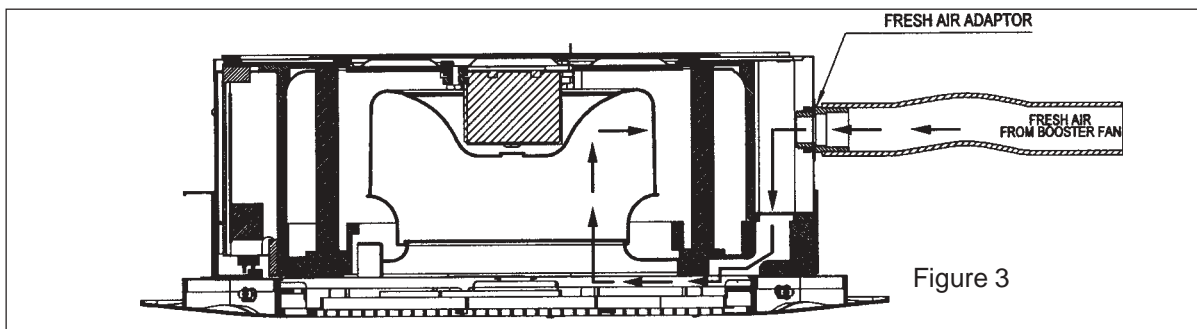
Remove the PE foam from the drain pan and another one on the unit.

Remove the pre-punched panel on the CKC unit with a screwdriver.

The diameter of the air intake knock out hole is 65mm

Then, fix the fresh air kit (refer to parts list) to the hole.

Finally, a flexible duct is connected to let the fresh air moving in.



The direction of fresh air intake is shown as figure 3

## Sealing Material

- It is possible to seal one of the four air discharge outlet (sealing two or more air discharge outlet could cause a malfunction).
- Remove the front panel and inserting the seal material into the air discharge outlet at the indoor unit to seal the air outlet.
- The sealing material is the same length as the longer air discharge outlet. If it is desired to seal the shorter air discharge outlet, cut the sealing material to shorten it.
- Push the sealing material in about 10 mm beyond the bottom surface of the indoor unit so that it does not touch the air louver. Be sure not to push the sealing material in any farther than about 10 mm.

## Overall Checking

- Ensure the following in particular:
  - 1) The unit is mounted solidly and rigidly in position.
  - 2) Piping and connections are leak proof after charging.
  - 3) Proper wiring has been done.
- Drainage check - pour some water into the main drain pipe from the flexible drain hose.
- Test run
  - 1) Conduct a test run after water drainage test and gas leakage test.
  - 2) Watch out for the following:
    - a) Is the electric plug firmly inserted into the socket.
    - b) Is there any abnormal sound from the unit.
    - c) Is there any abnormal vibration with regard to the unit itself or piping.
    - d) Is there smooth drainage of water.
- Check that:
  - 1) Condenser fan is running, with warm air blowing off the condensing unit.
  - 2) Evaporator blower is running and discharge cool air.
  - 3) The remote control incorporate a 3 minute delay in the circuit. Thus, it requires about 3 minutes before the outdoor condensing unit can start up.

## Standard Operation Conditions

### Cooling Only

Temperature	Ts°C	Th°C
Minimum indoor temperature	19.4	13.9
Maximum indoor temperature	26.7	19.4
Minimum outdoor temperature	19.4	13.9
Maximum outdoor temperature	46.0	24.0

### Heat Pump

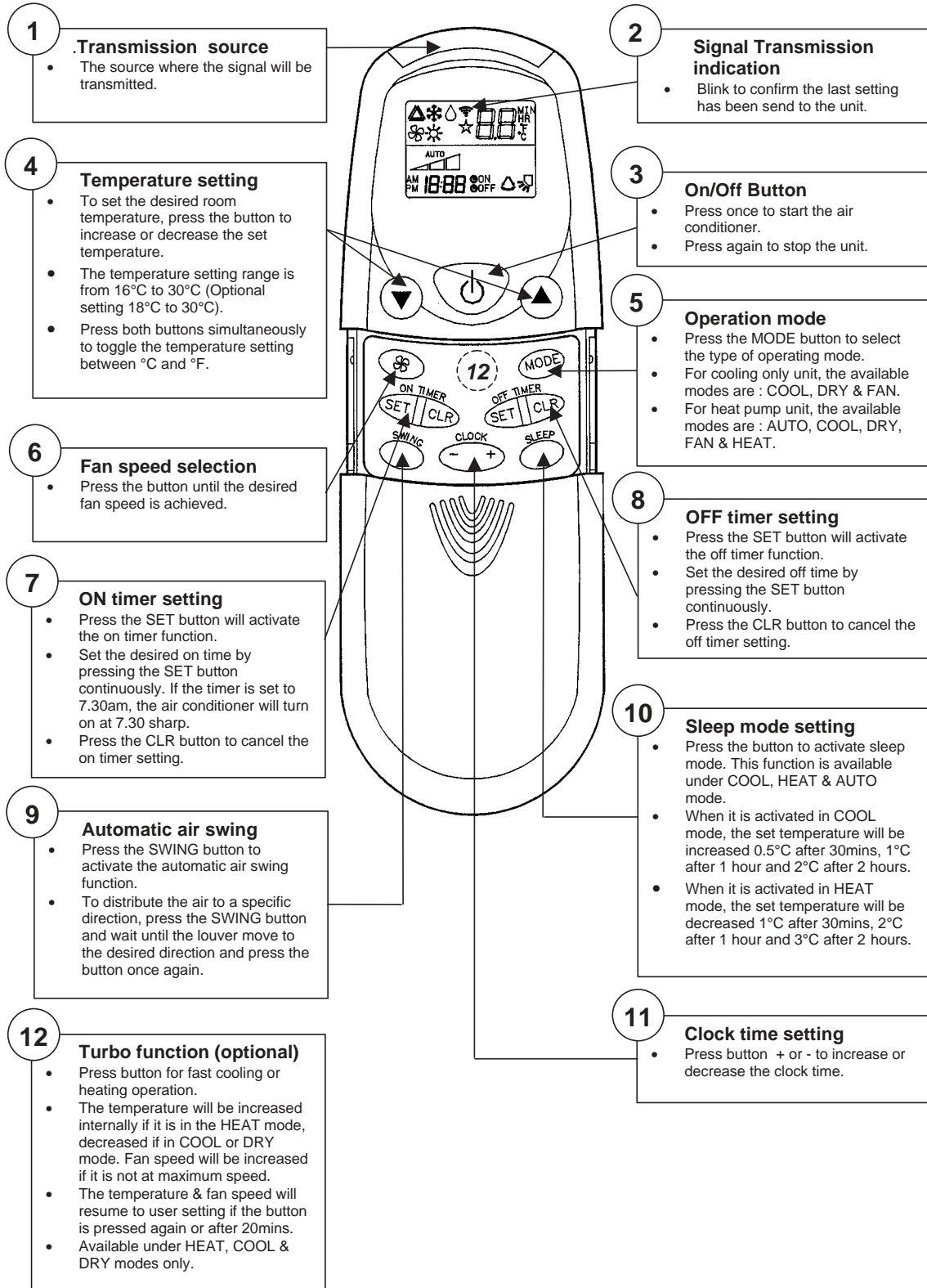
Temperature	Ts°C	Th°C
Minimum indoor temperature	15.0	-
Maximum indoor temperature	26.7	-
Minimum outdoor temperature	-8.0	-9.0
Maximum outdoor temperature	24	18

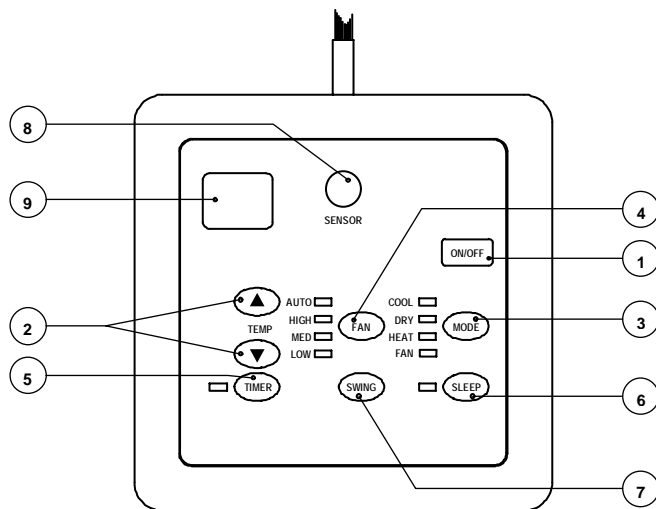
Ts: Drybulb temperature

Th: Wet bulb temperature

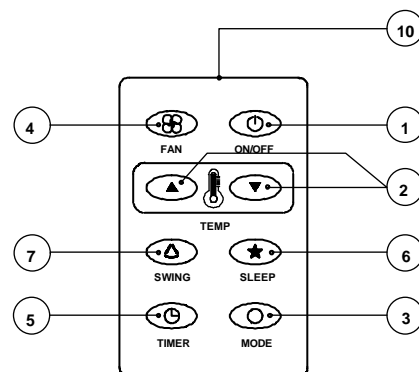
# Remote Control Operation Guide

## G7 Remote Controller





**SLM**



**MC-5300 (OPTIONAL)**

**1. “ON/OFF” switch**

- Press to start the air conditioner unit.
- Press again to stop the unit.

**2. Temperature setting**

- Set the desired room temperature.
- Press button to increase or decrease the set temperature. Setting range are between 16°C to 30°C (60°F to 80°F).

**3. Operation Modes**

- Press the “mode” button for select the type of operating mode.
  - Cooling Only :  
COOL, DRY, FAN
  - Heat Pump :  
AUTO, COOL, DRY, HEAT, FAN  
(AUTO mode is represented by both COOL and HEAT LED light on)

**4. Fan Speed selection.**

- Press the button until the desired fan speed is achieved.

**5. Timer.**

- Press the set button to select the switch timer of the air conditioner unit (the setting range is between 1 to 10 hours).

**6. “Sleep” mode**

- Press button to activate the sleep function can only be activated under “cool” or heating mode operation. activated under “cool” mode operation, the set temperature will increase 0.5°C after 30 minutes, 1°C after 1 hour and 2°C after 2 hours. If it is actiaved under “HEAT” mode operation, the set temperature will be decreased 0.5°C after 30 minutes, 1°C after 1 hour and 2°C after 2 hours.

**7. Air Swing**

- Press button to activate the automatic air swing function.

**8. Sensor**

- Infra red sensor to receive signals from wireless controller.

**9. LED Display**

- To display the set temperature (in °C) and timer delay setting (in hours).

**10. Transmission source**

- To transmit signals to the air conditioner.

# Servicing And Maintenance



**Warning: Disconnect from main supply before servicing the air conditioner.**

The unit is designed to give long life operation with minimum maintenance required. However, it should be regularly checked and the following items should be given due attention.

Components	Maintenance Procedure	Recommended Schedule
Air filter (Indoor Unit)	<ol style="list-style-type: none"> <li>1. Remove the ionizer filter before cleaning the filter.</li> <li>2. Remove the dust adhering on the filter by using a vacuum cleaner or wash using water less than 40°C with a neutral cleaning detergent.</li> <li>3. Rinse and dry it before fitting back the ionizer filter and set it back to unit.</li> <li>4. <b>Note : Never use petrol thinner, benzene or any other chemicals.</b></li> </ol>	At least once a month.
Indoor unit	<ol style="list-style-type: none"> <li>1. Clean away dirt or dust on grille or panel by wiping with soft cloth soaked in lukewarm (or cool) water or neutral detergent solution.</li> <li>2. <b>Note : Never user petrol, thinner, benzene or other volatile chemicals, which may cause plastic surface to deform.</b></li> </ol>	At least once a month.
Condense Drain Pan & Pipe	<ol style="list-style-type: none"> <li>1. Check the cleanliness and clean it if necessary.</li> <li>2. Check the condensate water flow.</li> </ol>	Every 3 months.
Indoor Fan	Check if there is any abnormal noise.	If necessary.
Indoor/ Outdoor Coil	<ol style="list-style-type: none"> <li>1. Check and remove the dirt between the fins.</li> <li>2. Check and remove any obstacles which hinder air flow through the indoor or outdoor.</li> </ol>	Every month.
Power Supply	<ol style="list-style-type: none"> <li>1. Check the running current and voltage for indoor and outdoor unit.</li> <li>2. Check the electrical wiring and tighten the wire onto the terminal block if necessary.</li> </ol>	Every 2 months. Every year.
Compressor	No maintenance needed if refrigerant circuit remains sealed. However, check for refrigerant leak at joint and fitting.	Every 6 months.
Compressor Oil	Oil is factory charged. Not necessary to add oil if circuit remains sealed.	No maintenance required.
Fan Motor Oil	All motors are pre-lubricated and sealed at factory.	No maintenance required.

# Pre Start Up Maintenance

## After Extended Shutdown

- Inspect thoroughly and clean indoor and outdoor units.
- Clean or replace air filter.
- Clean condense drain line.
- Clean clogged indoor and outdoor coils.
- Check fan imbalance before operation.
- Tighten all wire connections.
- Check for refrigerant leakage,

**Note: The crankcase heater should be energized for at least 6 hours before start of operation (after extended shutdown).**

## Troubleshooting

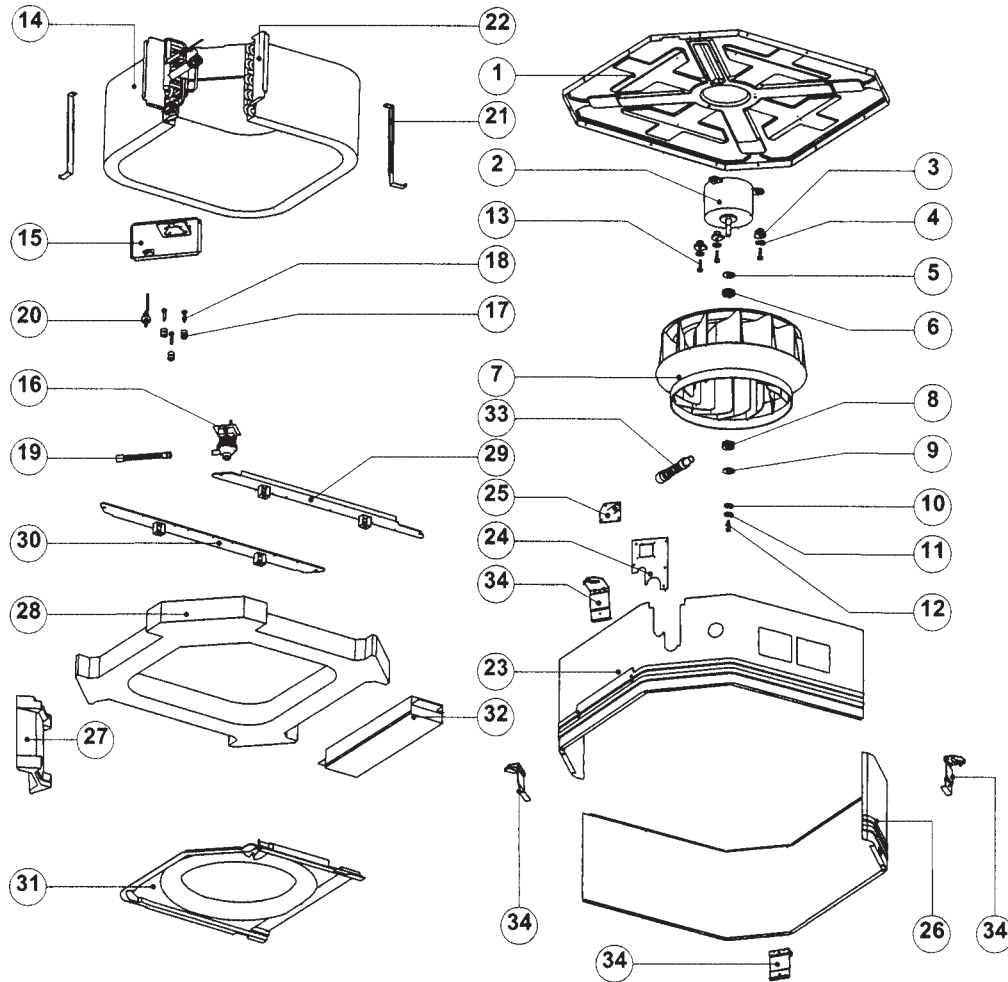
When any air conditioner malfunction is noted, immediately switch off the power supply to the unit, and contact the local dealer, if necessary. Some simple trouble shooting tips are given below:

Fault	Cause
1. Compressor does not work 3 minutes after starting.	<ul style="list-style-type: none"> <li>• Protection against frequent starting. Wait for 3 to 4 minutes.</li> </ul>
2. The unit does not work.	<ul style="list-style-type: none"> <li>• Power failure or need to replace the fuse.</li> <li>• The power plug is disconnected.</li> <li>• It is possible that your delay timer has been set incorrectly.</li> <li>• If the fault persist after the verifications, contact your installer.</li> </ul>
3. The air flow is too low.	<ul style="list-style-type: none"> <li>• The air filter is dirty.</li> <li>• The door and windows are opened.</li> <li>• The suction and discharge are clogged.</li> </ul>
4. The remote control light is dim.	<ul style="list-style-type: none"> <li>• Battery flat.</li> <li>• Batteries are incorrectly inserted or misplaced.</li> </ul>
5. Air discharge has bad front.	<ul style="list-style-type: none"> <li>• Odors may be caused by cigarette, smoke particles, perfume etc..which adhere to the coil.</li> </ul>
6. Condensation on the front panel.	<ul style="list-style-type: none"> <li>• This is due to air humidity after a long time operation.</li> <li>• The set temperature is too low, increase the temperature and change it to high fan.</li> </ul>
7. Hissing sound during operation.	<ul style="list-style-type: none"> <li>• Refrigerant flow into evaporator oil.</li> </ul>

**If the fault persist, call your local dealer.**

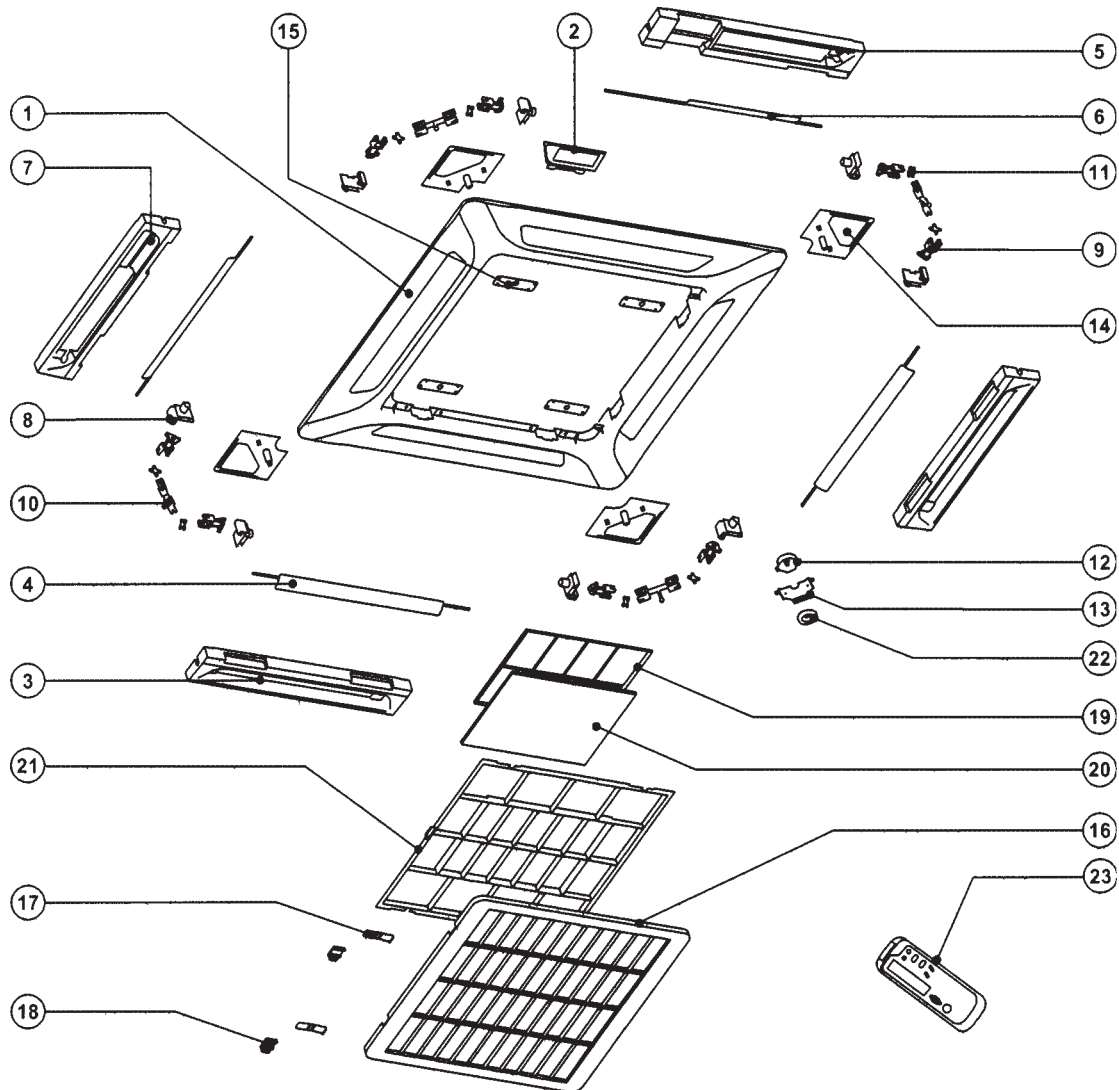
# Part List

## Unit - MCK - A/AR



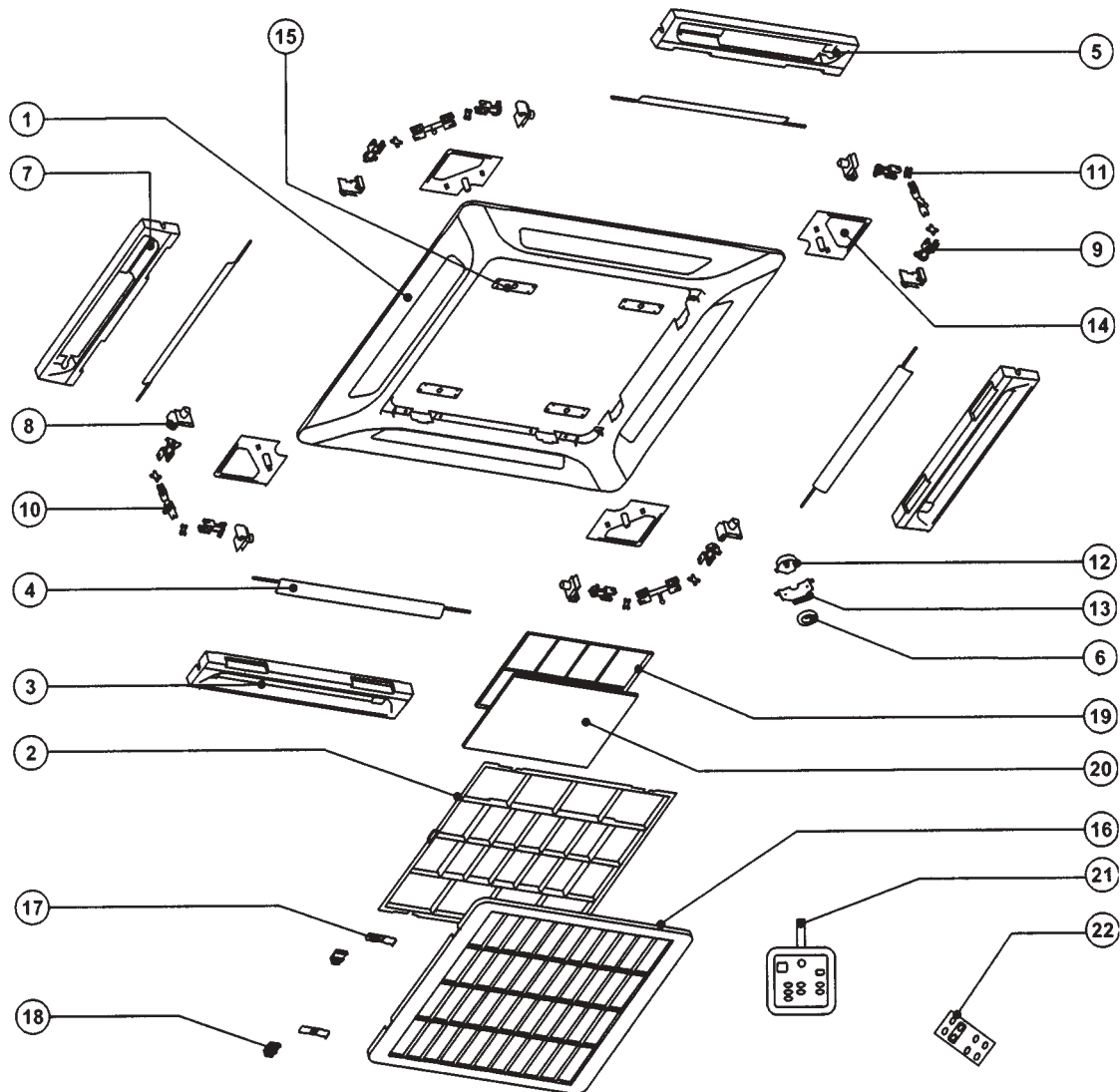
NO.	PARTS DESCRIPTION	NO.	PARTS DESCRIPTION
1	BASE PAN	18	HEXAGON BOLT
2	FAN MOTOR	19	DRAIN HOSE
3	FAN MOTOR BUSH	20	LEVEL SWITCH
4	PLAIN WASHER	21	COIL SUPPORT
5	FAN MOTOR WASHER	22	PARTITION
6	BUTTON COUPLING	23	SIDE PANEL FRONT
7	TURBO FAN	24	VALVE PLATE
8	TOP COUPLING	25	DRAIN CONNECTOR
9	FLAT WASHER	26	SIDE PANEL BACK
10	PLAIN WASHER	27	AIR GUIDE
11	SPRING WASHER	28	DRAIN PAN
12	HEXAGON BOLT	29	FIX BRACKET FRONT
13	HEXAGON BOLT	30	FIX BRACKET BACK
14	EVAPORATOR COIL	31	FAN COVER
15	DRAIN PUMP BRACKET	32	TERMINAL BOX
16	DRAIN PUMP	33	DRAIN PIPE
17	DRAIN PUMP BUSH	34	HANGER BRACKET A,B & C

## Panel ( Wireless Remote Control ) - MCK – A/AR



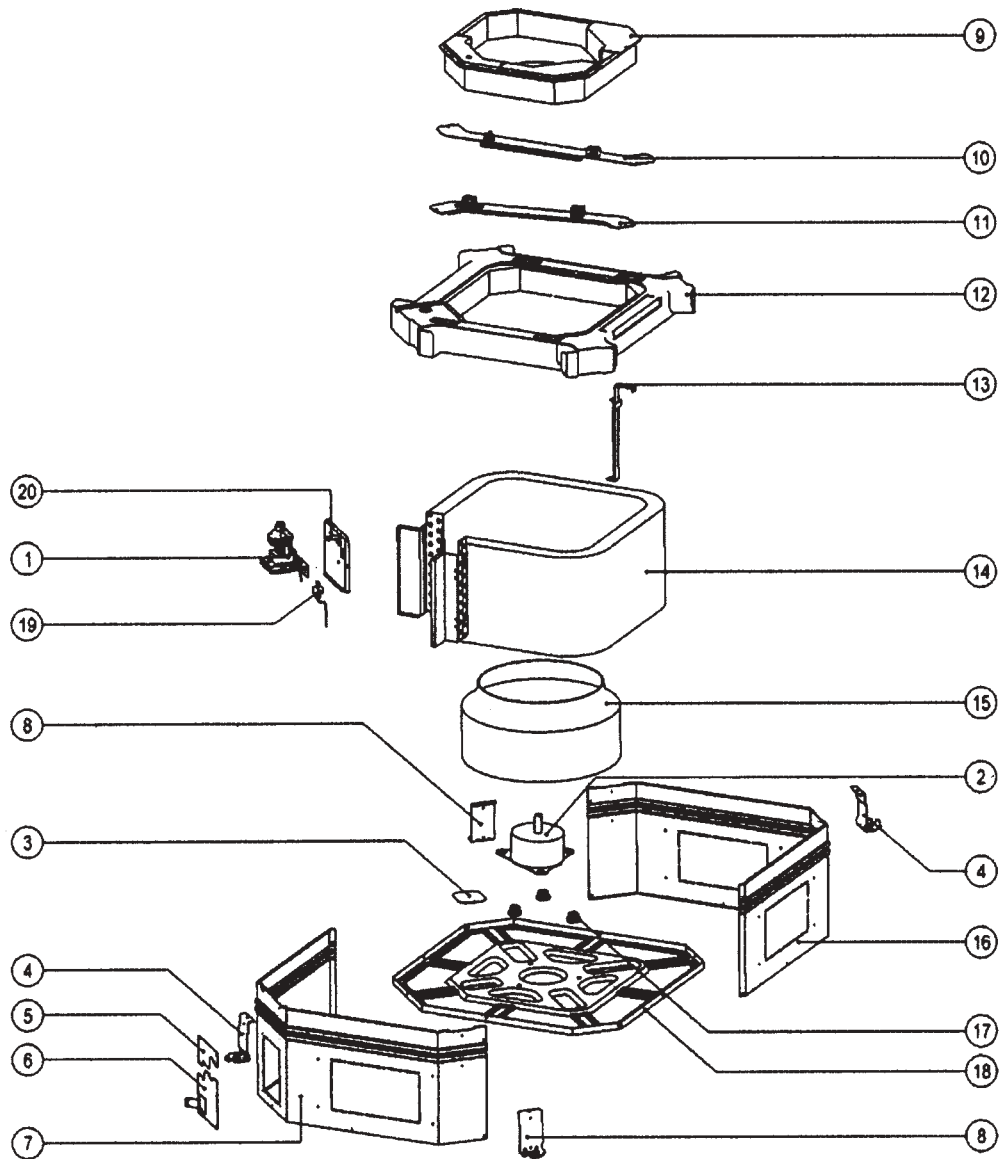
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	FRONT PANEL	13	SWING MOTOR BRACKET
2	RECEIVER BRACKET	14	PANEL COVER
3	DISCHARGE HOUSING A	15	FIX PLATE
4	METAL LOUVER A	16	AIR INTAKE GRILLE
5	DISCHARGE HOUSING B	17	GRILLE LOCK
6	METAL LOUVER B	18	GRILLE LOCK BRACKET
7	DISCHARGE HOUSING D	19	IONIZER FILTER FRAME
8	LOUVER BRACKET	20	IONIZER FILTER
9	CRANK SHARF	21	AIR FILTER
10	CRANK CONNECTOR	22	AIR SWING CAP
11	CRANK CROSS	23	REMOTE CONTROL
12	SWING MOTOR		

## Panel ( Wireless Remote Control ) - MCK – A/AR



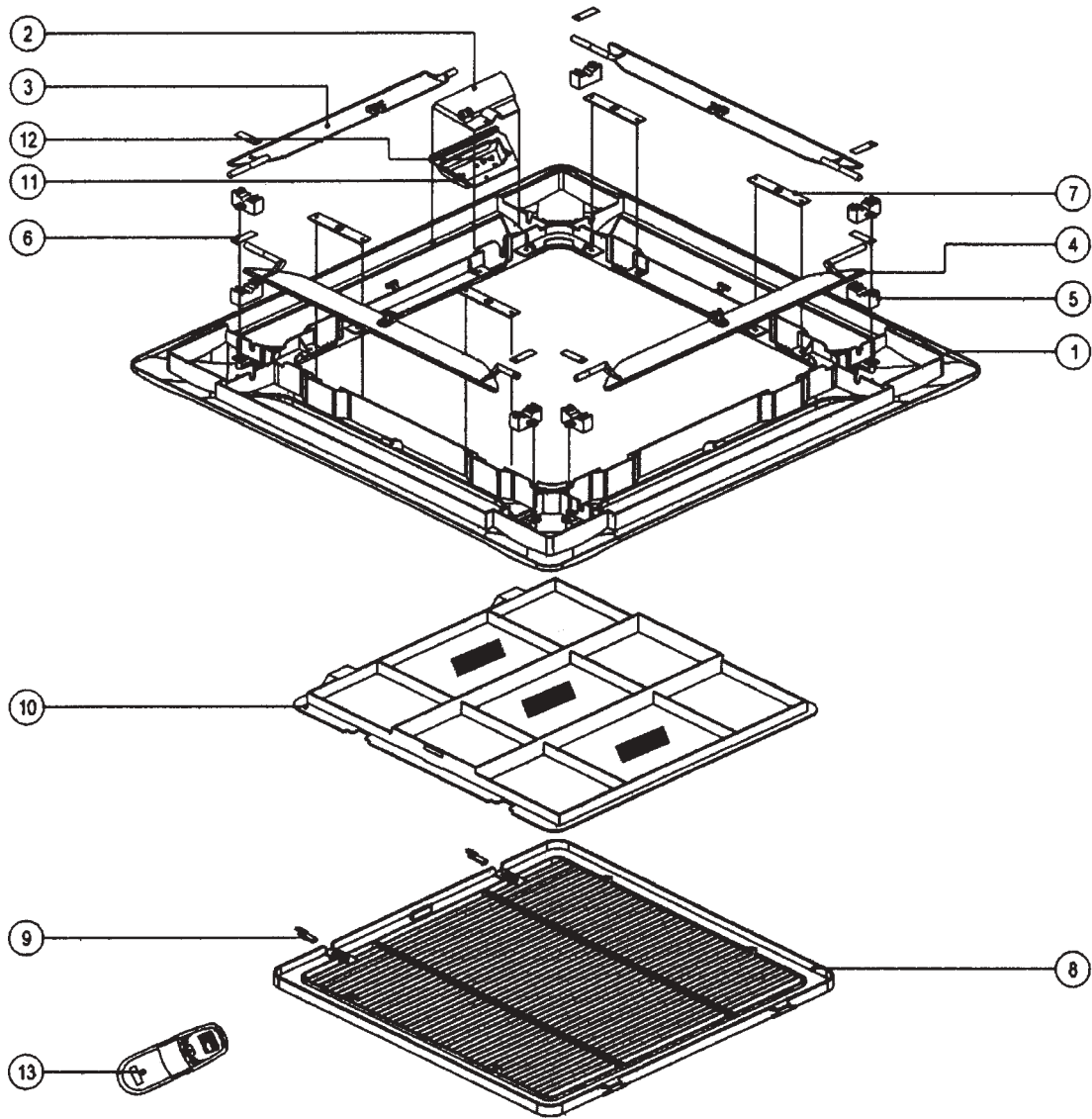
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	FRON PANEL	12	SWING MOTOR
2	AIR FILTER	13	SWING MOTOR BRACKET
3	DISCHARGE HOUSING A	14	PANEL COVER
4	METAL LOUVER A	15	FIX PLATE
5	DISCHARGE HOUSING C	16	AIR INTAKE GRILLE
6	AIR SWING CAP	17	GRILLE LOCK
7	DISCHARGE HOUSING D	18	GRILLE LOCK BRACKET
8	LOUVER BRACKET	19	IONIZER FILTER FRAME
9	CRANK SHARF	20	IONIZER FILTER
10	CRANK CONNECTOR	21	REMOTE CONTROL
11	CRANK CROSS	22	CARD REMOTE CONTROL

## Unit - MCK - B/BR



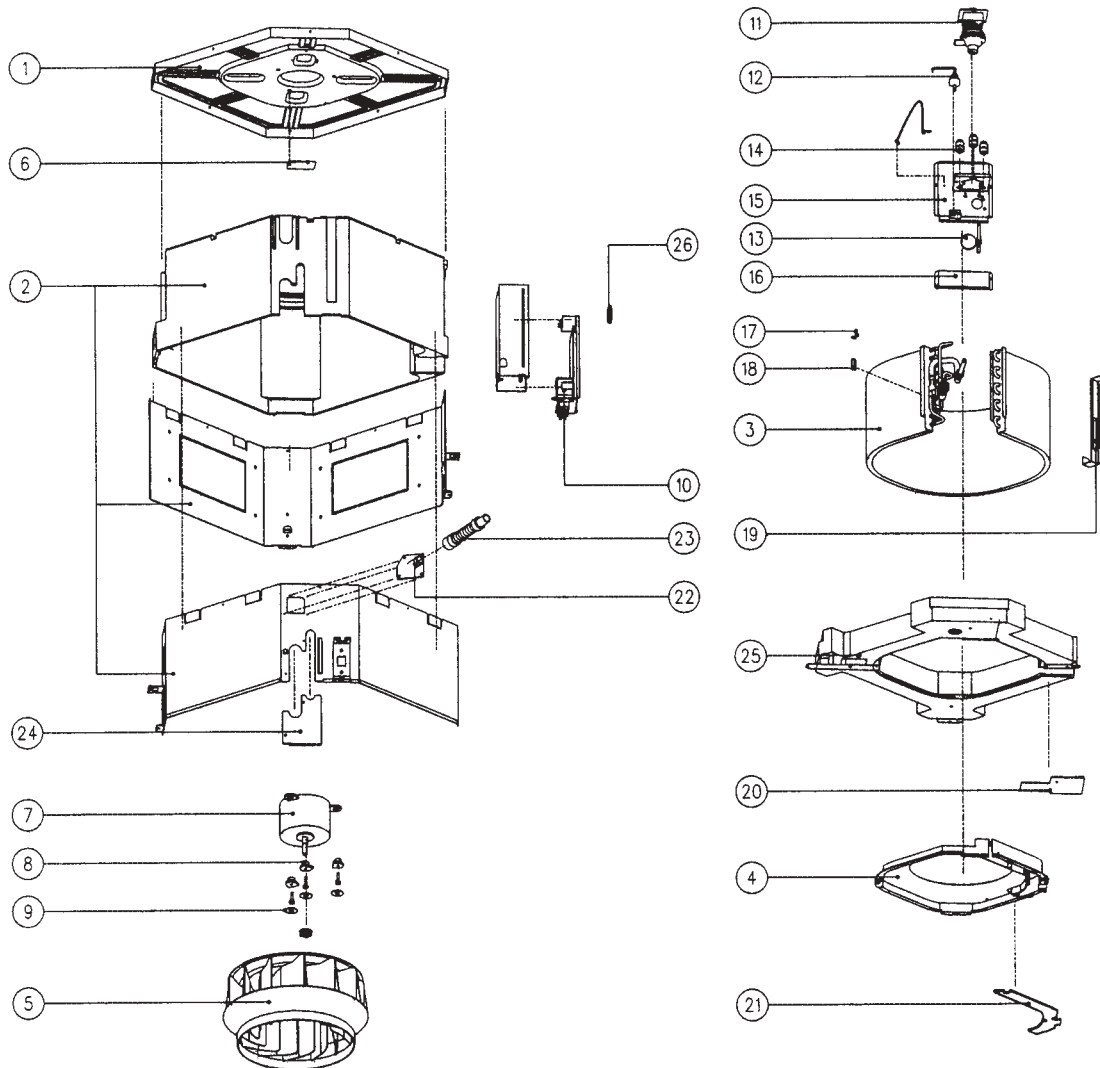
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	DRAIN PUMP	11	HOLDER GILLE SHORT
2	FAN MOTOR	12	DRAIN PAN
3	PLATE, WIRE	13	COIL HOLDER
4	HANGER BRACKET A	14	COIL ASSY
5	ASSY. VALVE PLATE BOTTOM	15	TURBO FAN
6	ASSY. VALVE PLATE TOP	16	ASSY PANEL A
7	ASSY PANEL B	17	BUSH, FAN MOTOR
8	HANGER BRACKET B	18	BASE PAN
9	CONTROL BOX ASSY	19	FLOAT SWITCH
10	HOLDER GRILLE LONG	20	DRAIN PUMP SUPPORT PLATE

Panel - MCK - B/BR



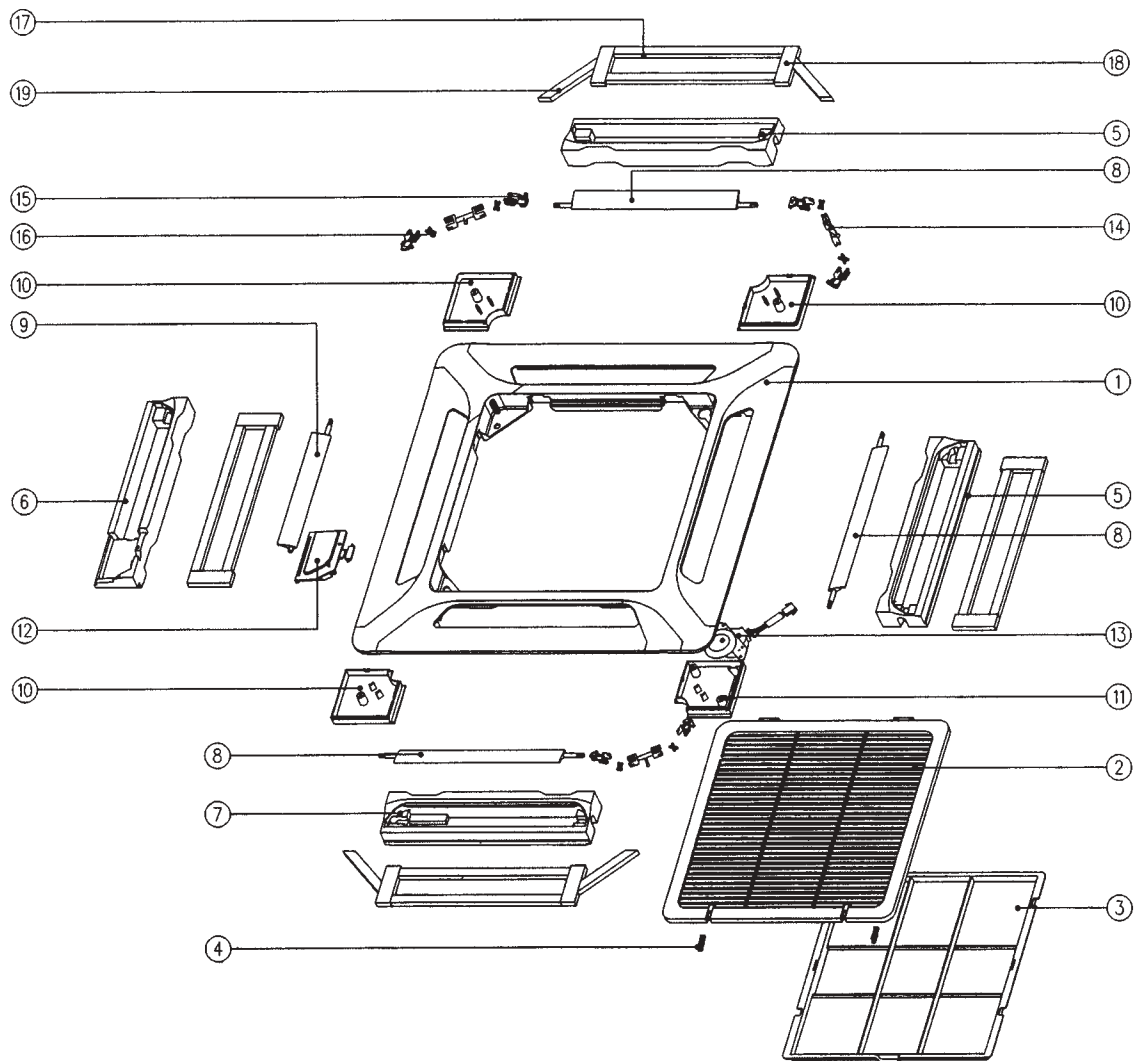
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	FRAME	8	INTAKE GRILLE
2	RECEIVER BRACKET	9	GRILLE LOCK
3	LOUVER, SHORT	10	FILTER NET
4	LOUVER	11	RECEIVER COVER
5	LOUVER HOLDER	12	LED DISPLAY BOARD
6	LOUVER CLIP	13	LCD HANDSET
7	PLATE, FIX		

Model : MCK / M5CK 010C/CR  
MCK / M5CK 015C/CR  
MCK 020C/CR



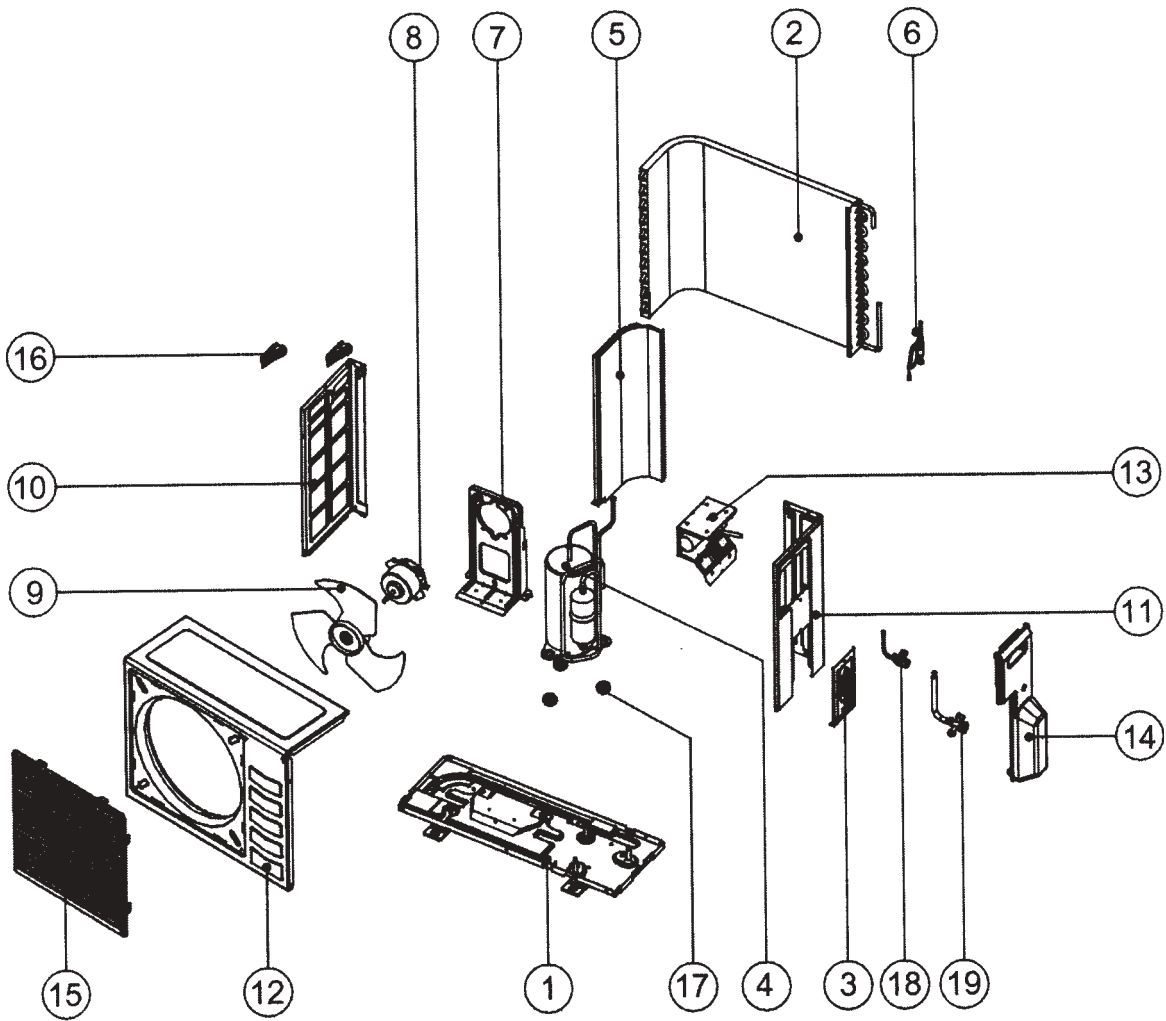
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	ASSY. BASE	14	BUSH, DRAIN PUMP
2	ASSY. CASING	15	ASSY. DRAIN PUMP SUPPORT BUCKET
3	ASSY. COIL	16	ASSY., ENDPLATE SUPPORT
4	COVER, FAN	17	CLIP, COIL SENSOR (6mm)
5	BLOWER WHEEL, TURBO FAN FX330 TU YAMAHA	18	TUBE, COIL SENSOR
6	PLATE, WIRE	19	BRACKET, COIL
7	MOTOR, ACK20C-501 HONG LU	20	COVER, TERMINAL
8	BUSH, FAN MOTOR	21	COVER, WIRE
9	BUSH, FAN MOTOR RING	22	CONNECTOR, DRAIN CK
10	ASSY., CONTROL BOX	23	HOSE, DRAIN CK
11	DRAIN PUMP PJV-0732	24	ASSY., COVER VALVE
12	LEVEL SWITCH/ FLOAT SWITCH FS-06122A	25	ASSY., DRAIN PAN
13	BUSH, WIRE NRID22XOD 36XT10.0-MODEL CE/SB	26	BUSH, WIRE

Panel : MCK / M5CK 010 / 015C/CR, MCK 020C/CR



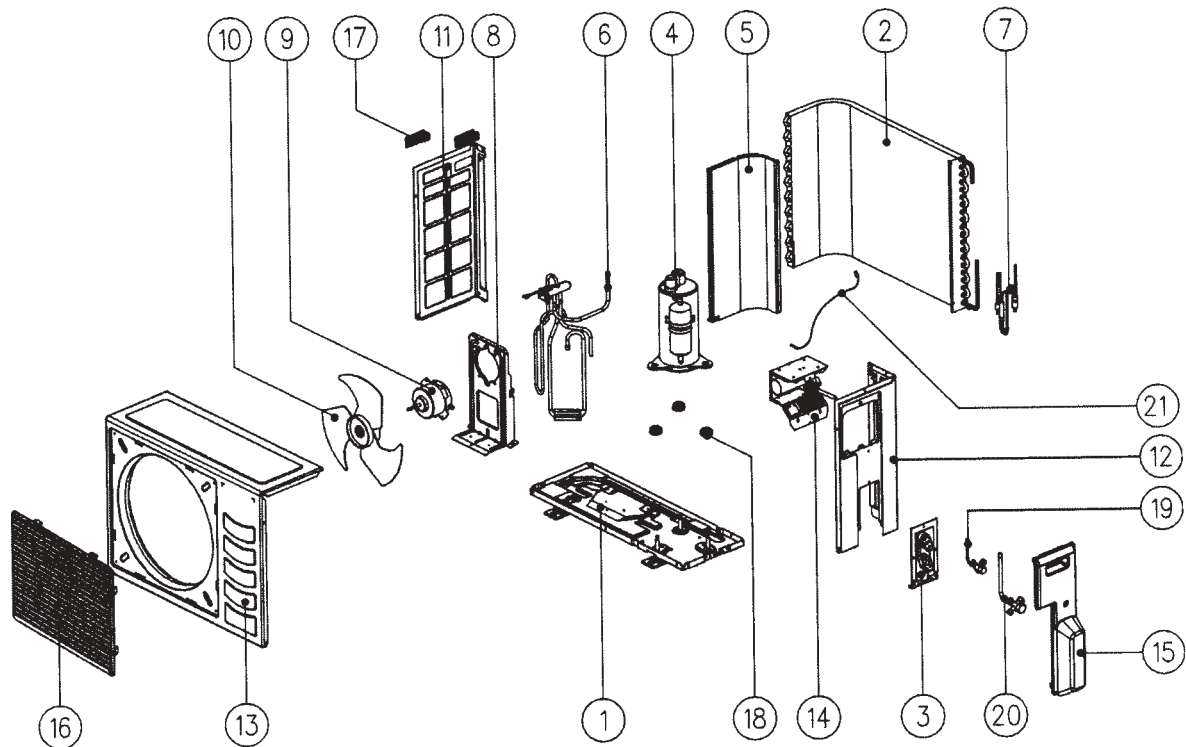
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	FRAME	11	LINKAGE, COVER MOTOR
2	INTAKE GRILLE	12	ASSY, BRACKET RECEIVER (LED/SLM)
3	FILTER	13	AIR SWING MOTOR ASSY
4	GRILLE LOCK	14	CRANK CONNECTOR
5	DISCHARGE, FOAM	15	LOUVER HOLDER
6	DISCHARGE, FOAM LED	16	CRANK CROSS
7	DISCHARGE, FOAM SHORT	17	INSULATION LONG
8	LOUVER	18	INSULATION SHORT
9	LED LOUVER	19	INSULATION CORNER
10	LINKAGE, COVER		

**Model : MLC / M5LC 010C / 015C**



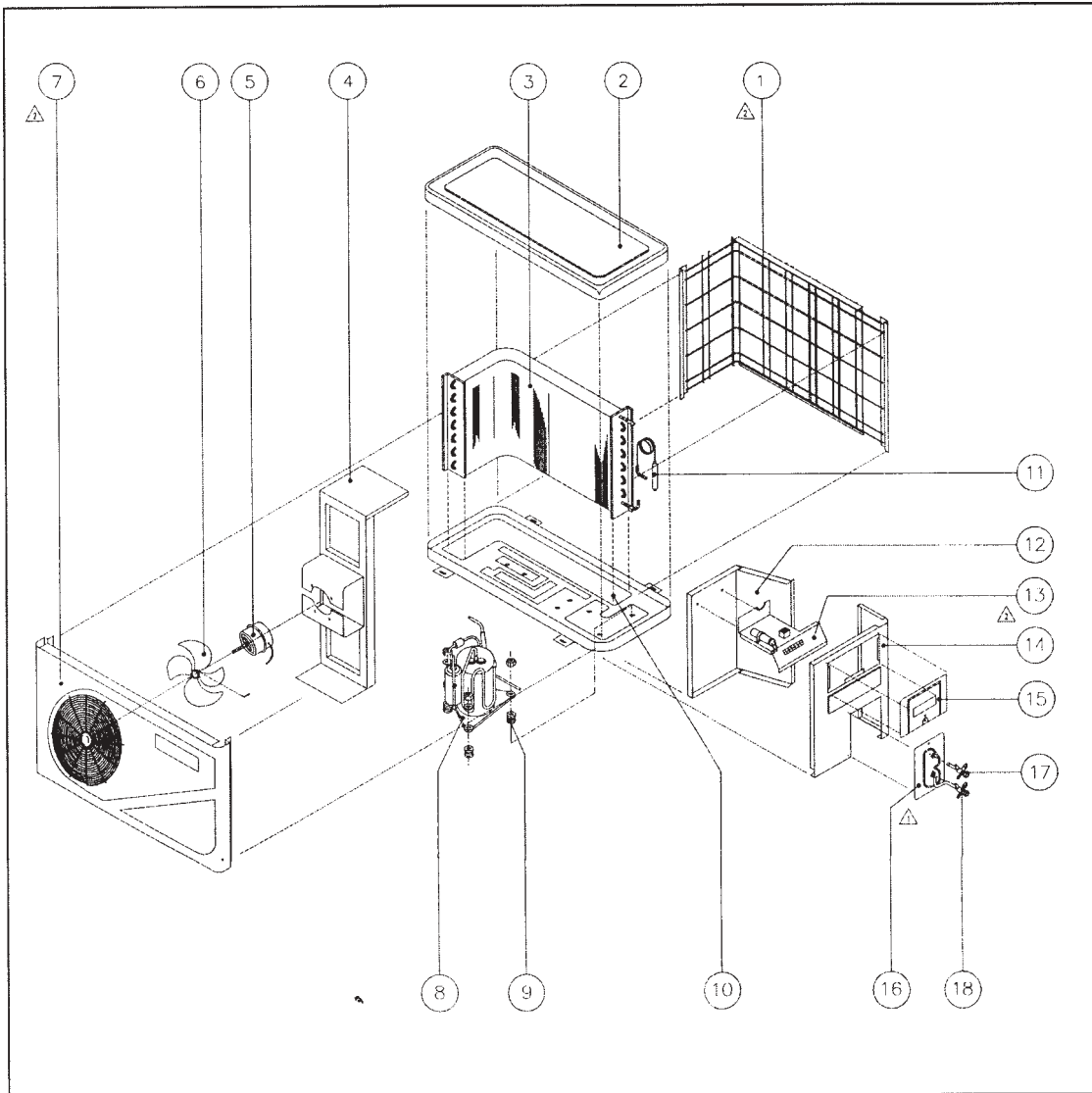
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	ASSY., BASE PAN	11	RIGHT PANEL
2	ASSY., CONDENSER COIL	12	ASSY., FRONT PANEL
3	VALVE BRACKET	13	ASSY. CONTROL PANEL
4	COMPRESSOR	14	ASSY., VALVE COVER
5	ASSY., PARTITION	15	ASSY., FRONT GRILLE
6	ASSY., CAP TUBE	16	PLASTIC, HANDLE
7	BRACKET, FAN MOTOR	17	RUBBER GROMMENT
8	FAN MOTOR	18	ASSY., FLARE VALVE 2 WAYS ¼"
9	FAN BLADE	19	ASSY., FLARE VALVE 3 WAYS 3/8" MLC 010C ASSY., FLARE VALVE 3 WAYS ½" MLC 015C
10	LEFT PANEL		

**Model : MLC / M5LC 010CR / 015CR**



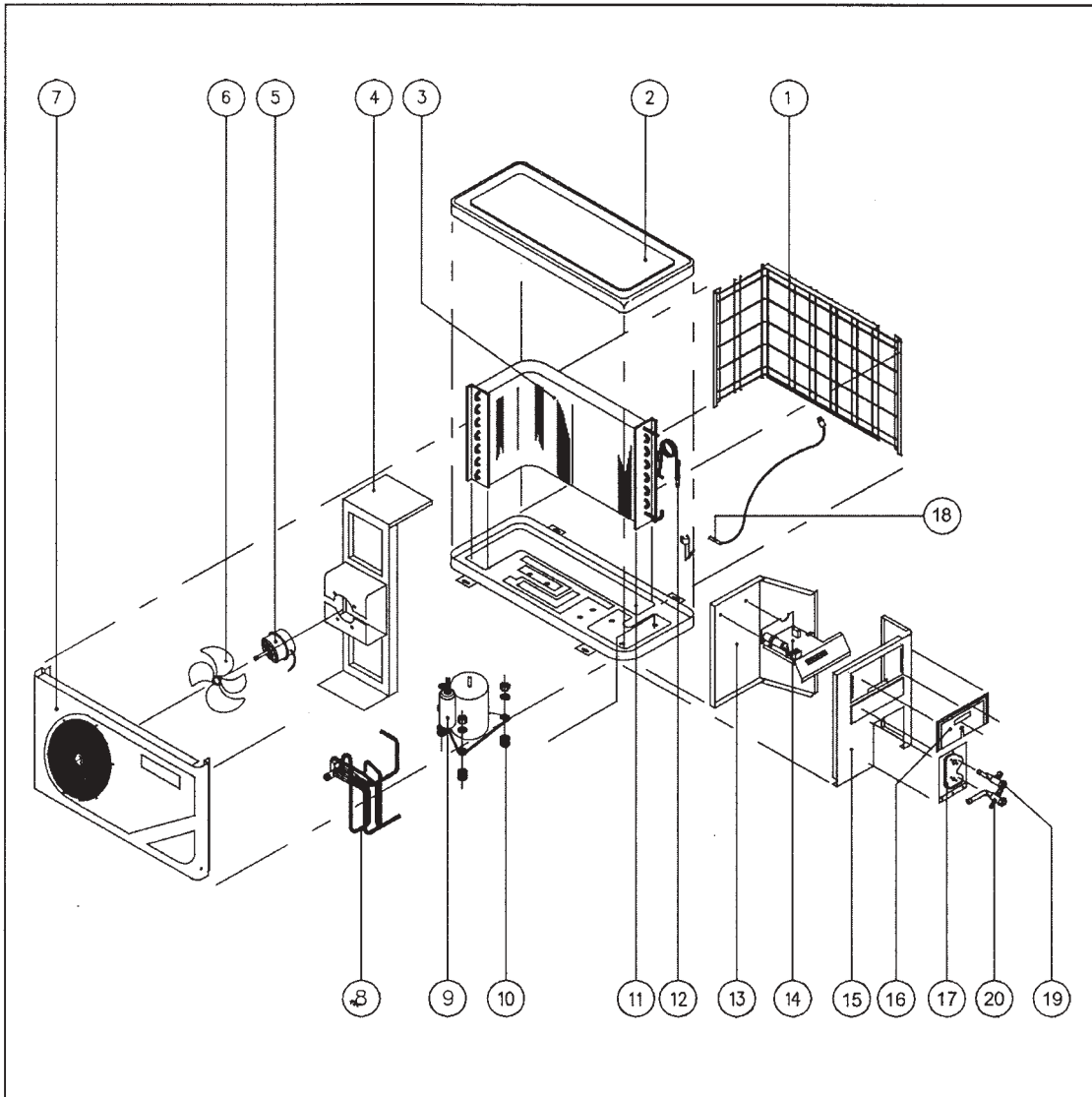
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	ASSY., BASE PAN	13	ASSY., FRONT PANEL
2	ASSY., CONDENSER COIL	14	ASSY. CONTROL PANEL
3	VALVE BRACKET	15	ASSY., VALVE COVER
4	COMPRESSOR	16	ASSY., FRONT GRILLE
5	ASSY., PARTITION	17	PLASTIC, HANDLE
6	ASSY., 4 WAY VALVE	18	RUBBER GROMMET
7	ASSY., CAP TUBE	19	ASSY., FLARE VALVE 2 WAYS ¼"
8	BRACKET, FAN MOTOR	20	ASSY., FLARE VALVE 3 WAYS 3/8"
9	FAN MOTOR		MLC 010CR
10	FAN BLADE		ASSY., FLARE VALVE 3 WAYS ½"
11	LEFT PANEL		MLC 015CR
12	RIGHT PANEL	21	SENSOR, OUTDOOR DEFROST

**Model : M4LC 010 / 015B**



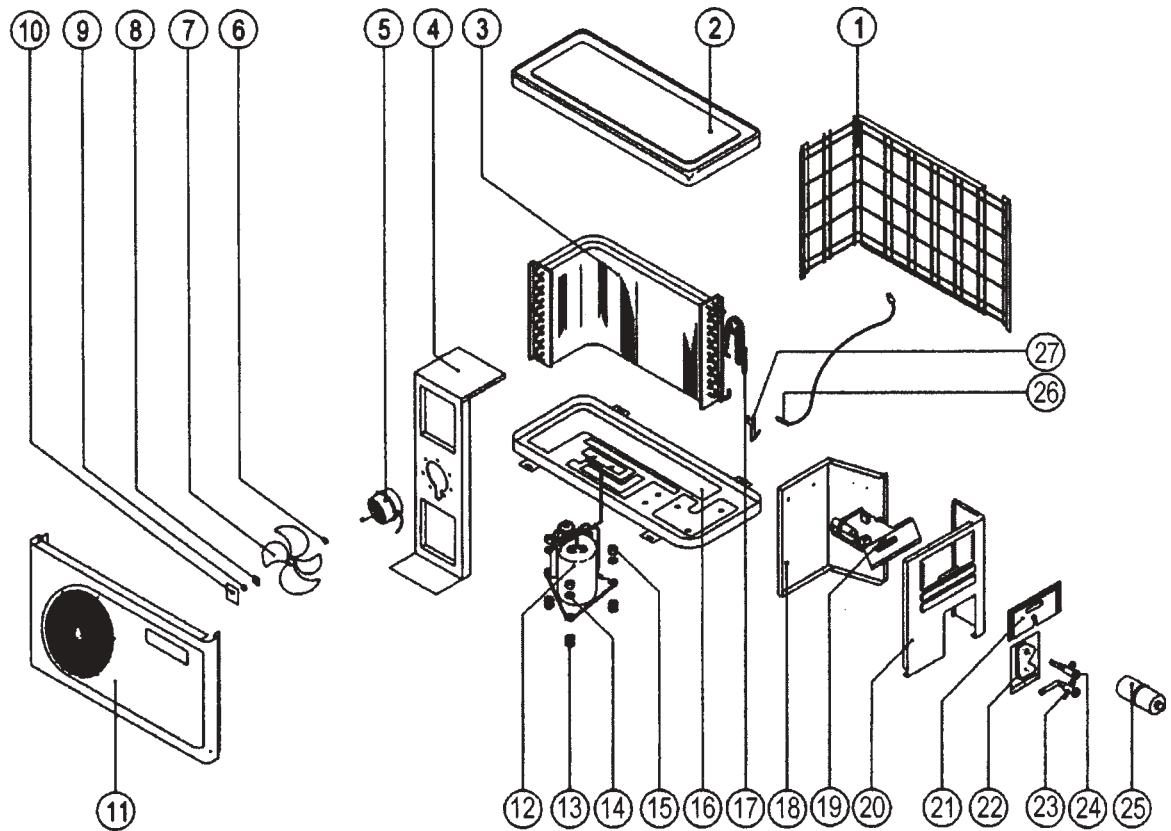
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	BACK GRILLE	11	ASSY., CAP TUBE
2	TOP PANEL	12	ASSY., PARTITION
3	ASSY., CONDENSER COIL	13	ASSY., TERMINAL BOX PANEL
4	BRACKET, MOTOR MOUNTING	14	ASSY., SIDE PANEL
5	FAN MOTOR	15	ASSY., ACCESS PANEL
6	FAN BLADE	16	FLARE VALVE MOUNTING PLATE
7	ASSY., FRONT PANEL	17	ASSY., FLARE VALVE 2 WAYS ¼"
8	COMPRESSOR	18	ASSY., FLARE VALVE 3 WAYS 3/8"
9	RUBBER GROMMET		MLC 010B
10	ASSY., BASE PAN		ASSY., FLARE VALVE 3 WAYS ½"
			MLC 015B

**Model : M4LC 010 / 015BR**



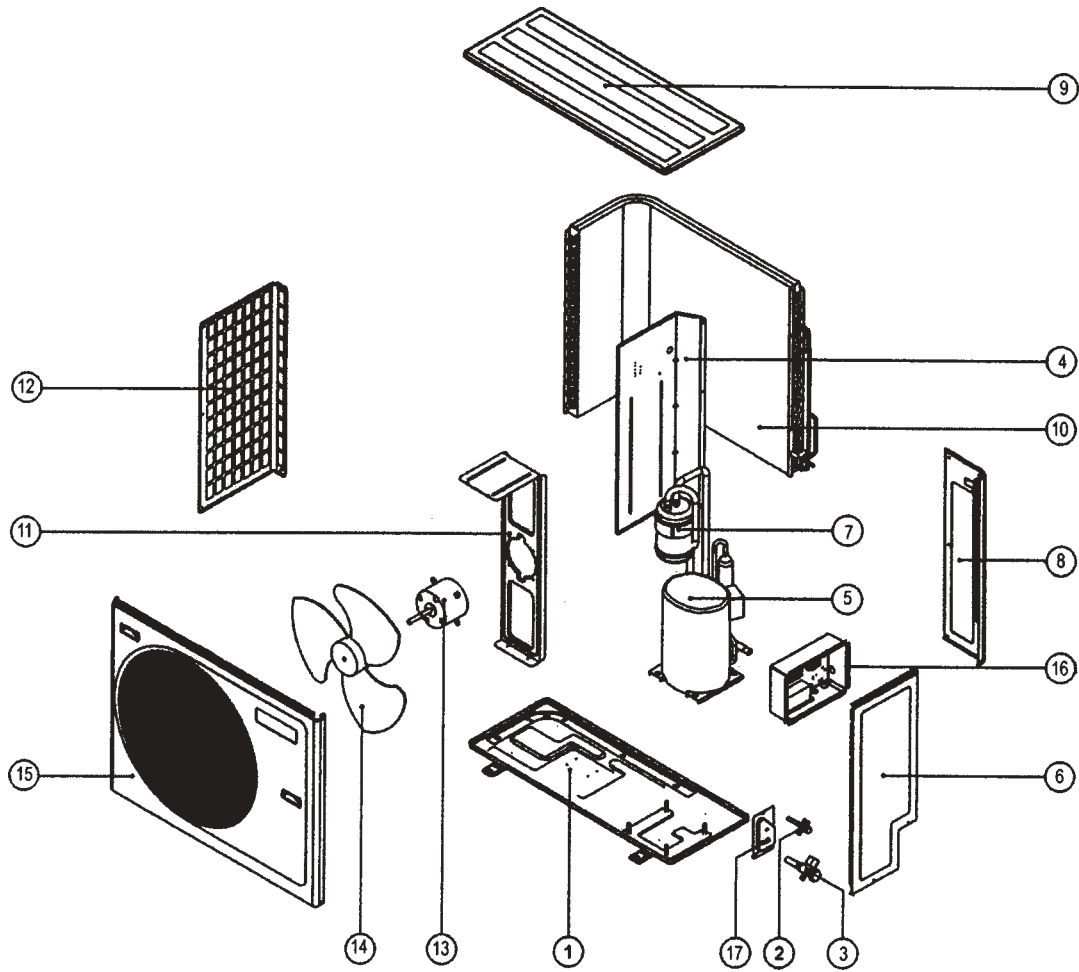
NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	BACK GRILLE	11	ASSY., CAP TUBE
2	TOP PANEL	12	ASSY., PARTITION
3	ASSY., CONDENSER COIL	13	ASSY., TERMINAL BOX PANEL
4	BRACKET, MOTOR MOUNTING	14	ASSY., SIDE PANEL
5	FAN MOTOR	15	ASSY., ACCESS PANEL
6	FAN BLADE	16	FLARE VALVE MOUNTING PLATE
7	ASSY., FRONT PANEL	17	ASSY., FLARE VALVE 2 WAYS ¼"
8	COMPRESSOR	18	ASSY., FLARE VALVE 3 WAYS 3/8"
9	RUBBER GROMMENT		MLC 010BR
10	ASSY., BASE PAN		ASSY., FLARE VALVE 3 WAYS ½"
			MLC 015BR

**Model : MLC / M4LC 020 / 025B/BR  
MLC 030B/BR**



NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	BACK PANEL	15	NUT
2	TOP PANEL	16	BASE PAN
3	COIL ASSY	17	CAPILLARY TUBE
4	MOTOR MOUNTING BRACKET	18	PARTITION
5	FAN MOTOR	19	TERMINAL BOX PANEL
6	RING WASHER	20	SIDE PANEL
7	FAN BLADE	21	ACCESS PANEL
8	SQUARE WASHER	22	PLATE, FLARE VALVE
9	HEX NUT	23	FLARE VALVE
10	BLACK LABEL	24	FLARE VALVE
11	FRONT PANEL	25	COMPRESSOR CAPACITOR
12	COMPRSSOR	26	OUTDOOR THERMISTER (COPPER)
13	RUBBER GROMMENT	27	THERMISTER CLIP
14	WASHER		

Model : MLC / M4LC 030 / 035 / 040 / 050 / 061C/CR



NO	PART DESCRIPTION	NO.	PART DESCRIPTION
1	BASE PAN	11	MOTOR BRACKET ASSY
2	FLARE VALVE	12	SIDE PANEL LEFT
3	FLARE VALVE	13	FAN MOTOR
4	PARTITION	14	FAN BLADE
5	COMPRESSOR	15	FRONT PANEL ASSY
6	ACCESS PANEL	16	TERMINAL BOX ASSY
7	ACCUMULATOR	17	PLATE, FLARE VALVE
8	BACK PANEL		
9	TOP PANEL		
10	COIL ASSY		

# Fresh Air Kit For MCK-C Models

