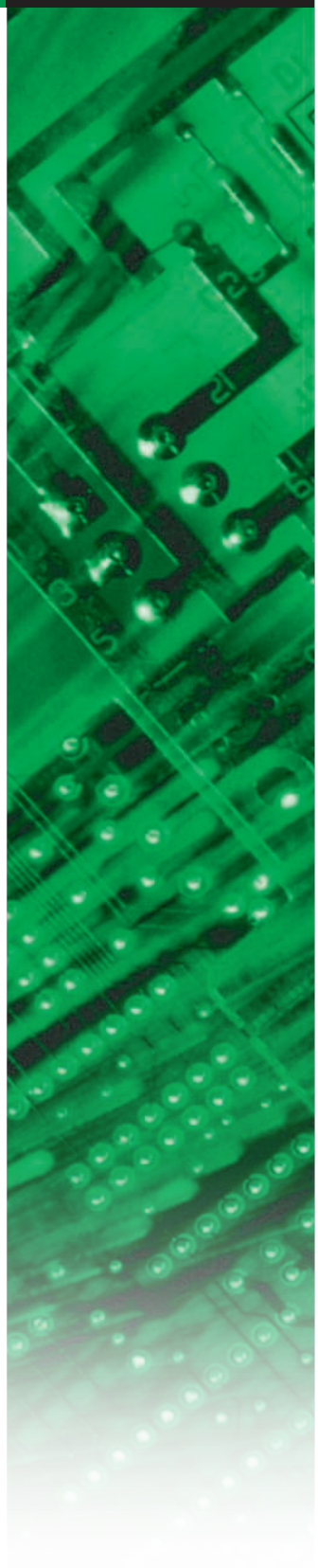
Catalog

MDB-R-2010

Ducted Blower Split Systems

Models: MDB 075-500 BR
MDSB 200-500 BR
MDB 125 CR



McQuay® Air Conditioning

Engineered for flexibility and performance.™

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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 hazard. May cause severe personal injury or death. Disconnect and lock off power before servicing equipment.

CE

Product Line Up

MDB		Nomenclature	Classification																	
			Controller					Handset		Marking			Refrigerant Control			Filter	Air Discharge			Others
			W/out Control	With Contactor	L208A	U1_SB125	Sequential	SLM3	LCD Sequential Controller	Local (w/out DOL)	CE Mark	Without Marking	TXV	Capillary Tube	Without Expansion Device	With air filter	Horizontal & Changeable	Horizontal & Not Changeable	Vertical & Changeable	Rivet "Made In Malaysia"
Heat Pump Model	75BR	ABEF			X			X			X				X	X		X		
	100BR	ABEE			X			X			X				X	X		X		
	125CR	FBED		X		X		X			X				X	X		X		
	150BR2	FBED		X			X		X		X				X	X	X			
	200BR2	FBED		X			X		X		X				X	X	X			
	250BR2	FBEA		X			X		X			X			X	X			X	
	300BR3	FBEB		X			X		X			X			X	X			X	
	350BR3	FBEB		X			X		X			X			X	X			X	
	400BR4	FBEB		X			X		X			X			X	X			X	
	500BR4	FBEB		X			X		X			X			X	X			X	

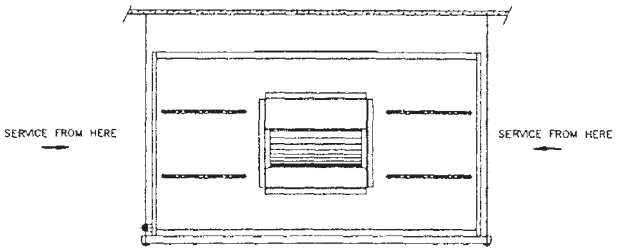
MDSB		Nomenclature	Classification															
			Controller				Handset	Marking		Refrigerant Control			Filter		Air Discharge			
			W/out Control	With Contactor	W/out Contactor	Sequential Controller	LCD Wired Handset	CE Mark	Without Marking	TXV	Capillary Tube	Without Expansion Device	With air filter	W/out Air Filter	Horizontal & Changeable	Horizontal & Not Changeable	Vertical as Standard	Vertical & Changeable
Heat Pump Model	200BR2	FBAA				X	X		X			X	X		X			
	250BR2	FBAA				X	X		X			X	X					X
	300BR3	FBAA				X	X		X			X	X					X
	350BR3	FBAA				X	X		X			X	X					X
	400BR4	FBAA				X	X		X			X	X					X
	500BR4	FBAA				X	X		X			X	X					X

MMC		Nomenclature	Classification																				
			Controller					Marking			Compressor					Refrigerant Control			Others				
			With Togami Contactor	With Chint Contactor	Without Contactor	With Auto HP/LP	With Manual HP/LP	CE Mark	ETL	Without Marking	Scroll-Copeland	Scroll Maneurop	Reciprocating-Maneurop	Reciprocating Bristol	Reciproacating-Copeland	TXV	Capillary Tube	Without Expansion Device	Centrifugal Fan	Rivet "Made In Malaysia"	With Accumulator	Phase Sequencer	Gold Fin (NA549)
Heat Pump Model	075CR	FBED	X			X		X			X					X							
		FBEJ	X			X		X			X					X							X
	100BR	FBEC	X			X		X			X					X							
		FBEJ	X			X		X			X					X							X
	125BR	FBEC	X			X		X			X					X							
		FBEJ	X			X		X			X					X							X

Features

Easy Maintenance

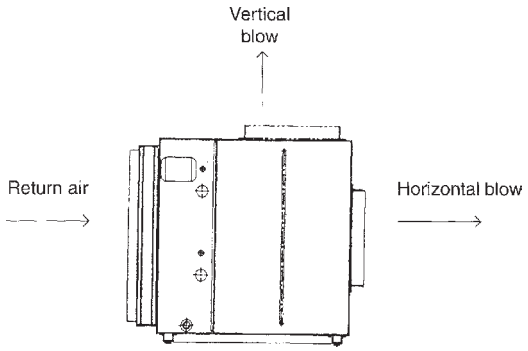
The simple design concept has maintenance and servicing in mind. Access to the internal part of the unit can be from either side of the unit by loosening a few screws.



Only for model MDB 075BR and 100BR
with additional servicing panel from bottom

Flexibility In Installation

MDB075BR - MDB200BR models come with standard horizontal air discharge whereas MDB250BR - MDB500BR models come with standard vertical air discharge. However, the range from MDB150BR - MDB500BR are designed to cater for either horizontal or vertical air discharge application.



Versatility

Multiple rooms can be cooled together at the same time by using just one unit of fan coil unit.

Fresh Air For Healthy Living

Fresh air can be introduced into the building through the design of fresh air intakes. This will help to improve the indoor air quality.

Superior Air Distribution For Comfortable Living

The conditioned air can be effectively distributed to every corner of the room through the ducting and this ensure a more pleasant environment for comfort living.

Flexibility Of Air Supply

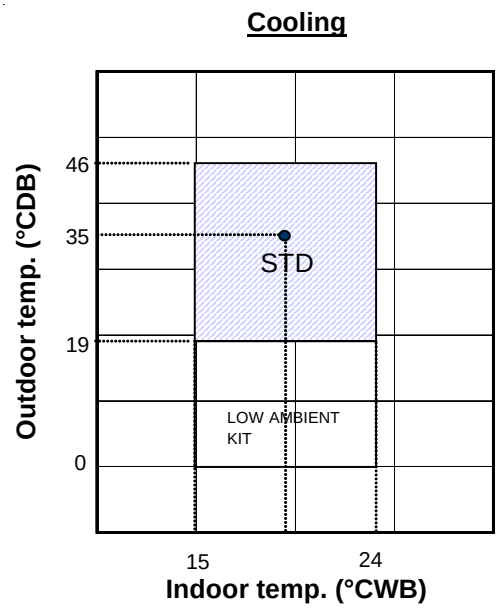
McQuay MDB series using belt driven fan such as that the air volume and static required can be adjusted according to the requirement. This flexibility allow for wider application.

Application Information

Operating Range

Ensure the operating temperature is in allowable range.

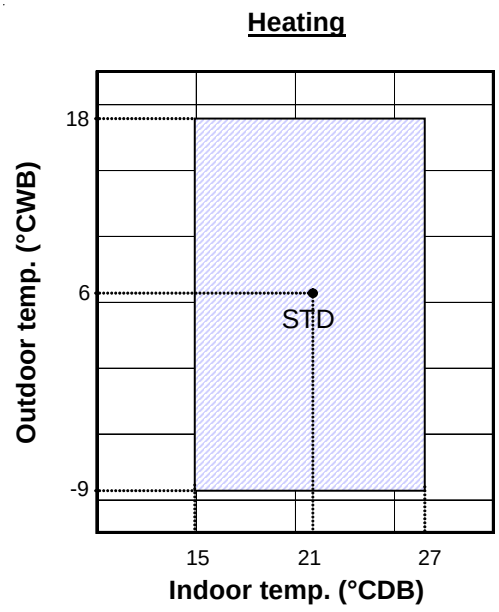
Cooling only

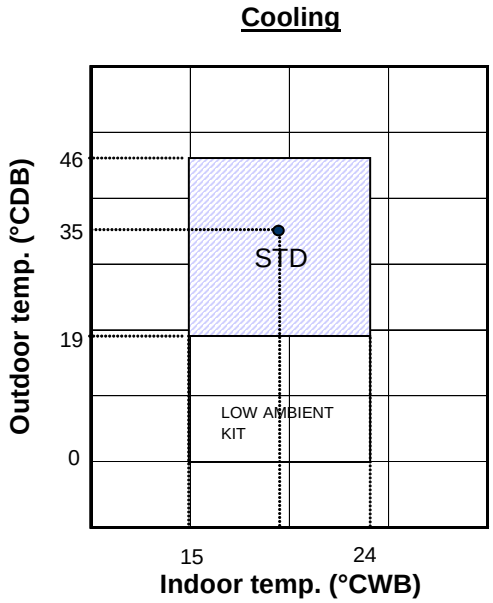


Caution :

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

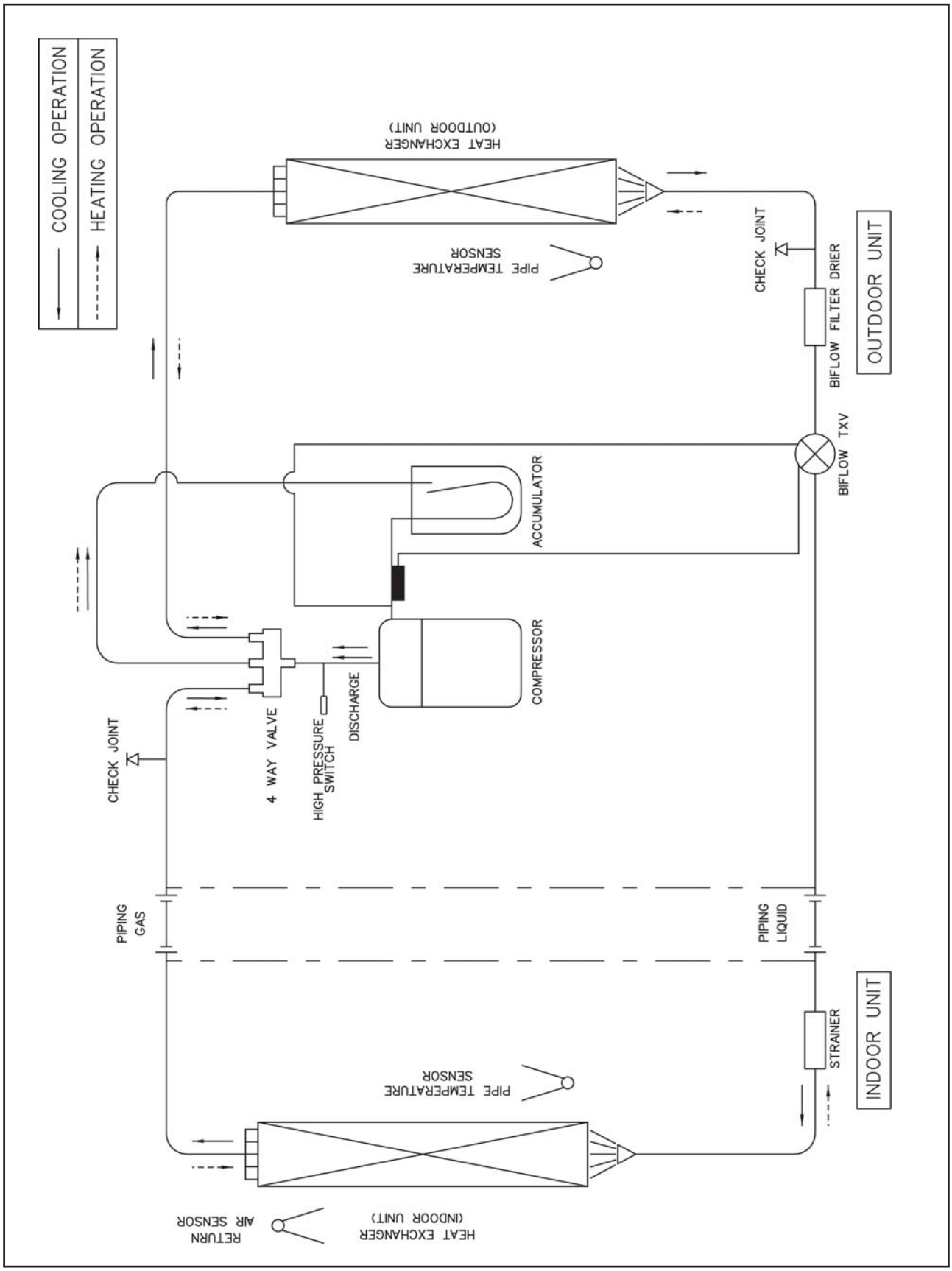
Heatpump



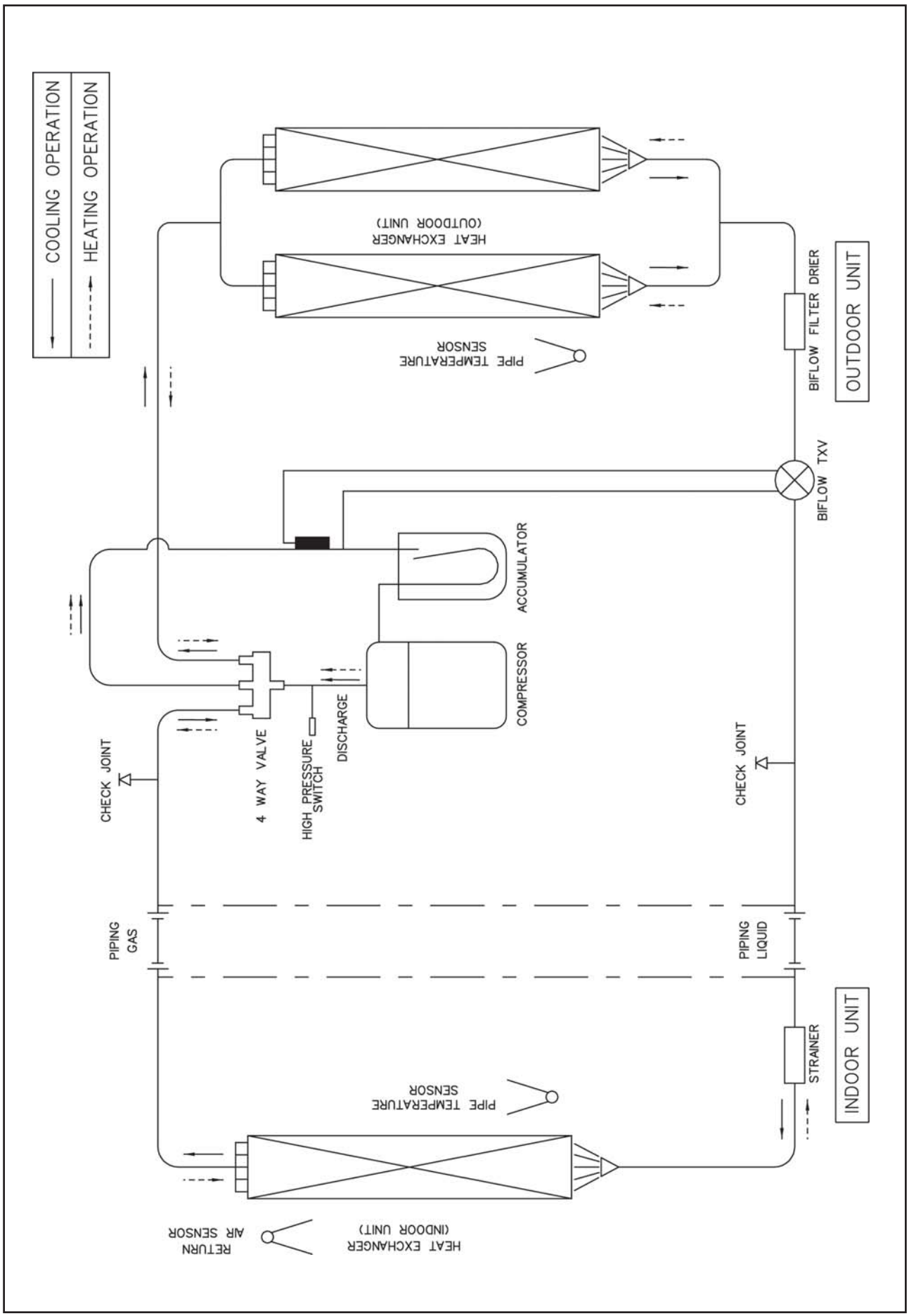


Refrigerant Circuit Diagrams

MODEL : MMC075CR



MODEL : MMC100/125BR



Controllers

Electrical Connection

Wiring regulations about wire diameter differs from country to country. Please refer to your LOCAL ELECTRICAL CODES for field wiring rules. Be sure that installation comply with such rules and regulations.

General Precaution

Ensure that the rated voltage of the unit correspond to the name plate 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 overcurrent protection should be provided in the exclusive line.

The unit must be GROUNDED to prevent possible hazard due to insulation failures

Every wiring must be firmly connected.

Every wiring should not touch the refrigerant piping, compressor and any moving parts of fan motor.

Operational Check

After all wiring is completed and the system is charged with refrigerant, make sure the unit is operating properly. Check that :

Condenser fans are running with warm air blowing off the condensing unit.

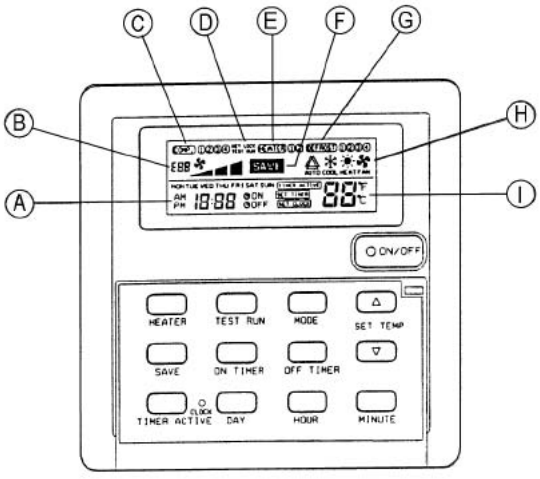
Evaporator blowers are running and discharging cool air from ducts.

Suction line and liquid line pressures are in the region of 75 psig and 275 psig respectively.

Sequential Controller Lcd Operating Instructions

(Standard for cooling and heatpump units)

1. Sequential controller LCD display



A : Time display
B : Error indication
C : Compressor running display (up to 4 compressors)
D : Key lock display
E : Heater display (up to 2 heaters)
F : Energy saving mode display
G : Compressor defrost cycle display (up to 4 compressors)
H : Operation mode display
I : Temperature set display

2. Operating Guide

2.1 **ON/OFF** key

Press once to start the air conditioning unit.
Press again to stop the unit.
The operation lamp next to the key lights up and goes off respectively when the unit is running or not running.
Caution : In the case when the **ON/OFF** key is pressed immediately after the operation is stopped, the unit will not restart until 3 minutes later to protect the compressor.

2.2 Selecting Operation Mode

Press the **MODE** key to select the type of operating mode. Consecutive press of the key switches the operation over *"COOL", "HEAT", "AUTO" and "FAN"*

2.3 SAVE Mode

Press the **SAVE** key to select the energy saving function. This option is only available for "COOL", "HEAT" and "AUTO" modes.

2.4 Auxiliary Electric Heater

If the "HEAT" mode provides insufficient heating to a room even at the highest temperature setting (30°C), press the **HEATER** key to activate the auxiliary electric heater. For models with two heaters, consecutive press of the key allows the selection of one or both heaters active.

2.5 Temperature Setting

To set the desired room temperature, press (▲) or (▼) to increase or decrease the set temperature in the range of 16°C to 30°C.

Press both (▲) and (▼) simultaneously to toggle between °C and °F setting.

2.6 Time Setting

Real time Clock

Press the **CLOCK** key once to activate set clock mode.

Press again to disable set clock mode.

Under set clock mode, the time of the present day can be set by pressing the respective **MINUTE, HOUR** and **DAY** key.

7days timer

Press the **ON TIMER** key to activate autoON timer mode. Under this mode, press the respective **MINUTE, HOUR** and **DAY** key to select the time of the week when the air-conditioning unit is to automatically start running. Press the **ON TIMER** key again to save the setting.

Press the **OFF TIMER** key to activate autoOFF timer mode. Under this mode, press the respective **MINUTE, HOUR** and **DAY** key to select the time of the week when the air-conditioning unit is to automatically stop running. Press the **ON TIMER** key again to save the setting.

Then to activate the 7days timer, press and hold the **TIMER ACTIVE** key until the word "TIMER ACTIVE" appears on the LCD screen. Repeat the same step to disable the 7days timer.

2.7 Other Function

Key Lock

Press the **MINUTE** key 3 times consecutively to activate the key lock. A *"KEY LOCK" symbol* will appear on the LCD screen. At this point, only the **ON/OFF** key is valid.

To disable the key lock, again press the **MINUTE** key 3 times consecutively.

Test run

Press the TEST key 2 times consecutively to test run the unit.

3. Error Code

When the system is on and an error occurs, the **ON/OFF** LED on the LCD panel will blink and an error code is shown. When the system is off and there is a thermistor error, the **ON/OFF** LED is off but the error code is still displayed. Each error code represents different message as below

Error code	Possible fault	Error code	Possible fault
E01	Require manual reset (possible causes)	E19	Indoor coil sensor 4 short
E02	Compressor 1 high temperature (overload)	E20	Indoor coil sensor 1 open
E03	Compressor 2 high temperature(overload)	E21	Indoor coil sensor 2 open
E04	Compressor 3 high temperature(overload)	E22	Indoor coil sensor 3 open
E05	Compressor 4 high temperature(overload)	E23	Indoor coil sensor 4 open
E06	Compressor 1 high pressure trip / contact open	E24	Outdoor coil sensor 1 short
E07	Compressor 2 high pressure trip / contact open	E25	Outdoor coil sensor 2 short
E08	Compressor 3 high pressure trip / contact open	E26	Outdoor coil sensor 3 short
E09	Compressor 4 high pressure trip / contact open	E27	Outdoor coil sensor 4 short
E10	Compressor 1 trip / low R-22 / outdoor abnormal	E28	Outdoor coil sensor 1 open
E11	Compressor 2 trip / low R-22 / outdoor abnormal	E29	Outdoor coil sensor 2 open
E12	Compressor 3 trip / low R-22 / outdoor abnormal	E30	Outdoor coil sensor 3 open
E13	Compressor 4 trip / low R-22 / outdoor abnormal	E31	Outdoor coil sensor 4 open
E14	Room sensor short	E32	Compressor 1 de-ice
E15	Room sensor open	E33	Compressor 2 de-ice
E16	Indoor coil sensor 1 short	E34	Compressor 3 de-ice
E17	Indoor coil sensor 2 short	E35	Compressor 4 de-ice
E18	Indoor coil sensor 3 short		

4. Installation Of Lcd Remote Controller

4.1 Accessories

The following accessories are included. If any part is missing, contact your dealer immediately.

① Remote controller

② Wooden screw 4.1 x 16 (2 pieces)

③ Instruction manual

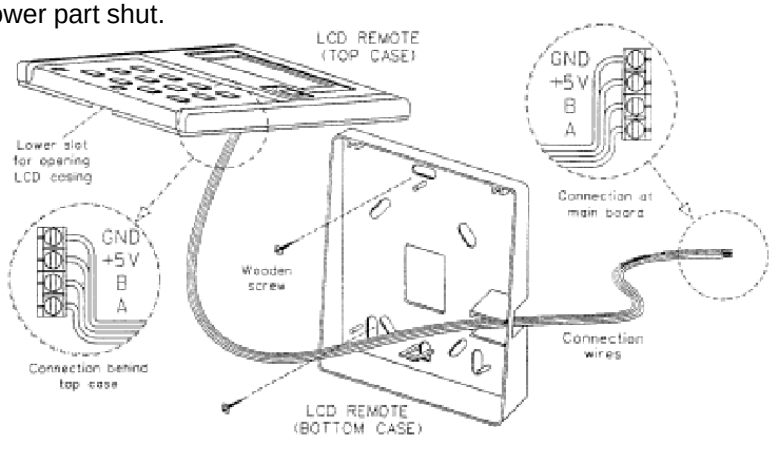
4.2 Stepbystep guide

i) First, open up the casing of the LCD remote controller **into its top and bottom** case using a screwdriver. To do this, insert the screwdriver into the lower slot and slide it in the outward direction.

ii) Fix the bottom case onto the wall with the 2 wooden screws provided. Then, insert the 4 connecting wires (from the main board) through the slot on the lower right.

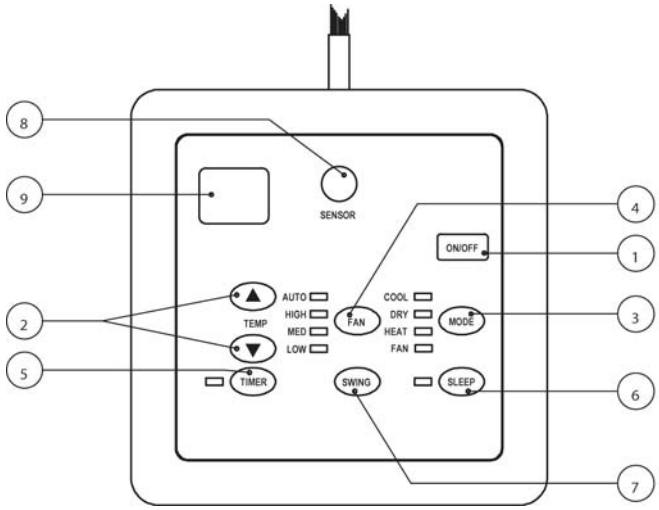
iii) Connect one end in each of the 4 wires to the terminal block behind the top case as shown below. The wire that goes into the “GND” terminal at the top case must be connected at the other end to the “GND” terminal at the main board. The same goes for the “+5V”, “B” and “A” connection.

iv) Fasten back the top and bottom case into place. Hook the two upper claws into their respective slots and snap the lower part shut.

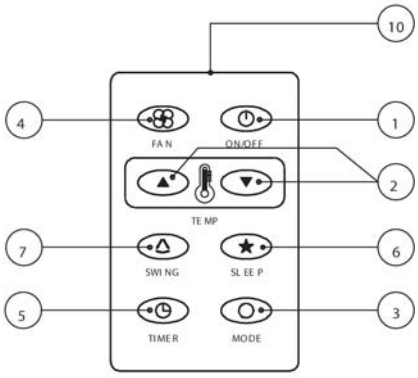


5. Auto Random Restart

When power resumed, the unit will automatically restart and operate at the previous setting as before power failure occurred. (Remove jumper at JH/JP1 will cancel the auto random restart function. Please refer to wiring diagram for the location of the JH/JP1).



SLM



AC-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 bothCOOL 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. When it is 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 descreased 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.

Installation

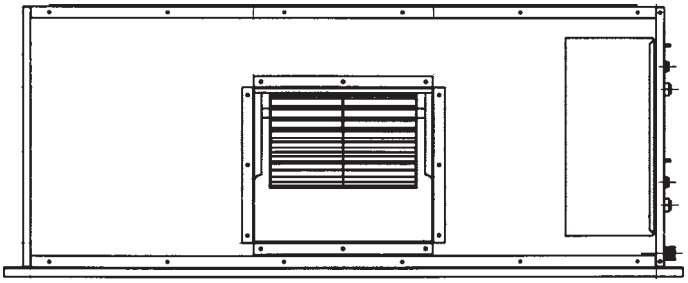
Indoor

Preliminary Site Survey

a) Electrical supply and installation is to confirm to local authority's (e.g. National Electricity Board) codes and regulations.
b) Voltage supply fluctuation must not exceed +/- 10% of rated voltage. Electricity supply line must be independent of welding transformers which can cause supply fluctuation.
c) Ensure that the location is convenient for wiring and piping.

Mounting

a) For ceiling mounted models, locate a position where piping and ducting work can be kept to a minimum. Ensure that overhead supports are strong enough to hold the unit's weight. Position hanger rods and check for alignment with the unit. Check that hangers are secure and that the base of fan-coil unit is level in two horizontal directions.



DRAINAGE PIPE SIDE

Pipings

Do not use contaminated or damaged copper tubings. If pipings, 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/caps from fittings, tubings and coils until ready to connect suction or liquid line into fittings.

Operational Check

After all electrical wiring is completed and the system is charged with refrigerant, make sure unit is operating properly. Check that:

a) Condenser fans are running, with warm air blowing off the condenser coil.
b) Evaporator blowers are running and discharging cool air.
c) Suction line inside condensing unit feels cool.
d) Liquid line inside condensing unit feels warm.

Electrical Connection

As wiring regulations differ from country to country, please refer to your LOCAL ELECTRICAL CODES for field wiring regulations and ensure that these are complied with. Besides, observe the following general precautions:

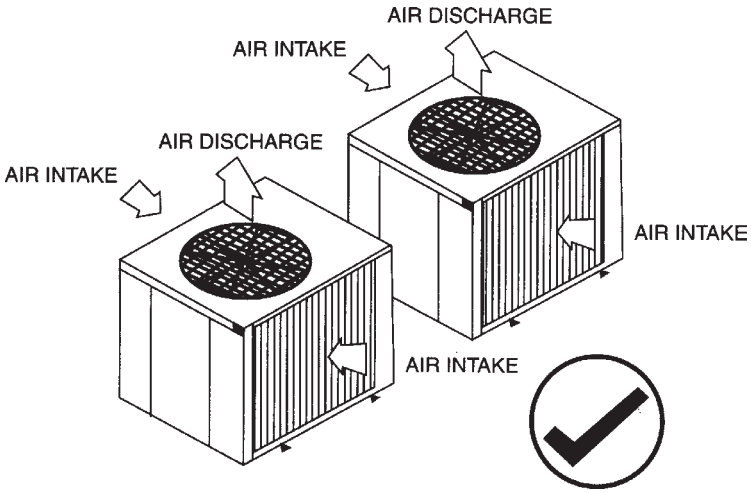
a) Ensure that the rated voltage of the unit corresponds to that of the name plate before commencing wiring work.
b) Provide a power outlet to be used exclusively for each unit. A power supply disconnect and a circuit breaker for over-current protection should be provided in the exclusive line.
c) The unit must be GROUNDED to prevent possible hazard due to insulation failure.
d) All wiring must be firmly connected.
e) Electrical wiring must not touch the refrigerant piping, compressor and any moving parts of the fan motors.

Outdoor

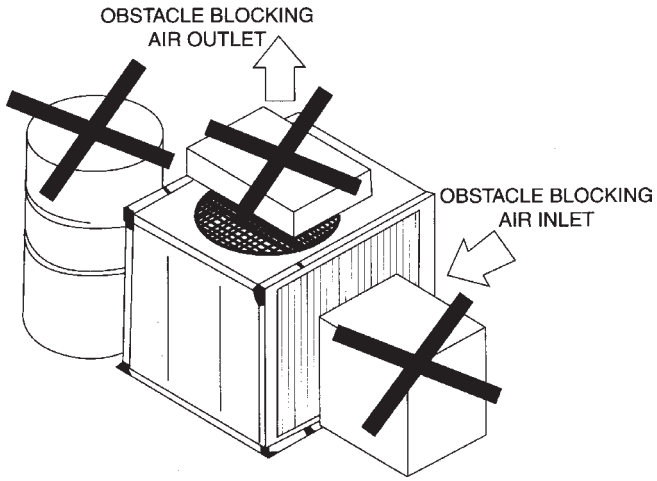
Location For Installation Of The Condensing Units

As condensing temperature rises, evaporating temperature rises and cooling capacity drops. In order to achieve maximum cooling capacity, the location selected should fulfill the following requirements:-

a) Install the condensing (outdoor) unit in a way such that hot air distributed by the outdoor condensing unit cannot be drawn in again (as in the case of short circuit of hot discharge air). Allow sufficient space for maintenance around the unit.



b) Ensure that there is no obstruction of air flow into or out of the unit. Remove obstacle which block air intake or discharge.



c) The location must be well ventilated, so that the unit can draw and distribute plenty of air thus lowering the condensing temperature.
d) A place capable of bearing the weight of the outdoor unit and isolating noise and vibration.
e) A place protected from direct sunlight. Otherwise use an awning for protection, if necessary.
f) A place where the hot air discharge and operating sound level will not annoy the neighbours.
g) The location must not be susceptible to dust or oil mist.

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.

Field Piping
To ensure satisfactory operation and performance, the following points should be noted for the field piping arrangements of the complete refrigerant cycle.

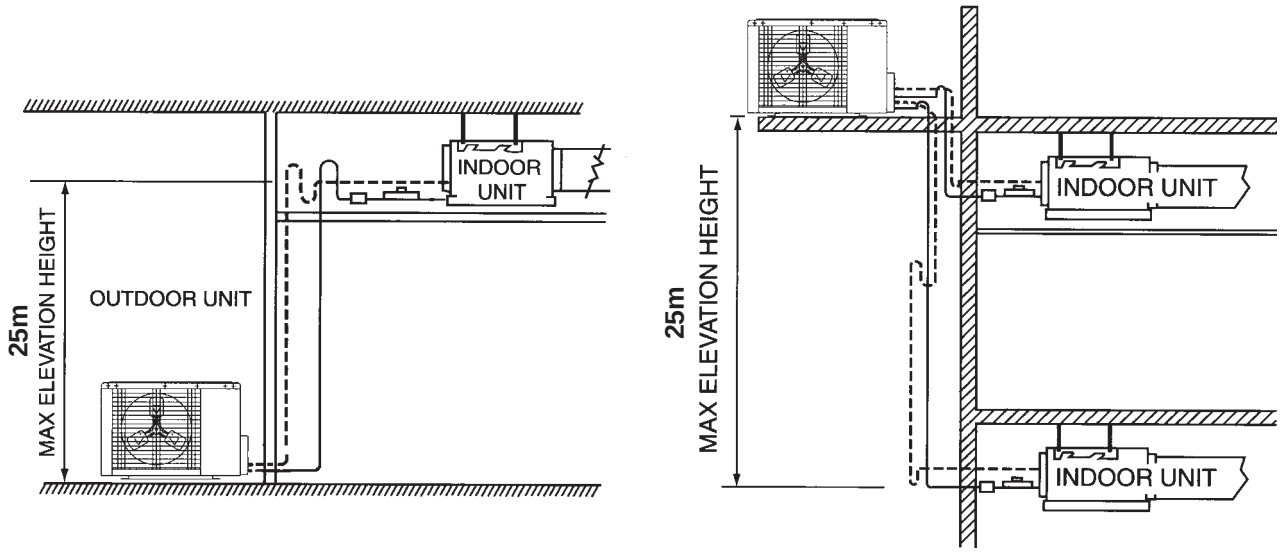
a) Liquid loops or oil traps must be provided according to the position of the outdoor and the indoor units (depending on whether the indoor unit is above or below the outdoor unit).
b) Field supplied filter dryer should be provided as close to the expansion valve(s) of the indoor unit (evaporator) as possible.
c) Field supplied sight glass must be assembled and mounted next to filter dryer.

Maximum Pipe Length And Maximum Number Of Bends
When the pipe is too long, the required refrigerant quantity increases. Both the capacity and reliability drops as a result. As the number of bends increases, system piping resistance to the refrigerant flow increases, thus lowering the cooling capacity and the compressor may become defective. If the height difference between the evaporator and the condenser is excessive, the cooling capacity drops, the lubricating oil return is retarded, affecting the compressor efficiency adversely.

Always choose the shortest piping path and follow the recommendations as shown below :-

Model	Max. elevation, m (ft)	Max. Total Length, m (ft)	Max. of Bends
MMC 075CR	25 (82.0)	45 (147.6)	8
MMC 100/125BR	25 (82.0)	45 (147.6)	8

CAUTION:
1) **Our guarantee on the performance of our air-conditioners is strictly revoked if the height, length and/or the number of bends of the refrigerant piping system installed is beyond the limit above.**
2) **Bendings must be carefully made so as not to crush the pipe. Use a pipe bender to bend a pipe as far as possible.**



Maximum Allowable Piping Length & Elevation Difference

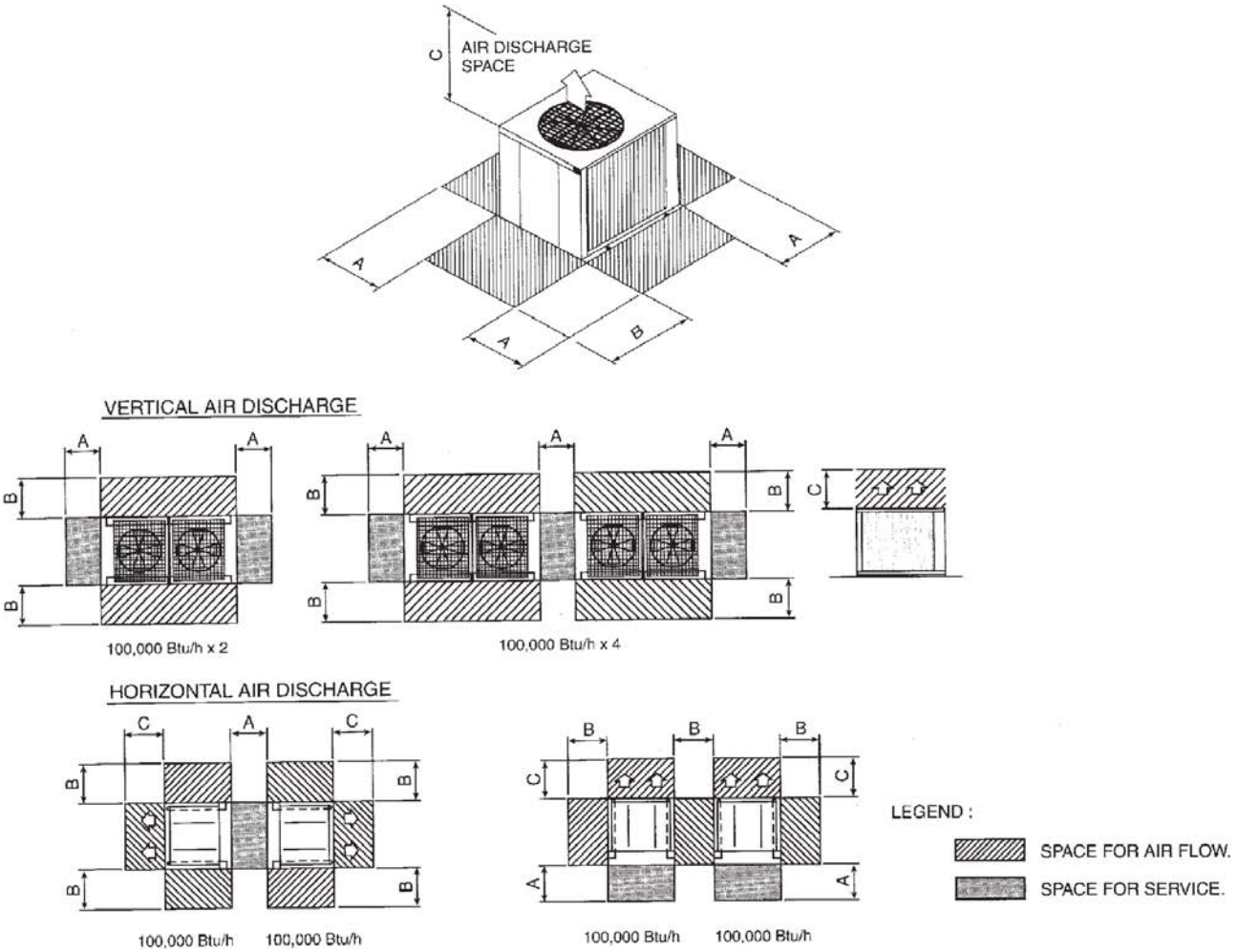
Installation Clearance

When two or more outdoor units are installed in a location, they must be positioned such that one unit will not be taking the hot discharge air from another to avoid hot air short circuiting.

This also applies when two or more units are installed one above the other. Below are the installation clearance guidelines :

Model	MMC 075CR	MMC 100BR	MMC 125BR	2 x MMC 100BR	2 x MMC 125BR
A (mm)	300	500	500	700	700
B (mm)	500	300	300	300	300
C (mm)	1,200	1,200	1,200	1,500	1,500

Model	3 x MMC 100BR	MMC 100BR + 2 x MMC 125BR	4 x MMC 100BR	4 x MMC 125BR
A (mm)	1,000	1,000	1,000	1,000
B (mm)	300	300	300	300
C (mm)	2,000	2,000	2,000	2,000



Guidelines Of Field-charging Air Conditioning Systems With Scroll Compressors

These guidelines are intended for use with Scroll compressors only with R22, R407C, R134a, R404A, R507, and R410A refrigerants. They do not apply to reciprocating compressors or competitive Scroll compressors.

Field-charging - Some Precaution Points

Scroll compressors have a very high volumetric efficiency and quickly pump a deep vacuum if there is insufficient refrigerant in the system or if refrigerant is added too slowly. Operation with low suction pressure will quickly lead to very high discharge temperatures. While this process is happening, the scrolls are not being well lubricated - scrolls depend on the oil mist in the refrigerant for lubrication. A lack of lubrication leads to high friction between the scroll flanks and tips and generates additional heat. The combination of heat of compression and heat from increased friction is concentrated in a small localized discharge area where temperatures can quickly rise to more than 300°C. These extreme temperatures damage the Scroll spirals and the orbiting Scroll bearing. This damage can occur in less than one minute especially on larger compressors. Failure may occur in the first few hours or the damage done during field charging may show up some time later.

Other typical field charging problems include undercharging, overcharging, moisture or air in the system etc. In time each one of these problems can cause compressor failure.

Equipment

Minimal equipment is required for field charging. The minimum equipment required to do a satisfactory job is:-

Set of service gauges
Hoses
Vacuum pump
Vacuum gauge
Scales
Thermometer

Charging Hoses

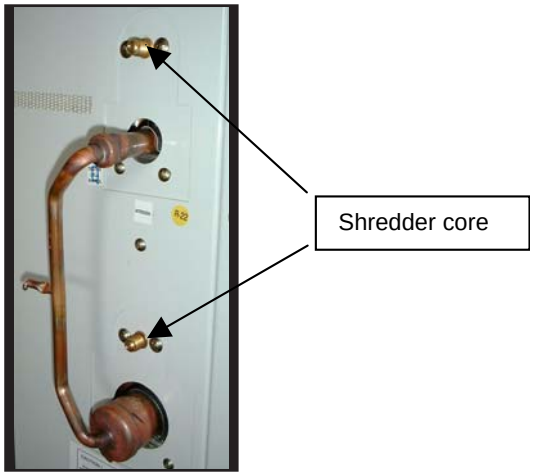
Most field-charging is done using standard service hoses. Hoses are made in different colors with different working pressures and with different leak rates but the most important point is the presence or absence of Shredder valve depressors. Shredder valve depressors severely restrict the flow through the service hoses. This slows evacuation and vapor charging dramatically. In most cases the Shredder depressor can be removed but it is simpler to have one set of hoses with and one set without Shredder depressors.

Hose with Shredder valve Depressor

Hose without Shredder valve Depressor

Hose selection is important depending whether the system is being evacuated or charged. Charging liquid from the cylinder into the liquid line should be carried out using an open hose connected to an unrestricted fitting. This will reduce charging time.

Typical service valves found on the outdoor unit



Shredder valves

Shredder valve with core in place

Shredder valve with core removed

Most split systems have a suitable connection on the outdoor unit

Shredder valves provide easy system access for pressure reading and addition of refrigerant. On small systems, they provide a reasonable connection for evacuation also. However, Shredder valves and the hoses connected to them can cause very severe pressure drops and can multiply evacuation time by a factor of 4 or 5. On the positive side, Shredder valves provide a restriction that slows the speed of liquid charging into the suction side. When a pressure drop is desirable (charging liquid into suction), connect via a Shredder valve. When a pressure drop is detrimental (evacuation), connect via an open fitting.

How Much Refrigerant?

The proper refrigerant charge should follow the volume as recommended by manufacturer and recommendation should be followed by the installer. Refer to the table of Refrigerant Charge Level.

If the installer cannot find the correct charge but the system must be started, refrigerant should be carefully added to the system until reasonable sub-cooling is measured in the liquid line and reasonable suction superheat is measured at the compressor suction. Suction and discharge pressures must be monitored carefully during the charging process.

Charge Limits

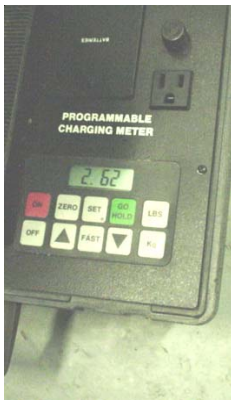
Copeland Scroll compressors have the different charge limits for different compressor models as shown in table below. If the total charge exceeds these limits, the system should have a crankcase heater and/or pump down cycle and/or accumulator to prevent liquid damage to the compressor. Some systems may require accumulators to limit liquid floodback even though the charge is lower than the published limit.

Compressor Range	Model	lbs.	kg.
Quest	ZR46 to ZR81	10	4.5
Summit	ZR84 to ZR144	16	7.3
Specter	ZR90 to ZR19M	17	7.7

Charging Recommendations

Charging liquid in a CONTROLLED manner into the suction side until the system is full. This recommendation does not hold true for reciprocating compressors where liquid charging into the suction side could cause severe damage.

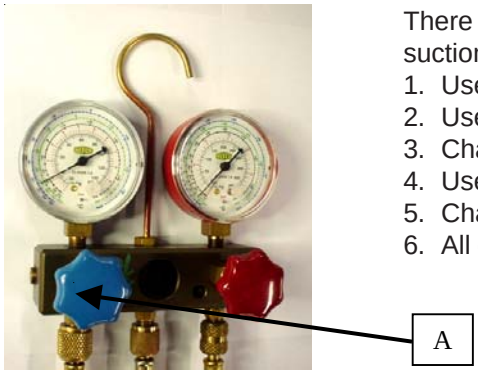
Charging Cylinder on Scale



Close-up of Scale

Carefully monitor the suction and discharge pressures - ensure that the suction pressure does not fall below 25 psig (1.7 bar) at any time during the charging process.

CAUTION : Manifold Gauge will show cylinder pressure rather than suction pressure if the cylinder valve and Manifold valve "A" are both open.



There are many ways of charging liquid in a "controlled manner" into the suction side:-

1. Use valve A on the manifold gauge set
2. Use the valve on the refrigerant cylinder
3. Charge through a Shredder valve
4. Use a hose with a Shredder valve depressor
5. Charge into the suction side at some distance from the compressor.
6. All of the above

Charging Procedures - Three phase compressors

The fundamental procedure is the same as for single phase models but the compressor can run in the wrong direction on starting. If this happens reverse any two phases and start again. Short term reverse rotation will not damage the compressor.

As compressors get larger the importance of correct field charging procedures grows exponentially. Unfortunately larger systems are often field charged which leads to many infant failures. All Specter compressors have internal discharge temperature protectors which are very effective in preventing dangerously high discharge temperatures during charging. The protection module will trip and lock the compressor out for 30 minutes. It is not normally necessary to wait 30 minutes for the module to reset. When the compressor has cooled down the module can be reset by breaking the power supply to the control circuit. Very often the serviceman does not understand why the module tripped and uses a jumper wire to bypass it. He continues to charge the system and removes the jumper when charging is complete. The compressor may or may not run with the protector back in the circuit but it is certain that the compressor has been damaged and premature failure is inevitable.

System Refrigerant Charge Level Guidelines

Indoor	Outdoor	Liquid Pipe	Gas Pipe	Refrigerant Charge (kg/7.5m pipe length)
MDB075BR	MMC075CR	1/2	1	4.60
MDB100BR	MMC100BR	5/8	1-1/8	5.60
MDB125CR	MMC125BR	5/8	1-3/8	6.50
MDB150BR2	MMC075CR x 2	1/2	1	4.60 x 2
MDB200BR2	MMC100BR x 2	5/8	1-1/8	5.60 x 2
MDB250BR2	MMC125BR x 2	5/8	1-3/8	6.50 x 2
MDB300BR3	MMC100BR x 3	5/8	1-1/8	5.60 x 3
MDB350BR3	MMC100BR + MMC125BR x 2	5/8	1-1/8 & 1-3/8	5.60 + (6.50 x 2)
MDB400BR4	MMC100BR x 4	5/8	1-1/8	5.60 x 4
MDB500BR4	MMC125BR x 4	5/8	1-3/8	6.50 x 4
MDSB200BR2	MMC100BR x 2	5/8	1-1/8	5.60 x 2
MDSB250BR2	MMC125BR x 2	5/8	1-3/8	6.50 x 2
MDSB300BR3	MMC100BR x 3	5/8	1-1/8	5.60 x 3
MDSB350BR3	MMC100BR + MMC125BR x 2	5/8	1-1/8 & 1-3/8	5.60 + (6.50 x 2)
MDSB400BR4	MMC100BR x 4	5/8	1-1/8	5.60 x 4
MDSB500BR4	MMC125BR x 4	5/8	1-3/8	6.50 x 4

Additional charge

Based on liquid pipe size per meter length:

Liquid Pipe Size, inch	Additional Charge, kg/meter
1/4"	0.02
5/16"	0.04
3/8"	0.05
1/2"	0.1
5/8"	0.17
3/4"	0.26
7/8"	0.37

Note:The additional refrigerant charge amount recommended is a guideline for longer piping application. The actual charge required may be different from the guideline due to different application and variation in site conditions.

Sound Data

SOUND PRESSURE LEVEL

MDB-BR SERIES

Model	Speed	1/1 Octave Sound Pressure Level (dB, ref 20μPa)							Overall A (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
*MDB075BR	High	55	54	54	51	49	44	36	56	50
	Medium	53	52	52	49	47	42	34	54	48
	Low	52	50	49	47	45	40	32	52	46
*MDB100BR	High	56	55	55	52	50	45	37	57	51
	Medium	54	54	53	50	48	43	36	55	49
	Low	53	52	51	48	46	41	35	53	47
*MDB150BR	High	58	56	57	54	52	47	39	59	54
MDB200BR	High	60	56	58	56	54	49	41	61	55
MDB250BR	High	62	57	59	59	57	52	43	63	58
MDB300BR	High	66	60	62	61	59	54	44	66	60
MDB350BR	High	67	60	62	62	59	54	44	66	61
MDB400BR	High	67	64	63	63	59	54	45	66	62
MDB500BR	High	69	66	66	64	61	56	47	68	63

Microphone position: 1 m away from the service panel and 1 m height from the floor level (free return and the discharge air was ducted to adjacent room). Tested with 2m length duct at the air discharge outlet and air return inlet.

*Microphone position: 1.4 m below the unit, discharge air is ducted to adjacent room, free return.

MDB-CR SERIES

Model	Speed	1/1 Octave Sound Pressure Level (dB, ref 20μPa)							Overall A (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
MDB125CR	High	58	56	57	54	52	47	39	59	54

Microphone position: 1.4 m below the unit, discharge air is ducted to adjacent room, free return. Tested with 2m length duct at the air discharge outlet and air return inlet.

SOUND POWER LEVEL

MDB-BR SERIES

Model	Speed	1/1 Octave Sound Power Level (dB, reference 1pW)							Overall A (dBA)
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
MDB075BR	High	72	73	71	68	65	61	56	73
	Medium	70	70	68	65	62	58	53	70
	Low	68	67	65	62	59	55	50	67
MDB100BR	High	74	74	73	70	67	63	58	75
	Medium	72	73	71	68	65	61	56	73
	Low	70	70	68	65	62	58	53	70
MDB150BR	High	77	78	77	74	71	67	62	79
MDB200BR	High	83	84	83	81	77	73	68	85
MDB250BR	High	85	86	85	83	79	75	70	87
MDB300BR	High	87	88	87	85	81	77	72	89
MDB350BR	High	90	91	90	87	84	80	75	92
MDB400BR	High	88	89	88	86	82	78	73	90
MDB500BR	High	94	95	94	92	88	84	79	96

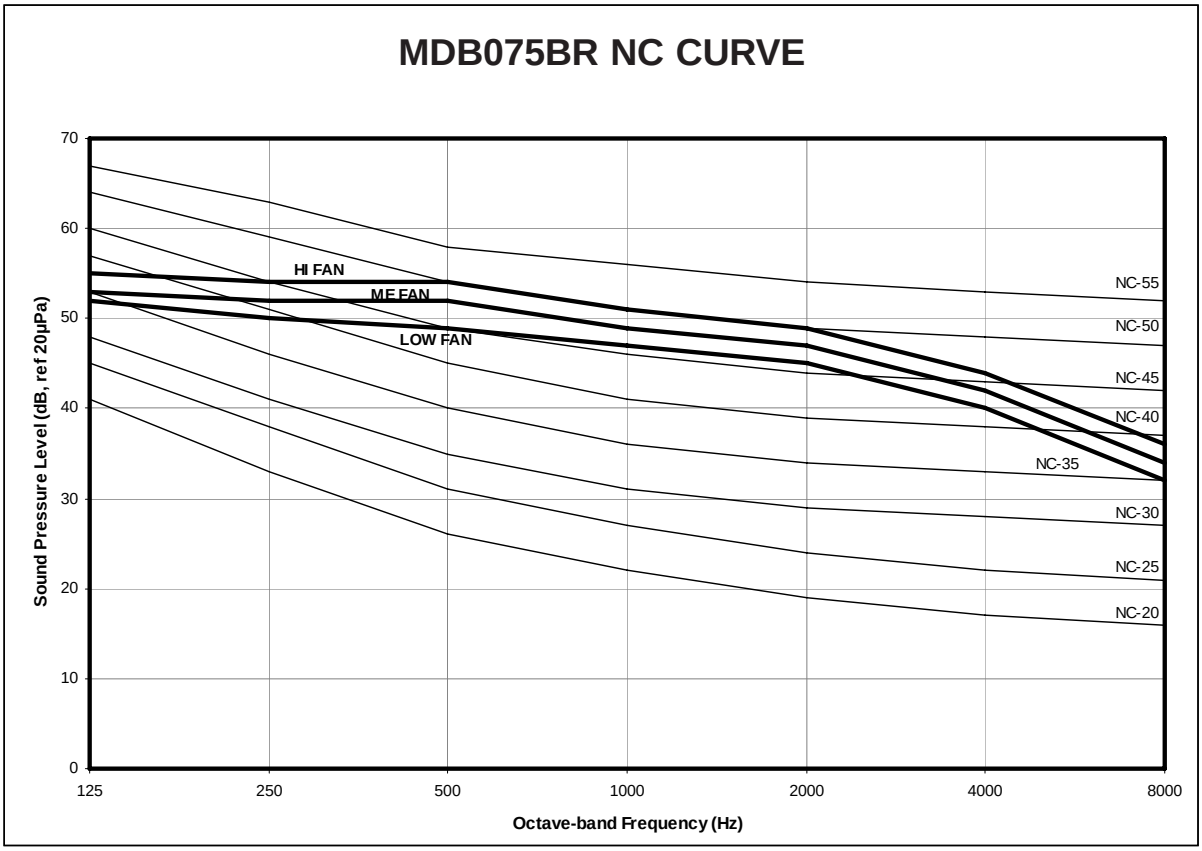
Remarks:Test with 5ft length discharge duct, terminated flush with the internal wall of reverberation room

MDB-CR SERIES

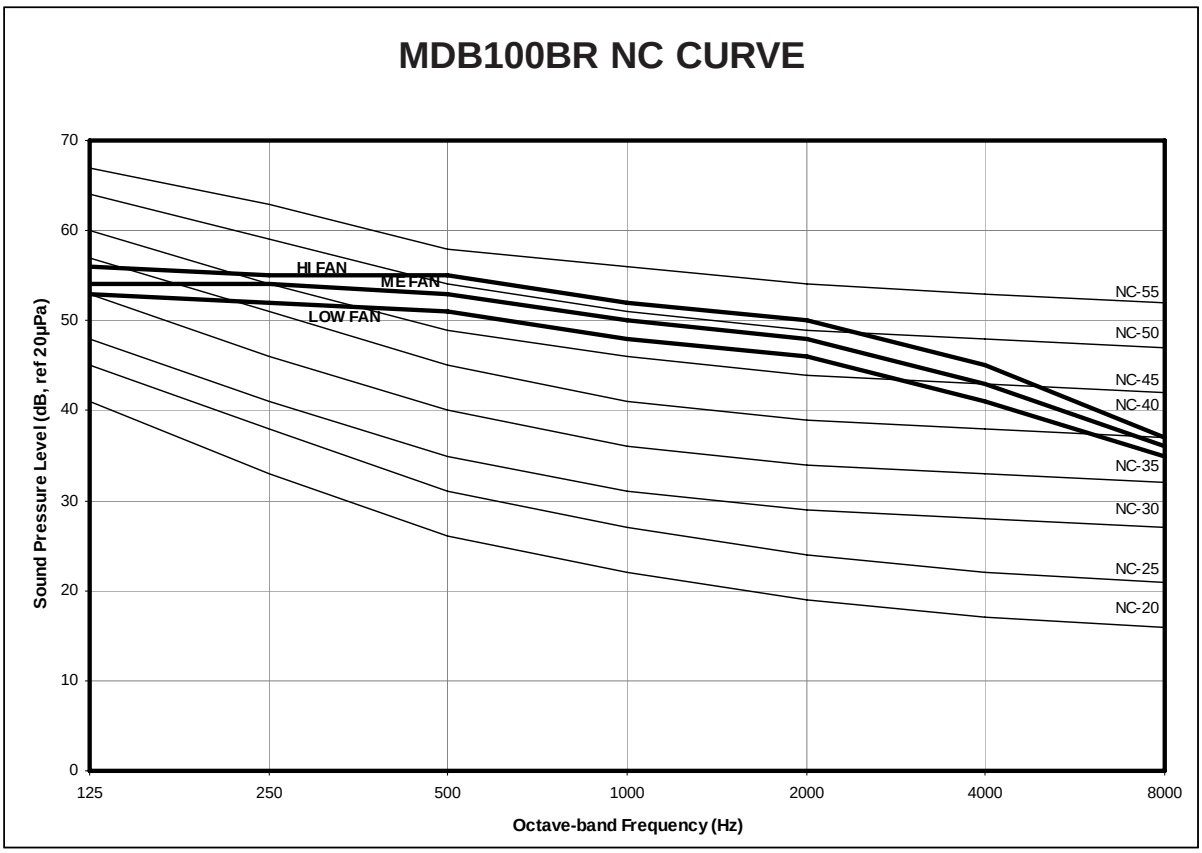
Model	Speed	1/1 Octave Sound Power Level (dB, reference 1pW)							Overall A (dBA)
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
MDB125CR	High	77	78	77	74	71	67	62	79

Remarks:Test with 5ft length discharge duct, terminated flush with the internal wall of reverberation room

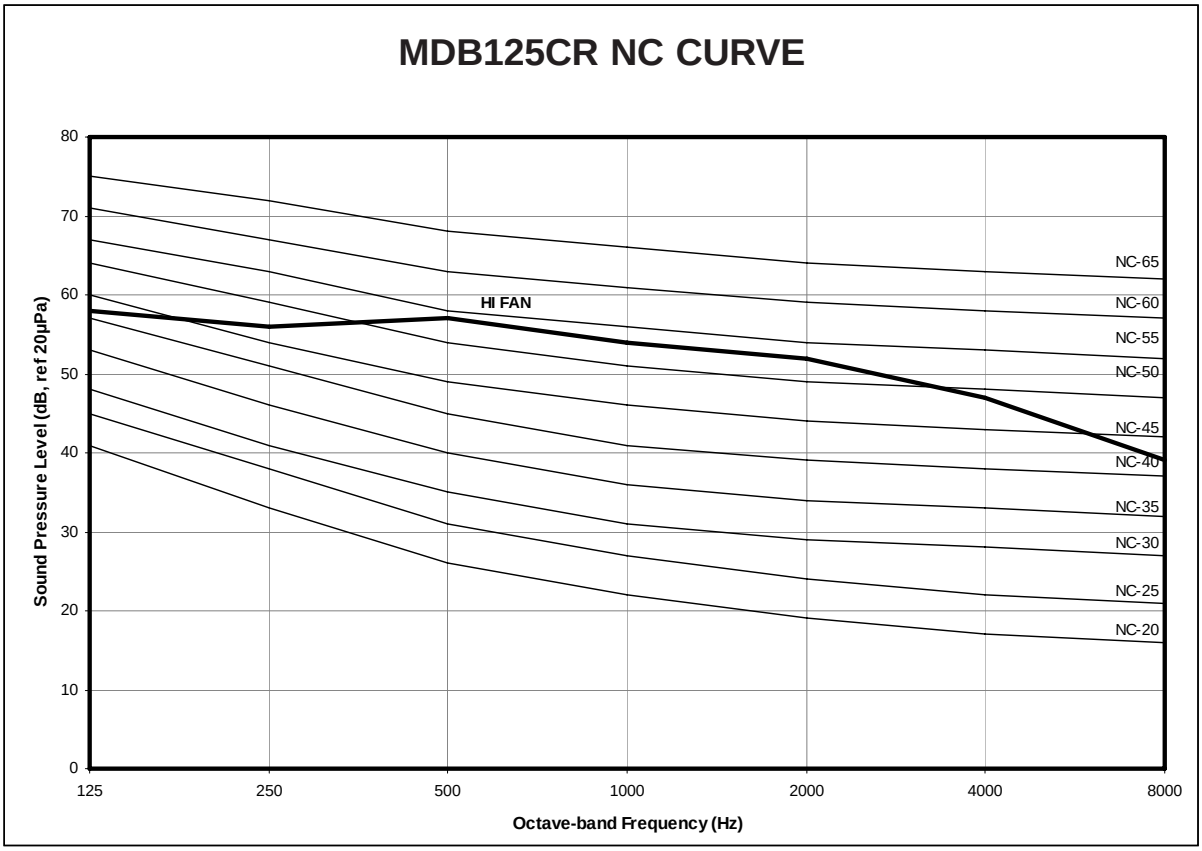
MDB075BR NC CURVE



MDB100BR NC CURVE



MDB125CR NC CURVE



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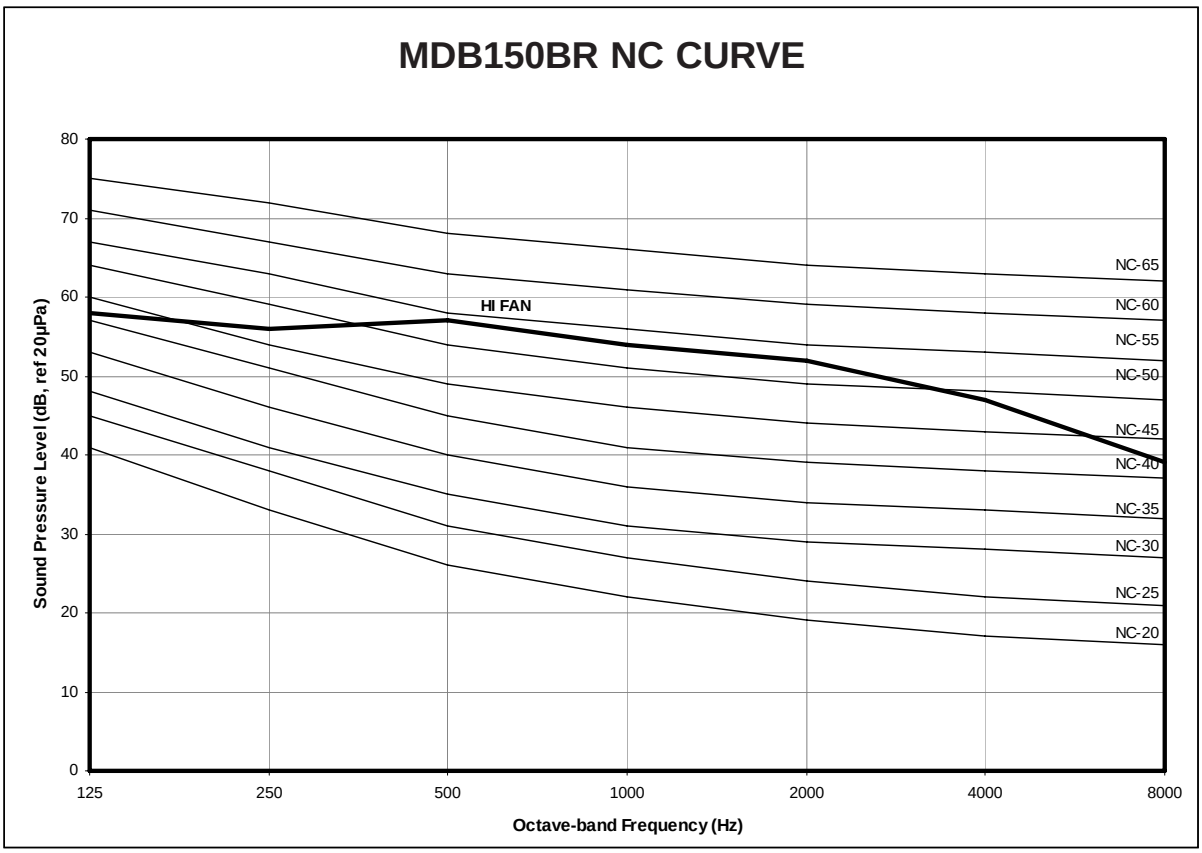
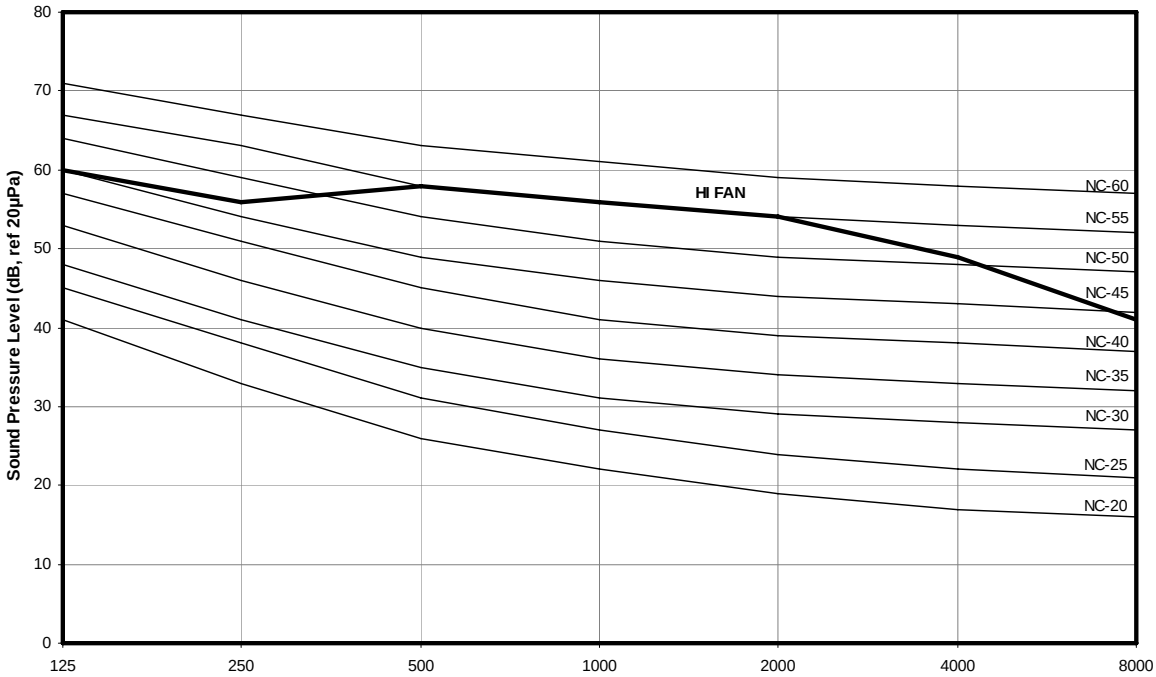
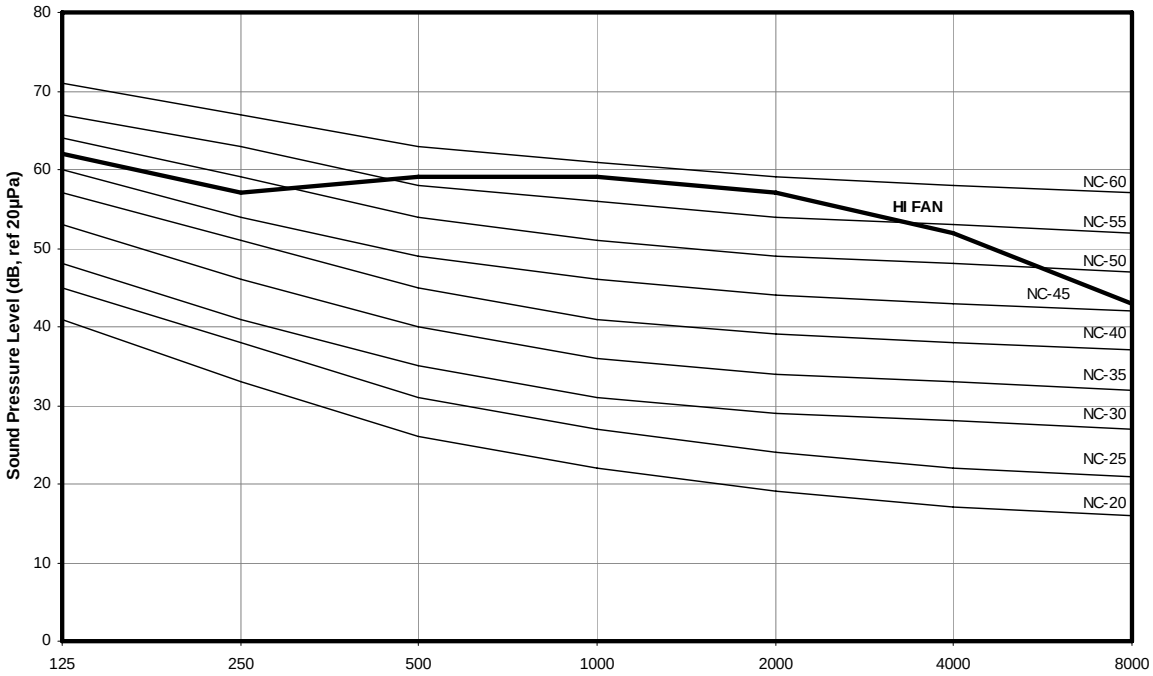


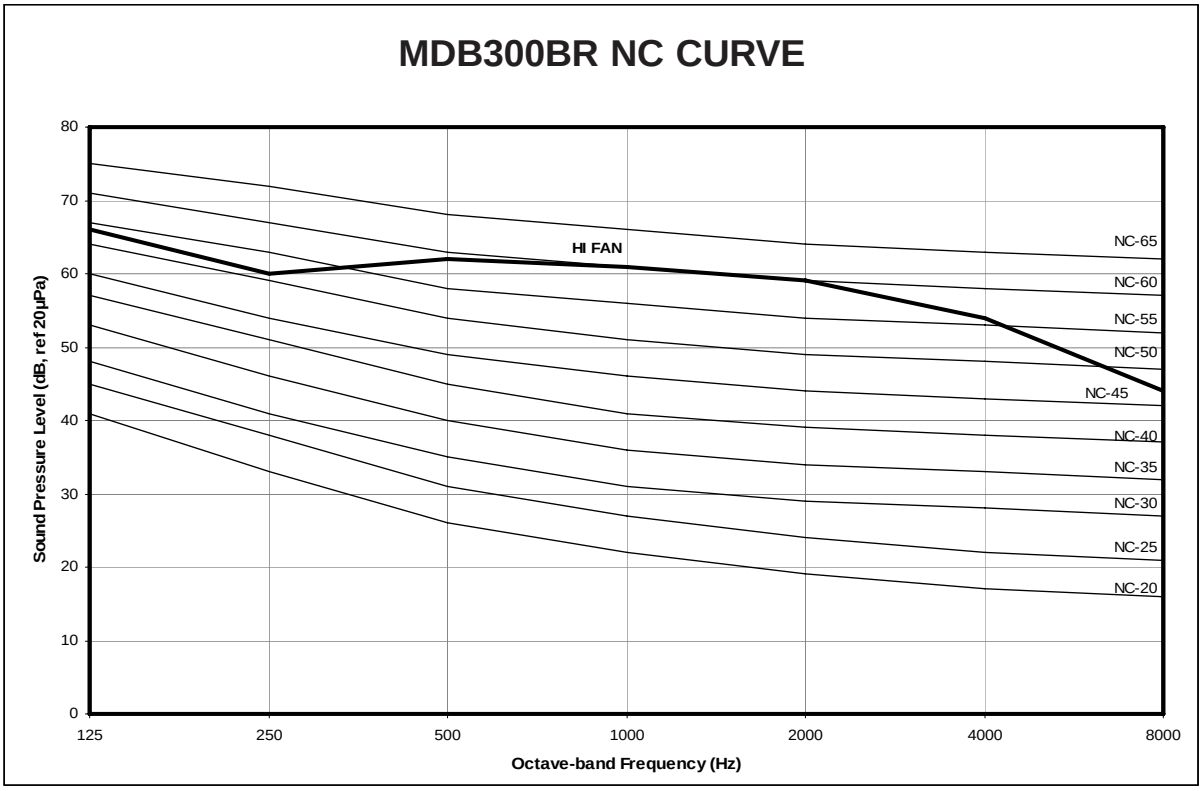
MDB200BR NC CURVE



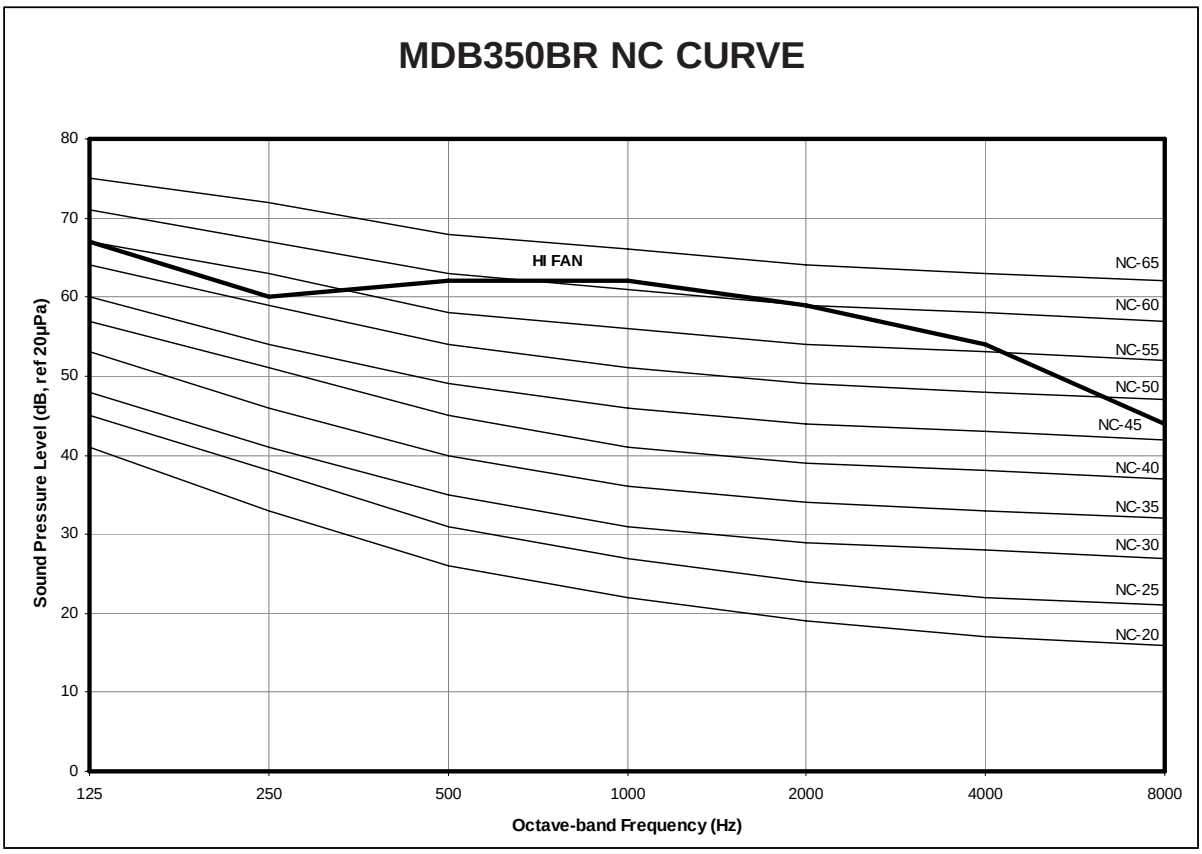
MDB250BR NC CURVE



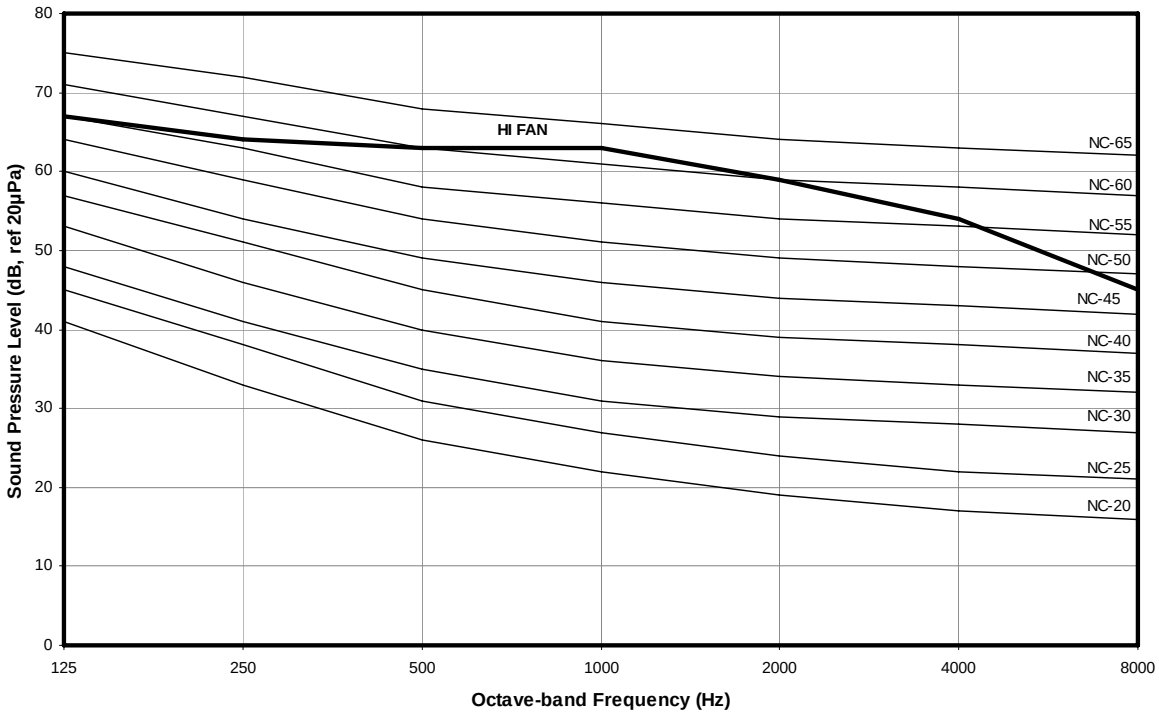
MDB300BR NC CURVE



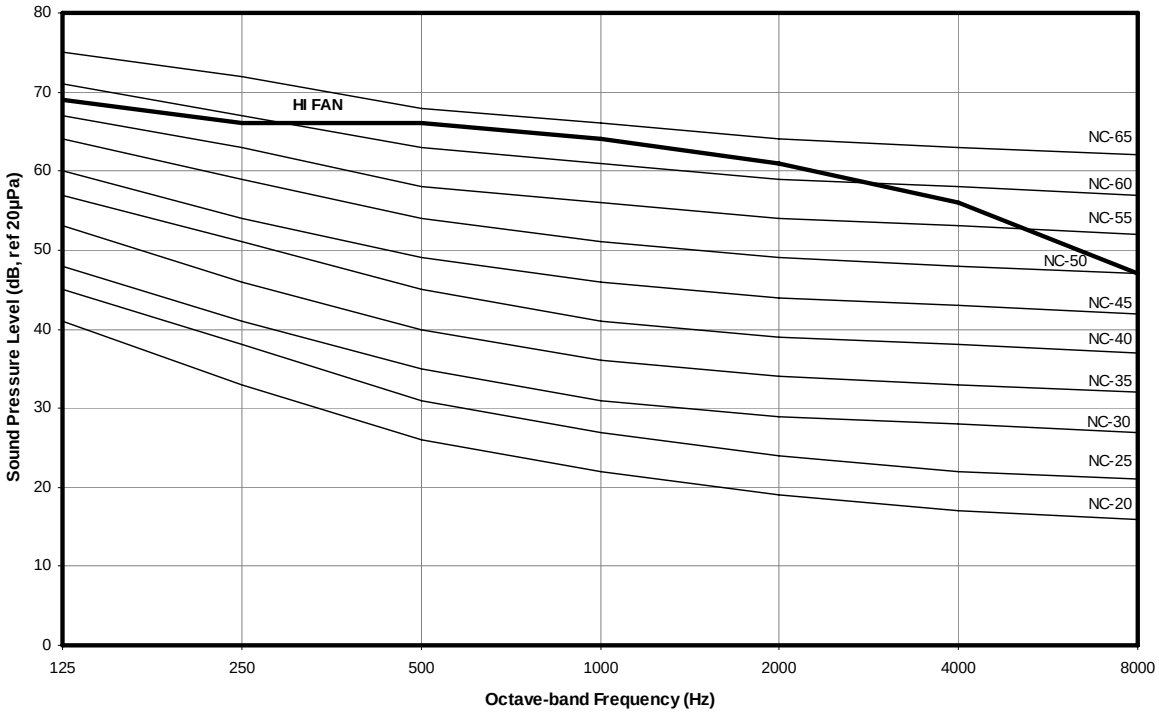
MDB350BR NC CURVE



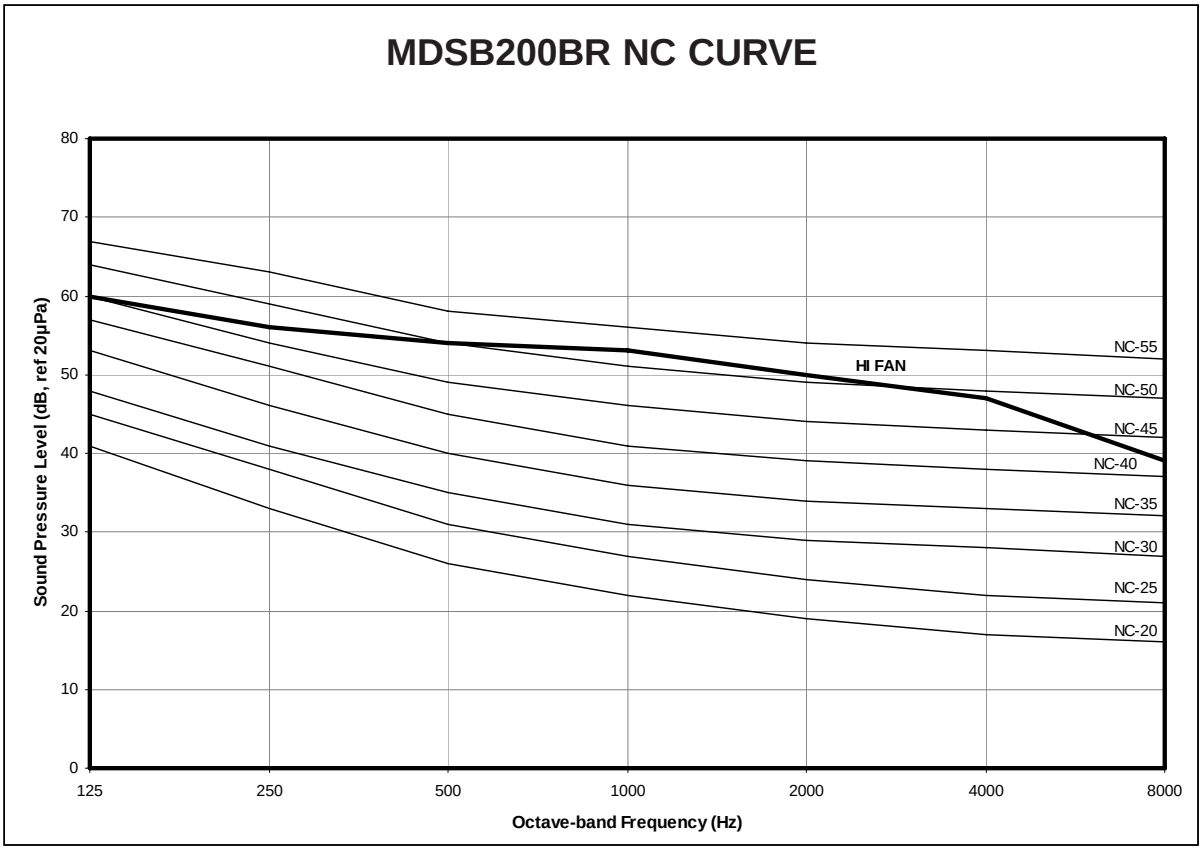
MDB400BR NC CURVE



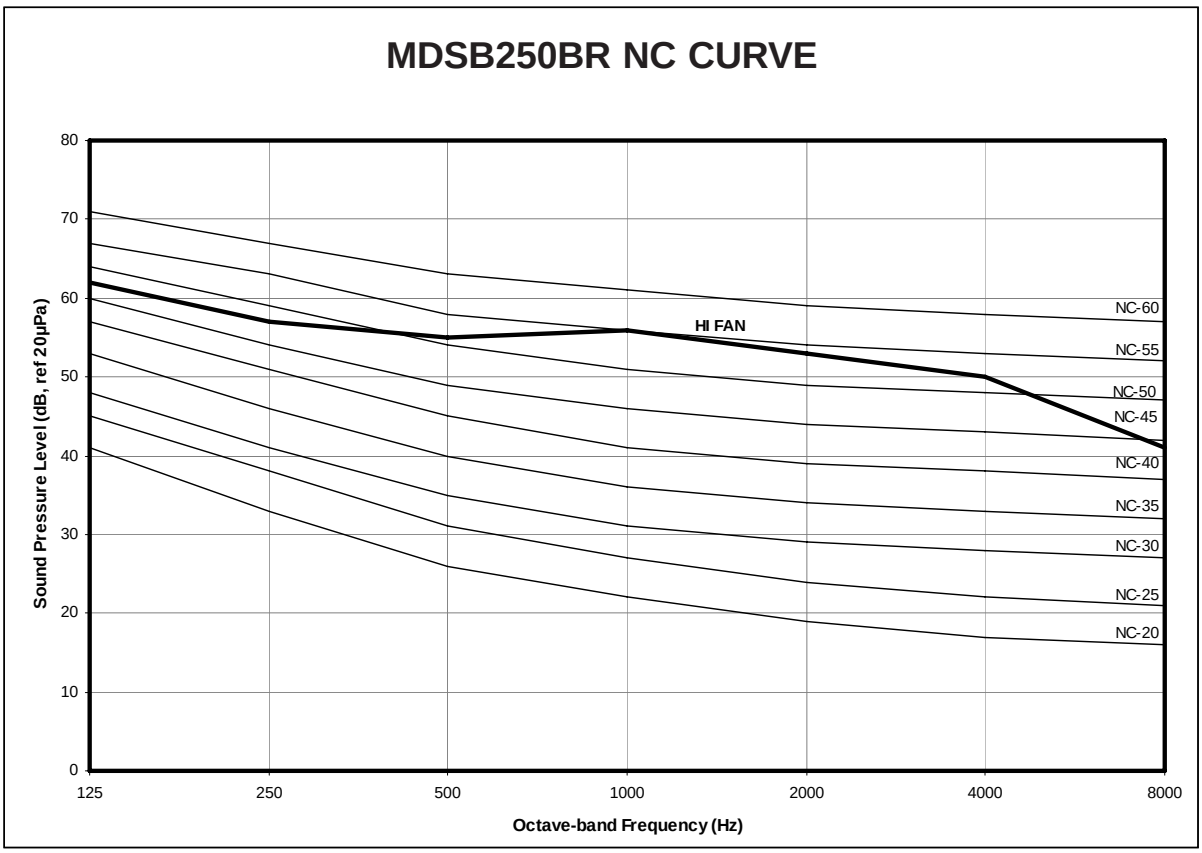
MDB500BR NC CURVE



MDSB200BR NC CURVE



MDSB250BR NC CURVE



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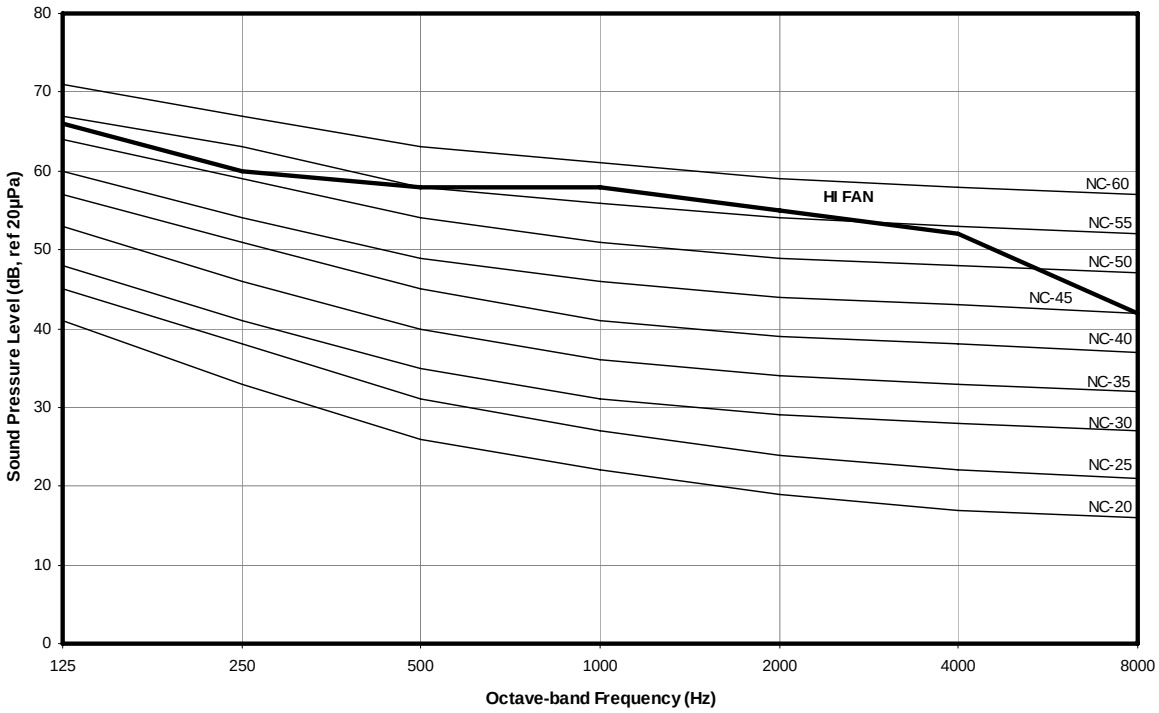

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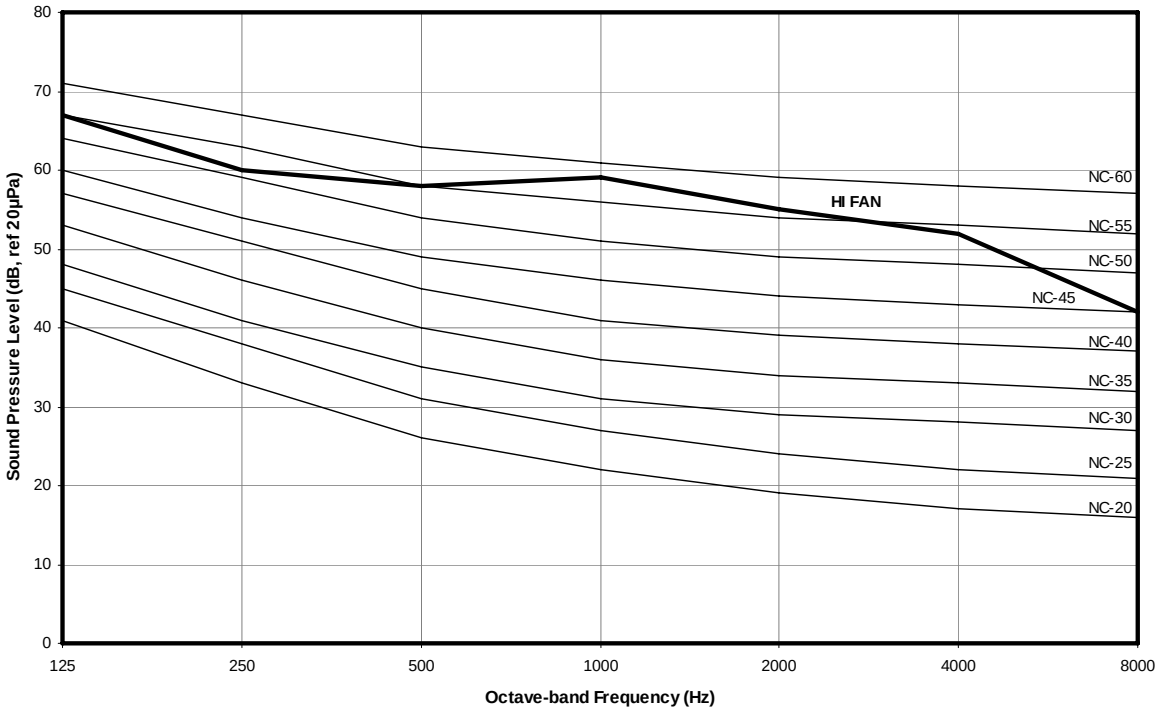
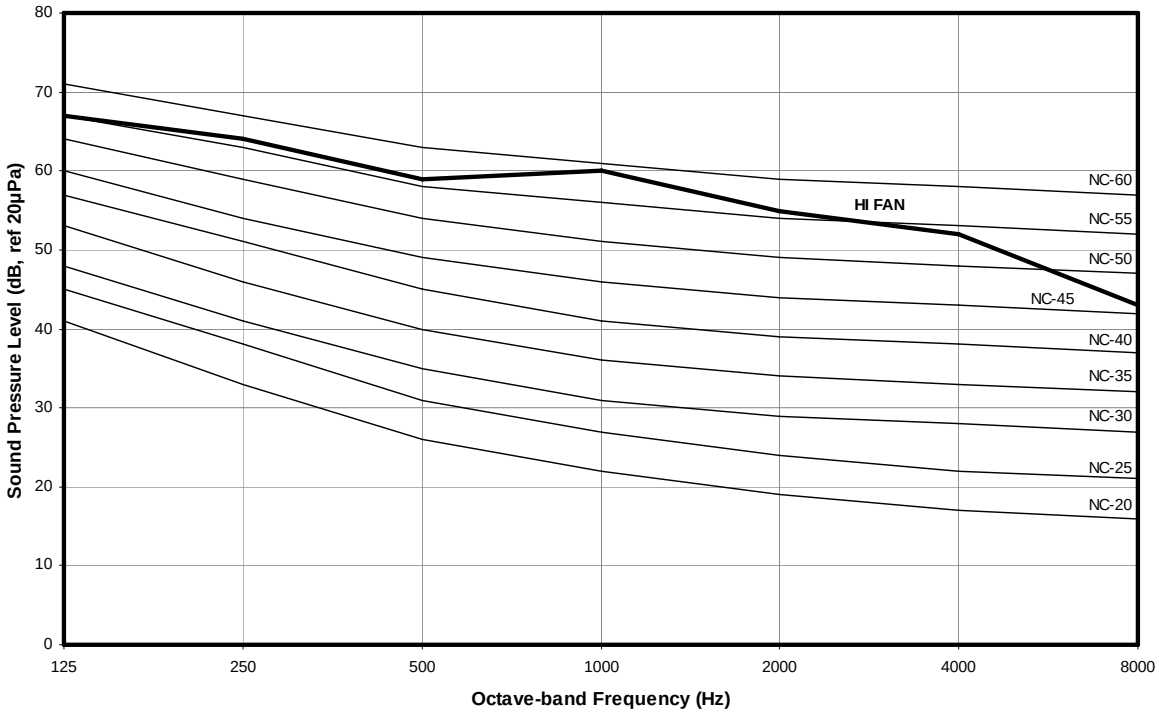
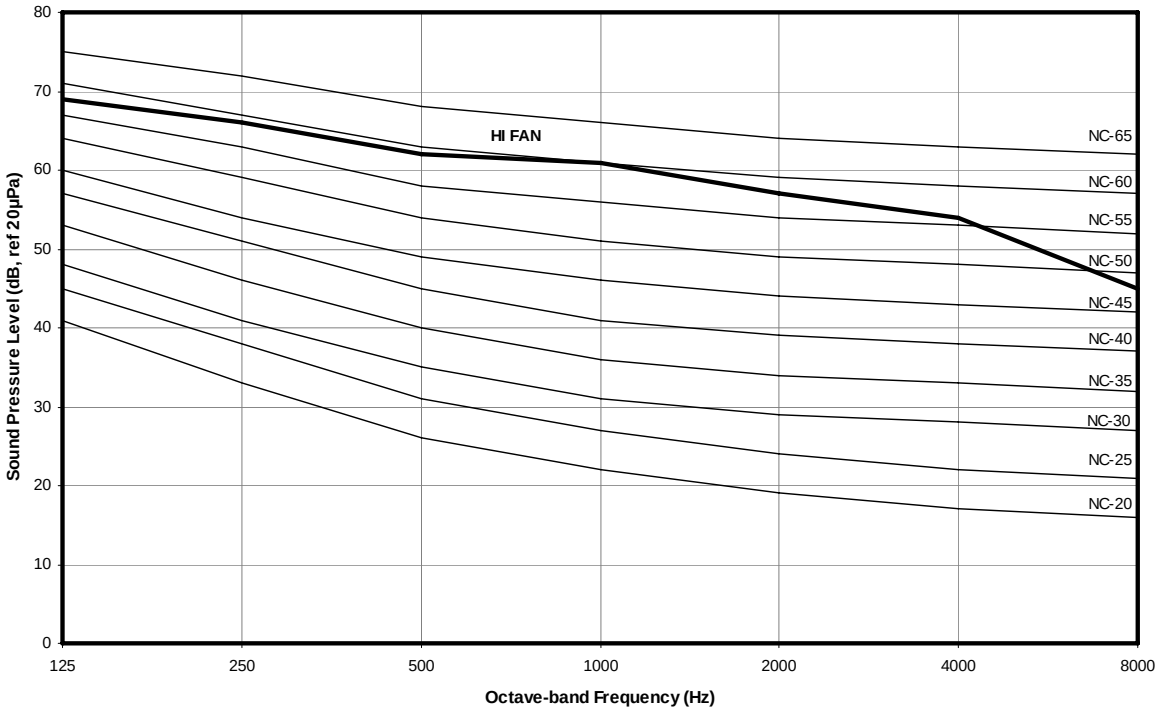


MDSB400BR NC CURVE



MDSB500BR NC CURVE



Selection Process

FAN PERFORMANCE CHART

The following are the design requirements for MDB125CR unit:

Model:	**MDB125CR**		
Supply Air Quantity	=	4250	CFM
External Static Pressure	=	25	mmAq

Step 1:

From the fan curve (at 4250 CFM),
Standard operating system;

Total Static Pressure	=	**33.5**	mmAq
Internal Static Pressure	=	**10.5**	mmAq
External Static Pressure	=	**23.0**	mmAq

External Static Pressure of 23.0 mmAq did not fulfill the design requirements.

Step 2:

Therefore at 4500 CFM and 25 mmAq External static pressure,

Total Static Pressure	=	10.5 + 25	mmAq
	=	**35.5**	mmAq

Step 3:

From the fan curve, the design requirement calls for RPM about 800, whereas the unit can only deliver RPM about 780 under the same CFM. Therefore, it is necessary to resize the pulley sizes.

From the table:

Motor pulley	=	3.5"
Blower pulley	=	6.5"
Motor RPM	=	1425

In order to obtain 800 RPM, we recalculate the new blower pulley as:
(while maintaining the motor pulley)

Db	=	3.5" x (1425/800)
	=	6.234"

The nearest pulley size will be a diameter of 6"

Recheck, with Db = **6"**

Blower pulley	=	1425 x (3.5/6)
	=	**831**

We thus need to change the blower pulley from 6.5" to 6" in order to obtain the higher operating static pressure.

Step 4:

When the pulley is changed, the V-belt length must be rechecked. We have for horizontal air throw configuration:

V-belt length, L	=	2C + 1.57 (Db + Dm)	
	=	(2 x (180 x 0.03937")) + 1.57 (3.5" + 6")	
	=	29.1"	

We thus can use a belt with a length of **30"**

where,	C	=	distance between the centres of the two pulleys
	Db	=	diameter of blower pulley
	Dm	=	diameter of motor pulley

Step 5:

From the fan curve, we can also notice that the motor power input has increased. At the new operating point, the power is approximately 1.25 kW.

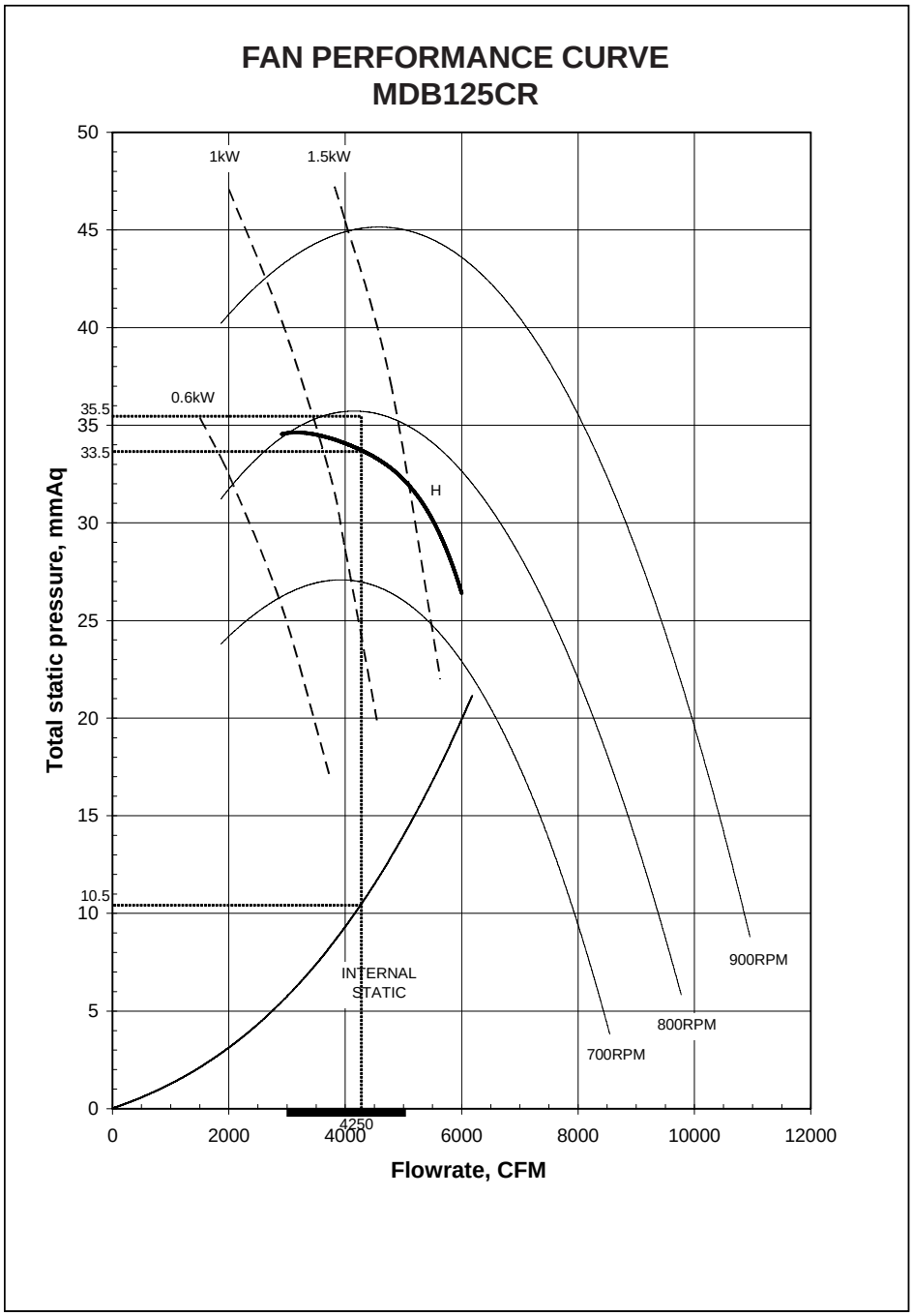
By applying a safety factor of 1.2 to account for losses, we calculate that the motor power input requirement should be = 1.25 x 1.2 = **1.5 kW**
Thus, the existing motor is still sufficient to drive the blower with the smaller 6" pulley.

Summary:

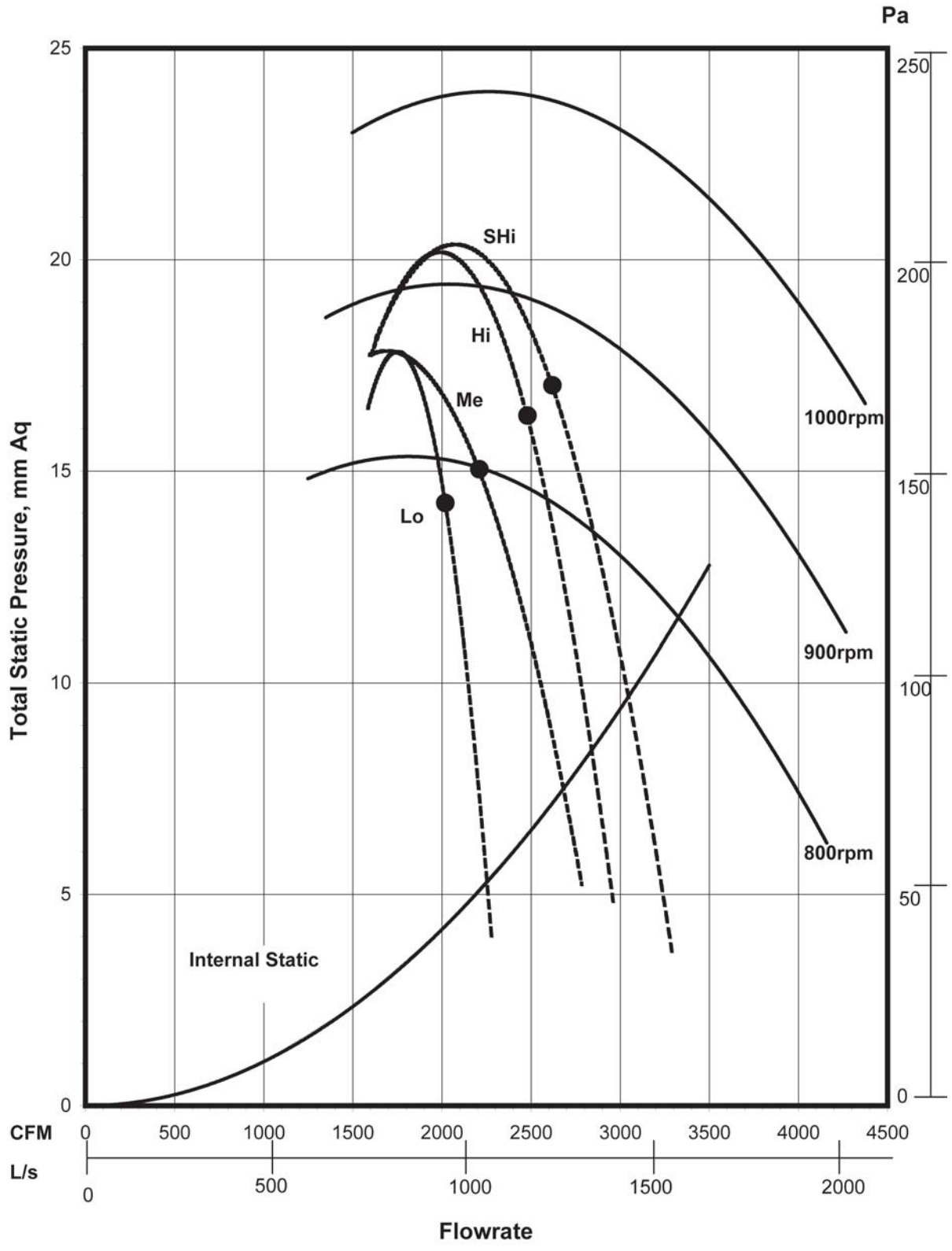
i) Fan motor kW	=	**1.5**	kW
ii) Blower pulley diameter	=	**6"**	
iii) V-belt size	=	**30"**	

The following table summarizes the pulley data, motor size used for the MDB/MDSB series, as manufactured:

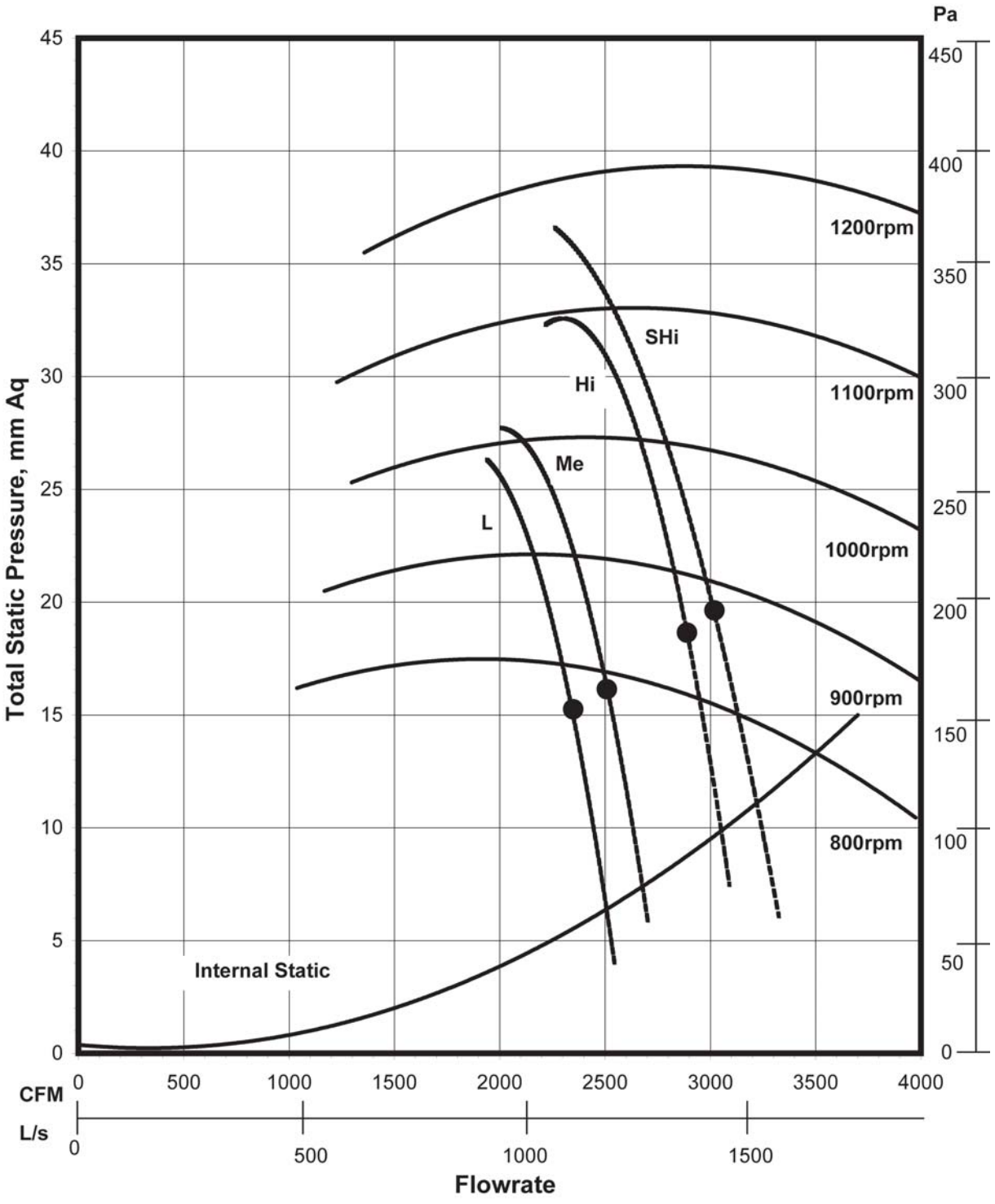
Model	Motor pulley, Dm		Blower pulley, Db		Pulley Centre Distance, C		Motor
	V-pulley	Taper #	V-pulley	Taper #	Horizontal	Vertical	
	(in.)	(mm)	(in.)	(mm)	(mm)	(mm)	kW
MDB 125CR	3.5	85	6.5	160	180	-	1.5
MDB 150BR	4.0	80	8.0	160	319	340	1.5
MDB/MDSB 200BR	4.0	80	7.0	140	314	330	3.0
MDB/MDSB 250BR	6.5	90	12.0	180	599	623	4.0
MDB/MDSB 300BR	6.5	95	12.0	180	599	623	4.0
MDB/MDSB 350BR	6.0	125	12.0	250	840	870	5.5
MDB/MDSB 400BR	5.5	106	13.0	250	732	782	5.5
MDB/MDSB 500BR	6.0	150	12.0	315	700	751	11.0



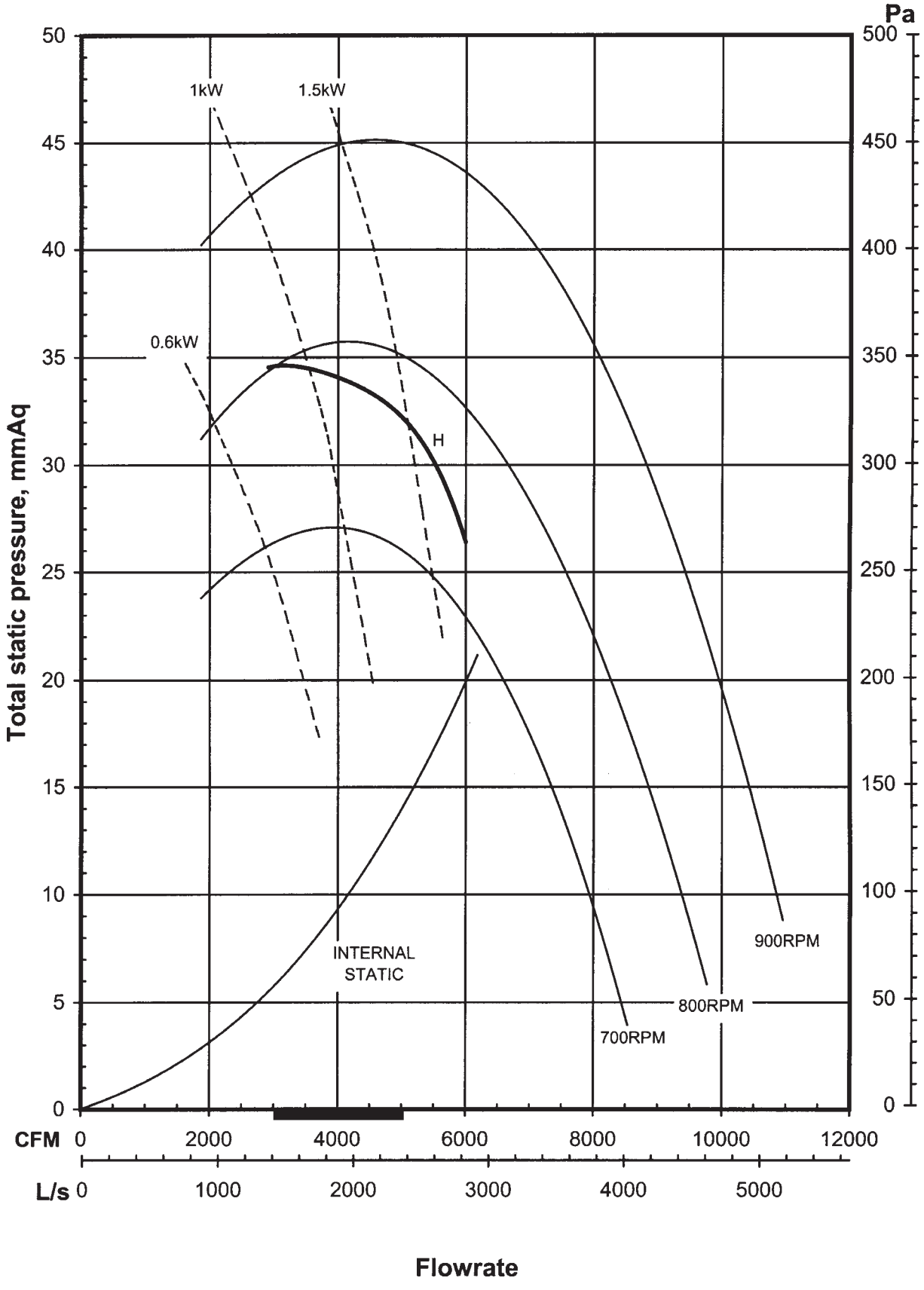
FAN PERFORMANCE CURVE
MDB075BR



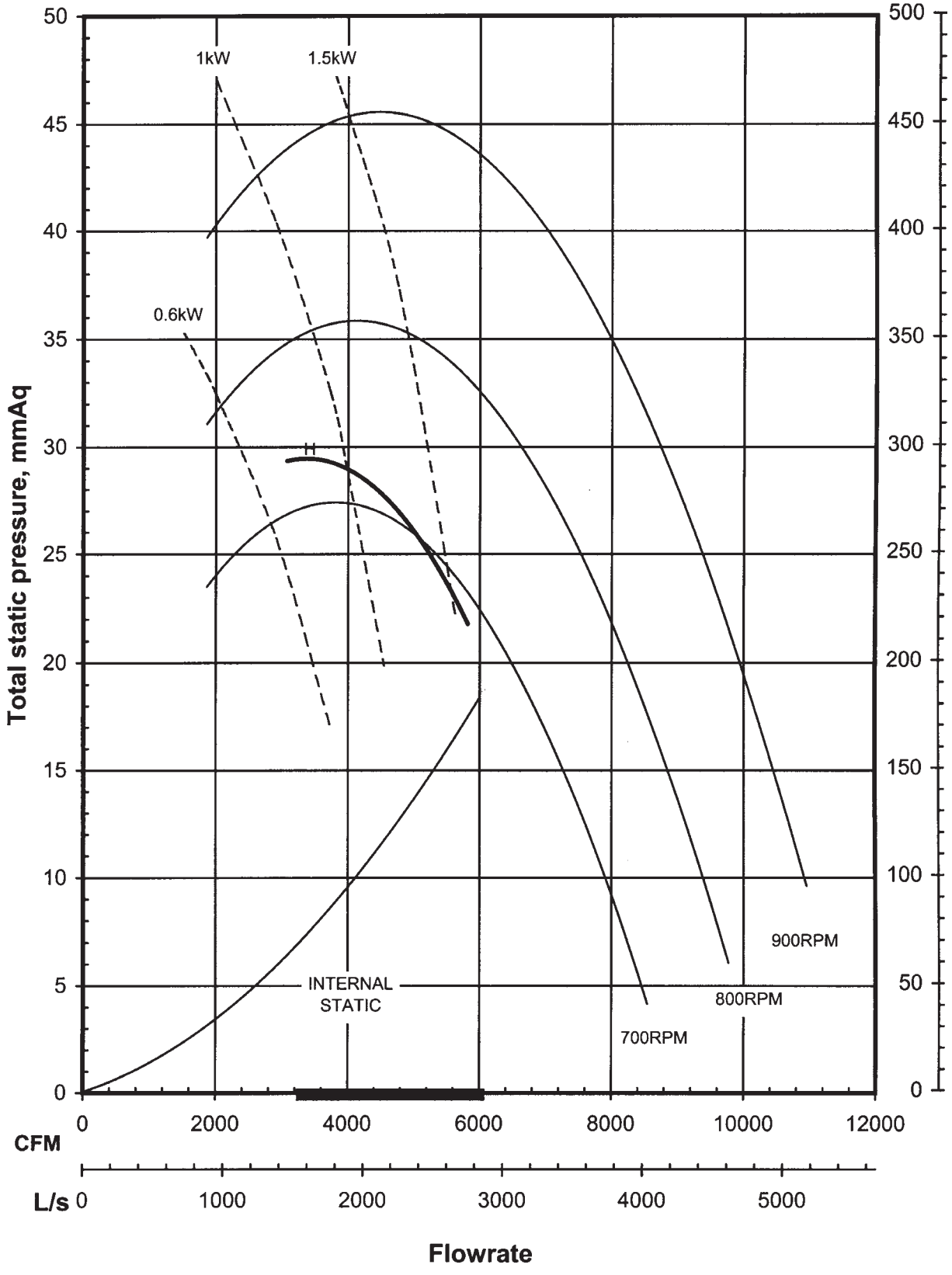
FAN PERFORMANCE CURVE
MDB100BR



FAN PERFORMANCE CURVE
MDB125CR



FAN PERFORMANCE CURVE
MDB150BR



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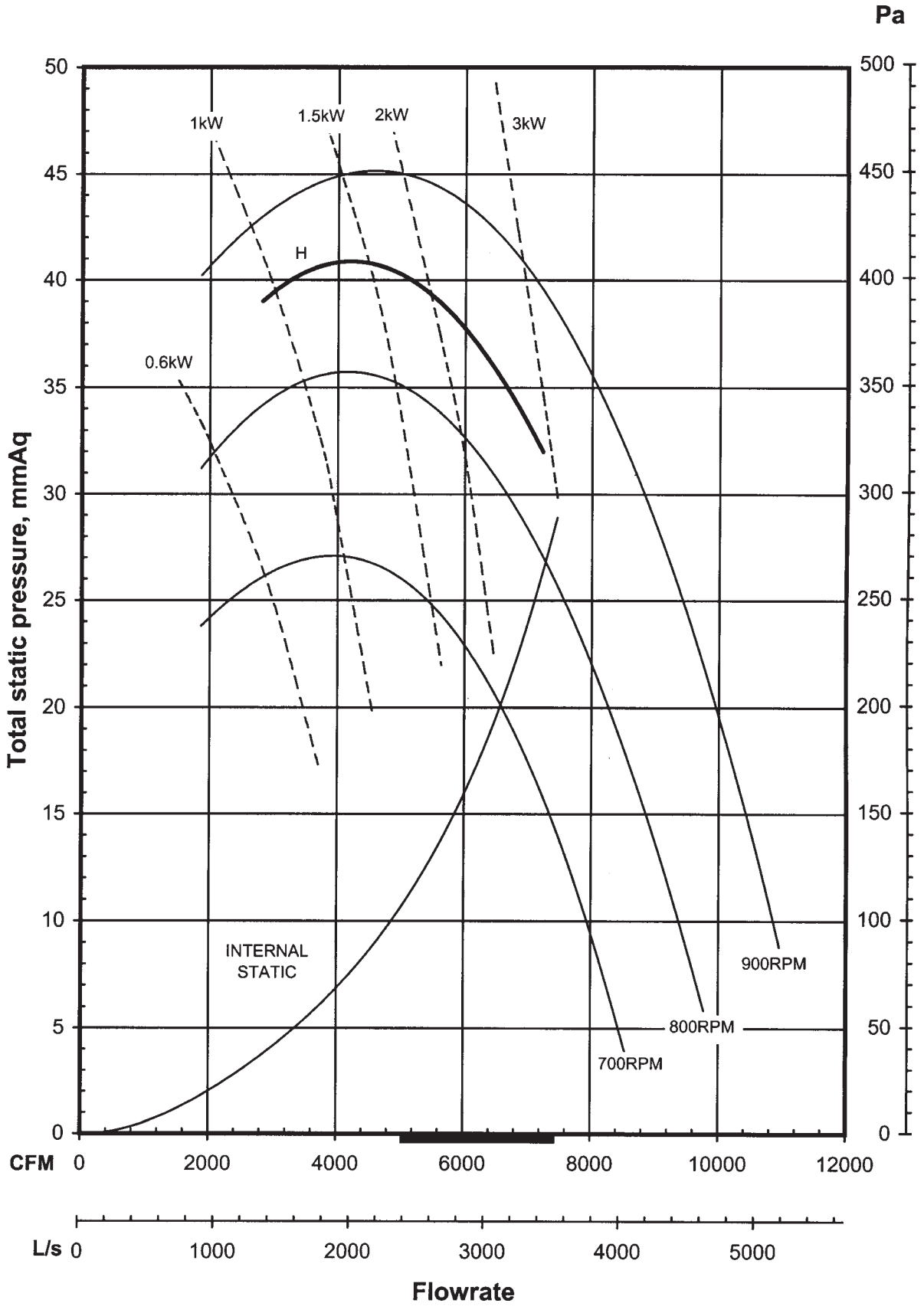
MDB/MDSB200BR



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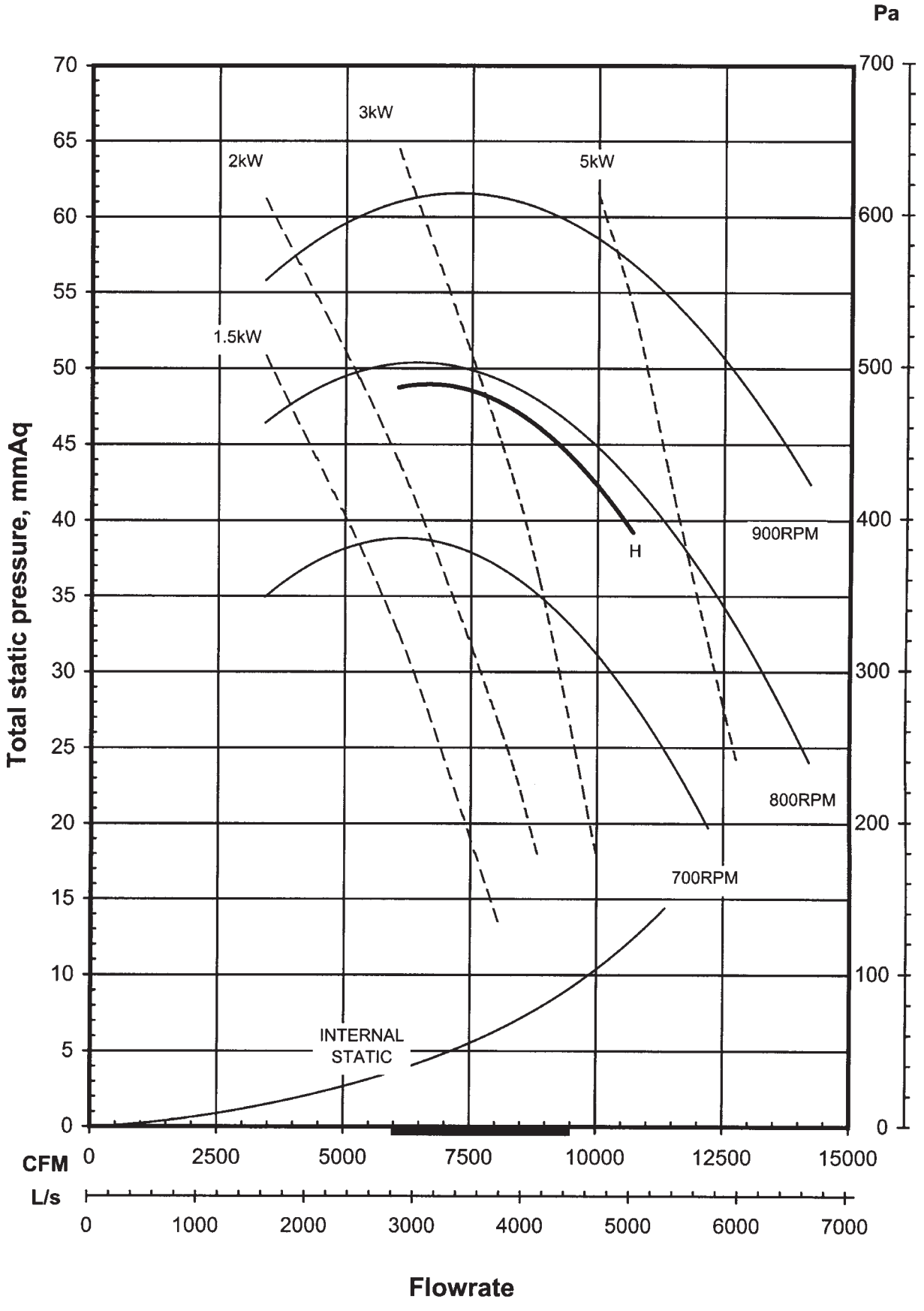
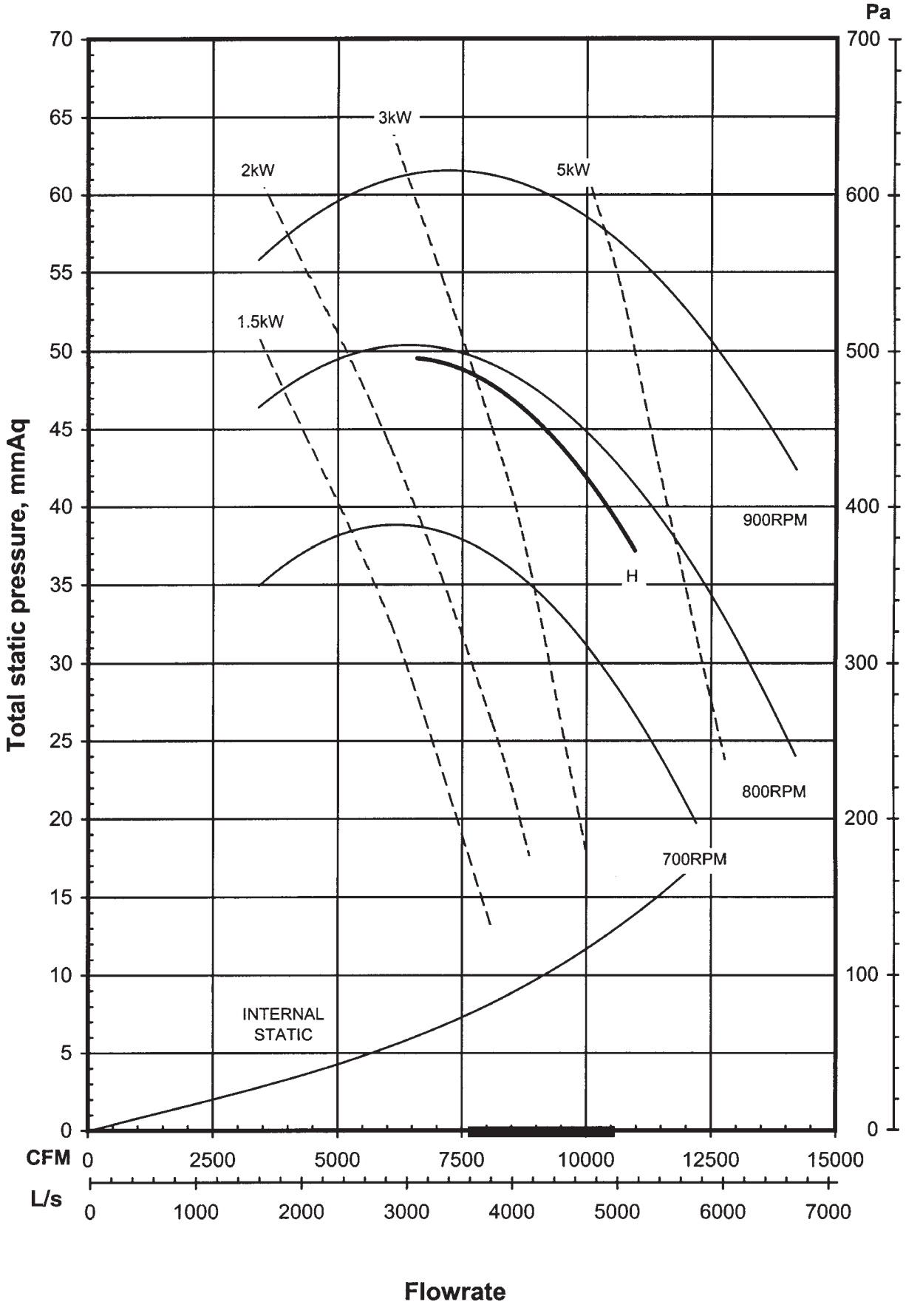
MDB/MDSB250BR



FAN PERFORMANCE CURVE
MDB/MDSB300BR



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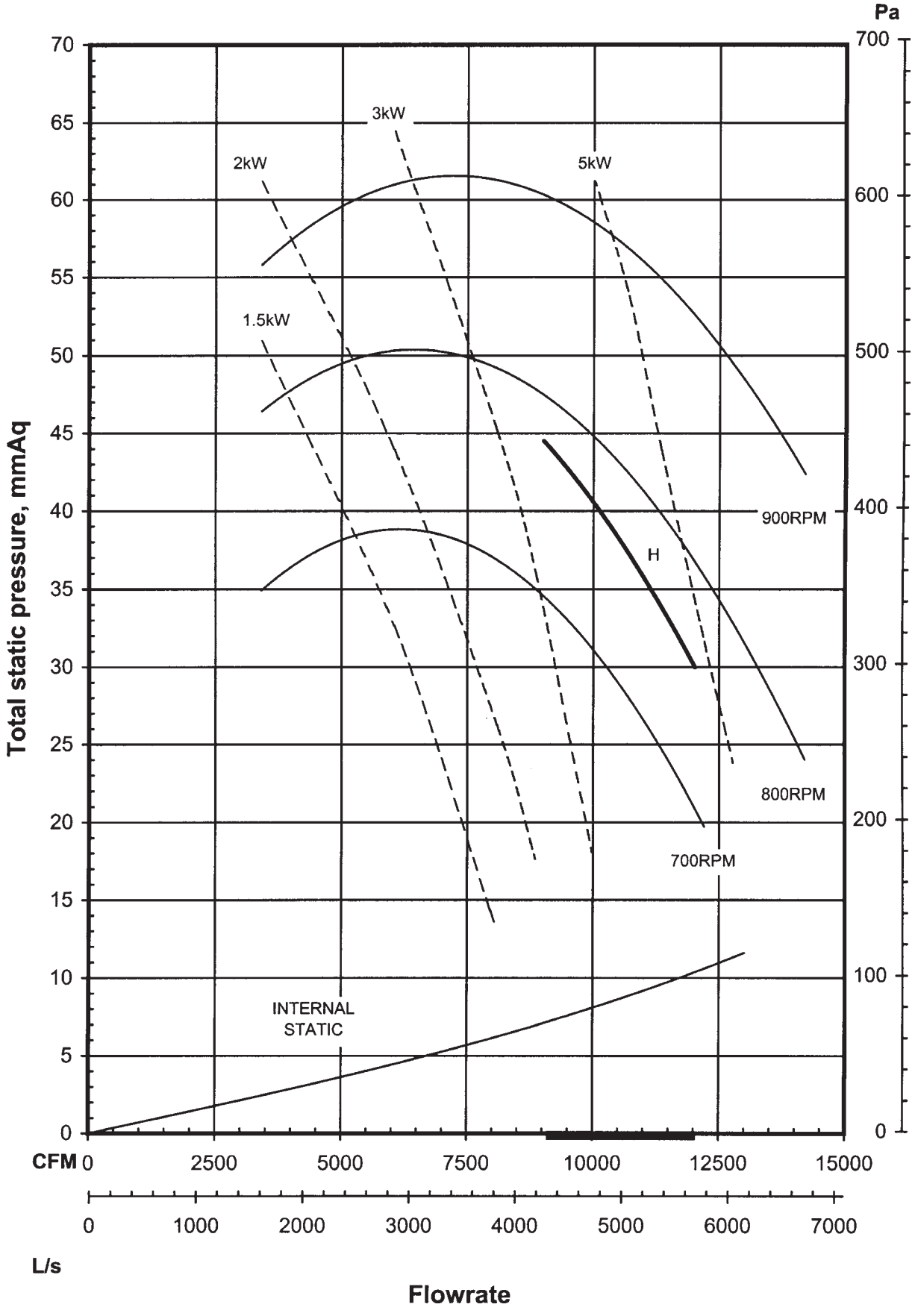

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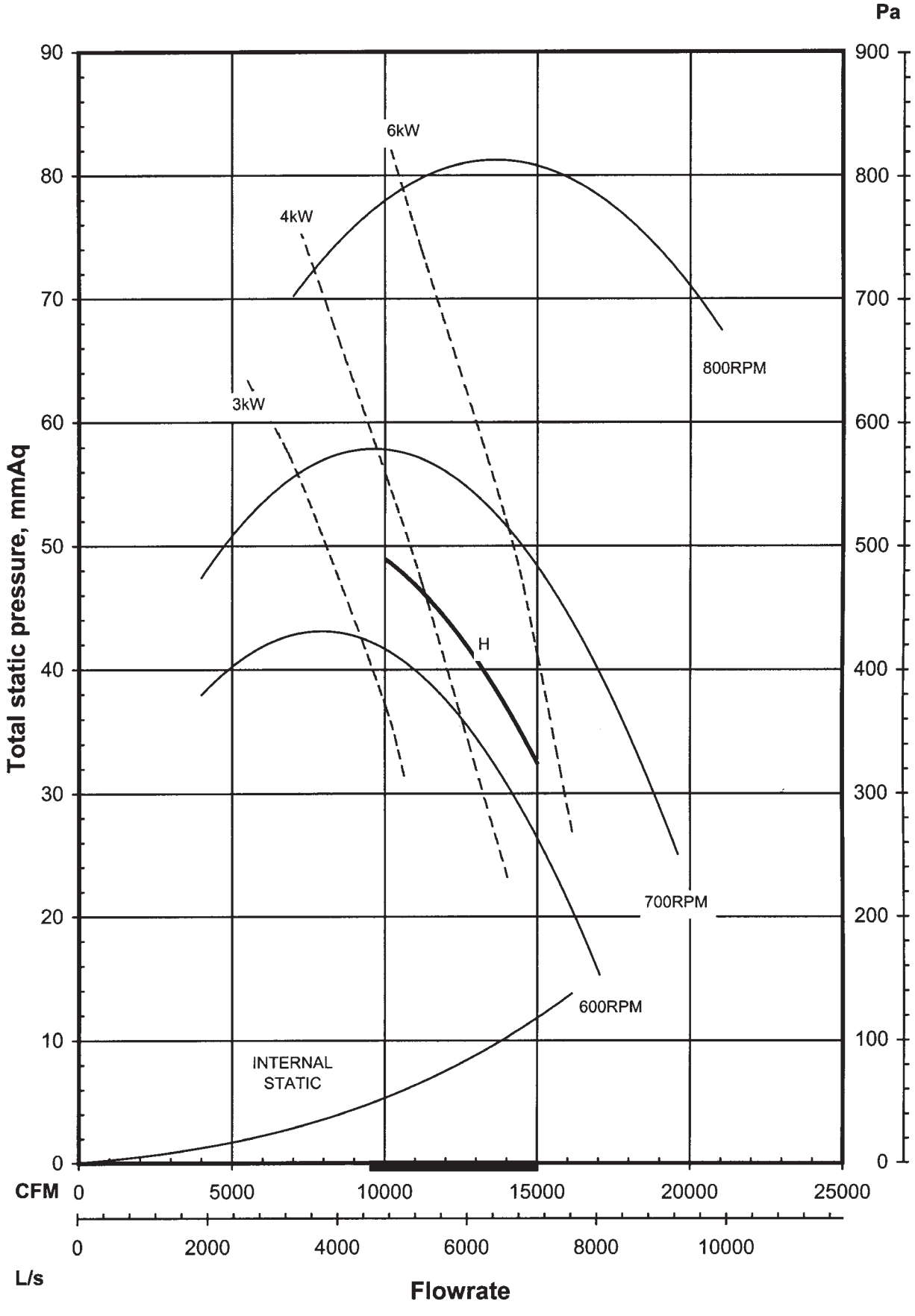

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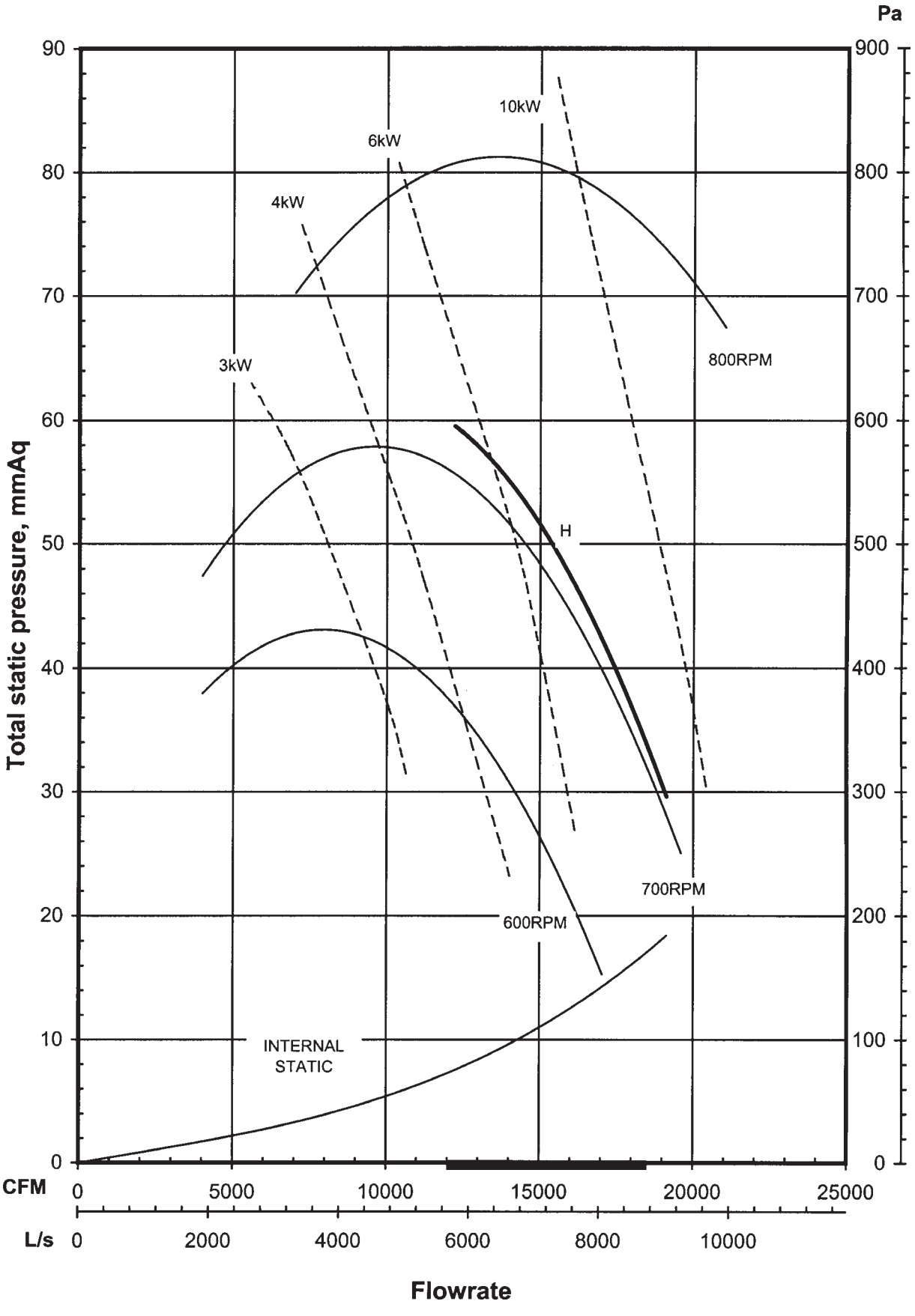
MDB/MDSB500BR



General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDB250BR2**
		OUTDOOR UNIT			**MMC125BR x 2**
NOMINAL COOLING CAPACITY				**Btu/h**	232,000
				W	67,995
NOMINAL HEATING CAPACITY				**Btu/h**	240,000
				W	70,340
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	23,466
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	20,122
NOMINAL RUNNING CURRENT (COOLING)				**A**	43.2
NOMINAL RUNNING CURRENT (HEATING)				**A**	39.4
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.24
COP				**W/W**	3.99
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	3776 / 8000
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	417.2 / 1.67
	SOUND PRESSURE LEVEL			**dBA**	63
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1231 / 48.46
			WIDTH	**mm/in**	1866 / 73.46
			DEPTH	**mm/in**	1259 / 49.56
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1506 / 59.29
			WIDTH	**mm/in**	2034 / 80.08
			DEPTH	**mm/in**	1412 / 55.59
	UNIT WEIGHT			**kg/lb**	343 / 756
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	34.92 / 1⅜
	REFRIGERANT CHARGE			**kg/lb**	6.50 (x2) / 14.33 (x2)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL	**INDOOR UNIT**			**MDB300BR3**
	OUTDOOR UNIT			**MMC100BR x 3**
NOMINAL COOLING CAPACITY			**Btu/h**	296,400
			W	86,870
NOMINAL HEATING CAPACITY			**Btu/h**	289,500
			W	84,848
NOMINAL TOTAL INPUT POWER (COOLING)			**W**	31,801
NOMINAL TOTAL INPUT POWER (HEATING)			**W**	29,575
NOMINAL RUNNING CURRENT (COOLING)			**A**	59.6
NOMINAL RUNNING CURRENT (HEATING)			**A**	57.2
POWER SOURCE			**V/Ph/Hz**	380~415 / 3 / 50
EER			**W/W**	3.00
COP			**W/W**	3.17
REFRIGERANT TYPE				R22
REFRIGERANT CONTROL				OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**		WIRED CONTROL
	AIR FLOW	**HIGH**	**l/s / cfm**	4248 / 9000
	EXTERNAL STATIC PRESSURE		**Pa / in.wg.**	325.5 / 1.31
	SOUND PRESSURE LEVEL		**dBA**	66
	UNIT DIMENSION	**HEIGHT**	**mm/in**	1231 / 48.46
		WIDTH	**mm/in**	1866 / 73.46
		DEPTH	**mm/in**	1259 / 49.56
	PACKING DIMENSION	**HEIGHT**	**mm/in**	1506 / 59.29
		WIDTH	**mm/in**	2034 / 80.08
		DEPTH	**mm/in**	1412 / 55.59
	UNIT WEIGHT		**kg/lb**	346 / 762
	CONDENSATE DRAIN SIZE		**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**		**l/s / cfm**	2832 / 6000
	SOUND PRESSURE LEVEL		**dBA**	65
	UNIT DIMENSION	**HEIGHT**	**mm/in**	946 / 37.24
		WIDTH	**mm/in**	1116 / 43.93
		DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION	**HEIGHT**	**mm/in**	1132 / 44.57
		WIDTH	**mm/in**	1282 / 50.47
		DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT		**kg/lb**	164 / 361
	PIPE CONNECTION	**TYPE**		BRAZING
		SIZE **LIQUID**	**mm/in**	15.88 / ⅝
		GAS	**mm/in**	28.58 / 1⅛
	REFRIGERANT CHARGE		**kg/lb**	5.60 (x3) / 12.35 (x3)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDB350BR3**	
		OUTDOOR UNIT			**MMC100BR x 1**	**MMC125BR x 2**
NOMINAL COOLING CAPACITY				**Btu/h**	330,800	
				W	96,952	
NOMINAL HEATING CAPACITY				**Btu/h**	336,500	
				W	98,623	
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	33,873	
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	29,787	
NOMINAL RUNNING CURRENT (COOLING)				**A**	62.8	
NOMINAL RUNNING CURRENT (HEATING)				**A**	58.2	
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50	
EER				**W/W**	3.17	
COP				**W/W**	3.72	
REFRIGERANT TYPE					R22	
REFRIGERANT CONTROL					OUTDOOR TXV	
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL	
	AIR FLOW		**HIGH**	**l/s / cfm**	4956 / 10500	
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	289.9 / 1.16	
	SOUND PRESSURE LEVEL			**dBA**	66	
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1486 / 58.50	
			WIDTH	**mm/in**	2122 / 83.54	
			DEPTH	**mm/in**	1259 / 49.56	
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1766 / 69.53	
			WIDTH	**mm/in**	2279 / 89.72	
			DEPTH	**mm/in**	1412 / 55.59	
	UNIT WEIGHT			**kg/lb**	440 / 970	
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00	
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57	
			WIDTH	**mm/in**	1282 / 50.47	
			DEPTH	**mm/in**	1112 / 43.78	
	UNIT WEIGHT			**kg/lb**	164 / 361	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING	BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / 5/8	15.88 / 5/8
			GAS	**mm/in**	28.58 / 1 1/8	34.92 / 1 3/8
	REFRIGERANT CHARGE			**kg/lb**	5.60 / 12.35	6.50 (x2) / 14.33 (x2)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDB400BR4**
		OUTDOOR UNIT			**MMC100BR x 4**
NOMINAL COOLING CAPACITY				**Btu/h**	395,200
				W	115,826
NOMINAL HEATING CAPACITY				**Btu/h**	386,000
				W	113,130
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	41,903
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	38,935
NOMINAL RUNNING CURRENT (COOLING)				**A**	78.7
NOMINAL RUNNING CURRENT (HEATING)				**A**	75.5
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.04
COP				**W/W**	3.22
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	5664 / 12000
	EXTERNAL STATIC PRESSURE (H/M/L)			**Pa / in.wg.**	356.7 / 1.43
	SOUND PRESSURE LEVEL (H/M/L)			**dBA**	66
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1486 / 58.50
			WIDTH	**mm/in**	2274 / 89.52
			DEPTH	**mm/in**	1526 / 60.07
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1766 / 69.53
			WIDTH	**mm/in**	2431 / 95.81
			DEPTH	**mm/in**	1684 / 66.3
	UNIT WEIGHT			**kg/lb**	513 / 1130
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	164 / 361
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	28.58 / 1⅛
	REFRIGERANT CHARGE			**kg/lb**	5.60 (x4) / 12.35 (x4)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDB500BR4**
		OUTDOOR UNIT			**MMC125BR x 4**
NOMINAL COOLING CAPACITY				**Btu/h**	464,000
				W	135,991
NOMINAL HEATING CAPACITY				**Btu/h**	480,000
				W	140,680
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	48,227
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	41,539
NOMINAL RUNNING CURRENT (COOLING)				**A**	88.4
NOMINAL RUNNING CURRENT (HEATING)				**A**	80.8
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.21
COP				**W/W**	3.95
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	7080 / 15000
	EXTERNAL STATIC PRESSURE (H/M/L)			**Pa / in.wg.**	393.7 / 1.58
	SOUND PRESSURE LEVEL (H/M/L)			**dBA**	68
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1486 / 58.50
			WIDTH	**mm/in**	2274 / 89.52
			DEPTH	**mm/in**	1526 / 60.07
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1766 / 69.53
			WIDTH	**mm/in**	2431 / 95.81
			DEPTH	**mm/in**	1684 / 66.3
	UNIT WEIGHT			**kg/lb**	606 / 1335
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	34.92 / 1⅜
	REFRIGERANT CHARGE			**kg/lb**	6.50 (x4) / 14.33 (x4)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB200BR2**
		OUTDOOR UNIT			**MMC100BR x 2**
NOMINAL COOLING CAPACITY				**Btu/h**	197,600
				W	57,913
NOMINAL HEATING CAPACITY				**Btu/h**	193,000
				W	56,565
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	21,264
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	19,780
NOMINAL RUNNING CURRENT (COOLING)				**A**	40.0
NOMINAL RUNNING CURRENT (HEATING)				**A**	38.4
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	2.93
COP				**W/W**	3.09
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	3021 / 6400
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	158.2 / 0.64
	SOUND PRESSURE LEVEL			**dBA**	58
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1015 / 39.96
			WIDTH	**mm/in**	1904 / 74.96
			DEPTH	**mm/in**	1107.5 / 43.60
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1206 / 47.48
			WIDTH	**mm/in**	2084 / 82.14
			DEPTH	**mm/in**	1188 / 46.77
	UNIT WEIGHT			**kg/lb**	220 / 485
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	164 / 361
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	28.58 / 1⅛
	REFRIGERANT CHARGE			**kg/lb**	5.60 (x2) / 12.35 (x2)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB250BR2**
		OUTDOOR UNIT			**MMC125BR x 2**
NOMINAL COOLING CAPACITY				**Btu/h**	232,000
				W	67,995
NOMINAL HEATING CAPACITY				**Btu/h**	240,000
				W	70,340
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	23,466
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	20,122
NOMINAL RUNNING CURRENT (COOLING)				**A**	43.2
NOMINAL RUNNING CURRENT (HEATING)				**A**	39.4
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.24
COP				**W/W**	3.99
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	3776 / 8000
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	417.2 / 1.67
	SOUND PRESSURE LEVEL			**dBA**	60
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1378 / 54.25
			WIDTH	**mm/in**	1933.7 / 76.13
			DEPTH	**mm/in**	1243.5 / 48.95
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1590 / 62.59
			WIDTH	**mm/in**	2134 / 84.01
			DEPTH	**mm/in**	1437 / 56.57
	UNIT WEIGHT			**kg/lb**	343 / 756
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	34.92 / 1⅜
	REFRIGERANT CHARGE			**kg/lb**	6.50 (x2) / 14.33 (x2)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB300BR3**
		OUTDOOR UNIT			**MMC100BR x 3**
NOMINAL COOLING CAPACITY				**Btu/h**	296,400
				W	86,870
NOMINAL HEATING CAPACITY				**Btu/h**	289,500
				W	84,848
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	31,801
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	29,575
NOMINAL RUNNING CURRENT (COOLING)				**A**	59.6
NOMINAL RUNNING CURRENT (HEATING)				**A**	57.2
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.00
COP				**W/W**	3.17
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	4248 / 9000
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	325.5 / 1.31
	SOUND PRESSURE LEVEL			**dBA**	63
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1378 / 54.25
			WIDTH	**mm/in**	1933.7 / 46.13
			DEPTH	**mm/in**	1243.5 / 48.95
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1590 / 62.59
			WIDTH	**mm/in**	2134 / 84.01
			DEPTH	**mm/in**	1437 / 56.57
	UNIT WEIGHT			**kg/lb**	346 / 762
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	164 / 361
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	28.58 / 1⅛
	REFRIGERANT CHARGE			**kg/lb**	5.60 (x3) / 12.35 (x3)

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB350BR3**	
		OUTDOOR UNIT			**MMC100BR x 1**	**MMC125BR x 2**
NOMINAL COOLING CAPACITY				**Btu/h**	330,800	
				W	96,952	
NOMINAL HEATING CAPACITY				**Btu/h**	336,500	
				W	98,623	
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	33,873	
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	29,787	
NOMINAL RUNNING CURRENT (COOLING)				**A**	62.8	
NOMINAL RUNNING CURRENT (HEATING)				**A**	58.2	
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50	
EER				**W/W**	3.17	
COP				**W/W**	3.72	
REFRIGERANT TYPE					R22	
REFRIGERANT CONTROL					OUTDOOR TXV	
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL	
	AIR FLOW		**HIGH**	**l/s / cfm**	4956 / 10500	
	EXTERNAL STATIC PRESSURE			**Pa / in.wg.**	289.9 / 1.16	
	SOUND PRESSURE LEVEL			**dBA**	63	
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1652 / 65.03	
			WIDTH	**mm/in**	2142.3 / 84.34	
			DEPTH	**mm/in**	1335 / 52.55	
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1868 / 73.54	
			WIDTH	**mm/in**	2370 / 93.30	
			DEPTH	**mm/in**	1537.4 / 60.52	
	UNIT WEIGHT			**kg/lb**	440 / 970	
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00	
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	164 / 361	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING	BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / 5/8	15.88 / 5/8
			GAS	**mm/in**	28.58 / 1 1/8	34.92 / 1 3/8
	REFRIGERANT CHARGE			**kg/lb**	5.60 / 12.35	6.50 (x2) / 14.33 (x2)

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253
3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB400BR4**
		OUTDOOR UNIT			**MMC100BR x 4**
NOMINAL COOLING CAPACITY				**Btu/h**	395,200
				W	115,826
NOMINAL HEATING CAPACITY				**Btu/h**	386,000
				W	113,130
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	41,903
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	38,935
NOMINAL RUNNING CURRENT (COOLING)				**A**	78.7
NOMINAL RUNNING CURRENT (HEATING)				**A**	75.5
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.04
COP				**W/W**	3.22
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	5664 / 12000
	EXTERNAL STATIC PRESSURE (H/M/L)			**Pa / in.wg.**	356.7 / 1.43
	SOUND PRESSURE LEVEL (H/M/L)			**dBA**	64
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1610 / 63.38
			WIDTH	**mm/in**	2320.3 / 91.35
			DEPTH	**mm/in**	1438 / 56.61
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1850 / 72.83
			WIDTH	**mm/in**	2431 / 95.71
			DEPTH	**mm/in**	1734 / 68.27
	UNIT WEIGHT			**kg/lb**	513 / 1130
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	2832 / 6000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	164 / 361
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	28.58 / 1⅛
	REFRIGERANT CHARGE			**kg/lb**	5.60 (x4) / 12.35 (x4)

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

General Data - Heatpump

MODEL		**INDOOR UNIT**			**MDSB500BR4**
		OUTDOOR UNIT			**MMC125BR x 4**
NOMINAL COOLING CAPACITY				**Btu/h**	464,000
				W	135,991
NOMINAL HEATING CAPACITY				**Btu/h**	480,000
				W	140,680
NOMINAL TOTAL INPUT POWER (COOLING)				**W**	48,227
NOMINAL TOTAL INPUT POWER (HEATING)				**W**	41,539
NOMINAL RUNNING CURRENT (COOLING)				**A**	88.4
NOMINAL RUNNING CURRENT (HEATING)				**A**	80.8
POWER SOURCE				**V/Ph/Hz**	380~415 / 3 / 50
EER				**W/W**	3.21
COP				**W/W**	3.95
REFRIGERANT TYPE					R22
REFRIGERANT CONTROL					OUTDOOR TXV
INDOOR UNIT	**CONTROL**	**OPERATION**			WIRED CONTROL
	AIR FLOW		**HIGH**	**l/s / cfm**	7080 / 15000
	EXTERNAL STATIC PRESSURE (H/M/L)			**Pa / in.wg.**	393.7 / 1.58
	SOUND PRESSURE LEVEL (H/M/L)			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	1610 / 63.38
			WIDTH	**mm/in**	2320.3 / 91.35
			DEPTH	**mm/in**	1438 / 56.61
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1850 / 72.83
			WIDTH	**mm/in**	2431 / 95.71
			DEPTH	**mm/in**	1734 / 68.27
	UNIT WEIGHT			**kg/lb**	606 / 1335
	CONDENSATE DRAIN SIZE			**mm/in**	25.40 / 1.00
OUTDOOR UNIT	**AIR FLOW**			**l/s / cfm**	4248 / 9000
	SOUND PRESSURE LEVEL			**dBA**	65
	UNIT DIMENSION		**HEIGHT**	**mm/in**	946 / 37.24
			WIDTH	**mm/in**	1116 / 43.93
			DEPTH	**mm/in**	939 / 36.96
	PACKING DIMENSION		**HEIGHT**	**mm/in**	1132 / 44.57
			WIDTH	**mm/in**	1282 / 50.47
			DEPTH	**mm/in**	1112 / 43.78
	UNIT WEIGHT			**kg/lb**	169 / 372
	PIPE CONNECTION	**TYPE**			BRAZING
		SIZE	**LIQUID**	**mm/in**	15.88 / ⅝
			GAS	**mm/in**	34.92 / 1⅜
	REFRIGERANT CHARGE			**kg/lb**	6.50 (x4) / 14.33 (x4)

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
a) COOLING - 26.7°C DB / 19.4°C WB INDOOR AND 35°C DB / 23.9°C WB OUTDOOR
b) HEATING - 21.1°C DB INDOOR AND 8.3°C DB / 6.1°C WB OUTDOOR
4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB075BR**
	OUTDOOR UNIT				**MMC075CR**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				DIRECT
	DIAMETER			**mm/in**	282.70 / 11.13
	LENGTH			**mm/in**	203.00 / 8.00
INDOOR FAN MOTOR	**TYPE**				PERMANENT SPLIT CAPACITOR
	QUANTITY				2
	INDEX OF PROTECTION (IP)				IP20
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	2513.8 / 85
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	0.54 / 5.82
		ROW			3
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS BARE COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.23 / 13.25
		ROW			2
		FIN PER INCH			14
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE SARAN NET
		QUANTITY		**pc**	2
		SIZE	**LENGTH**	**mm/in**	622 / 24.5
			WIDTH	**mm/in**	433 / 17.0
			THICKNESS	**mm/in**	12.70 / ½
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB100BR**
	OUTDOOR UNIT				**MMC100BR**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				DIRECT
	DIAMETER			**mm/in**	282.70 / 11.13
	LENGTH			**mm/in**	203.00 / 8.00
INDOOR FAN MOTOR	**TYPE**				PERMANENT SPLIT CAPACITOR
	QUANTITY				2
	INDEX OF PROTECTION (IP)				IP20
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	0.54 / 5.82
		ROW			4
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS BARE COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE SARAN NET
		QUANTITY		**pc**	2
		SIZE	**LENGTH**	**mm/in**	622 / 24.5
			WIDTH	**mm/in**	433 / 17.0
			THICKNESS	**mm/in**	12.70 / ½
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB125CR**
	OUTDOOR UNIT				**MMC125BR**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	394.97 / 15.55
	LENGTH			**mm/in**	381.00 / 15.00
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	0.79 / 8.60
		ROW			4
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	3
		SIZE	**LENGTH**	**mm/in**	457 / 17.99
			WIDTH	**mm/in**	589 / 23.19
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB150BR2**
	OUTDOOR UNIT				**MMC075CR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	394.97 / 15.55
	LENGTH			**mm/in**	381.00 / 15.00
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	2513.8 / 85
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.00 / 10.82
		ROW			4
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS BARE COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.23 / 13.25
		ROW			2
		FIN PER INCH			14
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	3
		SIZE	**LENGTH**	**mm/in**	457 / 17.99
			WIDTH	**mm/in**	433 / 23.19
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB200BR2**
	OUTDOOR UNIT				**MMC100BR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	394.97 / 15.55
	LENGTH			**mm/in**	381.00 / 15.00
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.20 / 12.92
		ROW			4
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS BARE COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	3
		SIZE	**LENGTH**	**mm/in**	542 / 19.4
			WIDTH	**mm/in**	738 / 29.1
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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

Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB250BR2**
	OUTDOOR UNIT				**MMC125BR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	469.90 / 18.50
	LENGTH			**mm/in**	459.99 / 18.11
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS COPPER
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.48 / 16.01
		ROW			4
		FIN PER INCH			14
OUTDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	533 / 21.0
			WIDTH	**mm/in**	532 / 21.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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

Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB300BR3**
	OUTDOOR UNIT				**MMC100BR x 3**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	469.90 / 18.50
	LENGTH			**mm/in**	459.99 / 18.11
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.62 / 17.50
		ROW			5
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			BARE TUBE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	533 / 21.0
			WIDTH	**mm/in**	532 / 21.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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

Components Data - Heatpump

MODEL	INDOOR UNIT				MDB350BR3	
	OUTDOOR UNIT				MMC100BR x 1	MMC125BR x 2
INDOOR FAN	TYPE				CENTRIFUGAL	
	QUANTITY				1	
	MATERIAL				ZINC COATED STEEL	
	DRIVE				BELT DRIVEN	
	DIAMETER			mm/in	469.90 / 18.50	
	LENGTH			mm/in	459.99 / 18.11	
INDOOR FAN MOTOR	TYPE				SQUIRREL CAGE INDUCTION	
	QUANTITY				1	
	INDEX OF PROTECTION (IP)				IP54	
OUTDOOR FAN	TYPE				PROPELLER	PROPELLER
	QUANTITY				1	1
	MATERIAL				ALUMINIUM	ALUMINIUM
	DRIVE				DIRECT	DIRECT
	DIAMETER			mm/in	660.40 / 26	762.00 / 30
OUTDOOR FAN MOTOR	TYPE				INDUCTION	INDUCTION
	QUANTITY				1	1
	INDEX OF PROTECTION (IP)				IP54	IP54
COMPRESSOR	TYPE				SCROLL	SCROLL
	OIL TYPE				SONTEX 200LT	SONTEX 200LT
	OIL AMOUNT			cm^3 / fl.oz.	3253.1 / 110	3253.1 / 110
INDOOR COIL	TUBE	MATERIAL			SEAMLESS COPPER	
		DIAMETER		mm/in	9.52 / ⅜	
		THICKNESS		mm/in	0.35 / 0.013	
	FIN	MATERIAL			ALUMINIUM	
		THICKNESS		mm/in	0.127 / 0.005	
		FACE AREA		m^2/ft^2	2.38 / 25.62	
		ROW			4	
		FIN PER INCH			12	
OUTDOOR COIL	TUBE	MATERIAL			BARE TUBE	INNER GROOVE
		DIAMETER		mm/in	9.52 / ⅜	9.52 / ⅜
		THICKNESS		mm/in	0.35 / 0.013	0.36 / 0.014
	FIN	MATERIAL			ALUMINIUM	ALUMINIUM
		THICKNESS		mm/in	0.127 / 0.005	0.127 / 0.005
		FACE AREA		m^2/ft^2	1.76 / 19.00	1.76 / 19.00
		ROW			2	2
		FIN PER INCH			12	18
AIR QUALITY	FILTER	TYPE			WASHABLE VILEDON	WASHABLE VILEDON
		QUANTITY		pc	6	6
		SIZE	LENGTH	mm/in	617 / 24.3	617 / 24.3
			WIDTH	mm/in	661 / 26.0	661 / 26.0
			THICKNESS	mm/in	50.8 / 2.00	50.8 / 2.00
CASING	INDOOR UNIT		MATERIAL		ELECTRO GALVANIZED MILD STEEL	
			COLOUR		LIGHT GREY	
	OUTDOOR UNIT		MATERIAL		ELECTRO GALVANIZED MILD STEEL	
			COLOUR		LIGHT GREY	

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB400BR4**
	OUTDOOR UNIT				**MMC100BR x 4**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	591.82 / 23.30
	LENGTH			**mm/in**	563.88 / 22.20
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS COPPER
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	2.38 / 25.62
		ROW			4
		FIN PER INCH			14
OUTDOOR COIL	**TUBE**	**MATERIAL**			BARE TUBE
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	668 / 26.3
			WIDTH	**mm/in**	661 / 26.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDB500BR4**
	OUTDOOR UNIT				**MMC125BR x 4**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	591.82 / 23.30
	LENGTH			**mm/in**	563.88 / 22.20
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	2.55 / 27.45
		ROW			5
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	668 / 26.3
			WIDTH	**mm/in**	661 / 26.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB200BR2**
	OUTDOOR UNIT				**MMC100BR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	394.97 / 15.55
	LENGTH			**mm/in**	381.00 / 15.00
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP20
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.20 / 12.92
		ROW			4
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS BARE COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	3
		SIZE	**LENGTH**	**mm/in**	542 / 19.4
			WIDTH	**mm/in**	738 / 29.1
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB250BR2**
	OUTDOOR UNIT				**MMC125BR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	469.90 / 18.50
	LENGTH			**mm/in**	459.99 / 18.11
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.48 / 16.01
		ROW			4
		FIN PER INCH			14
OUTDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	533 / 21.0
			WIDTH	**mm/in**	532 / 21.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB300BR3**
	OUTDOOR UNIT				**MMC100BR x 3**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	469.90 / 18.50
	LENGTH			**mm/in**	459.99 / 18.11
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.62 / 17.50
		ROW			5
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			BARE TUBE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	533 / 21.0
			WIDTH	**mm/in**	532 / 21.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB350BR3**	
	OUTDOOR UNIT				**MMC100BR x 1**	**MMC125BR x 2**
INDOOR FAN	**TYPE**				CENTRIFUGAL	
	QUANTITY				1	
	MATERIAL				ZINC COATED STEEL	
	DRIVE				BELT DRIVEN	
	DIAMETER			**mm/in**	469.90 / 18.50	
	LENGTH			**mm/in**	459.99 / 18.11	
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION	
	QUANTITY				1	
	INDEX OF PROTECTION (IP)				IP54	
OUTDOOR FAN	**TYPE**				PROPELLER	PROPELLER
	QUANTITY				1	1
	MATERIAL				ALUMINIUM	ALUMINIUM
	DRIVE				DIRECT	DIRECT
	DIAMETER			**mm/in**	660.40 / 26	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION	INDUCTION
	QUANTITY				1	1
	INDEX OF PROTECTION (IP)				IP54	IP54
COMPRESSOR	**TYPE**				SCROLL	SCROLL
	OIL TYPE				SONTEX 200LT	SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER	
		DIAMETER		**mm/in**	9.52 / ⅜	
		THICKNESS		**mm/in**	0.35 / 0.013	
	FIN	**MATERIAL**			ALUMINIUM	
		THICKNESS		**mm/in**	0.127 / 0.005	
		FACE AREA		**m^2/ft^2**	2.38 / 25.62	
		ROW			4	
		FIN PER INCH			12	
OUTDOOR COIL	**TUBE**	**MATERIAL**			BARE TUBE	INNER GROOVE
		DIAMETER		**mm/in**	9.52 / ⅜	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM	ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00	1.76 / 19.00
		ROW			2	2
		FIN PER INCH			12	18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON	WASHABLE VILEDON
		QUANTITY		**pc**	6	6
		SIZE	**LENGTH**	**mm/in**	617 / 24.3	617 / 24.3
			WIDTH	**mm/in**	661 / 26.0	661 / 26.0
			THICKNESS	**mm/in**	50.8 / 2.00	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL	
			COLOUR		LIGHT GREY	
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL	
			COLOUR		LIGHT GREY	

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Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB400BR4**
	OUTDOOR UNIT				**MMC100BR x 4**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	591.82 / 23.30
	LENGTH			**mm/in**	563.88 / 22.20
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	660.40 / 26
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	2.38 / 25.62
		ROW			4
		FIN PER INCH			14
OUTDOOR COIL	**TUBE**	**MATERIAL**			BARE TUBE
		DIAMETER		**mm/in**	9.52 / 3/8
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			12
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	668 / 26.3
			WIDTH	**mm/in**	661 / 26.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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

Components Data - Heatpump

MODEL	**INDOOR UNIT**				**MDSB500BR4**
	OUTDOOR UNIT				**MMC125BR x 4**
INDOOR FAN	**TYPE**				CENTRIFUGAL
	QUANTITY				1
	MATERIAL				ZINC COATED STEEL
	DRIVE				BELT DRIVEN
	DIAMETER			**mm/in**	591.82 / 23.30
	LENGTH			**mm/in**	563.88 / 22.20
INDOOR FAN MOTOR	**TYPE**				SQUIRREL CAGE INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
OUTDOOR FAN	**TYPE**				PROPELLER
	QUANTITY				1
	MATERIAL				ALUMINIUM
	DRIVE				DIRECT
	DIAMETER			**mm/in**	762.00 / 30
OUTDOOR FAN MOTOR	**TYPE**				INDUCTION
	QUANTITY				1
	INDEX OF PROTECTION (IP)				IP54
COMPRESSOR	**TYPE**				SCROLL
	OIL TYPE				SONTEX 200LT
	OIL AMOUNT			**cm^3 / fl.oz.**	3253.1 / 110
INDOOR COIL	**TUBE**	**MATERIAL**			SEAMLESS PLAIN COPPER
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.35 / 0.013
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	2.55 / 27.45
		ROW			5
		FIN PER INCH			12
OUTDOOR COIL	**TUBE**	**MATERIAL**			INNER GROOVE
		DIAMETER		**mm/in**	9.52 / ⅜
		THICKNESS		**mm/in**	0.36 / 0.014
	FIN	**MATERIAL**			ALUMINIUM
		THICKNESS		**mm/in**	0.127 / 0.005
		FACE AREA		**m^2/ft^2**	1.76 / 19.00
		ROW			2
		FIN PER INCH			18
AIR QUALITY	**FILTER**	**TYPE**			WASHABLE VILEDON
		QUANTITY		**pc**	6
		SIZE	**LENGTH**	**mm/in**	668 / 26.3
			WIDTH	**mm/in**	661 / 26.0
			THICKNESS	**mm/in**	50.8 / 2.00
CASING	**INDOOR UNIT**		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY
	OUTDOOR UNIT		**MATERIAL**		ELECTRO GALVANIZED MILD STEEL
			COLOUR		LIGHT GREY

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Safety Devices Data - Heatpump

MODEL	INDOOR UNIT			MDB075BR
	OUTDOOR UNIT			MMC075CR
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB100BR
	OUTDOOR UNIT			MMC100BR
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB125CR
	OUTDOOR UNIT			MMC125BR
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB150BR2
	OUTDOOR UNIT			MMC075CR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

Safety Devices Data - Heatpump

MODEL	INDOOR UNIT			MDB200BR2
	OUTDOOR UNIT			MMC100BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB250BR2
	OUTDOOR UNIT			MMC125BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB300BR3
	OUTDOOR UNIT			MMC100BR x 3
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB350BR3	
	OUTDOOR UNIT			MMC100BR x 1	MMC125BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET	AUTO RESET
		OPEN	Pa / psi	3240536 / 470	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET	AUTO RESET
		OPEN	Pa / psi	124105.6 / 18	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28	193053.2 / 28
	PHASE SEQUENCER			OYLT	OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257	125 / 257

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

Safety Devices Data - Heatpump

MODEL	INDOOR UNIT			MDB400BR4
	OUTDOOR UNIT			MMC100BR x 4
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDB500BR4
	OUTDOOR UNIT			MMC125BR x 4
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

Safety Devices Data - Heatpump

MODEL	INDOOR UNIT			MDSB200BR2
	OUTDOOR UNIT			MMC100BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDSB250BR2
	OUTDOOR UNIT			MMC125BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDSB300BR3
	OUTDOOR UNIT			MMC100BR x 3
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDSB350BR3	
	OUTDOOR UNIT			MMC100BR x 1	MMC125BR x 2
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET	AUTO RESET
		OPEN	Pa / psi	3240536 / 470	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET	AUTO RESET
		OPEN	Pa / psi	124105.6 / 18	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28	193053.2 / 28
	PHASE SEQUENCER			OYLT	OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257	125 / 257

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

Safety Devices Data - Heatpump

MODEL	INDOOR UNIT			MDSB400BR4
	OUTDOOR UNIT			MMC100BR x 4
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

MODEL	INDOOR UNIT			MDSB500BR4
	OUTDOOR UNIT			MMC125BR x 4
SAFETY DEVICE	HIGH PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	3240536 / 470
		CLOSE	Pa / psi	2647587 / 384
	LOW PRESSURE SWITCH	TYPE		AUTO RESET
		OPEN	Pa / psi	124105.6 / 18
		CLOSE	Pa / psi	193053.2 / 28
	PHASE SEQUENCER			OYLT
	DISCHARGE THERMOSTAT SETTING		°C / °F	125 / 257

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

Performance Data

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

Example:

Model: MDB075BR / MMC075BR
Indoor Condition: 23°C DB, 15°C WB
Outdoor Condition: 37°C DB
Fan Speed: High

Solution:

Overall
Based on the Performance table

1. Refer to the Indoor DB column,
   - **25°C** is located between 24°C and 27°C for 16°CWB (Thus, Interpolation need to be applied)
   - **25°C** is located between 24°C and 27°C for 19°CWB (Thus, Interpolation need to be applied)

2. Refer to the Indoor WB column,
   - **17°C** is located between 16°CWB and 19°CWB for 25°CDB (Thus, Interpolation need to be applied)

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.

1st Step
Interpolation of Indoor DB

Find TC, SC, PI for

(a) Indoor: ***25°C DB***, 16°C WB
Outdoor: 35°C DB
(b) Indoor: ***25°C DB***, 19°C WB
Outdoor: 35°C DB

(c) Indoor: ***25°C DB***, 16°C WB
Outdoor: 40°C DB
(d) Indoor: ***25°C DB***, 19°C WB
Outdoor: 40°C DB

2nd Step
Interpolation of Indoor WB

Find TC, SC, PI for

(a) Indoor: 25°C DB, ***17°C WB***
Outdoor: 35°C DB

(b) Indoor: 25°C DB, ***17°C WB***
Outdoor: 40°C DB

3rd Step
Interpolation of Outdoor DB

Find TC, SC, PI for

(a) Indoor: 25°C DB, 17°C WB
Outdoor: ***37°C DB***

Details:

1st Step:

To obtain the Total capacity and Sensible capacity and Power input for

(a) Indoor Condition: *25°C DB*, 16°C WB

Outdoor Condition: 35°C DB

Indoor WB ° C	Indoor DB ° C	Outdoor DB ° C			
			35		
			TC (kW)	SHC (kW)	PI (kW)
16					
	24		19.75	17.30	8.31
	25		x_1	y_1	z_1
	27		20.15	19.80	8.35

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{x_1 - 19.75kW}{20.15kW - 19.75kW}$$

$$\Rightarrow x_1 = 19.88kW$$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{y_1 - 17.30kW}{19.80kW - 17.30kW}$$

$$\Rightarrow y_1 = 18.13kW$$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{z_1 - 8.31kW}{8.35kW - 8.31kW}$$

$$\Rightarrow z_1 = 8.32kW$$

(b) Indoor Condition: *25°C DB*, 16°C WB

Outdoor Condition: 40°C DB

Indoor WB ° C	Indoor DB ° C	Outdoor DB ° C			
			40		
			TC (kW)	SHC (kW)	PI (kW)
16					
	24		17.77	15.84	8.99
	25		x_2	y_2	z_2
	27		18.27	18.05	9.04

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{x_2 - 17.77kW}{18.27kW - 17.77kW}$$

$$\Rightarrow x_2 = 17.94kW$$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{y_2 - 15.84kW}{18.05kW - 15.84kW}$$

$$\Rightarrow y_2 = 16.58kW$$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{25°C - 24°C}{27°C - 24°C} = \frac{z_2 - 8.99kW}{9.04kW - 8.99kW}$$

$$\Rightarrow z_2 = 9.01kW$$

* Repeat process (a) and (b) in 1st step for the condition below:

(c) Indoor Condition: *25°C DB*, 19°C WB

Outdoor Condition: 35°C DB

$\Rightarrow x_3 = 21.62kW$
$\Rightarrow y_3 = 14.46kW$
$\Rightarrow z_3 = 8.49kW$

(c) Indoor Condition: *25°C DB*, 19°C WB

Outdoor Condition: 40°C DB

$\Rightarrow x_4 = 19.47kW$
$\Rightarrow y_4 = 13.24kW$
$\Rightarrow z_4 = 9.17kW$

2nd Step:

To obtain the Total capacity and Sensible capacity and Power Input for

(a) Indoor Condition: 25°C DB, **17°C WB**
Outdoor Condition: 35°C DB

Indoor DB ° C	**Indoor WB ° C**	**Outdoor DB ° C**			
			35		
			TC (kW)	**SC (kW)**	**PI (kW)**
16	**25**		19.88	18.13	8.32
17			x_5	y_5	z_5
19			21.62	14.46	8.49

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{x_5 - 19.88kW}{21.62kW - 19.88kW}$$

$$\Rightarrow x_5 = 16.91kW$$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{y_5 - 18.13kW}{14.46kW - 18.13kW}$$

$$\Rightarrow y_5 = 17.73kW$$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{z_5 - 8.32kW}{8.49kW - 8.32kW}$$

$$\Rightarrow z_5 = 8.38kW$$

(b) Indoor Condition: 25°C DB, **17°C WB**
Outdoor Condition: 40°C DB

Indoor DB ° C	**Indoor WB ° C**	**Outdoor DB ° C**			
			40		
			TC (kW)	**SC (kW)**	**PI (kW)**
16	**25**		17.94	16.58	9.01
17			x_6	y_6	z_6
19			19.47	13.24	9.17

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{x_6 - 17.94kW}{19.47kW - 17.94kW}$$

$$\Rightarrow x_6 = 18.48kW$$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{y_6 - 16.58kW}{13.24kW - 16.58kW}$$

$$\Rightarrow y_6 = 15.47kW$$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{17°C - 16°C}{19°C - 16°C} = \frac{z_6 - 9.01kW}{9.17kW - 9.01kW}$$

$$\Rightarrow z_6 = 9.06kW$$

3rd Step:

To obtain the Total capacity and Sensible capacity for

(a) Indoor Condition: 25°C DB, 17°C WB

Outdoor Condition: 37°C DB

Indoor DB ° C	Indoor WB ° C		Outdoor DB ° C								
			35			37			40		
			TC (kW)	SHC (kW)	PI (kW)	TC (kW)	SC (kW)	PI (kW)	TC (kW)	SC (kW)	PI (kW)
25	**17**	—	20.46	16.91	8.38	**x**	**y**	**z**	18.48	15.47	9.06

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{37°C - 35°C}{40°C - 35°C} = \frac{x - 20.46kW}{18.48kW - 20.46kW}$$

$$\Rightarrow x = 19.66kW$$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{37°C - 35°C}{40°C - 35°C} = \frac{y - 16.91kW}{15.47kW - 16.91kW}$$

$$\Rightarrow y = 16.33kW$$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{37°C - 35°C}{40°C - 35°C} = \frac{z - 8.38kW}{9.06kW - 8.38kW}$$

$$\Rightarrow z = 8.65kW$$

R22 MODELS
(HEATPUMP)

MODEL : MDB075BR / MMC075BR
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
2250	16°C	21°C	21.43	14.92	6.67	20.75	14.59	7.13	20.03	14.24	7.66	19.26	13.87	8.26	17.33	12.66	8.94	16.10	11.98	9.84
		24°C	21.52	17.77	6.67	20.84	17.40	7.13	20.12	17.01	7.67	19.35	16.59	8.27	17.42	15.19	8.95	16.18	14.43	9.85
		27°C	21.59	20.45	6.68	20.94	20.07	7.14	20.23	19.66	7.68	19.51	19.15	8.29	17.66	17.44	8.98	16.58	16.38	9.90
		30°C	22.45	22.45	6.75	21.89	21.89	7.22	21.28	21.28	7.77	20.62	20.62	8.40	18.74	18.74	9.10	17.62	17.62	10.03
	19°C	24°C	23.55	14.09	6.84	22.82	13.78	7.30	22.03	13.46	7.84	21.20	13.12	8.45	19.10	11.99	9.13	17.76	11.38	10.04
		27°C	23.61	16.46	6.84	22.87	16.12	7.31	22.09	15.77	7.85	21.26	15.39	8.46	19.17	14.10	9.14	17.83	13.41	10.05
		30°C	23.70	20.09	6.85	22.95	19.72	7.32	22.16	19.34	7.86	21.33	18.94	8.47	19.23	17.41	9.15	17.90	16.65	10.06
		33°C	23.84	23.84	6.86	23.16	23.16	7.33	22.48	22.48	7.88	21.81	21.81	8.51	19.83	19.83	9.22	18.68	18.68	10.16
	22°C	27°C	25.84	13.24	7.02	25.02	12.95	7.50	24.17	12.64	8.04	23.27	12.33	8.66	20.99	11.28	9.35	19.54	10.72	10.27
		30°C	25.87	16.36	7.02	25.06	16.04	7.50	24.21	15.70	8.05	23.32	15.34	8.67	21.04	14.06	9.35	19.60	13.40	10.27
		33°C	25.94	19.07	7.03	25.13	18.73	7.51	24.28	18.37	8.06	23.39	18.00	8.67	21.10	16.56	9.36	19.66	15.84	10.28
		36°C	26.02	21.71	7.04	25.21	21.37	7.51	24.35	21.01	8.06	23.46	20.64	8.68	21.19	19.01	9.37	19.84	18.12	10.30
2500	16°C	21°C	21.88	15.52	6.70	21.18	15.19	7.16	20.43	14.82	7.69	19.63	14.42	8.30	17.67	13.15	8.98	16.39	12.43	9.88
		24°C	22.00	18.50	6.71	21.30	18.12	7.17	20.55	17.72	7.70	19.75	17.30	8.31	17.77	15.84	8.99	16.49	15.06	9.89
		27°C	22.15	21.44	6.72	21.49	20.98	7.19	20.82	20.44	7.73	20.15	19.80	8.35	18.27	18.05	9.04	17.14	16.98	9.97
		30°C	23.30	23.30	6.82	22.70	22.70	7.29	22.05	22.05	7.84	21.37	21.37	8.47	19.40	19.40	9.17	18.23	18.23	10.10
	19°C	24°C	24.03	14.65	6.87	23.27	14.34	7.34	22.45	14.01	7.88	21.59	13.66	8.49	19.44	12.50	9.17	18.08	11.87	10.08
		27°C	24.12	17.14	6.88	23.36	16.80	7.35	22.54	16.43	7.89	21.69	16.05	8.50	19.54	14.71	9.18	18.17	14.00	10.09
		30°C	24.23	21.03	6.89	23.45	20.66	7.36	22.63	20.27	7.90	21.78	19.86	8.51	19.64	18.25	9.20	18.31	17.36	10.11
		33°C	24.61	24.61	6.92	23.98	23.98	7.40	23.31	23.31	7.96	22.61	22.61	8.59	20.55	20.55	9.30	19.34	19.34	10.24
	22°C	27°C	26.33	13.75	7.06	25.49	13.46	7.54	24.61	13.16	8.09	23.68	12.84	8.70	21.35	11.76	9.39	19.87	11.19	10.31
		30°C	26.40	17.08	7.07	25.56	16.74	7.55	24.68	16.38	8.09	23.75	16.01	8.71	21.42	14.68	9.40	19.95	14.00	10.32
		33°C	26.50	19.97	7.08	25.66	19.62	7.55	24.77	19.26	8.10	23.84	18.88	8.72	21.50	17.38	9.41	20.03	16.64	10.33
		36°C	26.59	22.83	7.09	25.75	22.48	7.56	24.88	22.08	8.11	24.02	21.61	8.74	21.77	19.98	9.44	20.47	19.05	10.39
2750	16°C	21°C	22.27	15.94	6.73	21.54	15.57	7.19	20.77	15.18	7.73	19.96	14.76	8.33	17.95	13.46	9.01	16.65	12.72	9.91
		24°C	22.41	18.99	6.75	21.69	18.61	7.21	20.91	18.21	7.74	20.09	17.78	8.34	18.07	16.29	9.02	16.76	15.50	9.93
		27°C	22.73	22.14	6.77	22.10	21.77	7.24	21.45	21.35	7.79	20.75	20.75	8.41	18.81	18.81	9.10	17.63	17.63	10.03
		30°C	24.05	24.05	6.88	23.41	23.41	7.35	22.74	22.74	7.91	22.02	22.02	8.53	19.98	19.98	9.24	18.77	18.77	10.17
	19°C	24°C	24.43	15.33	6.91	23.64	15.01	7.37	22.80	14.68	7.91	21.92	14.32	8.52	19.73	13.09	9.20	18.33	12.40	10.11
		27°C	24.55	17.94	6.92	23.77	17.59	7.38	22.92	17.21	7.92	22.04	16.81	8.54	19.85	15.42	9.22	18.44	14.69	10.13
		30°C	24.68	22.11	6.93	23.87	21.72	7.40	23.05	21.32	7.94	22.19	20.86	8.55	20.05	19.07	9.24	18.77	18.01	10.17
		33°C	25.40	25.40	6.99	24.75	24.75	7.47	24.05	24.05	8.03	23.32	23.32	8.67	21.18	21.18	9.37	19.93	19.93	10.32
	22°C	27°C	26.75	14.38	7.10	25.89	14.09	7.57	24.98	13.78	8.12	24.03	13.47	8.74	21.65	12.35	9.43	20.14	11.75	10.34
		30°C	26.84	17.89	7.11	25.98	17.54	7.58	25.08	17.17	8.13	24.13	16.79	8.75	21.75	15.40	9.44	20.24	14.69	10.35
		33°C	26.97	21.01	7.12	26.10	20.65	7.59	25.19	20.28	8.14	24.23	19.89	8.76	21.84	18.31	9.45	20.33	17.55	10.37
		36°C	27.10	24.06	7.13	26.29	23.61	7.61	25.46	23.09	8.17	24.64	22.49	8.80	22.40	20.68	9.52	21.10	19.64	10.47

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	13.056	13.056	15.488	15.488	16.299	16.299	25.216	25.216	30.080	30.080	32.512	32.512	34.944	34.944
17	12.939	12.939	15.240	15.240	16.007	16.007	24.040	24.040	29.270	29.270	31.611	31.611	33.951	33.951
19	12.822	12.822	14.992	14.992	15.715	15.715	22.864	22.864	28.460	28.460	30.709	30.709	32.958	32.958
21	12.705	12.705	14.744	14.744	15.424	15.424	21.688	21.688	27.649	27.649	29.807	29.807	31.964	31.964
23	12.480	12.480	14.469	14.469	15.132	15.132	21.639	21.639	26.839	26.839	28.905	28.905	30.971	30.971
25	12.255	12.255	14.194	14.194	14.841	14.841	21.589	21.589	26.029	26.029	28.003	28.003	29.978	29.978
27	12.030	12.030	13.919	13.919	14.549	14.549	21.539	21.539	25.219	25.219	27.101	27.101	28.984	28.984

R22 MODELS
(HEATPUMP)

MODEL : MDB100BR / MMC100BR
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
2880	16°C	21°C	28.61	19.65	8.68	27.71	19.21	9.28	26.74	18.75	9.97	25.71	18.27	10.76	23.14	16.68	11.64	21.49	15.77	12.82
		24°C	28.73	23.40	8.69	27.82	22.91	9.29	26.86	22.40	9.98	25.83	21.85	10.77	23.26	20.00	11.65	21.60	19.01	12.83
		27°C	28.83	26.93	8.70	27.95	26.43	9.30	27.01	25.89	9.99	26.06	25.22	10.79	23.59	22.97	11.69	22.13	21.57	12.89
		30°C	29.98	29.98	8.79	29.22	29.22	9.40	28.41	28.41	10.12	27.54	27.54	10.93	25.02	25.02	11.84	23.52	23.52	13.06
	19°C	24°C	31.44	18.56	8.90	30.46	18.16	9.51	29.42	17.73	10.21	28.30	17.28	11.00	25.50	15.79	11.89	23.71	14.99	13.08
		27°C	31.52	21.68	8.91	30.54	21.24	9.51	29.50	20.77	10.22	28.39	20.27	11.01	25.59	18.57	11.90	23.81	17.66	13.09
		30°C	31.64	26.46	8.92	30.64	25.98	9.52	29.59	25.47	10.23	28.48	24.94	11.02	25.68	22.93	11.92	23.90	21.93	13.10
		33°C	31.83	31.83	8.93	30.92	30.92	9.55	30.02	30.02	10.26	29.11	29.11	11.08	26.48	26.48	12.00	24.93	24.93	13.23
	22°C	27°C	34.49	17.44	9.14	33.40	17.05	9.76	32.27	16.65	10.47	31.07	16.24	11.28	28.03	14.86	12.17	26.09	14.11	13.37
		30°C	34.54	21.55	9.15	33.46	21.13	9.77	32.33	20.68	10.48	31.13	20.20	11.28	28.09	18.52	12.18	26.16	17.64	13.37
		33°C	34.64	25.12	9.15	33.56	24.67	9.77	32.42	24.20	10.49	31.23	23.71	11.29	28.18	21.81	12.19	26.25	20.87	13.39
		36°C	34.74	28.60	9.16	33.66	28.15	9.78	32.51	27.67	10.50	31.32	27.18	11.30	28.29	25.04	12.20	26.48	23.86	13.42
3200	16°C	21°C	29.22	20.44	8.73	28.28	20.00	9.32	27.27	19.52	10.02	26.21	18.99	10.81	23.59	17.32	11.69	21.89	16.37	12.86
		24°C	29.37	24.36	8.74	28.43	23.87	9.34	27.43	23.34	10.03	26.37	22.78	10.82	23.73	20.86	11.70	22.02	19.84	12.88
		27°C	29.57	28.24	8.75	28.70	27.64	9.36	27.80	26.92	10.06	26.90	26.08	10.87	24.40	23.77	11.77	22.89	22.36	12.98
		30°C	31.11	31.11	8.87	30.31	30.31	9.49	29.45	29.45	10.21	28.53	28.53	11.03	25.90	25.90	11.94	24.34	24.34	13.15
	19°C	24°C	32.08	19.29	8.95	31.07	18.88	9.56	29.97	18.45	10.26	28.82	18.00	11.05	25.95	16.47	11.94	24.13	15.64	13.13
		27°C	32.20	22.58	8.96	31.18	22.13	9.57	30.10	21.64	10.27	28.96	21.14	11.07	26.08	19.37	11.96	24.26	18.45	13.14
		30°C	32.35	27.70	8.97	31.31	27.21	9.58	30.22	26.69	10.28	29.08	26.16	11.08	26.22	24.04	11.97	24.45	22.87	13.17
		33°C	32.85	32.85	9.01	32.01	32.01	9.64	31.13	31.13	10.37	30.19	30.19	11.19	27.44	27.44	12.11	25.82	25.82	13.33
	22°C	27°C	35.16	18.11	9.20	34.03	17.73	9.82	32.86	17.33	10.53	31.62	16.91	11.33	28.50	15.49	12.23	26.53	14.74	13.42
		30°C	35.24	22.49	9.20	34.12	22.04	9.82	32.95	21.58	10.54	31.71	21.09	11.34	28.60	19.34	12.24	26.63	18.44	13.43
		33°C	35.38	26.30	9.21	34.26	25.85	9.84	33.08	25.37	10.55	31.84	24.87	11.36	28.71	22.89	12.25	26.74	21.92	13.45
		36°C	35.50	30.07	9.22	34.38	29.61	9.85	33.22	29.08	10.56	32.07	28.46	11.38	29.07	26.31	12.29	27.33	25.09	13.52
3520	16°C	21°C	29.73	20.99	8.77	28.76	20.51	9.37	27.73	19.99	10.06	26.65	19.44	10.85	23.97	17.72	11.73	22.23	16.75	12.91
		24°C	29.93	25.02	8.78	28.95	24.51	9.38	27.92	23.98	10.08	26.83	23.42	10.86	24.12	21.45	11.75	22.38	20.42	12.92
		27°C	30.35	29.16	8.81	29.50	28.68	9.43	28.63	28.12	10.14	27.70	27.48	10.95	25.11	24.98	11.85	23.54	23.54	13.06
		30°C	32.11	32.11	8.95	31.26	31.26	9.58	30.36	30.36	10.30	29.40	29.40	11.11	26.68	26.68	12.02	25.06	25.06	13.24
	19°C	24°C	32.62	20.19	8.99	31.56	19.77	9.60	30.44	19.34	10.30	29.26	18.86	11.10	26.34	17.24	11.98	24.48	16.33	13.17
		27°C	32.78	23.63	9.01	31.73	23.16	9.61	30.61	22.67	10.32	29.43	22.15	11.11	26.50	20.31	12.00	24.62	19.35	13.19
		30°C	32.95	29.12	9.02	31.88	28.61	9.63	30.78	28.07	10.33	29.63	27.47	11.13	26.77	25.12	12.03	25.07	23.72	13.24
		33°C	33.92	33.92	9.10	33.04	33.04	9.73	32.12	32.12	10.46	31.13	31.13	11.28	28.28	28.28	12.20	26.61	26.61	13.43
	22°C	27°C	35.72	18.94	9.24	34.56	18.56	9.86	33.35	18.15	10.57	32.08	17.74	11.38	28.91	16.27	12.27	26.90	15.48	13.46
		30°C	35.84	23.56	9.25	34.69	23.10	9.87	33.48	22.61	10.59	32.22	22.11	11.39	29.04	20.29	12.29	27.03	19.35	13.48
		33°C	36.01	27.67	9.27	34.85	27.20	9.89	33.63	26.71	10.60	32.36	26.19	11.41	29.16	24.12	12.30	27.15	23.12	13.50
		36°C	36.19	31.69	9.28	35.10	31.10	9.91	34.00	30.42	10.64	32.90	29.62	11.46	29.91	27.24	12.39	28.18	25.87	13.63

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	16.630	16.630	19.236	19.236	20.104	20.104	29.659	29.659	34.871	34.871	37.477	37.477	40.083	40.083
17	16.602	16.602	18.968	18.968	19.757	19.757	29.206	29.206	33.938	33.938	36.441	36.441	38.944	38.944
19	16.575	16.575	18.700	18.700	19.409	19.409	28.753	28.753	33.006	33.006	35.405	35.405	37.805	37.805
21	16.547	16.547	18.433	18.433	19.061	19.061	28.300	28.300	32.073	32.073	34.369	34.369	36.666	36.666
23	16.145	16.145	18.071	18.071	18.713	18.713	27.286	27.286	31.141	31.141	33.334	33.334	35.527	35.527
25	15.742	15.742	17.710	17.710	18.365	18.365	26.273	26.273	30.208	30.208	32.298	32.298	34.388	34.388
27	15.340	15.340	17.348	17.348	18.017	18.017	25.259	25.259	29.275	29.275	31.262	31.262	33.249	33.249

R22 MODELS
(HEATPUMP)

MODEL : MDB125CR / MMC125BR
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
3780	16°C	21°C	33.60	24.96	8.74	32.53	24.41	9.35	31.40	23.83	10.04	30.19	23.21	10.84	27.16	21.19	11.73	25.23	20.04	12.91
		24°C	33.73	29.73	8.75	32.66	29.11	9.36	31.53	28.46	10.05	30.33	27.77	10.85	27.31	25.41	11.74	25.36	24.15	12.92
		27°C	33.85	33.85	8.76	32.82	32.82	9.37	31.72	31.72	10.07	30.59	30.59	10.87	27.69	27.69	11.77	25.99	25.99	12.99
		30°C	35.19	35.19	8.85	34.31	34.31	9.47	33.35	33.35	10.19	32.33	32.33	11.01	29.37	29.37	11.93	27.62	27.62	13.15
	19°C	24°C	36.91	23.58	8.97	35.77	23.07	9.58	34.54	22.52	10.28	33.23	21.95	11.08	29.94	20.06	11.98	27.83	19.04	13.17
		27°C	37.01	27.55	8.97	35.85	26.98	9.58	34.63	26.39	10.29	33.33	25.76	11.09	30.04	23.59	11.99	27.95	22.44	13.18
		30°C	37.15	33.62	8.98	35.98	33.01	9.59	34.74	32.37	10.30	33.43	31.69	11.11	30.15	29.14	12.00	28.06	27.86	13.20
		33°C	37.37	37.37	8.99	36.30	36.30	9.62	35.24	35.24	10.34	34.18	34.18	11.17	31.08	31.08	12.09	29.27	29.27	13.32
	22°C	27°C	40.50	22.15	9.21	39.22	21.67	9.83	37.89	21.16	10.55	36.48	20.63	11.36	32.91	18.88	12.26	30.64	17.93	13.47
		30°C	40.56	27.39	9.21	39.28	26.84	9.84	37.96	26.28	10.55	36.55	25.67	11.36	32.97	23.53	12.27	30.72	22.42	13.47
		33°C	40.67	31.91	9.22	39.40	31.34	9.85	38.07	30.75	10.56	36.67	30.13	11.38	33.08	27.71	12.28	30.82	26.51	13.48
		36°C	40.79	36.34	9.23	39.51	35.76	9.86	38.17	35.16	10.57	36.77	34.54	11.39	33.21	31.81	12.29	31.09	30.32	13.51
4200	16°C	21°C	34.30	25.97	8.79	33.20	25.41	9.39	32.02	24.81	10.09	30.77	24.13	10.89	27.69	22.01	11.77	25.70	20.80	12.96
		24°C	34.48	30.95	8.80	33.38	30.32	9.41	32.21	29.65	10.11	30.96	28.94	10.90	27.86	26.51	11.79	25.85	25.20	12.97
		27°C	34.72	34.72	8.82	33.69	33.69	9.43	32.64	32.64	10.14	31.58	31.58	10.95	28.64	28.64	11.86	26.87	26.87	13.08
		30°C	36.52	36.52	8.94	35.58	35.58	9.56	34.57	34.57	10.29	33.50	33.50	11.11	30.41	30.41	12.03	28.58	28.58	13.25
	19°C	24°C	37.66	24.51	9.02	36.47	23.99	9.63	35.19	23.44	10.33	33.84	22.87	11.13	30.47	20.92	12.03	28.33	19.87	13.22
		27°C	37.81	28.69	9.02	36.61	28.11	9.64	35.34	27.50	10.35	34.00	26.86	11.15	30.62	24.61	12.04	28.48	23.44	13.24
		30°C	37.98	35.19	9.04	36.77	34.57	9.65	35.48	33.91	10.36	34.15	33.24	11.16	30.78	30.55	12.06	28.71	28.71	13.26
		33°C	38.57	38.57	9.08	37.59	37.59	9.71	36.55	36.55	10.44	35.44	35.44	11.27	32.21	32.21	12.20	30.32	30.32	13.43
	22°C	27°C	41.28	23.01	9.26	39.96	22.52	9.89	38.58	22.02	10.60	37.12	21.48	11.41	33.47	19.68	12.32	31.15	18.72	13.52
		30°C	41.38	28.58	9.27	40.06	28.01	9.90	38.69	27.42	10.61	37.23	26.79	11.42	33.58	24.57	12.33	31.27	23.43	13.53
		33°C	41.54	33.42	9.28	40.22	32.84	9.91	38.84	32.23	10.63	37.38	31.60	11.44	33.71	29.08	12.34	31.40	27.85	13.55
		36°C	41.68	38.21	9.29	40.36	37.62	9.92	39.00	36.95	10.64	37.65	36.17	11.46	34.13	33.43	12.38	32.09	31.88	13.62
4620	16°C	21°C	34.91	26.67	8.83	33.77	26.05	9.43	32.56	25.40	10.13	31.29	24.70	10.93	28.14	22.52	11.81	26.10	21.29	13.00
		24°C	35.14	31.79	8.85	33.99	31.15	9.45	32.78	30.47	10.15	31.50	29.76	10.94	28.32	27.26	11.83	26.28	25.95	13.02
		27°C	35.63	35.63	8.88	34.64	34.64	9.50	33.62	33.62	10.21	32.52	32.52	11.03	29.48	29.48	11.94	27.64	27.64	13.15
		30°C	37.70	37.70	9.02	36.70	36.70	9.65	35.64	35.64	10.37	34.52	34.52	11.19	31.33	31.33	12.11	29.42	29.42	13.34
	19°C	24°C	38.29	25.65	9.06	37.06	25.13	9.67	35.74	24.57	10.38	34.36	23.97	11.18	30.93	21.90	12.07	28.74	20.75	13.27
		27°C	38.49	30.02	9.07	37.26	29.43	9.69	35.94	28.80	10.39	34.55	28.14	11.20	31.11	25.80	12.09	28.91	24.58	13.28
		30°C	38.69	37.00	9.09	37.43	36.35	9.70	36.14	35.67	10.41	34.79	34.79	11.22	31.44	31.44	12.12	29.43	29.43	13.34
		33°C	39.82	39.82	9.16	38.79	38.79	9.80	37.71	37.71	10.54	36.55	36.55	11.37	33.21	33.21	12.29	31.24	31.24	13.53
	22°C	27°C	41.94	24.07	9.31	40.58	23.58	9.93	39.15	23.06	10.65	37.66	22.54	11.46	33.94	20.67	12.36	31.58	19.67	13.56
		30°C	42.08	29.93	9.32	40.72	29.35	9.95	39.31	28.73	10.66	37.83	28.09	11.47	34.09	25.78	12.38	31.74	24.59	13.58
		33°C	42.28	35.16	9.33	40.91	34.56	9.96	39.49	33.93	10.68	37.99	33.28	11.49	34.24	30.65	12.39	31.87	29.37	13.60
		36°C	42.49	40.26	9.35	41.21	39.52	9.98	39.92	38.65	10.72	38.63	37.64	11.55	35.11	34.61	12.48	33.08	32.86	13.73

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	22.109	22.109	25.583	25.583	26.741	26.741	39.477	39.477	46.424	46.424	49.898	49.898	53.371	53.371
17	22.071	22.071	25.226	25.226	26.278	26.278	38.041	38.041	45.182	45.182	48.518	48.518	51.855	51.855
19	22.032	22.032	24.869	24.869	25.815	25.815	36.606	36.606	43.941	43.941	47.139	47.139	50.338	50.338
21	21.993	21.993	24.512	24.512	25.352	25.352	35.170	35.170	42.699	42.699	45.760	45.760	48.821	48.821
23	21.460	21.460	24.032	24.032	24.889	24.889	34.697	34.697	41.457	41.457	44.381	44.381	47.304	47.304
25	20.927	20.927	23.551	23.551	24.426	24.426	34.223	34.223	40.215	40.215	43.002	43.002	45.788	45.788
27	20.394	20.394	23.071	23.071	23.963	23.963	33.750	33.750	38.973	38.973	41.622	41.622	44.271	44.271

R22 MODELS
(HEATPUMP)

MODEL : MDB150BR2 / MMC075CR x 2
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
4140	16°C	21°C	42.86	29.83	13.31	41.51	29.17	14.23	40.06	28.48	15.29	38.51	27.74	16.50	34.66	25.32	17.85	32.19	23.95	19.65
		24°C	43.03	35.53	13.33	41.67	34.79	14.24	40.23	34.01	15.30	38.69	33.18	16.52	34.84	30.37	17.87	32.36	28.86	19.67
		27°C	43.19	40.90	13.34	41.87	40.14	14.26	40.47	39.31	15.32	39.03	38.30	16.55	35.33	34.87	17.92	33.16	32.75	19.77
		30°C	44.90	44.90	13.47	43.77	43.77	14.42	42.55	42.55	15.51	41.25	41.25	16.76	37.47	37.47	18.16	35.23	35.23	20.02
	19°C	24°C	47.09	28.18	13.65	45.63	27.57	14.58	44.06	26.92	15.65	42.40	26.23	16.87	38.20	23.98	18.24	35.51	22.75	20.05
		27°C	47.22	32.92	13.66	45.74	32.25	14.59	44.18	31.54	15.66	42.53	30.78	16.89	38.33	28.19	18.25	35.66	26.82	20.07
		30°C	47.40	40.17	13.67	45.90	39.45	14.60	44.33	38.68	15.68	42.66	37.88	16.90	38.46	34.82	18.27	35.81	33.29	20.09
		33°C	47.67	47.67	13.69	46.31	46.31	14.64	44.96	44.96	15.74	43.61	43.61	17.00	39.66	39.66	18.40	37.35	37.35	20.28
	22°C	27°C	51.67	26.48	14.02	50.04	25.89	14.97	48.34	25.29	16.06	46.55	24.66	17.29	41.98	22.56	18.67	39.09	21.43	20.50
		30°C	51.74	32.73	14.02	50.12	32.08	14.97	48.43	31.40	16.07	46.64	30.68	17.30	42.07	28.12	18.68	39.19	26.79	20.51
		33°C	51.89	38.14	14.04	50.27	37.46	14.99	48.57	36.75	16.08	46.78	36.00	17.32	42.21	33.12	18.69	39.33	31.68	20.53
		36°C	52.04	43.43	14.05	50.41	42.74	15.00	48.70	42.02	16.10	46.92	41.27	17.33	42.37	38.02	18.71	39.67	36.24	20.57
4600	16°C	21°C	43.77	31.03	13.38	42.36	30.37	14.30	40.85	29.64	15.36	39.26	28.84	16.57	35.33	26.30	17.92	32.79	24.86	19.72
		24°C	43.99	36.99	13.40	42.59	36.24	14.32	41.10	35.44	15.38	39.50	34.59	16.59	35.55	31.68	17.95	32.98	30.12	19.75
		27°C	44.30	42.88	13.42	42.99	41.96	14.35	41.64	40.87	15.43	40.30	39.60	16.67	36.54	36.09	18.06	34.28	33.96	19.90
		30°C	46.60	46.60	13.61	45.40	45.40	14.56	44.11	44.11	15.66	42.74	42.74	16.91	38.80	38.80	18.31	36.46	36.46	20.17
	19°C	24°C	48.05	29.29	13.72	46.53	28.68	14.65	44.90	28.02	15.73	43.17	27.33	16.95	38.88	25.00	18.31	36.15	23.75	20.13
		27°C	48.24	34.29	13.74	46.71	33.60	14.67	45.09	32.87	15.75	43.38	32.10	16.97	39.07	29.41	18.33	36.34	28.01	20.15
		30°C	48.46	42.06	13.76	46.91	41.31	14.69	45.27	40.53	15.77	43.57	39.72	16.99	39.27	36.51	18.36	36.63	34.72	20.19
		33°C	49.21	49.21	13.82	47.96	47.96	14.78	46.63	46.63	15.90	45.22	45.22	17.16	41.10	41.10	18.57	38.68	38.68	20.45
	22°C	27°C	52.67	27.50	14.10	50.98	26.92	15.05	49.22	26.31	16.14	47.36	25.68	17.38	42.70	23.52	18.75	39.74	22.38	20.58
		30°C	52.79	34.15	14.11	51.11	33.47	15.06	49.36	32.76	16.16	47.50	32.02	17.39	42.84	29.37	18.76	39.90	28.00	20.60
		33°C	53.00	39.94	14.13	51.32	39.25	15.08	49.55	38.52	16.18	47.69	37.76	17.41	43.01	34.75	18.79	40.06	33.28	20.62
		36°C	53.18	45.66	14.15	51.49	44.96	15.10	49.75	44.16	16.20	48.03	43.22	17.45	43.54	39.96	18.85	40.94	38.10	20.73
5060	16°C	21°C	44.54	31.88	13.44	43.08	31.14	14.36	41.54	30.35	15.42	39.92	29.52	16.63	35.90	26.91	17.98	33.30	25.44	19.79
		24°C	44.83	37.99	13.47	43.37	37.22	14.39	41.83	36.42	15.45	40.18	35.56	16.66	36.13	32.58	18.01	33.53	31.01	19.82
		27°C	45.46	44.27	13.51	44.19	43.55	14.46	42.89	42.70	15.55	41.50	41.50	16.79	37.61	37.61	18.17	35.27	35.27	20.02
		30°C	48.09	48.09	13.73	46.82	46.82	14.68	45.48	45.48	15.79	44.04	44.04	17.04	39.97	39.97	18.44	37.54	37.54	20.30
	19°C	24°C	48.86	30.65	13.79	47.28	30.03	14.72	45.60	29.36	15.80	43.83	28.64	17.02	39.46	26.17	18.38	36.67	24.80	20.19
		27°C	49.10	35.88	13.81	47.53	35.17	14.74	45.85	34.42	15.82	44.08	33.63	17.04	39.69	30.83	18.41	36.88	29.38	20.22
		30°C	49.36	44.22	13.83	47.75	43.45	14.77	46.11	42.63	15.85	44.39	41.71	17.07	40.11	38.14	18.45	37.55	36.01	20.31
		33°C	50.81	50.81	13.95	49.49	49.49	14.92	48.11	48.11	16.04	46.63	46.63	17.30	42.36	42.36	18.71	39.85	39.85	20.59
	22°C	27°C	53.50	28.77	14.17	51.77	28.18	15.12	49.95	27.56	16.21	48.05	26.94	17.45	43.31	24.70	18.82	40.29	23.50	20.64
		30°C	53.68	35.78	14.19	51.96	35.07	15.14	50.16	34.34	16.23	48.26	33.57	17.47	43.50	30.81	18.84	40.49	29.39	20.67
		33°C	53.94	42.01	14.21	52.20	41.30	15.16	50.38	40.55	16.26	48.47	39.77	17.49	43.68	36.62	18.87	40.67	35.10	20.70
		36°C	54.21	48.12	14.23	52.58	47.23	15.20	50.93	46.19	16.31	49.28	44.98	17.58	44.80	41.36	19.00	42.21	39.28	20.90

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	26.112	26.112	30.976	30.976	32.597	32.597	50.432	50.432	60.161	60.161	65.025	65.025	69.889	69.889
17	25.878	25.878	30.480	30.480	32.014	32.014	48.080	48.080	58.540	58.540	63.221	63.221	67.902	67.902
19	25.644	25.644	29.984	29.984	31.431	31.431	45.728	45.728	56.919	56.919	61.417	61.417	65.915	65.915
21	25.410	25.410	29.488	29.488	30.848	30.848	43.376	43.376	55.299	55.299	59.614	59.614	63.929	63.929
23	24.960	24.960	28.938	28.938	30.264	30.264	43.277	43.277	53.678	53.678	57.810	57.810	61.942	61.942
25	24.510	24.510	28.388	28.388	29.681	29.681	43.178	43.178	52.058	52.058	56.006	56.006	59.955	59.955
27	24.060	24.060	27.838	27.838	29.098	29.098	43.079	43.079	50.437	50.437	54.203	54.203	57.969	57.969

R22 MODELS
(HEATPUMP)

MODEL : MDB200BR2 / MMC100BR x 2
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
5760	16°C	21°C	57.23	39.29	16.68	55.42	38.42	17.83	53.49	37.51	19.16	51.42	36.53	20.67	46.27	33.35	22.37	42.98	31.55	24.63
		24°C	57.45	46.80	16.70	55.64	45.83	17.85	53.71	44.80	19.18	51.66	43.71	20.69	46.52	40.00	22.39	43.20	38.01	24.65
		27°C	57.66	53.87	16.72	55.90	52.87	17.87	54.03	51.78	19.20	52.11	50.44	20.74	47.17	45.93	22.46	44.27	43.14	24.77
		30°C	59.95	59.95	16.88	58.44	58.44	18.07	56.81	56.81	19.44	55.07	55.07	21.00	50.03	50.03	22.75	47.04	47.04	25.09
	19°C	24°C	62.88	37.12	17.10	60.92	36.31	18.27	58.83	35.45	19.61	56.61	34.55	21.14	51.00	31.58	22.85	47.41	29.97	25.13
		27°C	63.04	43.36	17.11	61.08	42.47	18.28	58.99	41.53	19.63	56.78	40.54	21.16	51.18	37.13	22.87	47.62	35.32	25.15
		30°C	63.28	52.91	17.13	61.29	51.95	18.30	59.18	50.95	19.65	56.95	49.89	21.18	51.35	45.86	22.89	47.81	43.85	25.17
		33°C	63.65	63.65	17.16	61.83	61.83	18.34	60.03	60.03	19.72	58.23	58.23	21.30	52.95	52.95	23.06	49.87	49.87	25.41
	22°C	27°C	68.99	34.87	17.56	66.81	34.10	18.75	64.54	33.31	20.12	62.15	32.48	21.67	56.05	29.72	23.39	52.19	28.23	25.68
		30°C	69.08	43.11	17.57	66.91	42.25	18.76	64.66	41.36	20.13	62.27	40.40	21.68	56.17	37.04	23.40	52.33	35.29	25.70
		33°C	69.28	50.23	17.59	67.11	49.33	18.78	64.85	48.40	20.15	62.46	47.42	21.70	56.35	43.62	23.42	52.51	41.73	25.72
		36°C	69.47	57.20	17.60	67.31	56.29	18.80	65.02	55.34	20.17	62.64	54.36	21.72	56.57	50.08	23.45	52.97	47.73	25.78
6400	16°C	21°C	58.43	40.87	16.77	56.56	40.00	17.92	54.54	39.04	19.25	52.41	37.98	20.76	47.17	34.64	22.46	43.78	32.74	24.72
		24°C	58.74	48.72	16.79	56.87	47.73	17.94	54.87	46.68	19.27	52.74	45.56	20.79	47.46	41.72	22.49	44.03	39.67	24.75
		27°C	59.15	56.48	16.82	57.39	55.27	17.98	55.60	53.84	19.34	53.80	52.16	20.89	48.79	47.54	22.62	45.77	44.73	24.94
		30°C	62.21	62.21	17.05	60.61	60.61	18.24	58.89	58.89	19.62	57.06	57.06	21.19	51.80	51.80	22.94	48.68	48.68	25.27
	19°C	24°C	64.16	38.58	17.20	62.13	37.77	18.36	59.95	36.90	19.71	57.64	35.99	21.24	51.91	32.93	22.95	48.27	31.28	25.22
		27°C	64.40	45.16	17.21	62.37	44.25	18.38	60.20	43.29	19.73	57.91	42.28	21.26	52.17	38.74	22.97	48.51	36.89	25.25
		30°C	64.69	55.39	17.24	62.63	54.41	18.41	60.44	53.38	19.76	58.17	52.32	21.29	52.44	48.09	23.00	48.90	45.74	25.30
		33°C	65.71	65.71	17.31	64.03	64.03	18.52	62.26	62.26	19.92	60.37	60.37	21.50	54.87	54.87	23.27	51.65	51.65	25.62
	22°C	27°C	70.32	36.22	17.67	68.06	35.45	18.86	65.72	34.65	20.23	63.23	33.82	21.77	57.01	30.97	23.49	53.06	29.47	25.78
		30°C	70.49	44.98	17.68	68.24	44.08	18.88	65.90	43.15	20.24	63.43	42.18	21.79	57.19	38.68	23.51	53.27	36.87	25.81
		33°C	70.76	52.61	17.70	68.52	51.69	18.90	66.15	50.73	20.27	63.67	49.73	21.82	57.42	45.77	23.54	53.48	43.84	25.84
		36°C	71.00	60.14	17.72	68.75	59.22	18.92	66.43	58.16	20.30	64.13	56.93	21.86	58.13	52.62	23.62	54.66	50.18	25.98
7040	16°C	21°C	59.47	41.98	16.85	57.52	41.01	18.00	55.46	39.98	19.33	53.29	38.88	20.84	47.93	35.45	22.53	44.46	33.50	24.80
		24°C	59.85	50.03	16.87	57.91	49.03	18.03	55.85	47.96	19.36	53.65	46.84	20.88	48.24	42.91	22.57	44.77	40.84	24.83
		27°C	60.69	58.31	16.93	59.00	57.36	18.11	57.26	56.24	19.48	55.40	54.96	21.03	50.22	49.97	22.77	47.09	47.08	25.09
		30°C	64.21	64.21	17.20	62.51	62.51	18.40	60.72	60.72	19.78	58.80	58.80	21.35	53.36	53.36	23.10	50.12	50.12	25.44
	19°C	24°C	65.23	40.38	17.28	63.13	39.55	18.45	60.89	38.67	19.79	58.52	37.73	21.32	52.69	34.47	23.03	48.95	32.66	25.30
		27°C	65.56	47.26	17.30	63.46	46.33	18.47	61.21	45.33	19.83	58.86	44.29	21.35	52.99	40.61	23.06	49.25	38.69	25.34
		30°C	65.90	58.24	17.33	63.75	57.22	18.50	61.56	56.15	19.86	59.26	54.94	21.39	53.55	50.23	23.12	50.13	47.43	25.44
		33°C	67.84	67.84	17.48	66.08	66.08	18.69	64.23	64.23	20.09	62.26	62.26	21.68	56.56	56.56	23.45	53.21	53.21	25.81
	22°C	27°C	71.44	37.89	17.76	69.12	37.11	18.95	66.69	36.30	20.32	64.16	35.48	21.86	57.82	32.53	23.58	53.79	30.96	25.87
		30°C	71.67	47.12	17.78	69.37	46.19	18.97	66.96	45.23	20.34	64.43	44.22	21.89	58.08	40.57	23.61	54.06	38.71	25.90
		33°C	72.01	55.34	17.80	69.69	54.39	19.00	67.26	53.41	20.37	64.71	52.39	21.92	58.32	48.24	23.64	54.30	46.23	25.94
		36°C	72.37	63.37	17.83	70.20	62.20	19.04	68.00	60.83	20.44	65.80	59.25	22.03	59.81	54.48	23.81	56.35	51.73	26.18

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	33.260	33.260	38.472	38.472	40.209	40.209	59.319	59.319	69.742	69.742	74.954	74.954	80.166	80.166
17	33.205	33.205	37.936	37.936	39.513	39.513	58.413	58.413	67.877	67.877	72.882	72.882	77.888	77.888
19	33.150	33.150	37.401	37.401	38.818	38.818	57.506	57.506	66.012	66.012	70.811	70.811	75.610	75.610
21	33.095	33.095	36.865	36.865	38.122	38.122	56.600	56.600	64.146	64.146	68.739	68.739	73.331	73.331
23	32.290	32.290	36.142	36.142	37.426	37.426	54.573	54.573	62.281	62.281	66.667	66.667	71.053	71.053
25	31.485	31.485	35.419	35.419	36.731	36.731	52.545	52.545	60.416	60.416	64.595	64.595	68.775	68.775
27	30.679	30.679	34.696	34.696	36.035	36.035	50.517	50.517	58.550	58.550	62.524	62.524	66.497	66.497

R22 MODELS
(HEATPUMP)

MODEL : MDB250BR2 / MMC125BR x 2
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
7200	16°C	21°C	67.19	49.92	18.41	65.06	48.82	19.67	62.80	47.66	21.14	60.37	46.41	22.81	54.33	42.37	24.68	50.47	40.08	27.18
		24°C	67.45	59.46	18.43	65.33	58.23	19.69	63.07	56.92	21.16	60.66	55.53	22.84	54.62	50.83	24.71	50.72	48.30	27.21
		27°C	67.70	67.70	18.45	65.64	65.64	19.72	63.43	63.43	21.19	61.18	61.18	22.88	55.38	55.38	24.78	51.97	51.97	27.34
		30°C	70.39	70.39	18.63	68.61	68.61	19.94	66.70	66.70	21.45	64.66	64.66	23.18	58.74	58.74	25.11	55.23	55.23	27.69
	19°C	24°C	73.82	47.16	18.87	71.53	46.14	20.16	69.07	45.05	21.64	66.46	43.90	23.33	59.87	40.13	25.22	55.67	38.08	27.73
		27°C	74.01	55.09	18.88	71.71	53.97	20.17	69.26	52.77	21.66	66.67	51.51	23.35	60.09	47.18	25.24	55.91	44.88	27.75
		30°C	74.30	67.23	18.90	71.96	66.01	20.19	69.48	64.73	21.69	66.87	63.39	23.38	60.29	58.27	25.26	56.13	55.71	27.78
		33°C	74.73	74.73	18.93	72.60	72.60	20.24	70.48	70.48	21.76	68.36	68.36	23.50	62.17	62.17	25.45	58.55	58.55	28.05
	22°C	27°C	81.00	44.31	19.38	78.44	43.33	20.70	75.77	42.32	22.21	72.97	41.27	23.91	65.81	37.76	25.81	61.27	35.86	28.34
		30°C	81.11	54.77	19.39	78.56	53.68	20.71	75.91	52.55	22.22	73.11	51.34	23.92	65.95	47.06	25.82	61.44	44.84	28.36
		33°C	81.34	63.82	19.41	78.80	62.68	20.73	76.14	61.50	22.24	73.33	60.25	23.95	66.16	55.42	25.85	61.65	53.02	28.39
		36°C	81.57	72.67	19.43	79.03	71.53	20.74	76.33	70.32	22.26	73.55	69.07	23.97	66.42	63.63	25.88	62.19	60.64	28.45
8000	16°C	21°C	68.61	51.93	18.51	66.41	50.82	19.77	64.04	49.61	21.24	61.54	48.26	22.91	55.38	44.01	24.78	51.40	41.60	27.27
		24°C	68.96	61.90	18.53	66.77	60.65	19.80	64.42	59.31	21.27	61.92	57.89	22.94	55.72	53.02	24.82	51.70	50.41	27.31
		27°C	69.44	69.44	18.56	67.38	67.38	19.85	65.28	65.28	21.34	63.17	63.17	23.05	57.29	57.29	24.97	53.74	53.74	27.52
		30°C	73.04	73.04	18.82	71.16	71.16	20.13	69.14	69.14	21.65	66.99	66.99	23.38	60.82	60.82	25.31	57.16	57.16	27.89
	19°C	24°C	75.33	49.02	18.98	72.95	47.99	20.26	70.38	46.89	21.75	67.68	45.73	23.44	60.94	41.84	25.32	56.67	39.74	27.83
		27°C	75.61	57.38	19.00	73.22	56.22	20.29	70.68	55.00	21.78	68.00	53.72	23.47	61.25	49.22	25.35	56.96	46.87	27.86
		30°C	75.96	70.38	19.02	73.53	69.14	20.32	70.96	67.83	21.81	68.29	66.48	23.50	61.57	61.10	25.39	57.42	57.42	27.92
		33°C	77.15	77.15	19.10	75.17	75.17	20.44	73.09	73.09	21.98	70.88	70.88	23.72	64.43	64.43	25.68	60.64	60.64	28.27
	22°C	27°C	82.56	46.02	19.50	79.91	45.04	20.81	77.16	44.03	22.32	74.24	42.97	24.03	66.93	39.35	25.93	62.30	37.45	28.45
		30°C	82.76	57.15	19.51	80.12	56.01	20.83	77.37	54.83	22.34	74.47	53.59	24.05	67.15	49.15	25.95	62.54	46.85	28.48
		33°C	83.07	66.84	19.54	80.44	65.68	20.86	77.67	64.46	22.37	74.76	63.19	24.08	67.42	58.16	25.98	62.79	55.70	28.51
		36°C	83.36	76.42	19.56	80.72	75.24	20.88	77.99	73.90	22.40	75.29	72.33	24.12	68.25	66.86	26.06	64.17	63.75	28.67
8800	16°C	21°C	69.82	53.34	18.59	67.54	52.11	19.86	65.12	50.79	21.33	62.57	49.40	23.00	56.28	45.04	24.87	52.20	42.57	27.37
		24°C	70.27	63.57	18.62	67.99	62.29	19.89	65.57	60.94	21.36	62.99	59.51	23.04	56.64	54.52	24.91	52.56	51.89	27.40
		27°C	71.26	71.26	18.69	69.27	69.27	19.99	67.23	67.23	21.50	65.05	65.05	23.21	58.96	58.96	25.13	55.28	55.28	27.69
		30°C	75.39	75.39	18.98	73.40	73.40	20.30	71.29	71.29	21.83	69.04	69.04	23.56	62.65	62.65	25.50	58.84	58.84	28.08
	19°C	24°C	76.59	51.30	19.07	74.12	50.25	20.36	71.49	49.13	21.84	68.71	47.93	23.53	61.86	43.80	25.41	57.48	41.50	27.92
		27°C	76.97	60.05	19.09	74.51	58.86	20.39	71.87	57.60	21.88	69.11	56.28	23.57	62.22	51.60	25.45	57.82	49.16	27.96
		30°C	77.38	74.00	19.12	74.85	72.71	20.42	72.28	71.34	21.91	69.58	69.58	23.61	62.87	62.87	25.52	58.86	58.86	28.08
		33°C	79.65	79.65	19.29	77.58	77.58	20.63	75.41	75.41	22.18	73.10	73.10	23.92	66.41	66.41	25.88	62.47	62.47	28.48
	22°C	27°C	83.87	48.14	19.59	81.16	47.15	20.91	78.30	46.12	22.42	75.33	45.08	24.12	67.88	41.34	26.02	63.16	39.33	28.55
		30°C	84.15	59.87	19.62	81.45	58.69	20.94	78.62	57.46	22.45	75.65	56.18	24.15	68.19	51.55	26.05	63.47	49.18	28.58
		33°C	84.55	70.31	19.65	81.82	69.11	20.97	78.97	67.86	22.48	75.98	66.56	24.19	68.48	61.29	26.09	63.75	58.74	28.62
		36°C	84.97	80.52	19.68	82.43	79.03	21.01	79.83	77.29	22.55	77.25	75.28	24.31	70.23	69.22	26.27	66.16	65.73	28.89

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0°C to 52°C without pressure trip.

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	44.219	44.219	51.166	51.166	53.482	53.482	78.954	78.954	92.848	92.848	99.795	99.795	106.743	106.743
17	44.141	44.141	50.452	50.452	52.556	52.556	76.083	76.083	90.365	90.365	97.037	97.037	103.709	103.709
19	44.064	44.064	49.738	49.738	51.630	51.630	73.211	73.211	87.881	87.881	94.278	94.278	100.676	100.676
21	43.986	43.986	49.025	49.025	50.704	50.704	70.340	70.340	85.398	85.398	91.520	91.520	97.642	97.642
23	42.920	42.920	48.064	48.064	49.778	49.778	69.393	69.393	82.914	82.914	88.762	88.762	94.609	94.609
25	41.854	41.854	47.103	47.103	48.853	48.853	68.446	68.446	80.430	80.430	86.003	86.003	91.576	91.576
27	40.787	40.787	46.142	46.142	47.927	47.927	67.500	67.500	77.947	77.947	83.245	83.245	88.542	88.542

R22 MODELS
(HEATPUMP)

MODEL : MDB300BR3 / MMC100CR x 3
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
8100	16°C	21°C	85.84	58.94	24.95	83.13	57.64	26.66	80.23	56.26	28.65	77.13	54.80	30.91	69.41	50.02	33.45	64.48	47.32	36.83
		24°C	86.18	70.20	24.97	83.46	68.74	26.69	80.57	67.20	28.68	77.49	65.56	30.95	69.78	60.00	33.49	64.80	57.02	36.87
		27°C	86.50	80.80	25.00	83.86	79.30	26.72	81.04	77.66	28.72	78.16	75.66	31.01	70.75	68.90	33.59	66.40	64.71	37.05
		30°C	89.93	89.93	25.25	87.66	87.66	27.02	85.22	85.22	29.07	82.61	82.61	31.41	75.04	75.04	34.03	70.56	70.56	37.52
	19°C	24°C	94.32	55.68	25.57	91.39	54.47	27.32	88.24	53.18	29.33	84.91	51.83	31.62	76.49	47.37	34.17	71.12	44.96	37.58
		27°C	94.56	65.04	25.59	91.61	63.71	27.34	88.49	62.30	29.35	85.17	60.82	31.64	76.77	55.70	34.20	71.42	52.99	37.61
		30°C	94.92	79.37	25.62	91.93	77.93	27.37	88.77	76.42	29.39	85.43	74.83	31.68	77.03	68.79	34.24	71.71	65.77	37.65
		33°C	95.47	95.47	25.66	92.75	92.75	27.43	90.05	90.05	29.49	87.34	87.34	31.85	79.43	79.43	34.49	74.80	74.80	38.01
	22°C	27°C	103.48	52.31	26.27	100.21	51.15	28.05	96.81	49.96	30.09	93.22	48.72	32.40	84.08	44.57	34.98	78.28	42.34	38.41
		30°C	103.63	64.66	26.28	100.37	63.38	28.06	96.98	62.04	30.11	93.40	60.61	32.42	84.25	55.56	35.00	78.49	52.93	38.43
		33°C	103.92	75.35	26.30	100.67	74.00	28.09	97.27	72.60	30.14	93.69	71.13	32.45	84.53	65.42	35.03	78.76	62.60	38.47
		36°C	104.21	85.80	26.33	100.97	84.44	28.11	97.52	83.01	30.16	93.96	81.54	32.48	84.86	75.12	35.07	79.45	71.59	38.55
9000	16°C	21°C	87.65	61.31	25.08	84.84	60.00	26.80	81.82	58.57	28.79	78.62	56.98	31.05	70.76	51.96	33.58	65.67	49.11	36.96
		24°C	88.11	73.08	25.12	85.30	71.60	26.83	82.30	70.02	28.83	79.10	68.34	31.09	71.19	62.59	33.63	66.05	59.51	37.01
		27°C	88.72	84.73	25.16	86.09	82.91	26.89	83.40	80.75	28.92	80.70	78.23	31.24	73.19	71.30	33.83	68.66	67.09	37.30
		30°C	93.32	93.32	25.50	90.92	90.92	27.28	88.34	88.34	29.34	85.59	85.59	31.69	77.71	77.71	34.31	73.02	73.02	37.80
	19°C	24°C	96.24	57.87	25.72	93.19	56.65	27.46	89.92	55.35	29.48	86.47	53.99	31.76	77.86	49.40	34.32	72.40	46.91	37.72
		27°C	96.60	67.74	25.74	93.55	66.38	27.49	90.30	64.93	29.51	86.87	63.42	31.80	78.25	58.11	34.36	72.77	55.34	37.76
		30°C	97.04	83.09	25.78	93.94	81.62	27.53	90.66	80.08	29.55	87.25	78.48	31.84	78.66	72.13	34.40	73.36	68.60	37.84
		33°C	98.56	98.56	25.89	96.04	96.04	27.70	93.38	93.38	29.79	90.56	90.56	32.15	82.31	82.31	34.80	77.47	77.47	38.32
	22°C	27°C	105.48	54.33	26.42	102.10	53.17	28.21	98.58	51.98	30.25	94.85	50.73	32.56	85.51	46.46	35.13	79.59	44.21	38.56
		30°C	105.73	67.47	26.44	102.36	66.13	28.23	98.85	64.73	30.28	95.14	63.26	32.59	85.79	58.02	35.16	79.90	55.31	38.59
		33°C	106.14	78.91	26.48	102.77	77.54	28.26	99.23	76.10	30.31	95.51	74.60	32.63	86.13	68.66	35.21	80.22	65.76	38.64
		36°C	106.50	90.22	26.51	103.13	88.83	28.30	99.65	87.24	30.35	96.20	85.39	32.69	87.20	78.94	35.32	81.99	75.27	38.85
9900	16°C	21°C	89.20	62.98	25.19	86.28	61.52	26.91	83.20	59.96	28.90	79.94	58.32	31.17	71.90	53.17	33.70	66.69	50.26	37.09
		24°C	89.78	75.05	25.24	86.86	73.54	26.96	83.77	71.95	28.95	80.48	70.26	31.22	72.37	64.36	33.75	67.15	61.26	37.13
		27°C	91.04	87.47	25.32	88.50	86.03	27.09	85.90	84.35	29.13	83.10	82.44	31.46	75.33	74.95	34.06	70.63	70.62	37.52
		30°C	96.32	96.32	25.72	93.77	93.77	27.52	91.08	91.08	29.58	88.20	88.20	31.93	80.04	80.04	34.55	75.18	75.18	38.05
	19°C	24°C	97.84	60.56	25.84	94.69	59.32	27.59	91.33	58.00	29.60	87.78	56.59	31.89	79.03	51.71	34.44	73.43	49.00	37.84
		27°C	98.34	70.89	25.88	95.19	69.49	27.63	91.82	68.00	29.65	88.29	66.44	31.94	79.49	60.92	34.49	73.87	58.04	37.90
		30°C	98.86	87.36	25.92	95.63	85.83	27.67	92.34	84.22	29.70	88.89	82.41	31.99	80.32	75.35	34.58	75.20	71.15	38.05
		33°C	101.76	101.76	26.14	99.12	99.12	27.96	96.35	96.35	30.05	93.39	93.39	32.42	84.85	84.85	35.07	79.82	79.82	38.59
	22°C	27°C	107.15	56.83	26.55	103.69	55.67	28.34	100.04	54.45	30.38	96.24	53.21	32.69	86.73	48.80	35.26	80.69	46.44	38.69
		30°C	107.51	70.68	26.58	104.06	69.29	28.37	100.45	67.84	30.42	96.65	66.32	32.73	87.11	60.86	35.31	81.09	58.06	38.74
		33°C	108.02	83.01	26.63	104.54	81.59	28.41	100.90	80.12	30.47	97.07	78.58	32.78	87.49	72.36	35.36	81.44	69.35	38.79
		36°C	108.56	95.06	26.67	105.31	93.30	28.48	101.99	91.25	30.57	98.69	88.87	32.94	89.72	81.72	35.60	84.53	77.60	39.16

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	49.890	49.890	57.708	57.708	60.313	60.313	88.978	88.978	104.613	104.613	112.431	112.431	120.249	120.249
17	49.807	49.807	56.904	56.904	59.270	59.270	87.619	87.619	101.815	101.815	109.323	109.323	116.832	116.832
19	49.725	49.725	56.101	56.101	58.226	58.226	86.260	86.260	99.017	99.017	106.216	106.216	113.414	113.414
21	49.642	49.642	55.298	55.298	57.183	57.183	84.900	84.900	96.220	96.220	103.108	103.108	109.997	109.997
23	48.435	48.435	54.213	54.213	56.139	56.139	81.859	81.859	93.422	93.422	100.001	100.001	106.580	106.580
25	47.227	47.227	53.129	53.129	55.096	55.096	78.818	78.818	90.624	90.624	96.893	96.893	103.163	103.163
27	46.019	46.019	52.044	52.044	54.052	54.052	75.776	75.776	87.826	87.826	93.786	93.786	99.746	99.746

R22 MODELS
(HEATPUMP)

MODEL : MDB350BR3 / MMC100BR x 1 + MMC125BR x 2
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
9450	16°C	21°C	95.81	68.48	26.57	92.77	66.97	28.40	89.55	65.37	30.52	86.08	63.67	32.93	77.46	58.12	35.63	71.96	54.98	39.23
		24°C	96.18	81.57	26.60	93.15	79.87	28.43	89.92	78.08	30.55	86.49	76.18	32.97	77.88	69.72	35.67	72.33	66.25	39.27
		27°C	96.53	93.89	26.63	93.59	92.14	28.46	90.45	90.24	30.59	87.24	87.24	33.03	78.97	78.97	35.78	74.11	74.11	39.46
		30°C	100.36	100.36	26.89	97.83	97.83	28.78	95.11	95.11	30.97	92.20	92.20	33.46	83.75	83.75	36.25	78.75	78.75	39.96
	19°C	24°C	105.26	64.69	27.24	101.99	63.29	29.10	98.49	61.79	31.24	94.77	60.22	33.68	85.37	55.05	36.40	79.37	52.24	40.03
		27°C	105.53	75.57	27.26	102.25	74.03	29.12	98.76	72.39	31.27	95.06	70.66	33.70	85.68	64.72	36.43	79.71	61.57	40.06
		30°C	105.94	92.22	27.29	102.60	90.55	29.15	99.08	88.80	31.30	95.34	86.95	33.74	85.97	79.93	36.47	80.03	76.43	40.10
		33°C	106.55	106.55	27.33	103.51	103.51	29.22	100.50	100.50	31.42	97.48	97.48	33.92	88.64	88.64	36.74	83.48	83.48	40.48
	22°C	27°C	115.49	60.78	27.98	111.84	59.44	29.88	108.04	58.05	32.05	104.04	56.61	34.51	93.84	51.79	37.26	87.37	49.20	40.91
		30°C	115.65	75.13	27.99	112.01	73.64	29.89	108.24	72.09	32.07	104.24	70.42	34.53	94.03	64.56	37.28	87.60	61.50	40.93
		33°C	115.98	87.55	28.02	112.35	85.98	29.92	108.56	84.36	32.10	104.56	82.65	34.57	94.34	76.02	37.31	87.90	72.73	40.97
		36°C	116.31	99.69	28.04	112.68	98.11	29.95	108.84	96.45	32.13	104.87	94.74	34.60	94.71	87.28	37.35	88.67	83.18	41.06
10500	16°C	21°C	97.83	71.23	26.71	94.69	69.72	28.54	91.31	68.05	30.66	87.75	66.20	33.08	78.97	60.38	35.77	73.29	57.06	39.37
		24°C	98.33	84.92	26.75	95.20	83.19	28.58	91.86	81.36	30.70	88.28	79.41	33.12	79.45	72.72	35.82	73.72	69.15	39.42
		27°C	99.02	98.44	26.80	96.08	96.08	28.65	93.07	93.07	30.80	90.07	90.07	33.27	81.68	81.68	36.04	76.63	76.63	39.73
		30°C	104.15	104.15	27.16	101.47	101.47	29.06	98.59	98.59	31.26	95.52	95.52	33.75	86.73	86.73	36.54	81.50	81.50	40.26
	19°C	24°C	107.41	67.24	27.39	104.01	65.83	29.25	100.36	64.31	31.40	96.50	62.73	33.83	86.90	57.39	36.56	80.80	54.51	40.18
		27°C	107.81	78.71	27.42	104.41	77.12	29.28	100.78	75.45	31.44	96.95	73.68	33.87	87.33	67.52	36.60	81.21	64.30	40.22
		30°C	108.30	96.54	27.46	104.84	94.84	29.33	101.18	93.04	31.48	97.38	91.19	33.92	87.79	83.81	36.64	81.87	79.71	40.30
		33°C	110.00	110.00	27.58	107.19	107.19	29.50	104.22	104.22	31.73	101.07	101.07	34.25	91.86	91.86	37.06	86.46	86.46	40.81
	22°C	27°C	117.72	63.13	28.14	113.95	61.79	30.04	110.02	60.40	32.22	105.86	58.94	34.68	95.43	53.98	37.42	88.83	51.37	41.07
		30°C	118.00	78.40	28.17	114.24	76.83	30.07	110.32	75.21	32.25	106.18	73.51	34.71	95.75	67.42	37.45	89.17	64.27	41.11
		33°C	118.45	91.69	28.20	114.70	90.09	30.11	110.75	88.42	32.29	106.59	86.68	34.76	96.13	79.78	37.50	89.53	76.40	41.16
		36°C	118.87	104.83	28.23	115.09	103.21	30.14	111.21	101.37	32.33	107.36	99.22	34.82	97.32	91.72	37.62	91.50	87.45	41.39
11550	16°C	21°C	99.56	73.17	26.83	96.30	71.48	28.67	92.85	69.67	30.79	89.22	67.76	33.20	80.24	61.78	35.90	74.43	58.39	39.50
		24°C	100.20	87.20	26.88	96.94	85.45	28.71	93.49	83.60	30.84	89.82	81.63	33.25	80.77	74.78	35.95	74.94	71.18	39.55
		27°C	101.60	101.60	26.97	98.77	98.77	28.85	95.87	95.87	31.03	92.75	92.75	33.51	84.07	84.07	36.27	78.83	78.83	39.97
		30°C	107.50	107.50	27.40	104.65	104.65	29.31	101.65	101.65	31.51	98.44	98.44	34.01	89.33	89.33	36.80	83.90	83.90	40.53
	19°C	24°C	109.20	70.37	27.52	105.68	68.93	29.38	101.93	67.40	31.53	97.97	65.75	33.97	88.21	60.08	36.68	81.95	56.93	40.31
		27°C	109.75	82.37	27.56	106.24	80.74	29.43	102.48	79.01	31.58	98.54	77.20	34.02	88.72	70.78	36.74	82.44	67.44	40.36
		30°C	110.33	101.50	27.61	106.73	99.73	29.48	103.06	97.86	31.63	99.21	95.75	34.08	89.64	87.55	36.83	83.92	82.67	40.53
		33°C	113.57	113.57	27.84	110.62	110.62	29.78	107.53	107.53	32.01	104.23	104.23	34.53	94.69	94.69	37.35	89.08	89.08	41.11
	22°C	27°C	119.59	66.03	28.28	115.72	64.68	30.19	111.65	63.27	32.36	107.41	61.83	34.82	96.79	56.70	37.56	90.05	53.95	41.21
		30°C	119.99	82.12	28.32	116.13	80.51	30.22	112.10	78.83	32.40	107.87	77.06	34.87	97.23	70.72	37.61	90.50	67.46	41.26
		33°C	120.56	96.45	28.36	116.67	94.80	30.27	112.61	93.09	32.45	108.34	91.30	34.92	97.64	84.07	37.66	90.90	80.58	41.32
		36°C	121.16	110.45	28.41	117.53	108.41	30.33	113.83	106.02	32.56	110.15	103.26	35.09	100.13	94.95	37.92	94.34	90.16	41.71

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	60.849	60.849	70.402	70.402	73.586	73.586	108.614	108.614	127.720	127.720	137.273	137.273	146.825	146.825
17	60.744	60.744	69.420	69.420	72.312	72.312	105.289	105.289	124.303	124.303	133.478	133.478	142.653	142.653
19	60.639	60.639	68.439	68.439	71.039	71.039	101.965	101.965	120.887	120.887	129.684	129.684	138.481	138.481
21	60.533	60.533	67.457	67.457	69.765	69.765	98.640	98.640	117.471	117.471	125.889	125.889	134.308	134.308
23	59.065	59.065	66.135	66.135	68.492	68.492	96.680	96.680	114.055	114.055	122.095	122.095	130.136	130.136
25	57.596	57.596	64.812	64.812	67.218	67.218	94.719	94.719	110.638	110.638	118.301	118.301	125.963	125.963
27	56.127	56.127	63.490	63.490	65.944	65.944	92.758	92.758	107.222	107.222	114.506	114.506	121.791	121.791

R22 MODELS
(HEATPUMP)

MODEL : MDB400BR4 / MMC100BR x 4
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
10800	16°C	21°C	114.46	78.58	32.87	110.83	76.85	35.13	106.98	75.01	37.75	102.84	73.06	40.74	92.55	66.70	44.08	85.97	63.10	48.53
		24°C	114.90	93.60	32.90	111.28	91.65	35.17	107.43	89.59	37.79	103.33	87.41	40.78	93.04	80.01	44.12	86.40	76.02	48.58
		27°C	115.33	107.74	32.94	111.81	105.73	35.21	108.05	103.55	37.84	104.22	100.88	40.86	94.34	91.86	44.26	88.54	86.28	48.82
		30°C	119.90	119.90	33.27	116.88	116.88	35.60	113.63	113.63	38.31	110.15	110.15	41.39	100.06	100.06	44.84	94.08	94.08	49.44
	19°C	24°C	125.76	74.24	33.70	121.85	72.62	35.99	117.66	70.91	38.65	113.22	69.10	41.66	101.99	63.17	45.03	94.83	59.94	49.52
		27°C	126.08	86.72	33.72	122.15	84.95	36.02	117.98	83.07	38.68	113.56	81.09	41.70	102.36	74.26	45.07	95.23	70.65	49.56
		30°C	126.56	105.83	33.76	122.57	103.91	36.06	118.36	101.90	38.72	113.90	99.77	41.74	102.71	91.73	45.11	95.61	87.70	49.61
		33°C	127.30	127.30	33.81	123.67	123.67	36.14	120.06	120.06	38.86	116.46	116.46	41.97	105.90	105.90	45.44	99.73	99.73	50.08
	22°C	27°C	137.98	69.74	34.61	133.61	68.21	36.96	129.08	66.62	39.65	124.30	64.96	42.70	112.11	59.43	46.09	104.37	56.45	50.61
		30°C	138.17	86.21	34.63	133.82	84.50	36.97	129.31	82.72	39.67	124.54	80.81	42.72	112.34	74.08	46.11	104.65	70.57	50.64
		33°C	138.55	100.46	34.66	134.23	98.67	37.01	129.70	96.80	39.71	124.92	94.84	42.76	112.70	87.23	46.16	105.01	83.46	50.69
		36°C	138.95	114.39	34.69	134.62	112.59	37.04	130.03	110.68	39.75	125.28	108.72	42.80	113.14	100.15	46.20	105.93	95.45	50.79
12000	16°C	21°C	116.87	81.74	33.05	113.12	80.00	35.31	109.09	78.09	37.93	104.83	75.97	40.92	94.34	69.28	44.25	87.56	65.48	48.70
		24°C	117.48	97.44	33.09	113.73	95.46	35.36	109.74	93.36	37.98	105.47	91.12	40.97	94.92	83.45	44.31	88.07	79.35	48.77
		27°C	118.29	112.97	33.15	114.78	110.54	35.44	111.19	107.67	38.11	107.60	104.31	41.16	97.58	95.07	44.58	91.54	89.45	49.15
		30°C	124.42	124.42	33.60	121.22	121.22	35.95	117.78	117.78	38.66	114.12	114.12	41.75	103.61	103.61	45.20	97.36	97.36	49.81
	19°C	24°C	128.32	77.16	33.89	124.26	75.54	36.19	119.89	73.80	38.85	115.29	71.98	41.85	103.82	65.86	45.22	96.53	62.55	49.70
		27°C	128.80	90.32	33.92	124.73	88.50	36.23	120.40	86.58	38.89	115.83	84.55	41.90	104.33	77.48	45.27	97.03	73.78	49.76
		30°C	129.39	110.78	33.97	125.26	108.83	36.28	120.88	106.77	38.94	116.34	104.64	41.96	104.87	96.17	45.33	97.81	91.47	49.86
		33°C	131.41	131.41	34.11	128.06	128.06	36.50	124.51	124.51	39.25	120.74	120.74	42.36	109.75	109.75	45.85	103.30	103.30	50.49
	22°C	27°C	140.63	72.44	34.82	136.13	70.90	37.17	131.43	69.31	39.86	126.46	67.63	42.91	114.01	61.95	46.29	106.12	58.95	50.81
		30°C	140.97	89.97	34.84	136.48	88.17	37.20	131.80	86.31	39.89	126.85	84.35	42.94	114.39	77.36	46.33	106.53	73.75	50.85
		33°C	141.51	105.21	34.89	137.03	103.38	37.24	132.31	101.47	39.94	127.34	99.46	43.00	114.85	91.55	46.39	106.96	87.67	50.91
		36°C	142.01	120.29	34.93	137.50	118.43	37.29	132.86	116.32	40.00	128.26	113.85	43.08	116.26	105.25	46.54	109.32	100.35	51.20
13200	16°C	21°C	118.94	83.97	33.20	115.05	82.02	35.46	110.93	79.95	38.09	106.59	77.76	41.07	95.86	70.89	44.40	88.92	67.01	48.87
		24°C	119.71	100.07	33.25	115.81	98.05	35.52	111.69	95.93	38.15	107.30	93.67	41.14	96.49	85.81	44.48	89.53	81.69	48.93
		27°C	121.38	116.63	33.37	118.00	114.71	35.69	114.53	112.47	38.39	110.81	109.91	41.45	100.44	99.93	44.87	94.17	94.16	49.44
		30°C	128.43	128.43	33.89	125.03	125.03	36.26	121.43	121.43	38.98	117.60	117.60	42.07	106.72	106.72	45.53	100.23	100.23	50.13
	19°C	24°C	130.46	80.75	34.05	126.25	79.10	36.35	121.77	77.34	39.01	117.04	75.45	42.02	105.38	68.95	45.38	97.91	65.33	49.86
		27°C	131.12	94.52	34.10	126.92	92.65	36.40	122.43	90.66	39.07	117.72	88.58	42.08	105.99	81.22	45.45	98.49	77.39	49.93
		30°C	131.81	116.47	34.15	127.50	114.45	36.46	123.12	112.30	39.13	118.52	109.88	42.16	107.10	100.46	45.57	100.26	94.86	50.14
		33°C	135.67	135.67	34.44	132.16	132.16	36.84	128.46	128.46	39.60	124.52	124.52	42.72	113.13	113.13	46.21	106.42	106.42	50.85
	22°C	27°C	142.87	75.77	34.99	138.25	74.22	37.34	133.39	72.60	40.04	128.32	70.95	43.08	115.64	65.07	46.47	107.58	61.91	50.98
		30°C	143.34	94.24	35.03	138.74	92.38	37.39	133.93	90.45	40.08	128.86	88.43	43.13	116.15	81.15	46.52	108.12	77.41	51.04
		33°C	144.03	110.67	35.08	139.38	108.79	37.44	134.53	106.82	40.14	129.43	104.77	43.20	116.65	96.48	46.59	108.59	92.47	51.11
		36°C	144.75	126.75	35.14	140.41	124.40	37.52	135.99	121.66	40.28	131.59	118.49	43.40	119.63	108.95	46.91	112.70	103.46	51.60

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	66.520	66.520	76.943	76.943	80.418	80.418	118.638	118.638	139.485	139.485	149.908	149.908	160.332	160.332
17	66.410	66.410	75.872	75.872	79.027	79.027	116.825	116.825	135.754	135.754	145.765	145.765	155.775	155.775
19	66.300	66.300	74.801	74.801	77.635	77.635	115.013	115.013	132.023	132.023	141.621	141.621	151.219	151.219
21	66.190	66.190	73.730	73.730	76.244	76.244	113.200	113.200	128.293	128.293	137.478	137.478	146.663	146.663
23	64.580	64.580	72.284	72.284	74.853	74.853	109.145	109.145	124.562	124.562	133.334	133.334	142.107	142.107
25	62.969	62.969	70.838	70.838	73.461	73.461	105.090	105.090	120.831	120.831	129.191	129.191	137.550	137.550
27	61.359	61.359	69.392	69.392	72.070	72.070	101.035	101.035	117.101	117.101	125.047	125.047	132.994	132.994

R22 MODELS
(HEATPUMP)

MODEL : MDB500BR4 / MMC125BR x 4
COOLING MODE

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
13500	16°C	21°C	134.38	99.84	37.83	130.13	97.64	40.43	125.60	95.31	43.45	120.75	92.83	46.88	108.66	84.75	50.73	100.93	80.17	55.85
		24°C	134.91	118.93	37.87	130.65	116.45	40.47	126.13	113.84	43.49	121.31	111.07	46.94	109.24	101.66	50.78	101.45	96.60	55.91
		27°C	135.41	135.41	37.91	131.27	131.27	40.52	126.87	126.87	43.55	122.36	122.36	47.03	110.76	110.76	50.94	103.95	103.95	56.19
		30°C	140.78	140.78	38.29	137.23	137.23	40.97	133.41	133.41	44.09	129.32	129.32	47.64	117.48	117.48	51.60	110.46	110.46	56.90
	19°C	24°C	147.65	94.32	38.78	143.06	92.27	41.43	138.14	90.09	44.48	132.93	87.80	47.95	119.75	80.26	51.82	111.33	76.16	56.99
		27°C	148.03	110.19	38.81	143.42	107.94	41.46	138.53	105.55	44.52	133.34	103.03	47.99	120.18	94.36	51.87	111.81	89.77	57.04
		30°C	148.60	134.47	38.85	143.91	132.03	41.50	138.97	129.47	44.57	133.73	126.77	48.04	120.59	116.55	51.92	112.26	111.43	57.09
		33°C	149.46	149.46	38.91	145.20	145.20	41.60	140.96	140.96	44.73	136.73	136.73	48.30	124.34	124.34	52.30	117.10	117.10	57.64
	22°C	27°C	162.00	88.62	39.84	156.87	86.66	42.54	151.55	84.65	45.64	145.94	82.54	49.14	131.62	75.51	53.05	122.54	71.73	58.25
		30°C	162.22	109.54	39.86	157.12	107.37	42.56	151.83	105.11	45.66	146.22	102.68	49.16	131.90	94.13	53.07	122.87	89.67	58.28
		33°C	162.68	127.65	39.89	157.59	125.37	42.60	152.27	122.99	45.70	146.66	120.51	49.21	132.32	110.84	53.13	123.30	106.04	58.34
		36°C	163.14	145.35	39.93	158.06	143.05	42.63	152.67	140.63	45.75	147.09	138.14	49.26	132.84	127.26	53.18	124.38	121.28	58.46
15000	16°C	21°C	137.22	103.86	38.03	132.82	101.65	40.64	128.08	99.22	43.65	123.08	96.52	47.09	110.77	88.03	50.93	102.80	83.20	56.05
		24°C	137.93	123.81	38.09	133.53	121.29	40.69	128.84	118.62	43.72	123.83	115.78	47.16	111.44	106.03	51.00	103.40	100.82	56.13
		27°C	138.89	138.89	38.15	134.77	134.77	40.79	130.55	130.55	43.86	126.34	126.34	47.37	114.57	114.57	51.31	107.48	107.48	56.57
		30°C	146.09	146.09	38.67	142.33	142.33	41.37	138.29	138.29	44.50	133.98	133.98	48.05	121.65	121.65	52.03	114.31	114.31	57.32
	19°C	24°C	150.66	98.04	39.00	145.89	95.98	41.65	140.77	93.77	44.71	135.36	91.46	48.17	121.89	83.68	52.05	113.34	79.48	57.20
		27°C	151.23	114.76	39.04	146.45	112.45	41.69	141.36	110.00	44.76	135.99	107.43	48.23	122.50	98.45	52.11	113.92	93.74	57.27
		30°C	151.91	140.76	39.10	147.06	138.27	41.75	141.93	135.66	44.82	136.59	132.95	48.29	123.13	122.20	52.17	114.83	114.83	57.38
		33°C	154.29	154.29	39.26	150.35	150.35	42.01	146.19	146.19	45.17	141.77	141.77	48.76	128.85	128.85	52.77	121.28	121.28	58.11
	22°C	27°C	165.12	92.04	40.07	159.83	90.08	42.78	154.32	88.06	45.88	148.48	85.93	49.38	133.86	78.71	53.28	124.60	74.90	58.48
		30°C	165.51	114.31	40.10	160.24	112.03	42.81	154.74	109.66	45.91	148.93	107.17	49.42	134.30	98.30	53.33	125.08	93.70	58.53
		33°C	166.15	133.68	40.15	160.89	131.36	42.86	155.34	128.92	45.97	149.51	126.38	49.48	134.84	116.32	53.39	125.58	111.40	58.60
		36°C	166.73	152.84	40.20	161.44	150.48	42.91	155.99	147.79	46.03	150.59	144.66	49.58	136.50	133.73	53.57	128.35	127.51	58.92
16500	16°C	21°C	139.64	106.69	38.20	135.07	104.22	40.81	130.24	101.59	43.83	125.14	98.80	47.27	112.55	90.08	51.11	104.40	85.14	56.24
		24°C	140.55	127.14	38.27	135.97	124.58	40.88	131.14	121.89	43.91	125.99	119.02	47.35	113.29	109.04	51.19	105.12	103.79	56.31
		27°C	142.51	142.51	38.40	138.55	138.55	41.08	134.47	134.47	44.18	130.10	130.10	47.70	117.93	117.93	51.65	110.57	110.57	56.91
		30°C	150.78	150.78	39.01	146.80	146.80	41.73	142.58	142.58	44.86	138.07	138.07	48.42	125.30	125.30	52.40	117.69	117.69	57.70
	19°C	24°C	153.17	102.60	39.19	148.23	100.50	41.84	142.97	98.27	44.89	137.42	95.87	48.36	123.72	87.60	52.22	114.95	83.01	57.39
		27°C	153.95	120.10	39.24	149.02	117.72	41.90	143.74	115.19	44.96	138.21	112.55	48.43	124.44	103.20	52.31	115.64	98.33	57.47
		30°C	154.75	147.99	39.31	149.70	145.41	41.97	144.56	142.68	45.04	139.16	139.16	48.52	125.74	125.74	52.44	117.71	117.71	57.71
		33°C	159.29	159.29	39.64	155.17	155.17	42.40	150.83	150.83	45.58	146.20	146.20	49.17	132.82	132.82	53.18	124.95	124.95	58.53
	22°C	27°C	167.74	96.28	40.27	162.31	94.31	42.98	156.61	92.25	46.08	150.65	90.15	49.58	135.77	82.67	53.48	126.31	78.67	58.67
		30°C	168.30	119.74	40.32	162.89	117.38	43.03	157.25	114.93	46.13	151.30	112.36	49.64	136.37	103.11	53.54	126.94	98.36	58.74
		33°C	169.10	140.62	40.38	163.65	138.22	43.09	157.95	135.73	46.20	151.96	133.12	49.72	136.96	122.58	53.62	127.50	117.49	58.82
		36°C	169.95	161.05	40.44	164.85	158.07	43.18	159.67	154.59	46.35	154.50	150.56	49.95	140.45	138.44	53.99	132.32	131.46	59.38

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

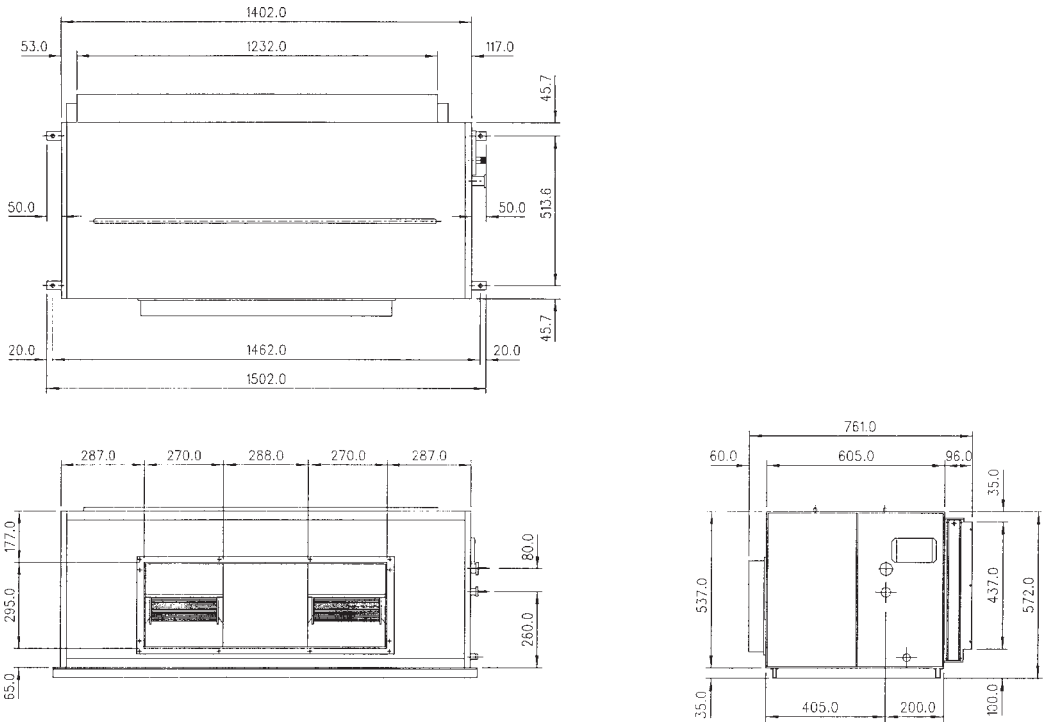
Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.

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	88.437	88.437	102.332	102.332	106.963	106.963	157.908	157.908	185.697	185.697	199.591	199.591	213.485	213.485
17	88.282	88.282	100.904	100.904	105.112	105.112	152.166	152.166	180.730	180.730	194.074	194.074	207.418	207.418
19	88.127	88.127	99.477	99.477	103.260	103.260	146.423	146.423	175.762	175.762	188.557	188.557	201.352	201.352
21	87.972	87.972	98.049	98.049	101.408	101.408	140.680	140.680	170.795	170.795	183.040	183.040	195.285	195.285
23	85.839	85.839	96.128	96.128	99.557	99.557	138.786	138.786	165.828	165.828	177.523	177.523	189.218	189.218
25	83.707	83.707	94.206	94.206	97.705	97.705	136.893	136.893	160.861	160.861	172.006	172.006	183.151	183.151
27	81.575	81.575	92.284	92.284	95.854	95.854	134.999	134.999	155.894	155.894	166.489	166.489	177.084	177.084

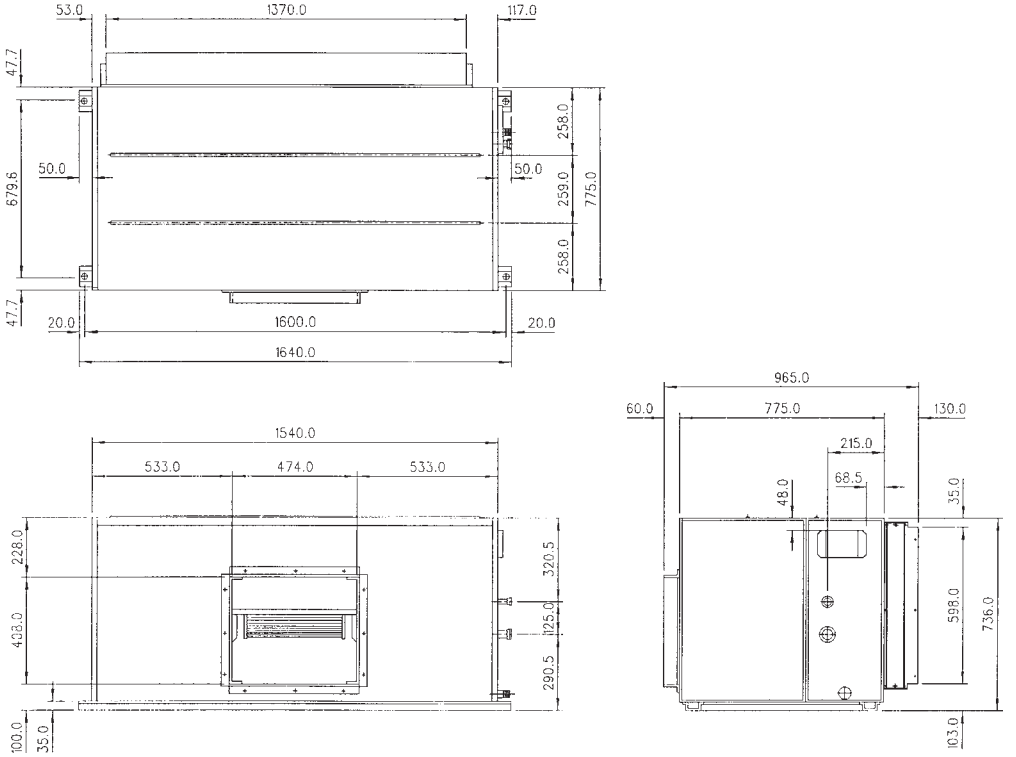
Dimensional Data

INDOOR
MODEL: MDB 075/100 BR (HORIZONTAL AIR DISCHARGE ONLY)



Dimension in mm

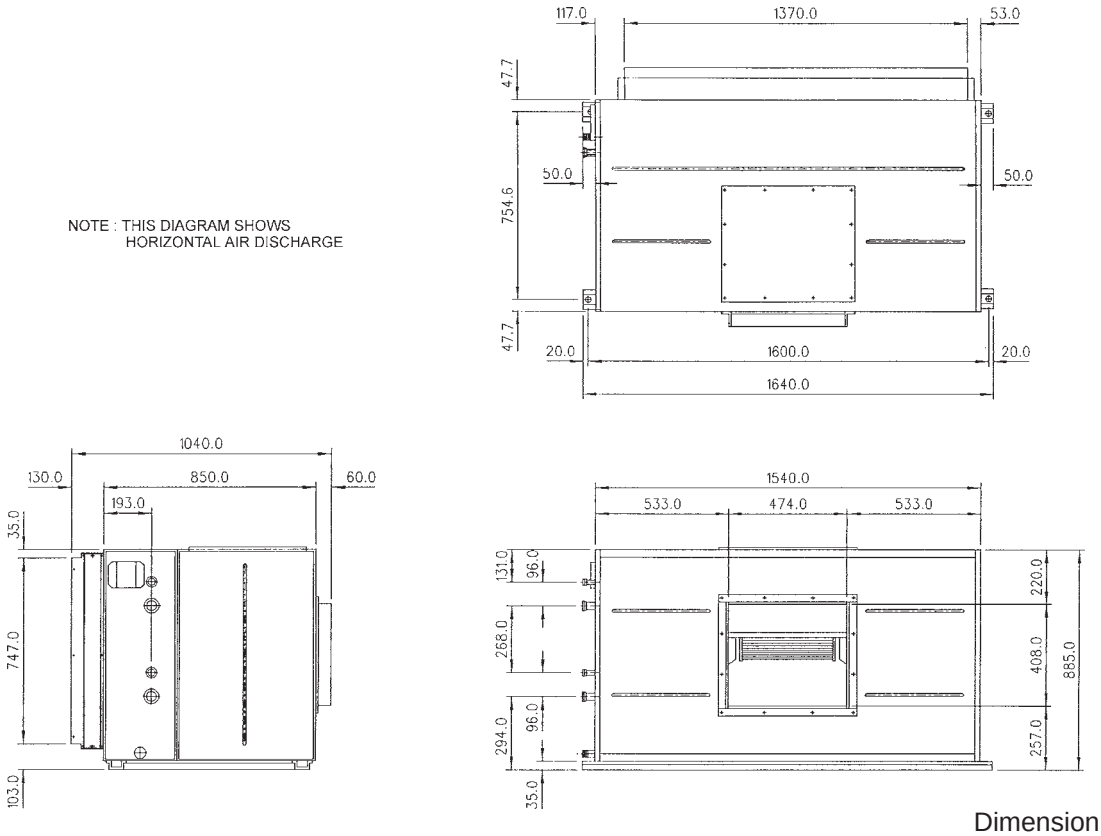
MODEL: MDB 125CR (HORIZONTAL AIR DISCHARGE ONLY)



Dimension in mm

MODEL: MDB 150BR2 (STANDARD: HORIZONTAL AIR DISCHARGE; OPTIONAL: VERTICAL AIR DISCHARGE)

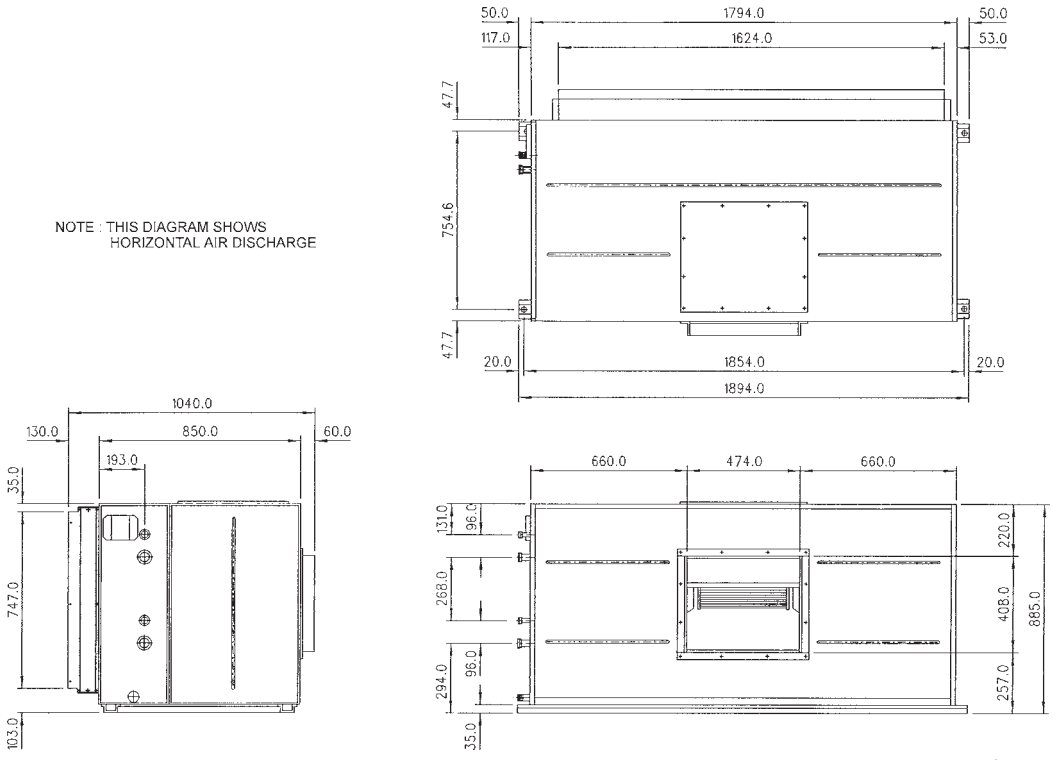
NOTE : THIS DIAGRAM SHOWS
HORIZONTAL AIR DISCHARGE



Dimension in mm

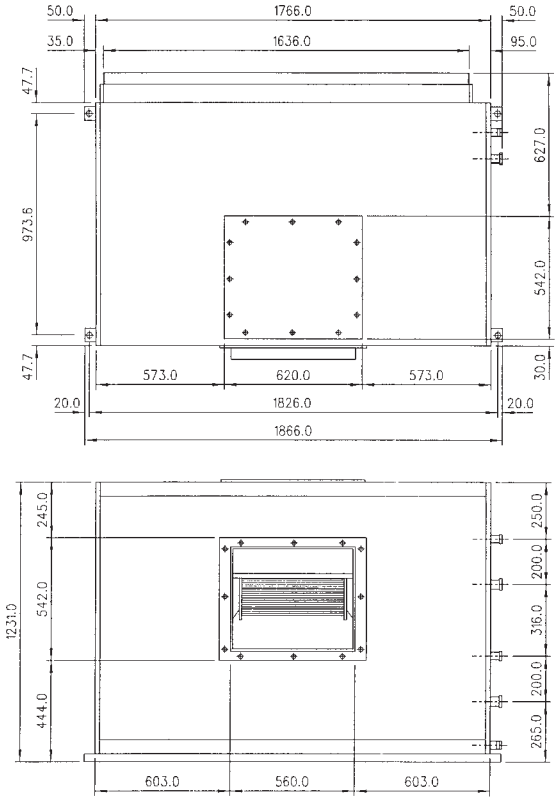
MODEL: MDB 200BR2 (STANDARD: HORIZONTAL AIR DISCHARGE; OPTIONAL: VERTICAL AIR DISCHARGE)

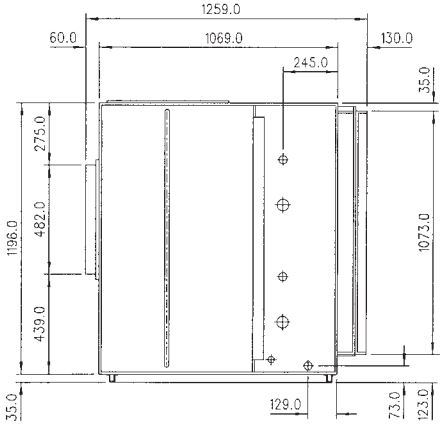
NOTE : THIS DIAGRAM SHOWS
HORIZONTAL AIR DISCHARGE



Dimension in mm

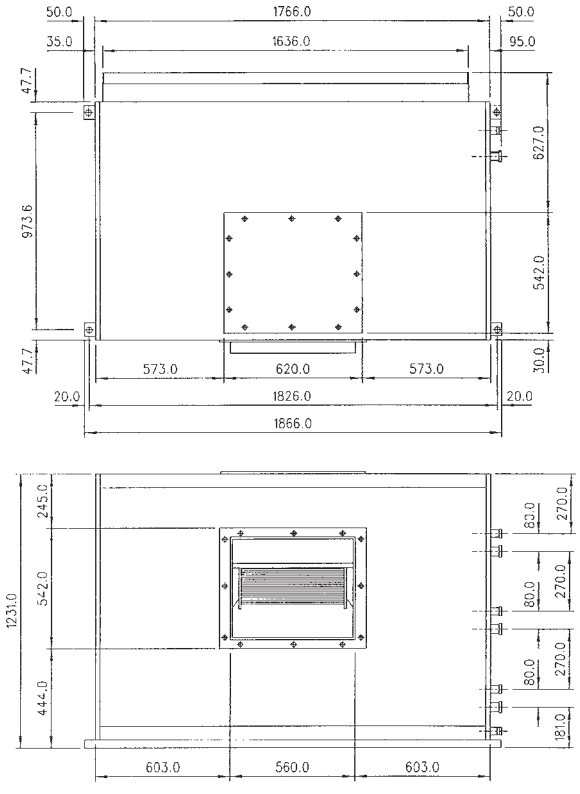
MODEL: MDB 250BR2 (STANDARD: VERTICAL AIR DISCHARGE; OPTIONAL: HORIZONTAL AIR DISCHARGE)

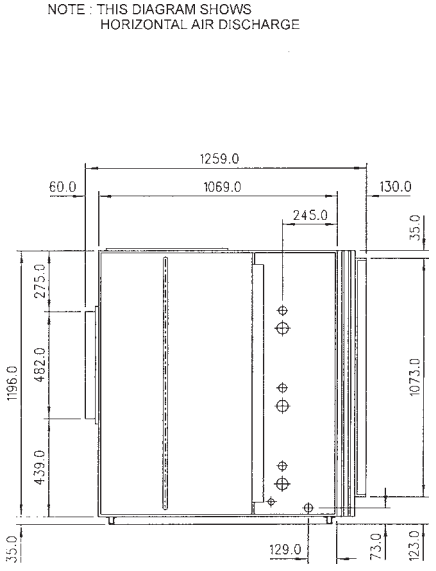




Dimension in mm

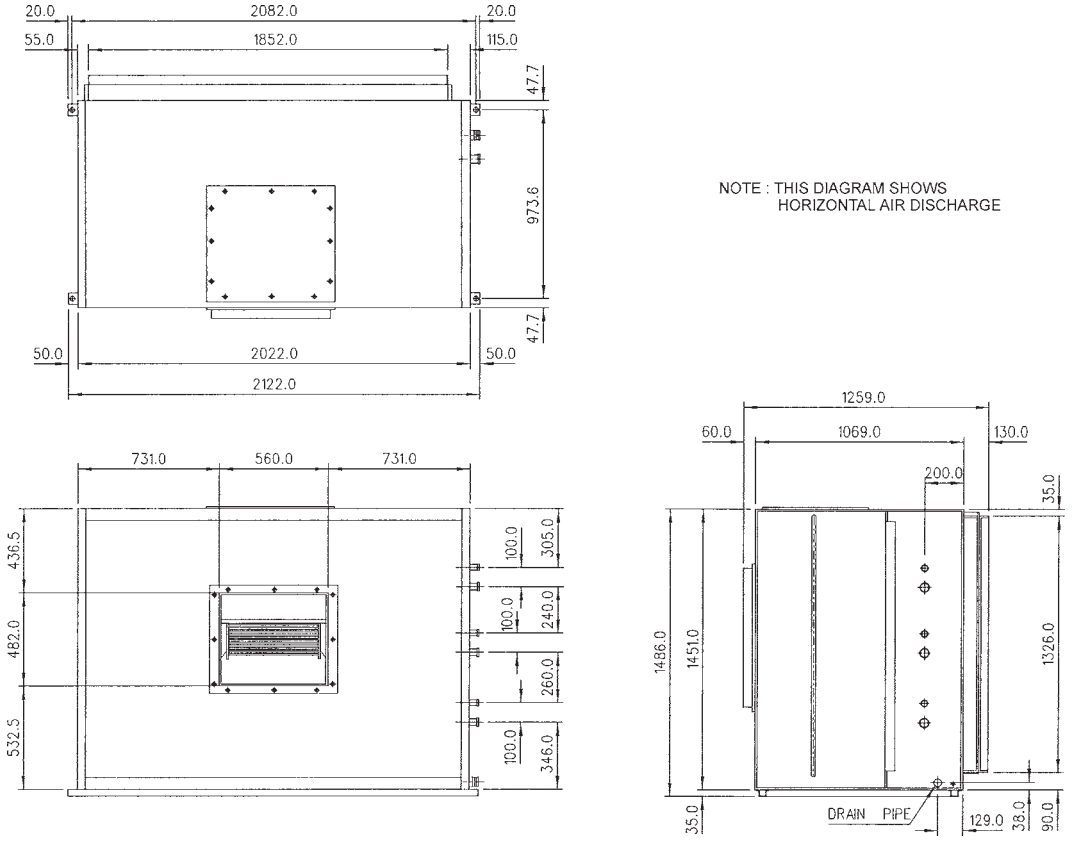
MODEL: MDB 300BR3 (STANDARD: VERTICAL AIR DISCHARGE; OPTIONAL: HORIZONTAL AIR DISCHARGE)





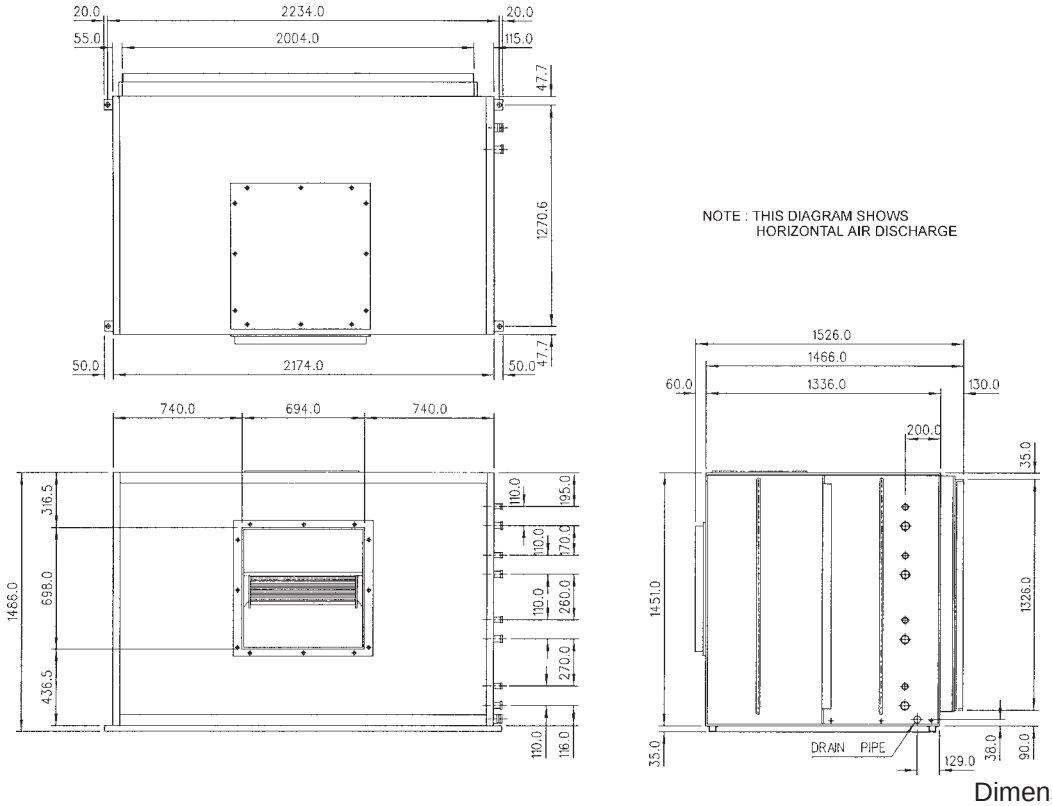
Dimension in mm

MODEL: MDB 350BR3 (STANDARD: VERTICAL AIR DISCHARGE; OPTIONAL: HORIZONTAL AIR DISCHARGE)



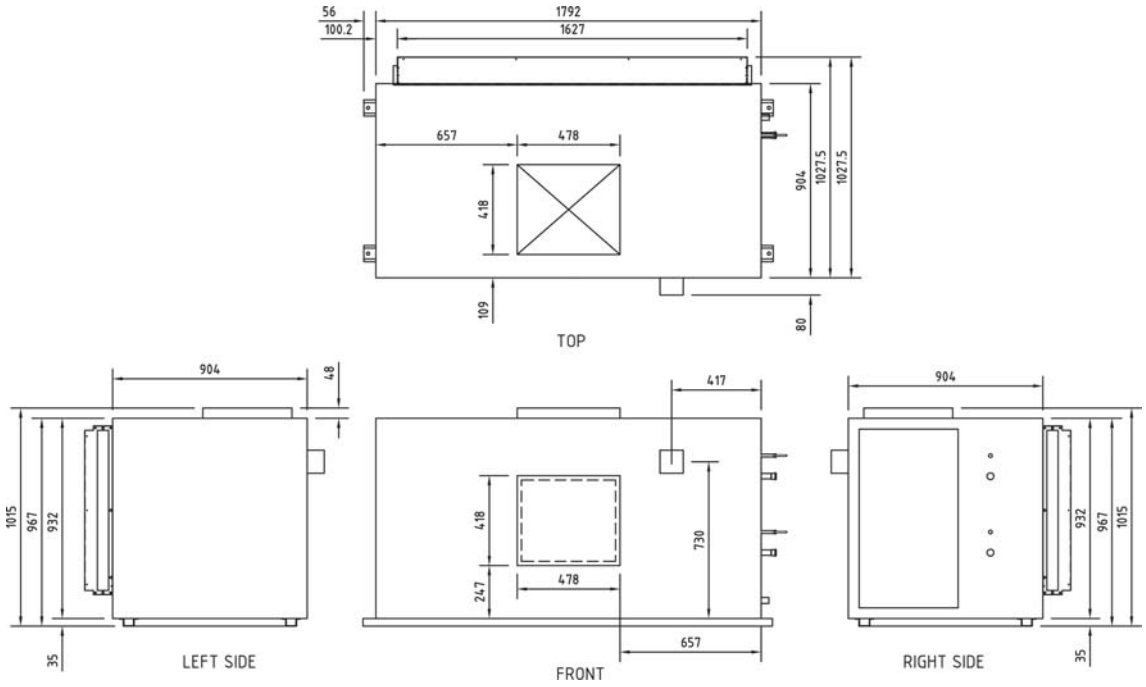
Dimension in mm

MODEL: MDB 400/500 BR4 (STANDARD: VERTICAL AIR DISCHARGE; OPTIONAL: HORIZONTAL AIR DISCHARGE)



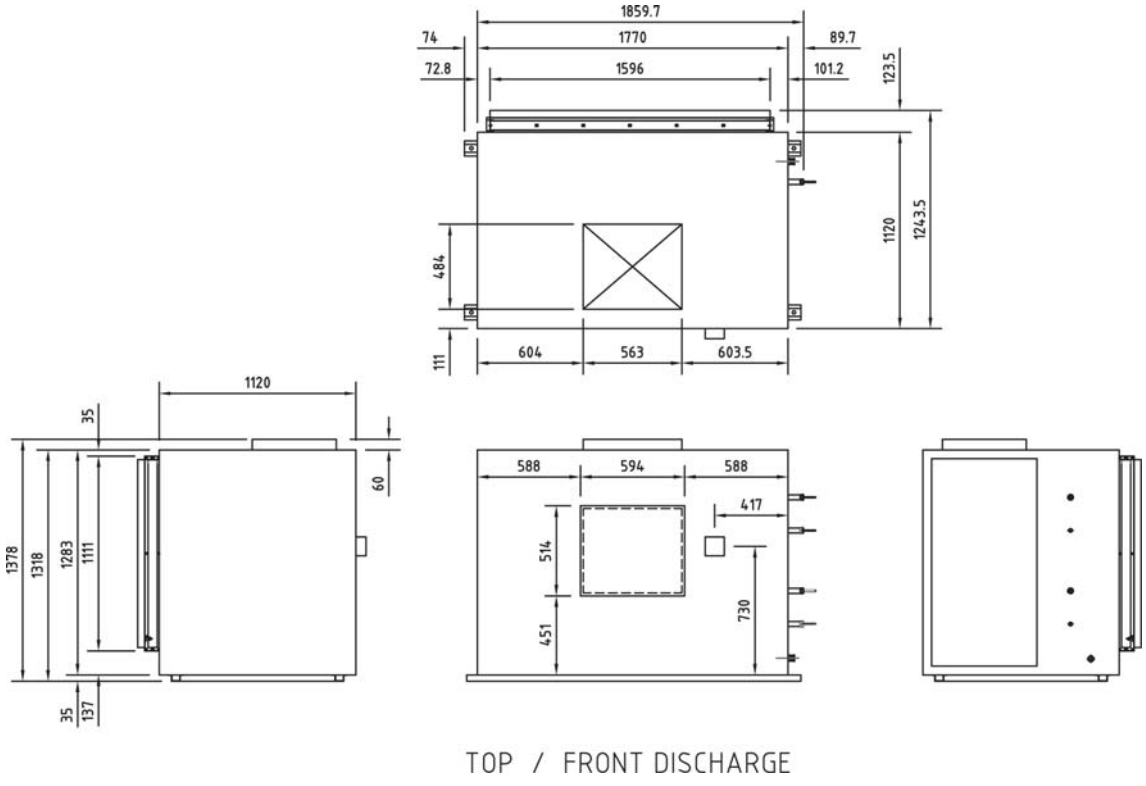
Dimension in mm

MODEL: MDSB 200BR2 (STANDARD: HORIZONTAL AIR DISCHARGE; OPTIONAL: VERTICAL AIR DISCHARGE)



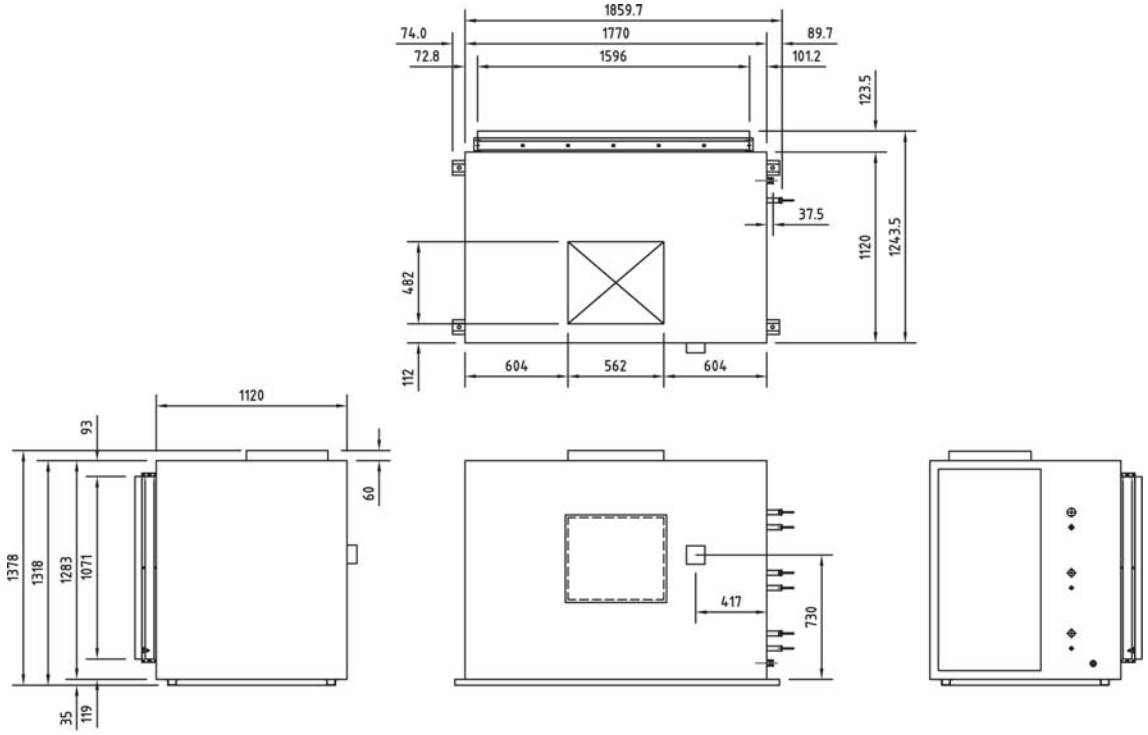
Dimension in mm

MODEL: MDSB 250BR2 (STANDARD: VERTICAL AIR DISCHARGE; OPTIONAL: HORIZONTAL AIR DISCHARGE)



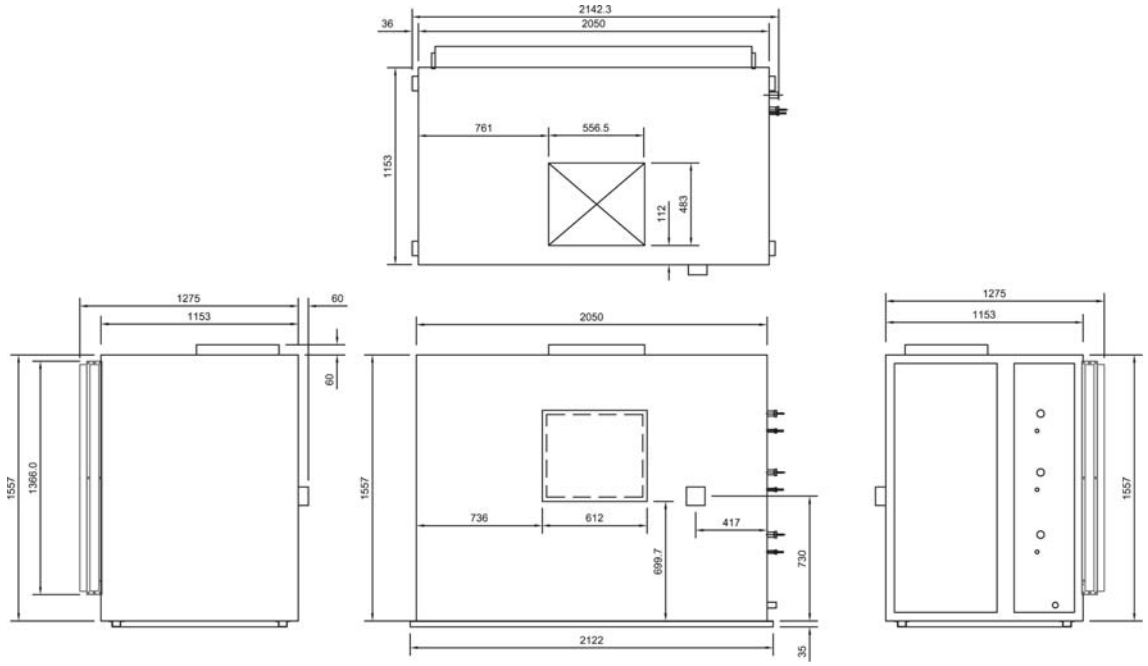
Dimension in mm

MODEL: MDSB 300BR3 (STANDARD: VERTICAL AIR DISCHARGE;
OPTIONAL: HORIZONTAL AIR DISCHARGE)



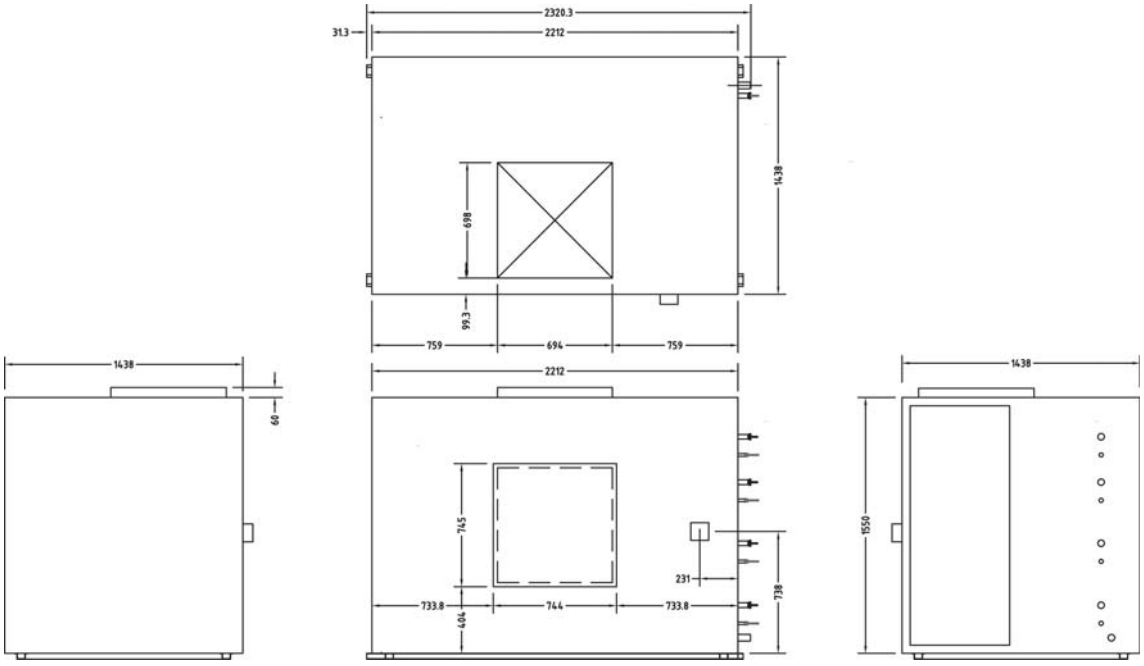
Dimension in mm

MODEL: MDSB 350BR3 (STANDARD: VERTICAL AIR DISCHARGE;
OPTIONAL: HORIZONTAL AIR DISCHARGE)



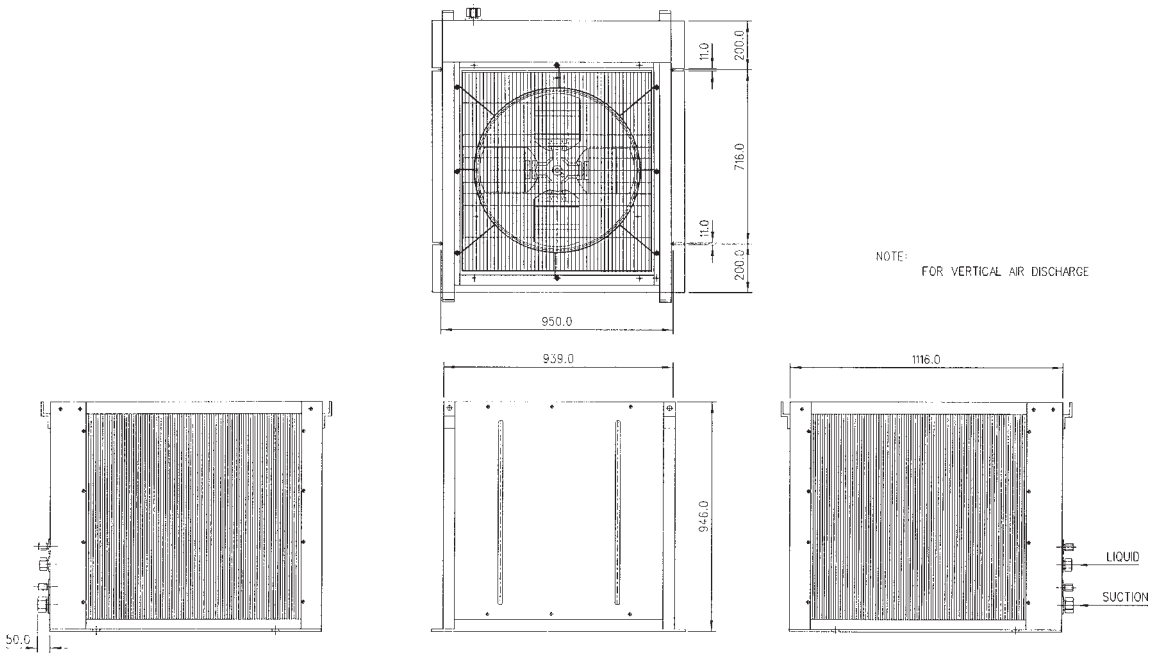
Dimension in mm

MODEL: MDSB 400/500BR4 (STANDARD: VERTICAL AIR DISCHARGE;
OPTIONAL: HORIZONTAL AIR DISCHARGE)



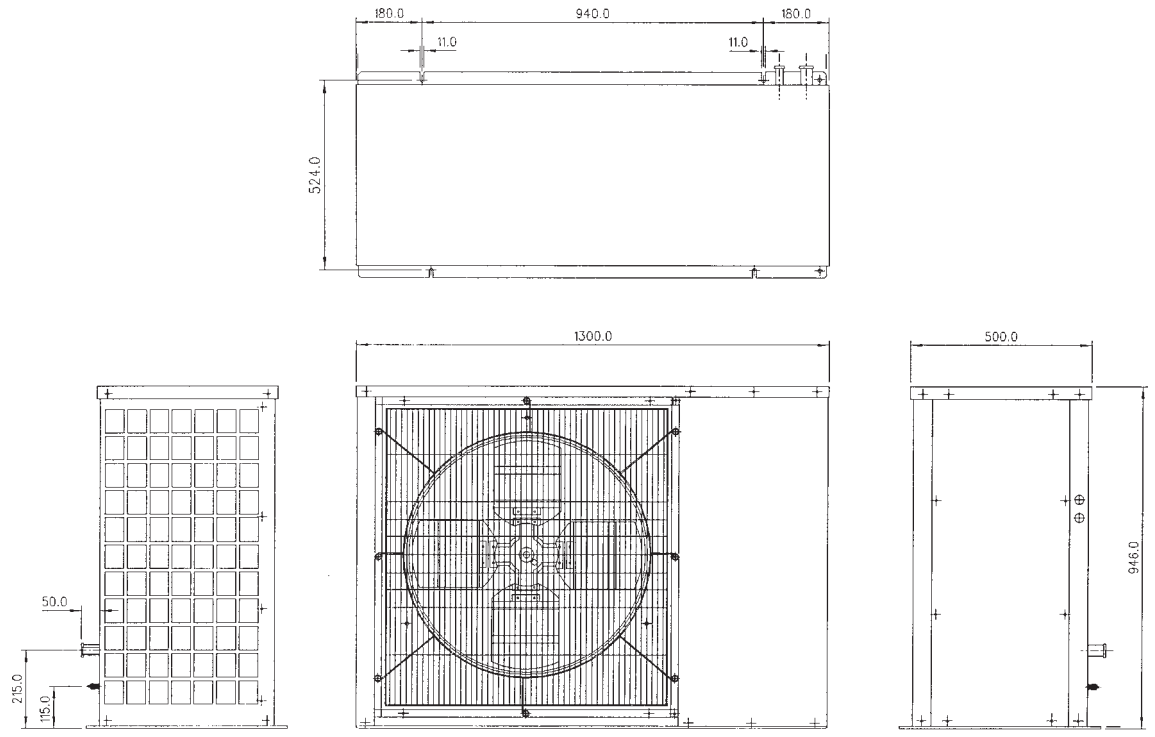
Dimension in mm

OUTDOOR
MODEL: MMC100/125 BR (STANDARD: VERTICAL AIR DISCHARGE;
OPTIONAL: HORIZONTAL AIR DISCHARGE)



Dimension in mm

MODEL: MMC 075CR



Dimension in mm

Electrical Data

MODEL	INDOOR UNIT		MDB075BR
	OUTDOOR UNIT		MMC075CR
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	220~240 / 1 / 50
	RATED INPUT POWER	W	830
	RATED RUNNING CURRENT	A	3.7
	MOTOR OUTPUT	W	375
	POLES		6
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	220~240 / 1 / 50
	RATED INPUT POWER	W	740
	RATED RUNNING CURRENT	A	3.8
	MOTOR OUTPUT	W	480
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	μF	NIL
	RATED INPUT POWER (COOLING)	W	6930
	RATED INPUT POWER (HEATING)	W	7530
	RATED RUNNING CURRENT (COOLING)	A	11.7
	RATED RUNNING CURRENT (HEATING)	A	12.0
	LOCKED ROTOR AMP.	A	95.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253

MODEL	INDOOR UNIT		MDB100BR
	OUTDOOR UNIT		MMC100BR
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	220~240 / 1 / 50
	RATED INPUT POWER	W	1800
	RATED RUNNING CURRENT	A	8.0
	MOTOR OUTPUT	W	500
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	μF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
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Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDB125CR
	OUTDOOR UNIT		MMC125BR
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	1100
	RATED RUNNING CURRENT	A	2.7
	MOTOR OUTPUT	W	1500
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	640
	RATED RUNNING CURRENT	A	1.4
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	9408
	RATED INPUT POWER (HEATING)	W	7736
	RATED RUNNING CURRENT (COOLING)	A	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.1
	LOCKED ROTOR AMP.	A	110.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
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MODEL	INDOOR UNIT		MDB150BR2
	OUTDOOR UNIT		MMC075CR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	1630
	RATED RUNNING CURRENT	A	3.1
	MOTOR OUTPUT	W	1500
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	220~240 / 1 / 50
	RATED INPUT POWER	W	740
	RATED RUNNING CURRENT	A	3.8
	MOTOR OUTPUT	W	480
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	6930
	RATED INPUT POWER (HEATING)	W	7530
	RATED RUNNING CURRENT (COOLING)	A	11.7
	RATED RUNNING CURRENT (HEATING)	A	12.0
	LOCKED ROTOR AMP.	A	95.0

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Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDB200BR2
	OUTDOOR UNIT		MMC100BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	2730
	RATED RUNNING CURRENT	A	5.0
	MOTOR OUTPUT	W	3000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

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MODEL	INDOOR UNIT		MDB250BR2
	OUTDOOR UNIT		MMC125BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	3370
	RATED RUNNING CURRENT	A	6.3
	MOTOR OUTPUT	W	4000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	640
	RATED RUNNING CURRENT	A	1.4
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	9408
	RATED INPUT POWER (HEATING)	W	7736
	RATED RUNNING CURRENT (COOLING)	A	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.1
	LOCKED ROTOR AMP.	A	110.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
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Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDB300BR3
	OUTDOOR UNIT		MMC100BR x 3
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	4000
	RATED RUNNING CURRENT	A	7.1
	MOTOR OUTPUT	W	4000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253

MODEL	INDOOR UNIT		MDB350BR3	
	OUTDOOR UNIT		MMC100BR x 1	MMC125BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F	
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	
	RATED INPUT POWER	W	4510	
	RATED RUNNING CURRENT	A	8.4	
	MOTOR OUTPUT	W	5500	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		CLASS F	CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	380~415 / 3 / 50
	RATED INPUT POWER	W	660	640
	RATED RUNNING CURRENT	A	1.5	1.4
	MOTOR OUTPUT	W	470	470
COMPRESSOR	INSULATION GRADE		CLASS F	CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	380~415 / 3 / 50
	CAPACITOR	µF	NIL	NIL
	RATED INPUT POWER (COOLING)	W	8607	9408
	RATED INPUT POWER (HEATING)	W	7865	7736
	RATED RUNNING CURRENT (COOLING)	A	16.0	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.2	15.1
	LOCKED ROTOR AMP.	A	125.0	110.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253

Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDB400BR4
	OUTDOOR UNIT		MMC100BR x 4
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	4835
	RATED RUNNING CURRENT	A	8.7
	MOTOR OUTPUT	W	5500
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

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MODEL	INDOOR UNIT		MDB500BR4
	OUTDOOR UNIT		MMC125BR x 4
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	8035
	RATED RUNNING CURRENT	A	14.7
	MOTOR OUTPUT	W	11000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	640
	RATED RUNNING CURRENT	A	1.4
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	9408
	RATED INPUT POWER (HEATING)	W	7736
	RATED RUNNING CURRENT (COOLING)	A	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.1
	LOCKED ROTOR AMP.	A	110.0

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253

Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDSB200BR2
	OUTDOOR UNIT		MMC100BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	2730
	RATED RUNNING CURRENT	A	5.0
	MOTOR OUTPUT	W	3000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

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MODEL	INDOOR UNIT		MDSB250BR2
	OUTDOOR UNIT		MMC125BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	3370
	RATED RUNNING CURRENT	A	6.3
	MOTOR OUTPUT	W	4000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	640
	RATED RUNNING CURRENT	A	1.4
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	9408
	RATED INPUT POWER (HEATING)	W	7736
	RATED RUNNING CURRENT (COOLING)	A	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.1
	LOCKED ROTOR AMP.	A	110.0

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Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDSB300BR3
	OUTDOOR UNIT		MMC100BR x 3
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	4000
	RATED RUNNING CURRENT	A	7.1
	MOTOR OUTPUT	W	4000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

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MODEL	INDOOR UNIT		MDSB350BR3	
	OUTDOOR UNIT		MMC100BR x 1	MMC125BR x 2
INDOOR MOTOR	INSULATION GRADE		CLASS F	
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	
	RATED INPUT POWER	W	4510	
	RATED RUNNING CURRENT	A	8.4	
	MOTOR OUTPUT	W	5500	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		CLASS F	CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	380~415 / 3 / 50
	RATED INPUT POWER	W	660	640
	RATED RUNNING CURRENT	A	1.5	1.4
	MOTOR OUTPUT	W	470	470
COMPRESSOR	INSULATION GRADE		CLASS F	CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50	380~415 / 3 / 50
	CAPACITOR	µF	NIL	NIL
	RATED INPUT POWER (COOLING)	W	8607	9408
	RATED INPUT POWER (HEATING)	W	7865	7736
	RATED RUNNING CURRENT (COOLING)	A	16.0	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.2	15.1
	LOCKED ROTOR AMP.	A	125.0	110.0

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Electrical Data - Heatpump

MODEL	INDOOR UNIT		MDSB400BR4
	OUTDOOR UNIT		MMC100BR x 4
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	4835
	RATED RUNNING CURRENT	A	8.7
	MOTOR OUTPUT	W	5500
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	660
	RATED RUNNING CURRENT	A	1.5
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	8607
	RATED INPUT POWER (HEATING)	W	7865
	RATED RUNNING CURRENT (COOLING)	A	16.0
	RATED RUNNING CURRENT (HEATING)	A	15.2
	LOCKED ROTOR AMP.	A	125.0

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MODEL	INDOOR UNIT		MDSB500BR4
	OUTDOOR UNIT		MMC125BR x 4
INDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	8035
	RATED RUNNING CURRENT	A	14.7
	MOTOR OUTPUT	W	11000
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	RATED INPUT POWER	W	640
	RATED RUNNING CURRENT	A	1.4
	MOTOR OUTPUT	W	470
COMPRESSOR	INSULATION GRADE		CLASS F
	POWER SOURCE	V/Ph/Hz	380~415 / 3 / 50
	CAPACITOR	µF	NIL
	RATED INPUT POWER (COOLING)	W	9408
	RATED INPUT POWER (HEATING)	W	7736
	RATED RUNNING CURRENT (COOLING)	A	17.0
	RATED RUNNING CURRENT (HEATING)	A	15.1
	LOCKED ROTOR AMP.	A	110.0

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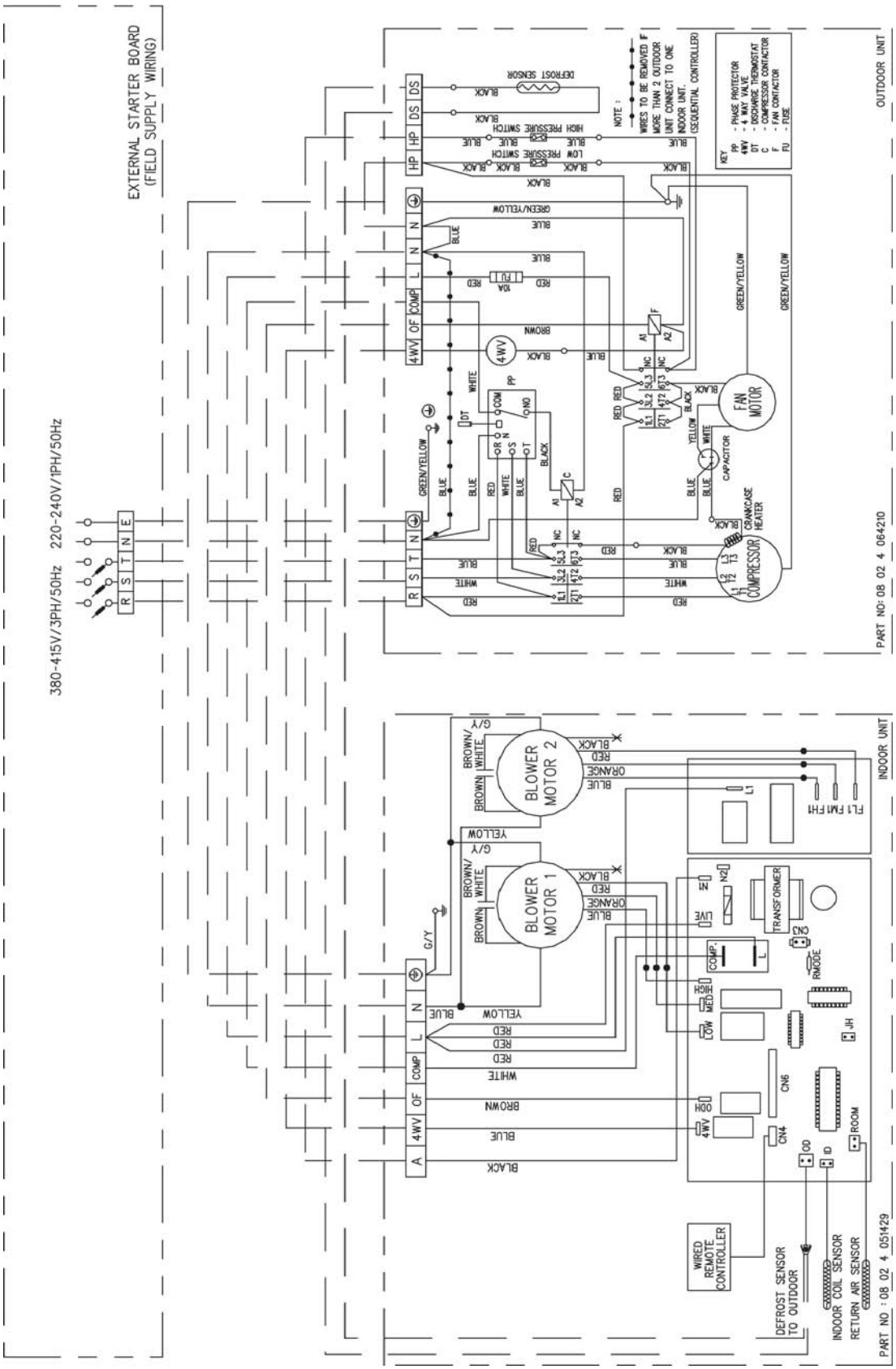
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO13253

Wiring Diagrams

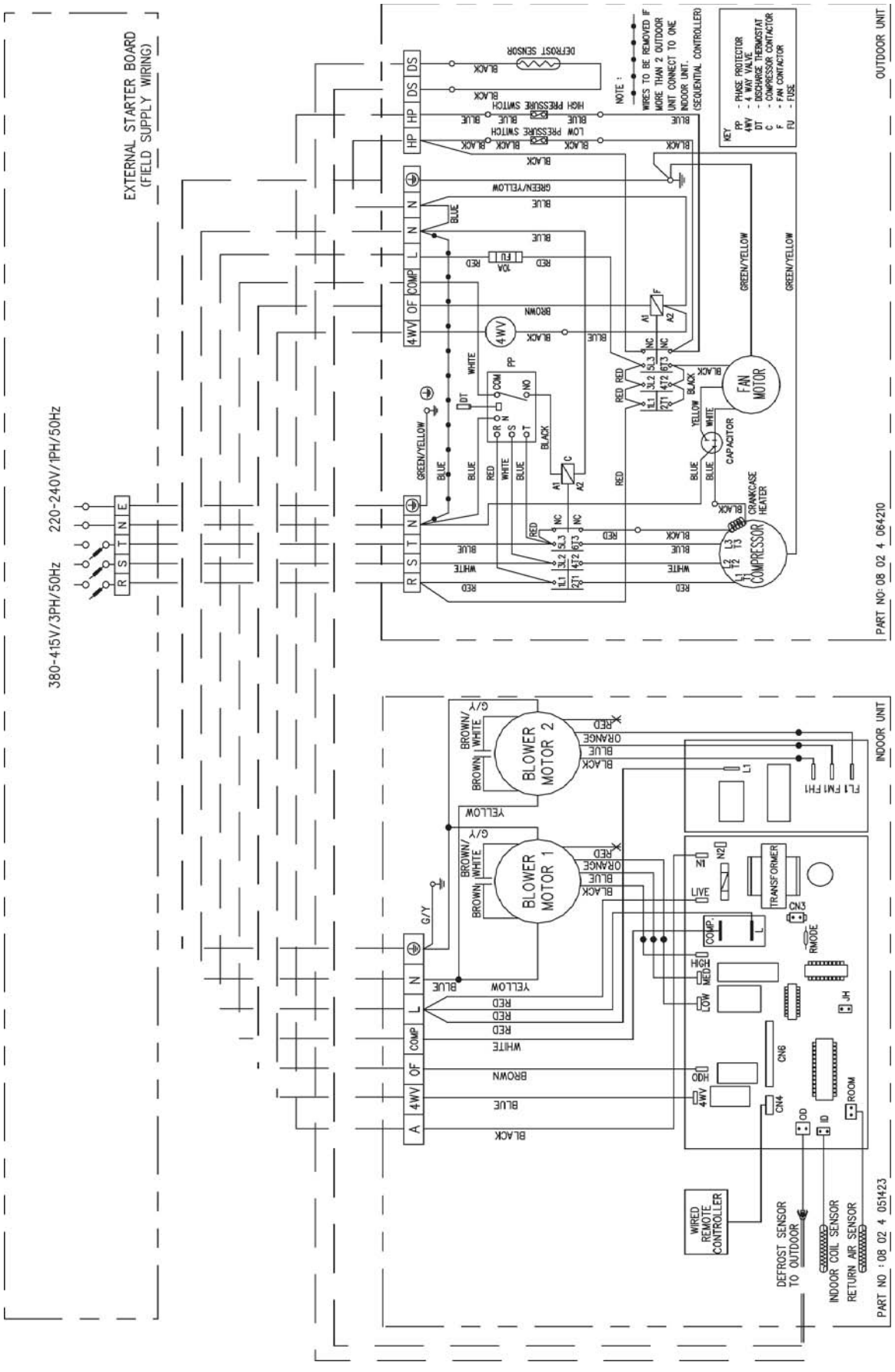
MODEL : MDB075BR ~ MMC075CR



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH U1.4 CCT SLM AP
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

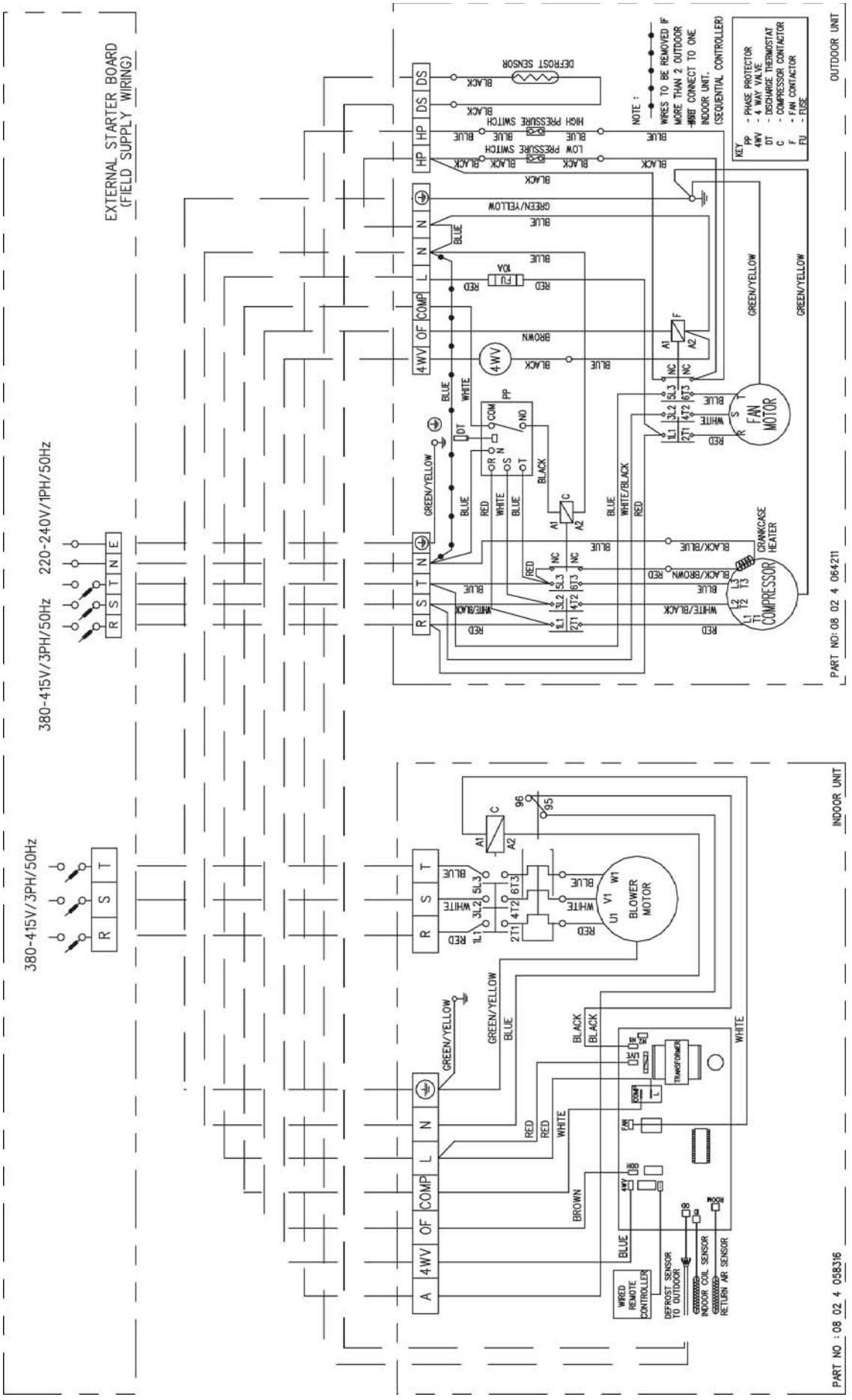
MODEL : MDB100BR ~ MMC100BR



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH U1.4 CCT SLM AP
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

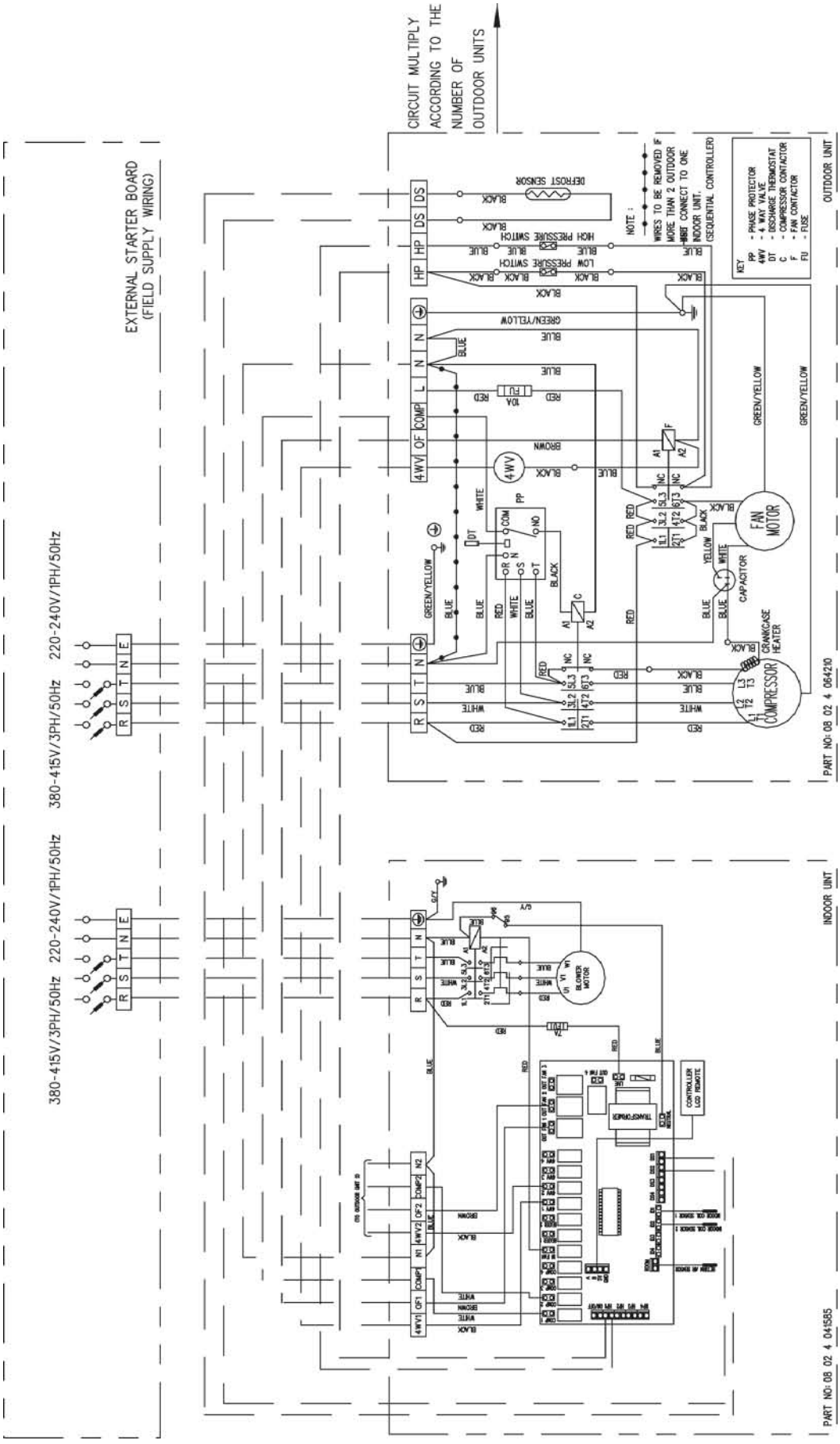
MODEL : MDB125CR ~ MMC125BR



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH U1-SB125 CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

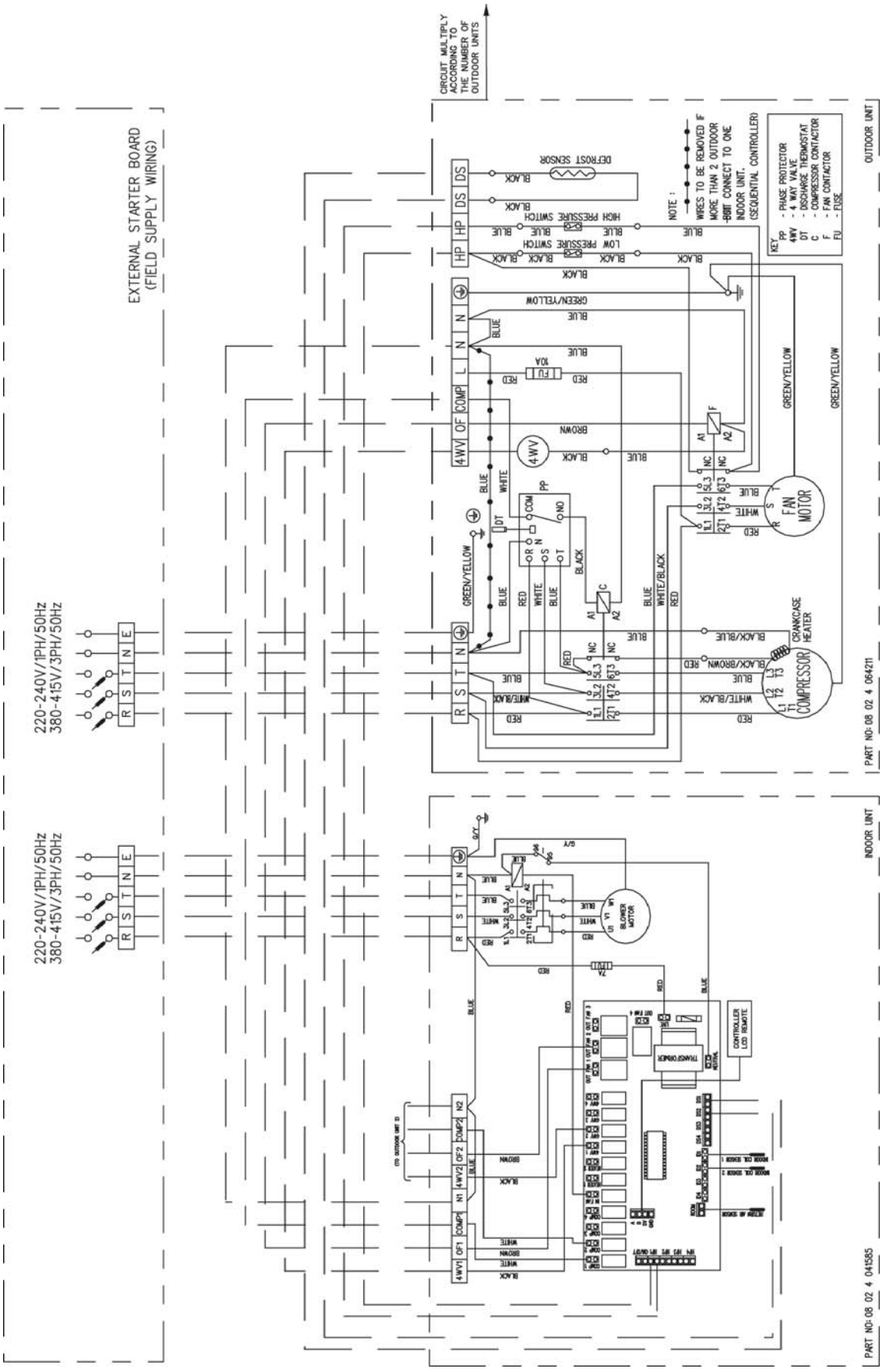
MODEL : MDB150BR2 ~ MMC075CR x 2
MDB200BR2 ~ MMC100BR x 2



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

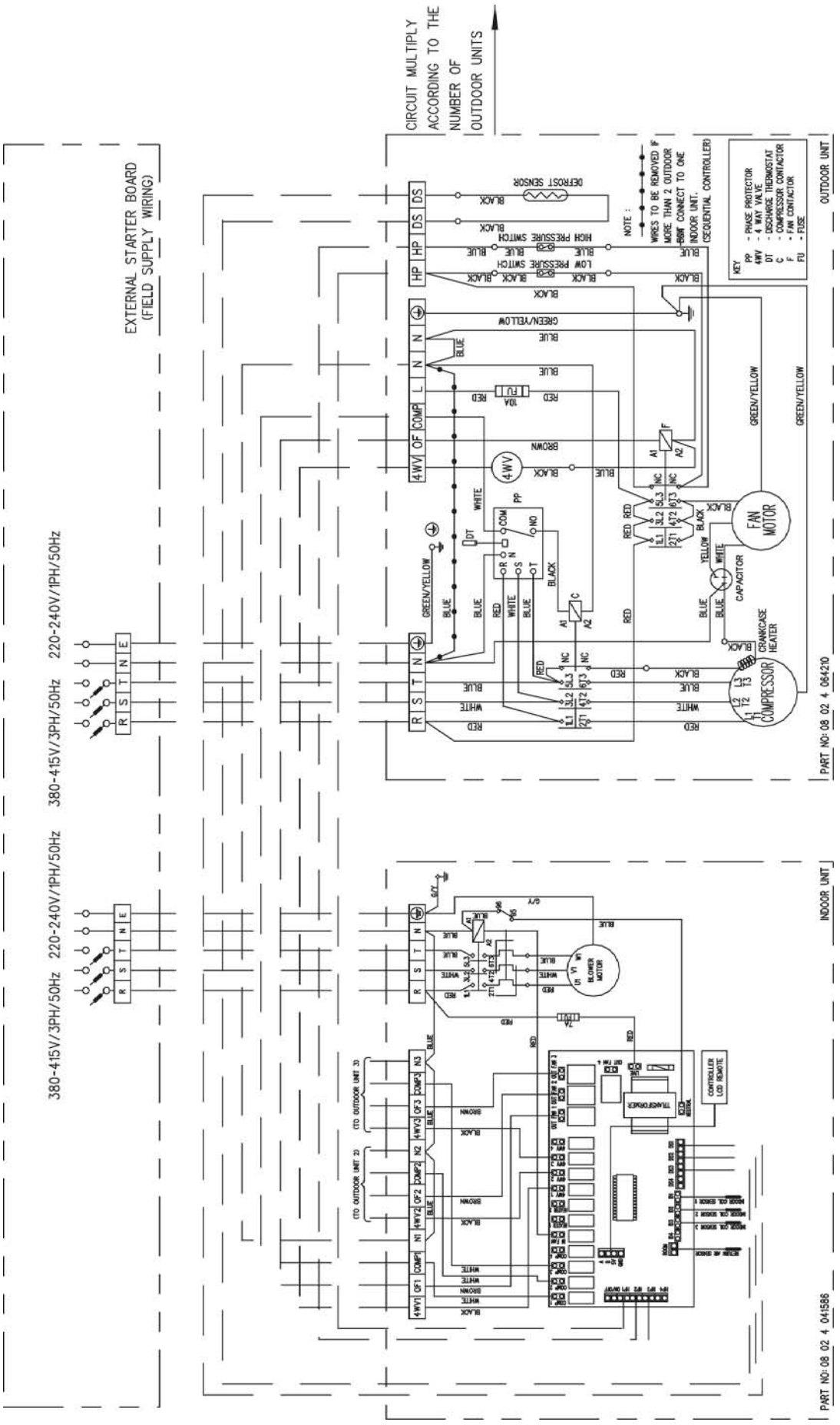
MODEL : MDB250BR2 ~ MMC125BR x 2



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

MODEL : MDB300BR3 ~ MMC100BR x 3



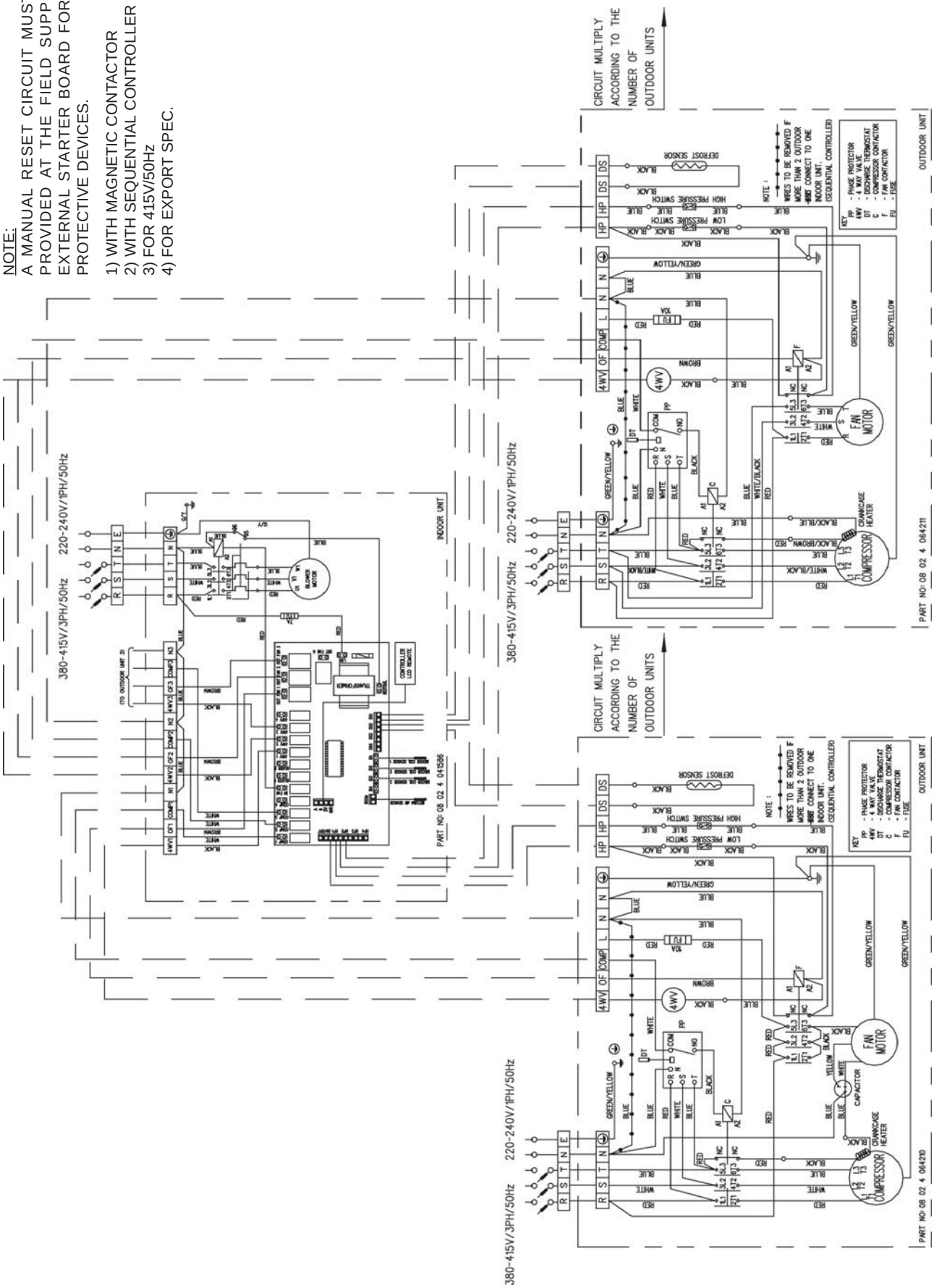
NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

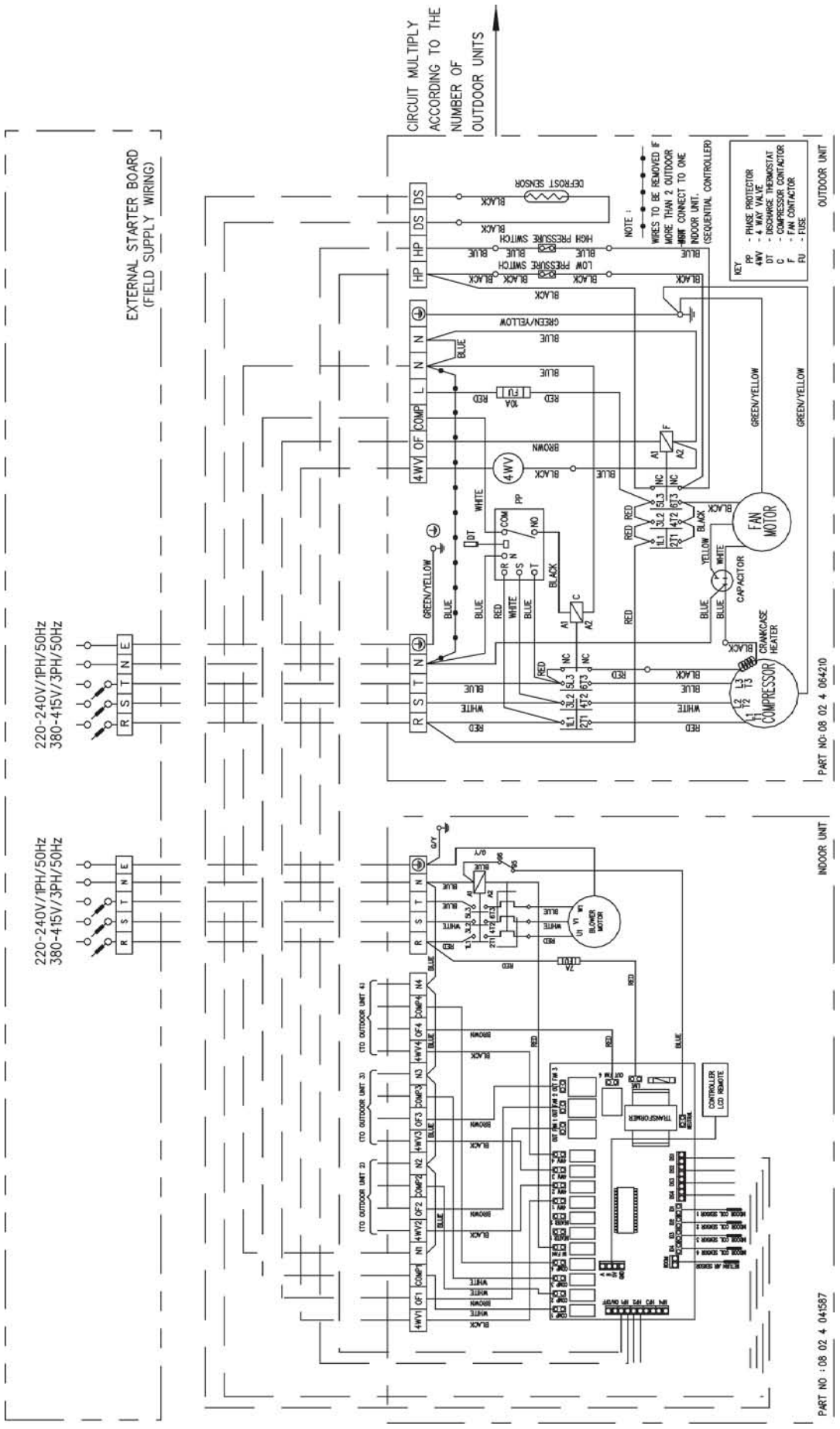
MODEL : MDB350BR3 ~ MMC100BR + MMC125BR x 2

NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.



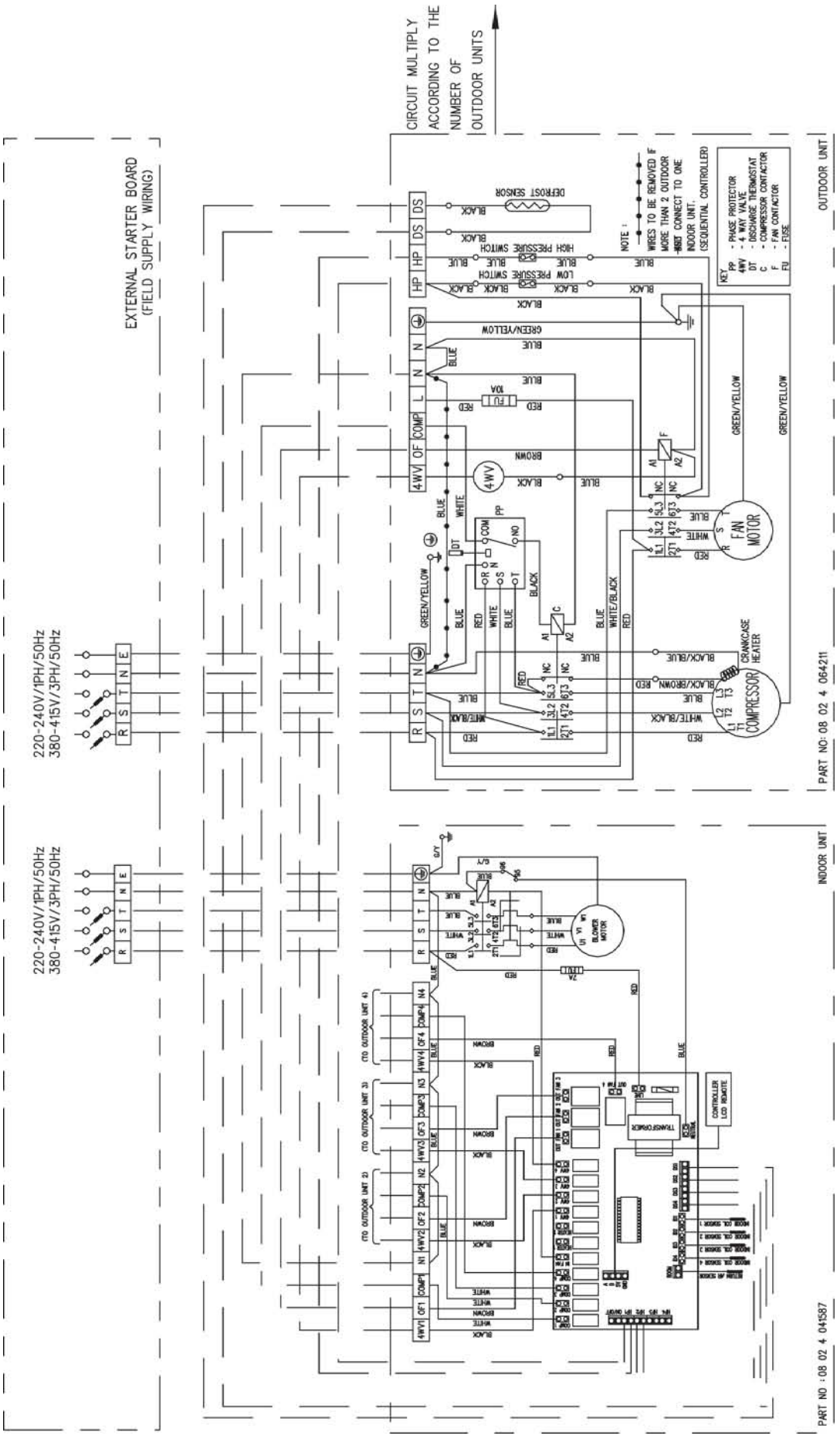
MODEL : MDB400BR4 ~ MMC100BR x 4



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

MODEL : MDB500BR4 ~ MMC125BR x 4



NOTE:
A MANUAL RESET CIRCUIT MUST BE PROVIDED AT THE FIELD SUPPLIED EXTERNAL STARTER BOARD FOR ALL PROTECTIVE DEVICES.

1) WITH MAGNETIC CONTACTOR
2) WITH SEQUENTIAL CONTROLLER
3) FOR 415V/50Hz
4) FOR EXPORT SPEC.

Servicing And Maintenance

The design concept of the Condensing Unit is such that all servicing can be done from the front and side of the unit.

Upon removal of front and side panel, all the electrical “terminal box”, fan and motor assembly and compressor are easily accessible.

Under normal circumstances, these outdoor units only require a check and cleaning of air intake coil surfaces once quarterly. However, if a unit is installed in area subjected to much oil, mist and dust, the coil must be regularly cleaned by qualified Air Conditioner Service Technicians to ensure sufficient heat exchange and proper operation. Otherwise, the systems life span might be shortened.

Note: Avoid direct contact of any coil treatment material on the plastic part. This may cause plastic part to deform as a result of chemical reaction.

CAUTION

When the compressor is to be stopped for a long time, the crankcase heater should be energized for at least 6 hours before start of operation.

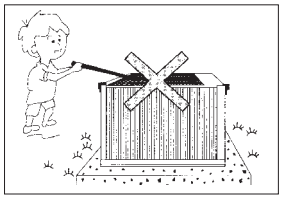
Do not charge OXYGEN, ACETYLENE or other flammable and poisonous gases into the refrigeration cycle when performing a leakage test or an airtight test. These types of gases are extremely dangerous, because explosion can occur.

It is recommended that nitrogen or refrigerant be charged for these types of tests.

CAUTION FOR USE

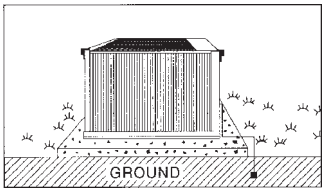
Bear the following points in mind to safeguard against malfunction and breakdown.

Do not stick rods or other objects through the air outlet during operation since this may result to damage or injury



The air conditioner must not re-start within 3 minutes after shutdown. (These models are equipped with a crankcase heater with the compressor).

Make sure the air conditioner is properly grounded by checking the ground terminal.

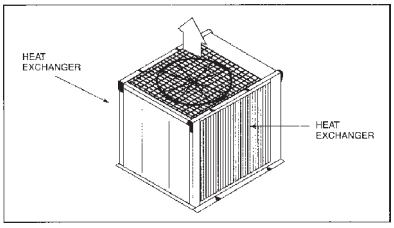


MAINTENANCE

For superb performance and lasting durability, please do not forget to conduct proper and regular maintenance.

Cleaning The Outdoor Unit Heat Exchanger

If you use your air conditioner for prolonged period of time, the outdoor unit heat exchanger will become dirty impairing its function and reducing the performance of the air conditioned. Consult your local dealer about the cleaning of the heat exchanger.



Troubleshooting

When a malfunction of the air conditioner unit is detected, immediately switch off the main power supply before proceeding with the following troubleshooting procedures.
The following are common fault conditions and simple troubleshooting tips. If any other fault conditions which are not listed occur, contact your nearest local dealer. DO NOT attempt to troubleshoot the unit by yourself.

No	Fault conditions	Possible causes / corrective actions
1	The air conditioner unit will not resume after power failure.	• The auto restart function is not functioning. Please turn on the unit with the wireless / wired controller.
2	The compressor does not operate 3 minutes after the air conditioner unit is started.	• Protection against frequent starting. • Wait for 3 or 4 minutes for the compressor to start operating by it self.
3	The airflow is too slow or room cannot be cooled sufficiently.	• The air filter is dirty. • The doors and windows are opened. • The air suction and discharge of both indoor and outdoor units are clogged or blocked. • The regulated temperature or temperature setting is not low enough.
4	Discharge airflow has bad odor.	• Cigarettes, smoke particles, perfume and others, which might have adhered onto the coil, may cause odor. • Contact your nearest dealer.
5	Condensation on the front air grille of the indoor unit.	• This is caused by air humidity after an extended period of operation. • The set temperature is too low. Increase the temperature setting and operate the unit at high fan speed.
6	Water flowing out from the air conditioner.	• Switch off the unit and contact your nearest dealer. This might be due to tilted installation.
7	Hissing airflow sound from the air conditioner unit during operation.	• Liquid refrigerant flowing into the evaporator coil.
8	The wireless controller display is dim.	• The batteries are discharged. • The batteries are not correctly inserted. • The assembly is not good.
9	Compressor operates continuously.	• Dirty air filter. Clean the air filter. • Temperature setting too low (cooling). Use higher temperature setting. • Temperature setting too high (heating), Use lower temperature setting.
10	No cool air comes out during cooling cycle, or no hot air comes out during heating cycle.	• Temperature setting too high (cooling). Use lower temperature setting. • Temperature setting too low (heating). Use higher temperature setting.
11	On heating cycle, warm air does not come out.	• Unit is in defrost mode. Heating operation will resume after defrost cycle ends.

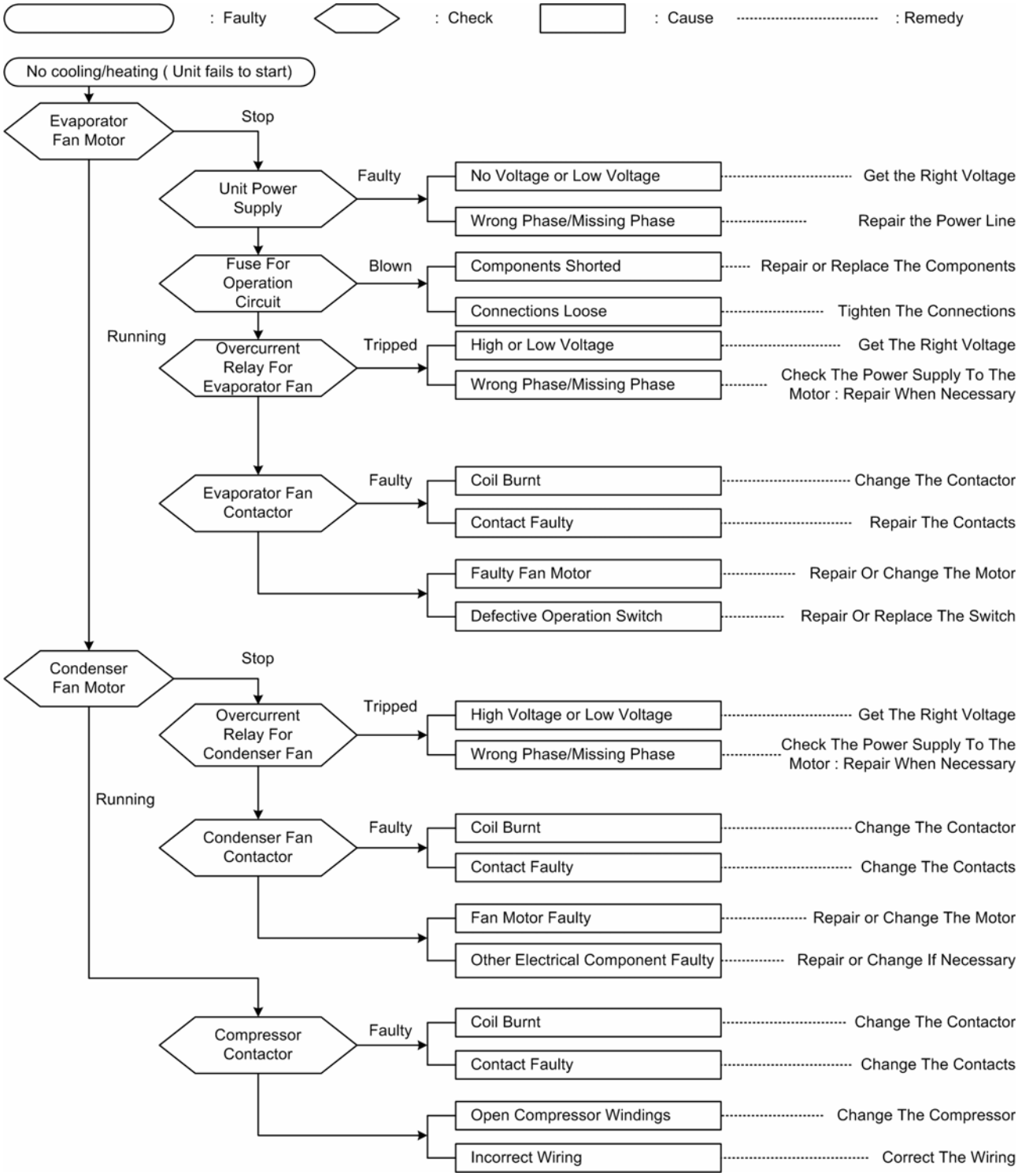
Diagnostic Guidelines

By means of pressure reading:

Data / Circuit	Pressure					Probable cause
	Too low	A little low	Normal	A little high	Too high	
High side **Low side**					● ●	1. Overcharged with refrigerant. 2. Non-condensable gases in refrigerant circuit (e.g. air) 3. Obstructed air-intake / discharge. 4. Hot air short circuiting in outdoor unit.
High side **Low side**	●				●	1. Poor compression / no compression (compressor defective) 2. Reversing valve leaking.
High side **Low side**	 ●	●				1. Undercharged with refrigerant. 2. Refrigerant leakage. 3. Air filter clogged / dirty (indoor unit). 4. Indoor fan locked / seized. 5. Defective defrost control, outdoor coil freeze up (heating). 6. Outdoor fan locked / seized (heating).
High side **Low side**				 ●	●	1. Outdoor fan blocked (cooling). 2. Outdoor coil dirty (cooling). 3. Indoor fan locked / seized (heating). 4. Indoor air filter clogged / dirty (heating). 5. Non-condensable gases in refrigerant circuit (e.g. air)
High side **Low side**				●	 ●	1. Air intake temperature of indoor unit too high.

By means of diagnostic flow chart:
Generally, there are two kinds of problems, i.e. starting failure and insufficient cooling/heating. “Starting failure” is caused by electrical defect while improper application or defects in refrigerant circuit causes “Insufficient cooling / heating”.

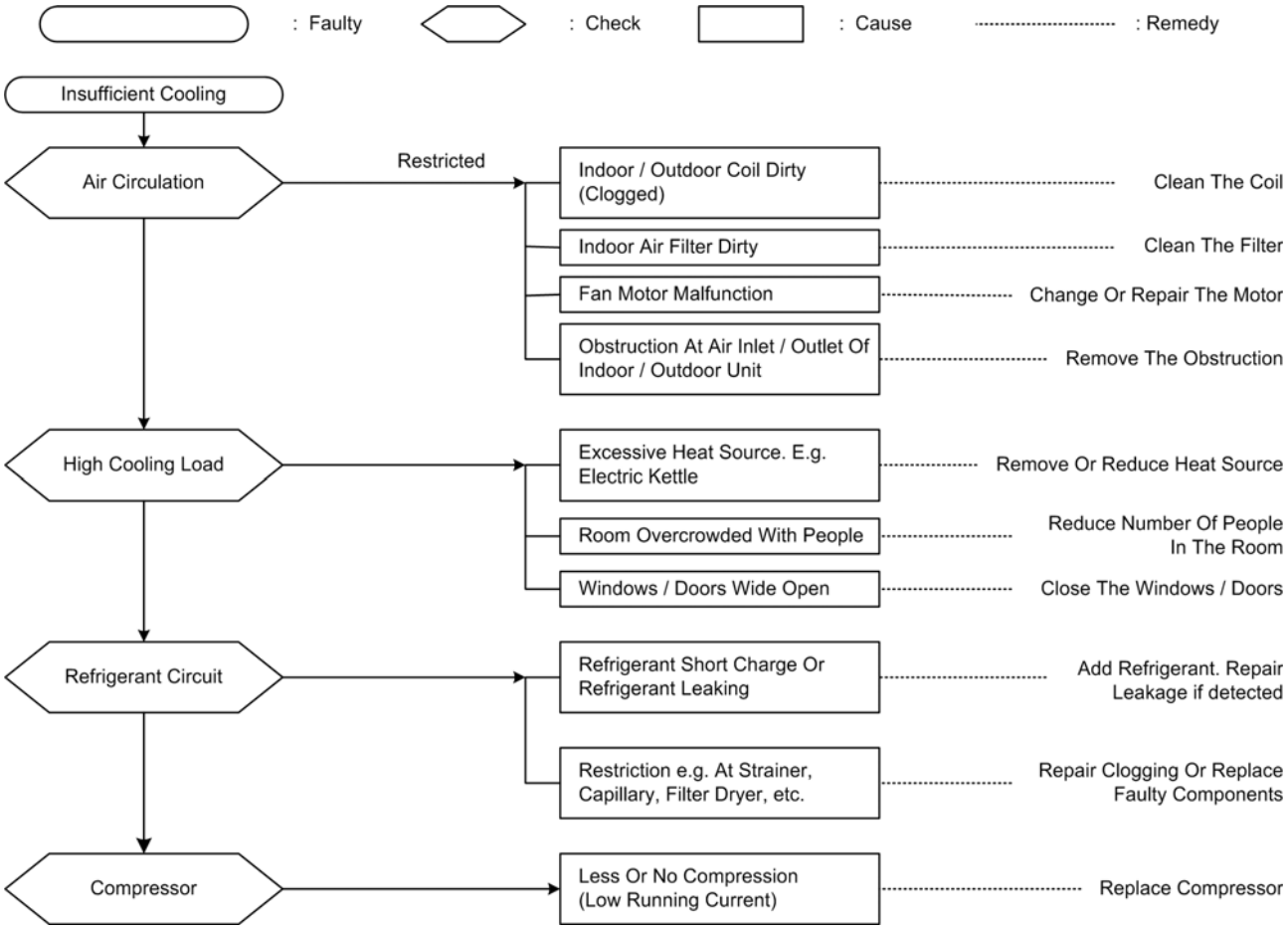
i) Diagnosis of Electric Circuit



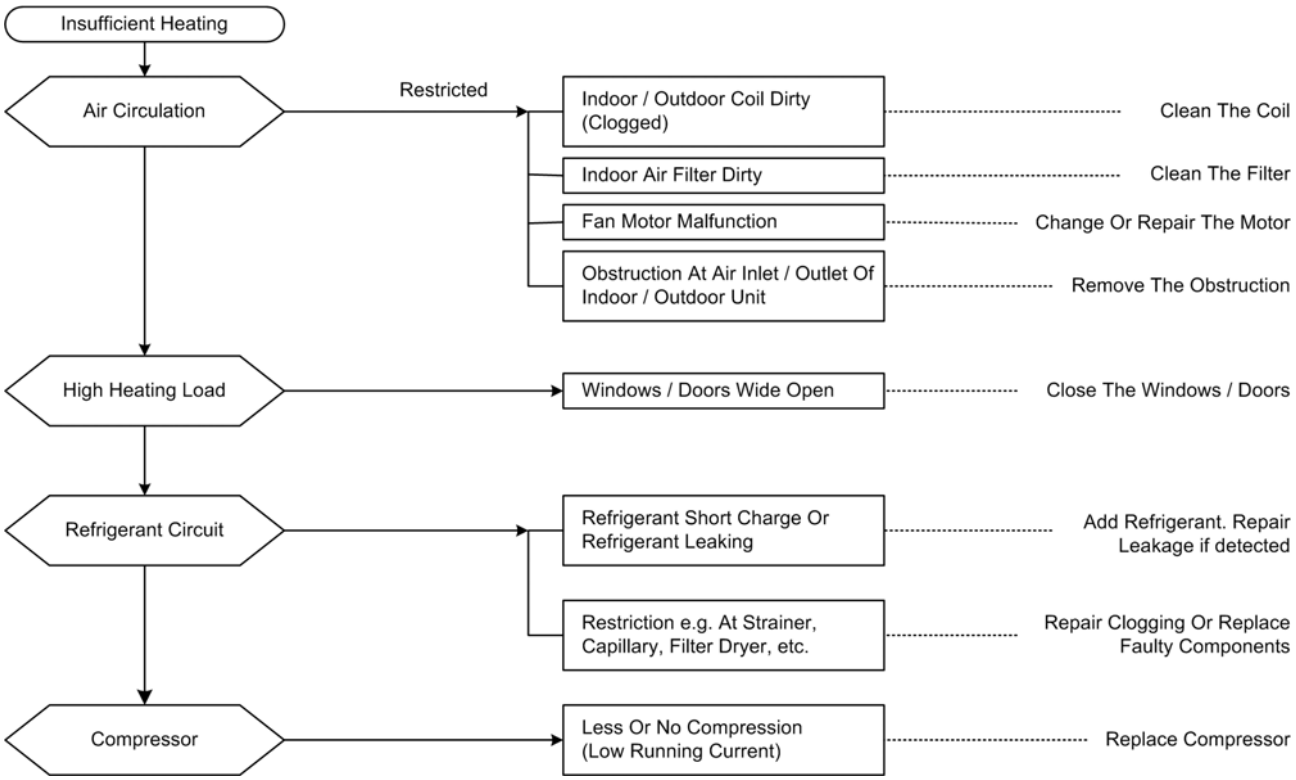
The most common causes of air conditioner failure to “start” are :
a) Voltage not within ±10% of rated voltage.
b) Power supply interrupted.
c) Improper control settings.
d) Air conditioner is disconnected from main power source.
e) Fuse blown or circuit breaker off.

ii) Diagnosis of Refrigerant Circuit / Application

There might be some causes where the unit starts running but does not perform satisfactorily, i.e. insufficient cooling. Judgement could be made by measuring temperature difference of indoor unit's intake and discharge air as well as running current.



Satisfactory operation with temperature difference of air intake & discharge of indoor unit 8°C to 13°C. *
(* value is for reference only)

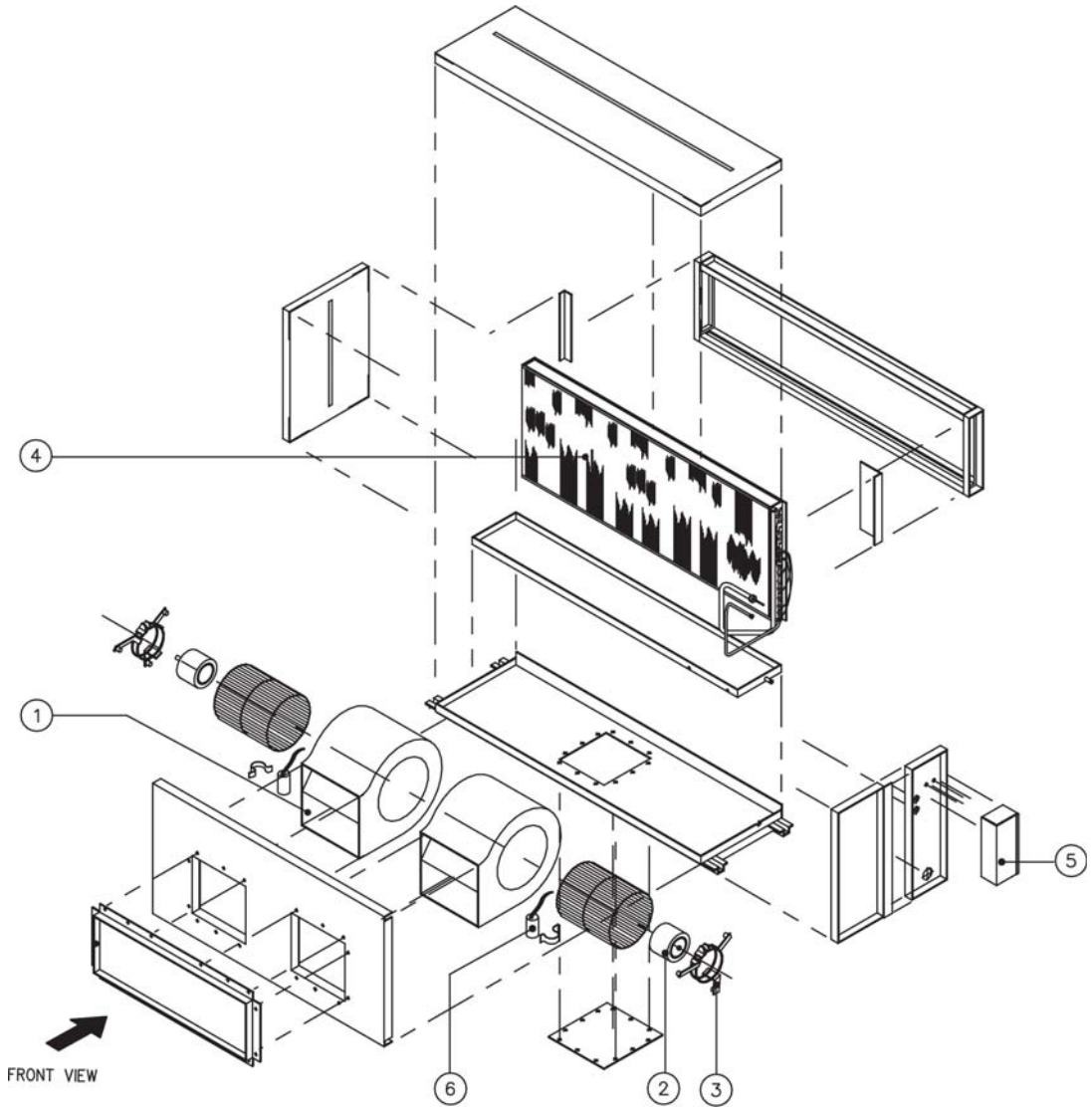


Satisfactory operation with temperature difference of air intake & discharge of indoor unit 14°C to 20°C. *
(* value is for reference only)

Exploded View And Parts List

HEATPUMP MODEL (INDOOR)
HORIZONTAL AIR DISCHARGE

MODEL: MDB075BR



NO	DESCRIPTION
1	BLOWER
2	MOTOR
3	FAN MOTOR BRACKET
4	ASSY COIL
5	TER. BOX

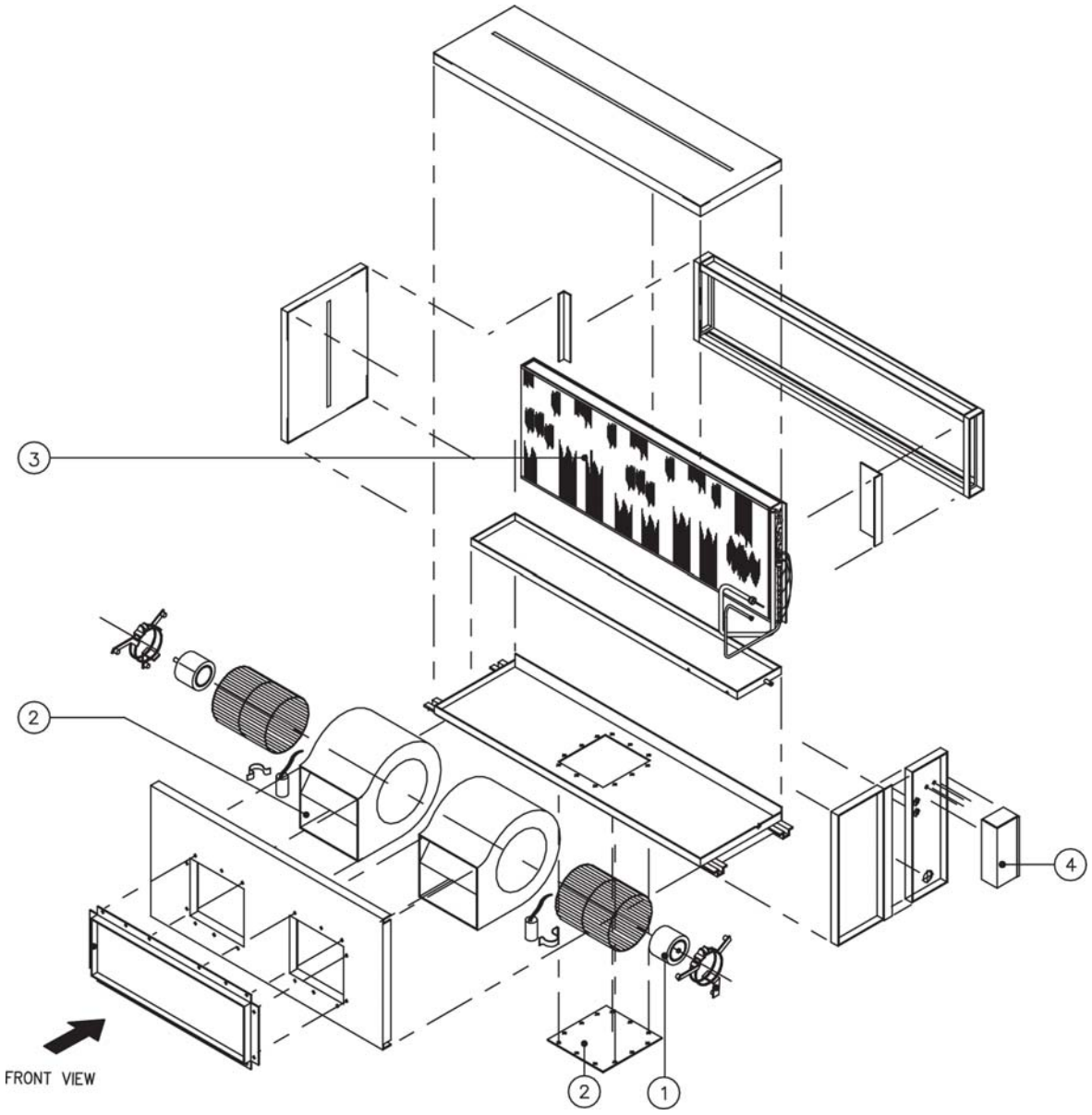
NO	DESCRIPTION
6	CAPACITOR 7.5MFD/440VAC 6.0MFD/440VAC

Parts Not In Diagram

	CONTROL MODULE
	SARAN NET FILTER

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

MODEL : MDB100BR



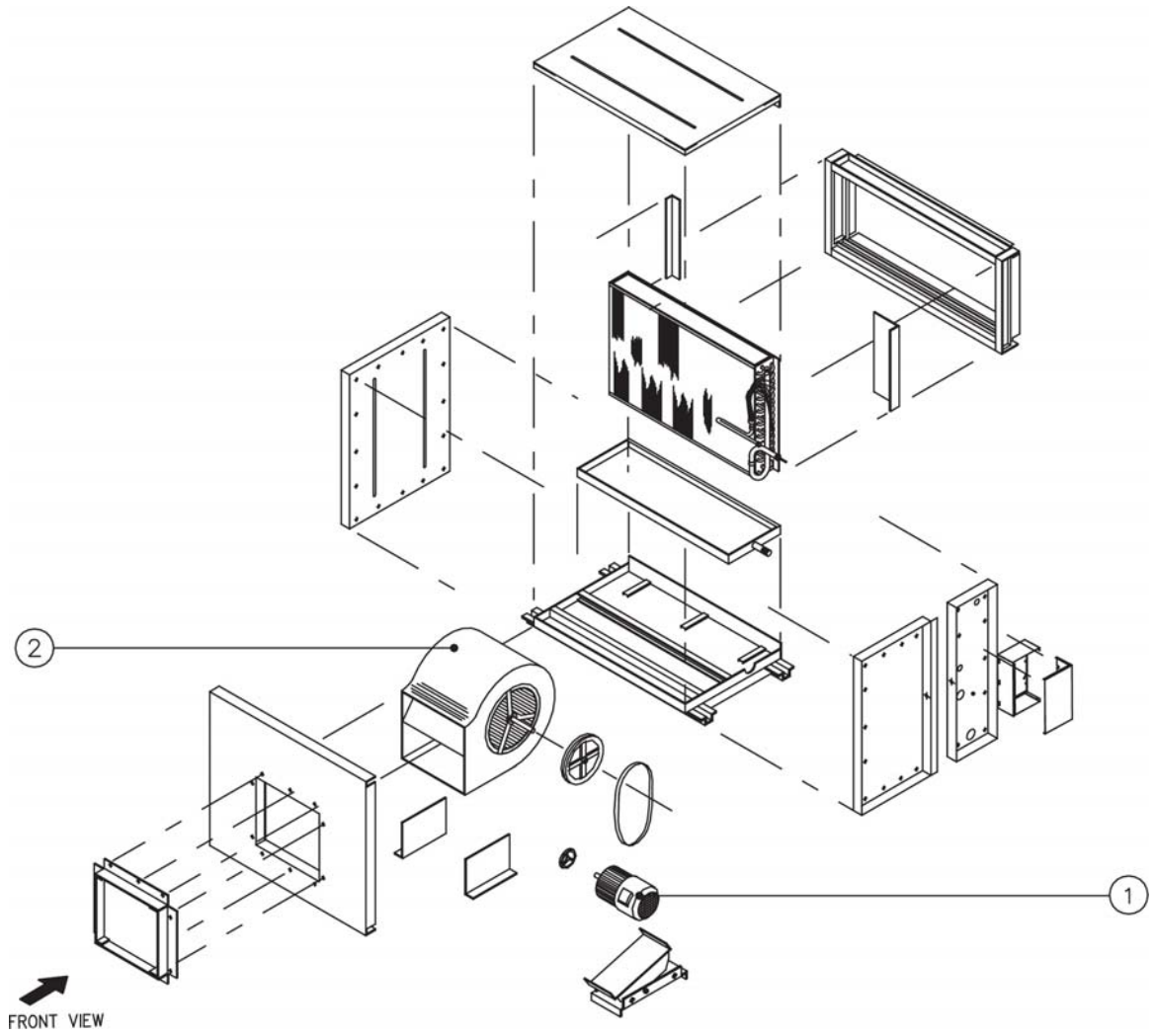
NO	DESCRIPTION
1	MOTOR
2	BLOWER
3	ASSY COIL
4	TER. BOX

Parts Not In Diagram

	SARAN NET FILTER
	CONTROL MODULE

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

MODEL : MDB125CR



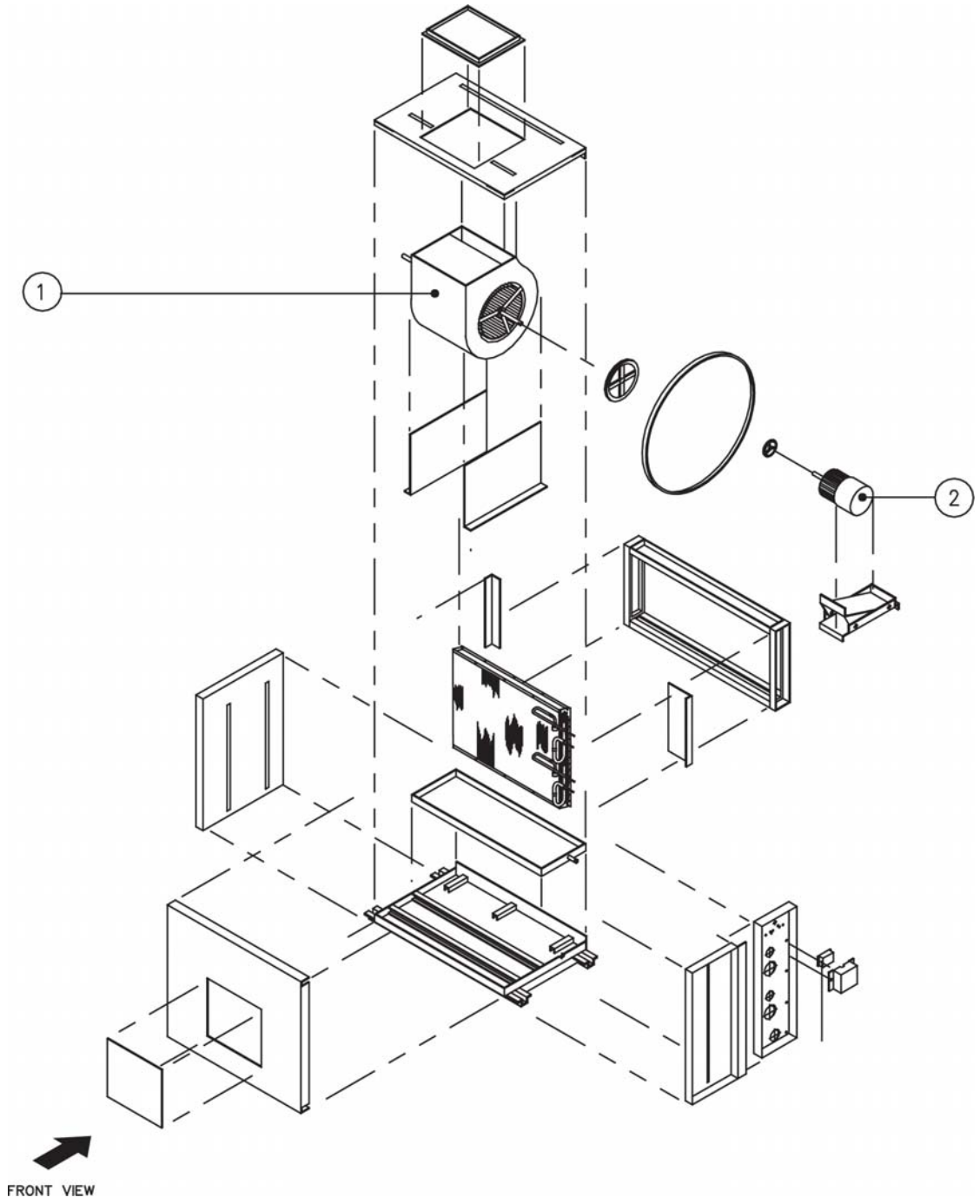
NO	DESCRIPTION
1	MOTOR
2	BLOWER

Parts Not In Diagram

	TXV VALVE
	CONTROL MODULE

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

MODEL : MDB150BR2



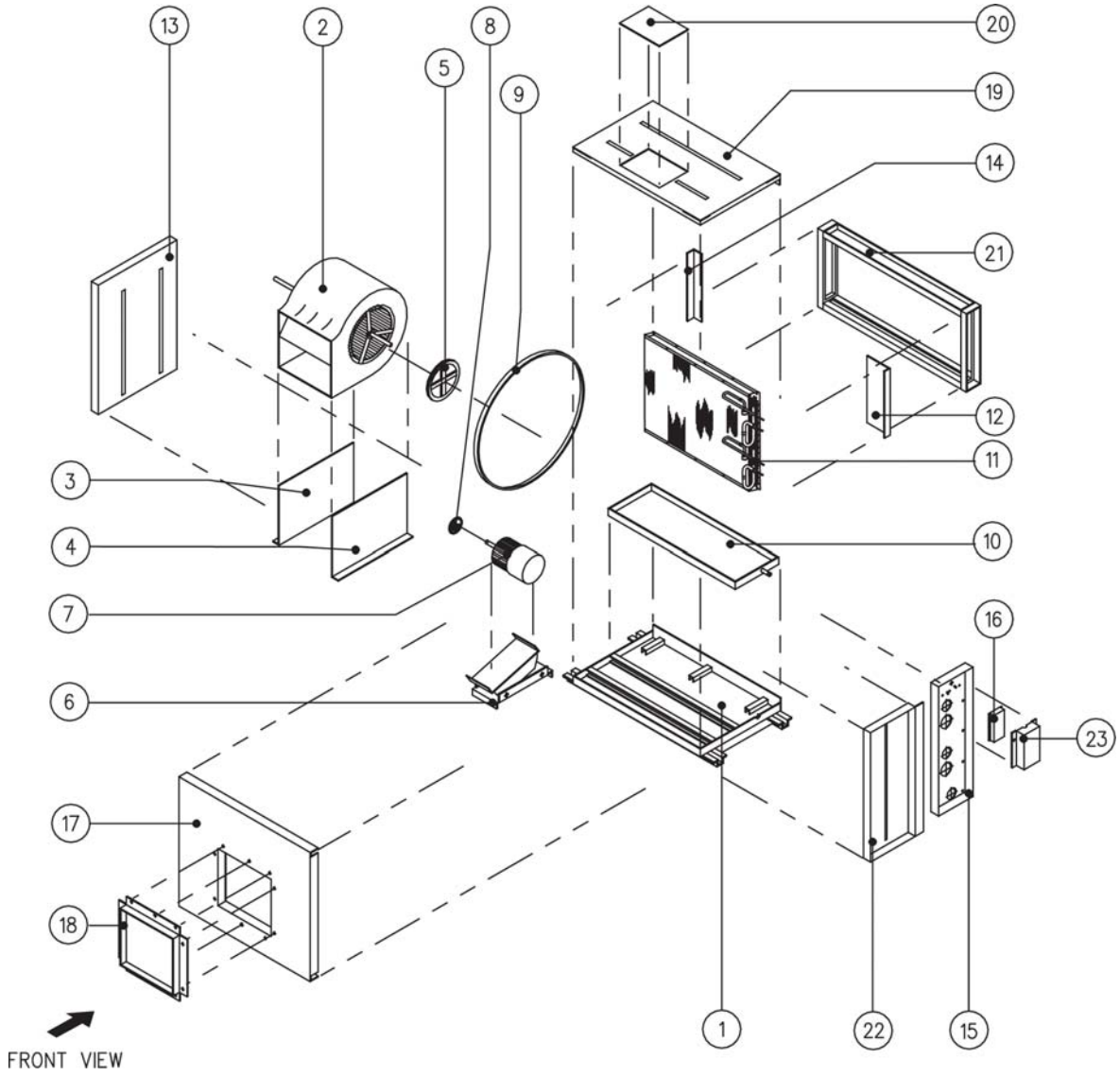
NO	DESCRIPTION
1	BLOWER
2	MOTOR

Parts Not In Diagram

	TXV VALVE
	CONTROL MODULE

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

MODEL : MDB200BR2



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER L
4	SUPT, BLOWER R
5	PULLEY, 2 SPZ 140/1610
6	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT, MOTOR BRACKET L
7	MOTOR
8	PULLEY, 2 SPZ 80/1210
9	BELT
10	ASSY, DRAIN PAN
11	ASSY, COIL
12	COVER, COIL SIDE R
13	PANEL, SIDE R
14	COVER, COIL SIDE L

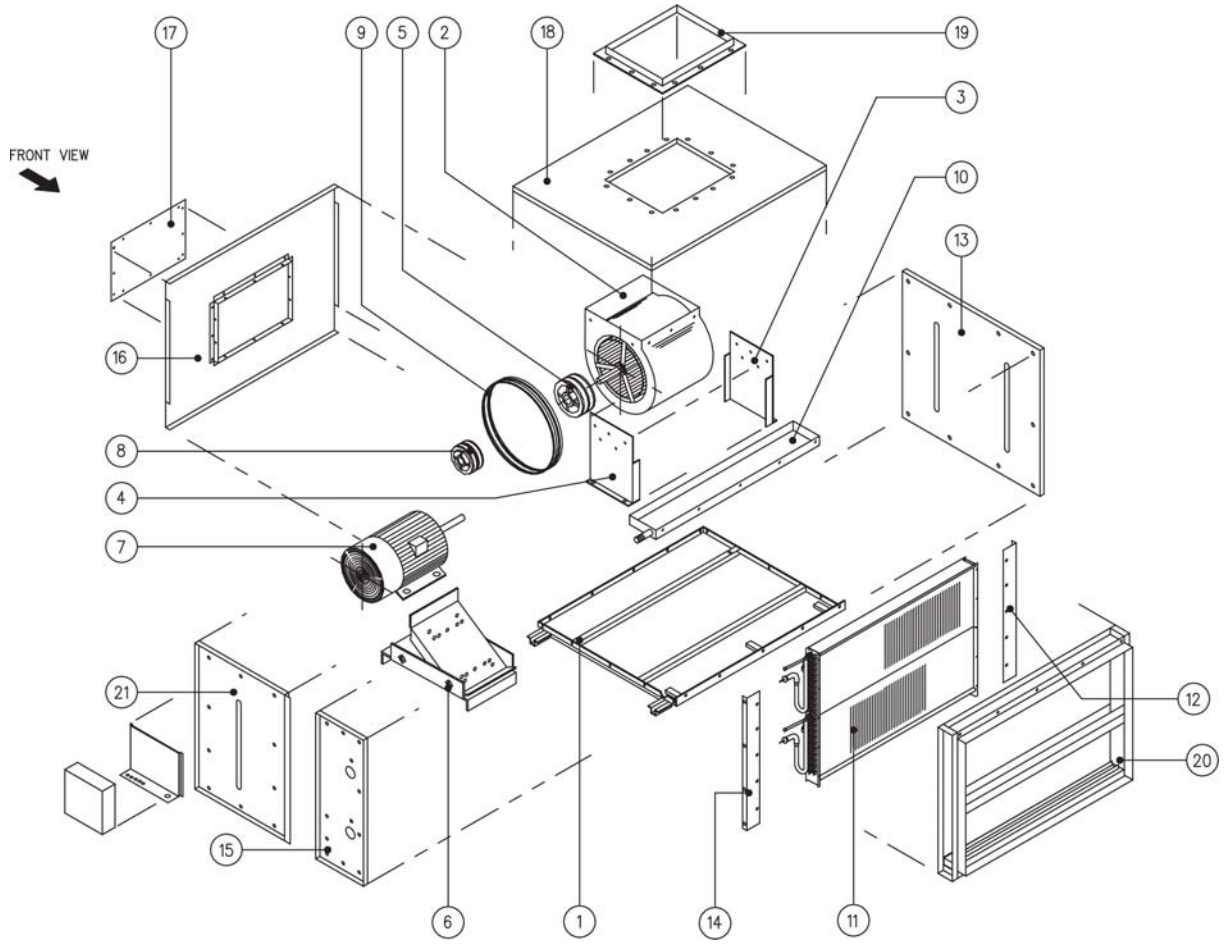
NO	DESCRIPTION
15	ASSY, PANEL SMALL SIDE L
16	ASSY, TER. BOX
17	ASSY, PANEL F
18	FLANGE, BLOWER T/B FLANGE, BLOWER L/R
19	ASSY, PANEL T
20	COVER, BLOWER
21	ASSY, FILTER SUPT. T/B SUPPORT, FILTER L/R
22	PANEL, SIDE BIG L
23	COVER, TER. BOX

Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

MODEL : MDB250BR2



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER
4	SUPT, BLOWER
5	PULLEY, 2 SPZ 180/2012
6	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT. MOTOR BRACKET L
7	MOTOR
8	PULLEY, 2 SPZ 90/1610
9	BELT
10	ASSY, DRAIN PAN
11	ASSY, COIL
12	COVER, COIL SIDE L
13	PANEL, SIDE L

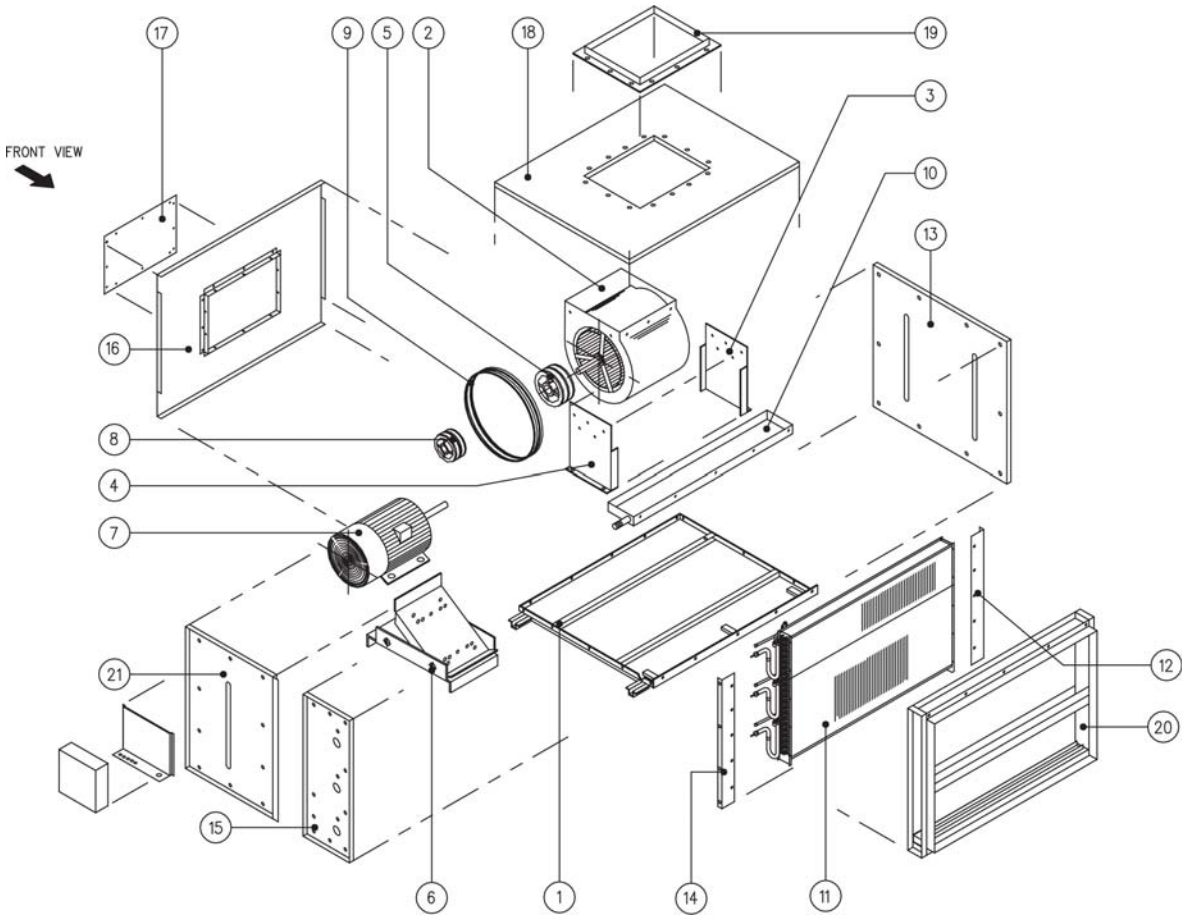
NO	DESCRIPTION
14	COVER, COIL SIDE R
15	PANEL, SMALL SIDE R
16	ASSY, FRONT PANEL
17	COVER, BLOWER
18	ASSY, TOP PANEL
19	FLANGE, BLOWER T/B FLANGE, BLOWER L/R
20	ASSY, FILTER SUPT. T/B ASSY, FILTER R/CENTRE FLANGE, FILTER L/R
21	PANEL, SIDE BIG R

Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

MODEL : MDB300BR3



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER
4	SUPT, BLOWER
5	PULLEY, 2 SPZ 180/2012
6	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT. MOTOR BRACKET L
7	MOTOR
8	PULLEY, 2 SPZ 90/1610
9	BELT
10	ASSY, DRAIN PAN
11	ASSY, COIL
12	COVER, COIL SIDE L
13	PANEL, SIDE L

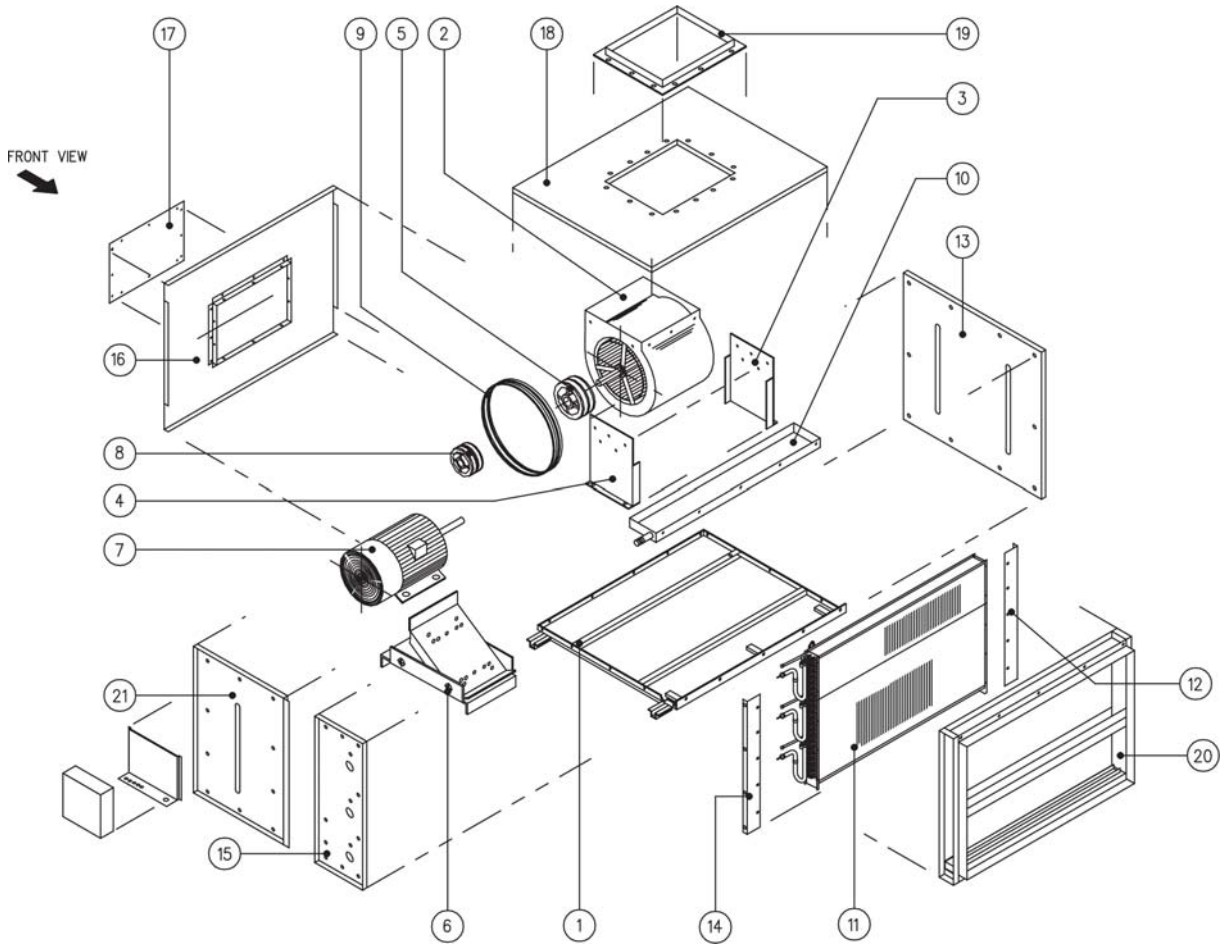
NO	DESCRIPTION
14	COVER, COIL SIDE R
15	PANEL, SMALL SIDE R
16	ASSY, FRONT PANEL
17	COVER, BLOWER
18	ASSY, TOP PANEL
19	FLANGE, BLOWER T/B FLANGE, BLOWER L/R
20	ASSY, FILTER SUPT. T/B ASSY, FILTER R/CENTRE FLANGE, FILTER L/R
21	PANEL, SIDE BIG R

Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

MODEL : MDB350BR3



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER L
4	SUPT, BLOWER R
5	PULLEY, 2 SPZ 250/2012
6	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT, MOTOR BRACKET L SUPT, MOTOR BRACKET R
7	MOTOR
8	PULLEY, 2 SPZ 125/1610
9	BELT
10	ASSY, DRAIN PAN
11	ASSY, COIL
12	COVER, COIL SIDE L
13	PANEL, SIDE L

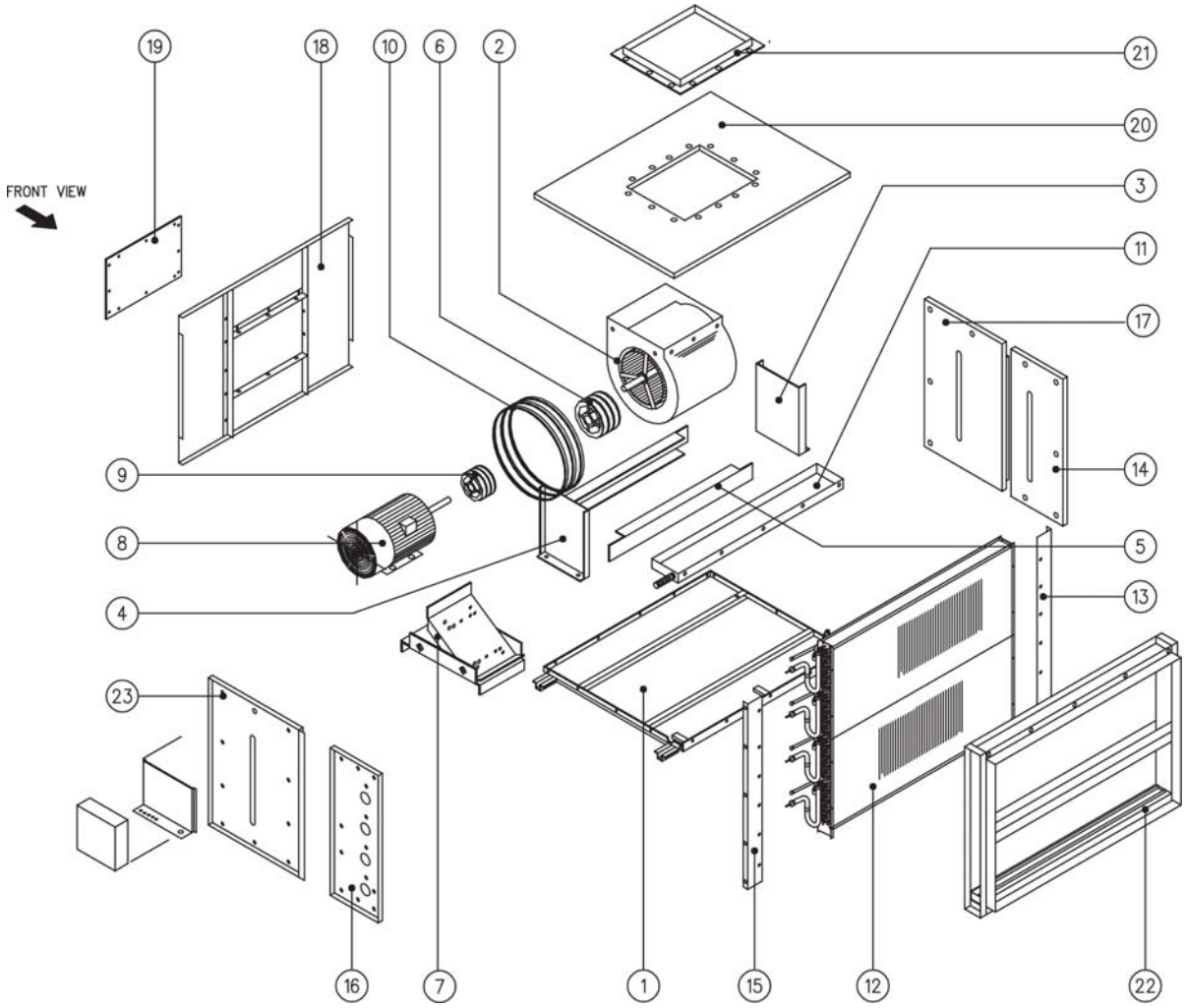
NO	DESCRIPTION
14	COVER, COIL SIDE R
15	PANEL, SMALL SIDE R
16	ASSY, FRONT PANEL
17	COVER, BLOWER
18	ASSY, TOP PANEL
19	FLANGE, BLOWER L/R FLANGE, BLOWER T/B
20	ASSY, FILTER SUPT. T/B ASSY, FILTER R/CENTRE SUPT, FILTER L/R
21	PANEL, SIDE BIG R

Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

MODEL : MDB400BR4



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER L
4	SUPT, BLOWER R
5	SUPT, BLOWER F/B
6	PULLEY, 2 SPA 250/2517
7	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT, MOTOR BRACKET L
8	MOTOR
9	PULLEY, 2 SPA 106/1610
10	BELT
11	ASSY, DRAIN PAN
12	ASSY, COIL
13	COVER, COIL SIDE L
14	PANEL, SIDE BACK L

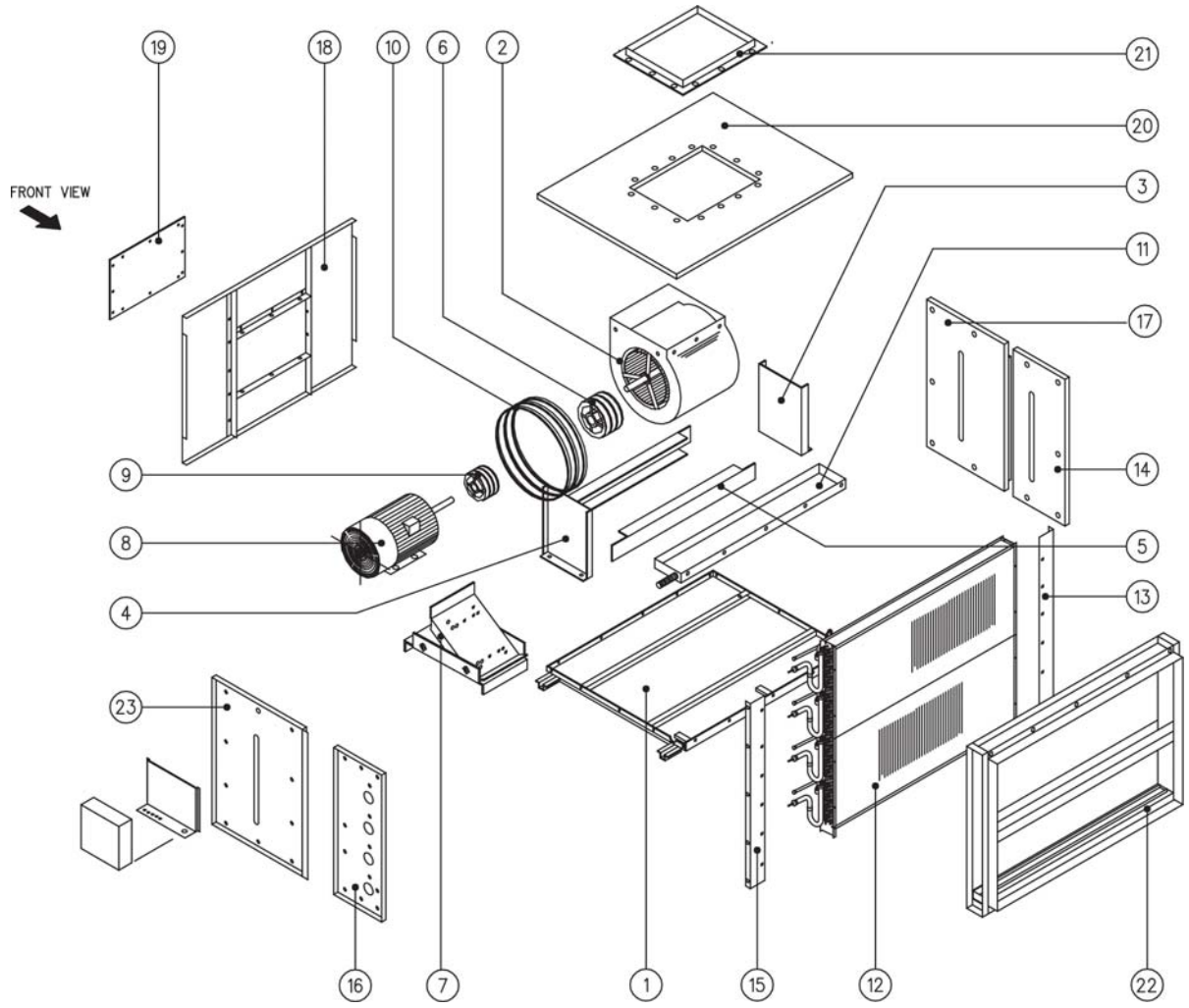
NO	DESCRIPTION
15	COVER, COIL SIDE R
16	PANEL, SIDE BACK R
17	PANEL, SIDE FRONT L/R
18	ASSY, FRONT PANEL
19	COVER, BLOWER
20	ASSY, TOP PANEL
21	FLANGE, BLOWER L/R FLANGE, BLOWER T/B
22	SUPPORT, FILTER L/R COVER, FILTER SUPT, FILTER T/B
23	PANEL, SIDE FRONT L/R

Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

MODEL : MDB500BR4



NO	DESCRIPTION
1	ASSY, BASE PAN
2	BLOWER
3	SUPT, BLOWER L
4	SUPT, BLOWER R
5	SUPT, BLOWER F/B
6	PULLEY, 2 SPA 315/2517
7	BASE, MOTOR UPPER BASE, MOTOR LOWER SUPT, MOTOR BRACKET L
8	MOTOR
9	PULLEY, 2 SPA 150/2012
10	BELT
11	ASSY, DRAIN PAN
12	ASSY, COIL
13	COVER, COIL SIDE L
14	PANEL, SIDE BACK L

NO	DESCRIPTION
15	COVER, COIL SIDE R
16	PANEL, SIDE BACK R HEADER
17	PANEL, SIDE FRONT L/R
18	ASSY, PANEL F
19	COVER, BLOWER
20	ASSY, PANEL T
21	FLANGE, BLOWER L/R FLANGE, BLOWER T/B
22	SUPT, FILTER L/R COVER, FILTER SUPT, FILTER T/B
23	PANEL, SIDE FRONT L/R

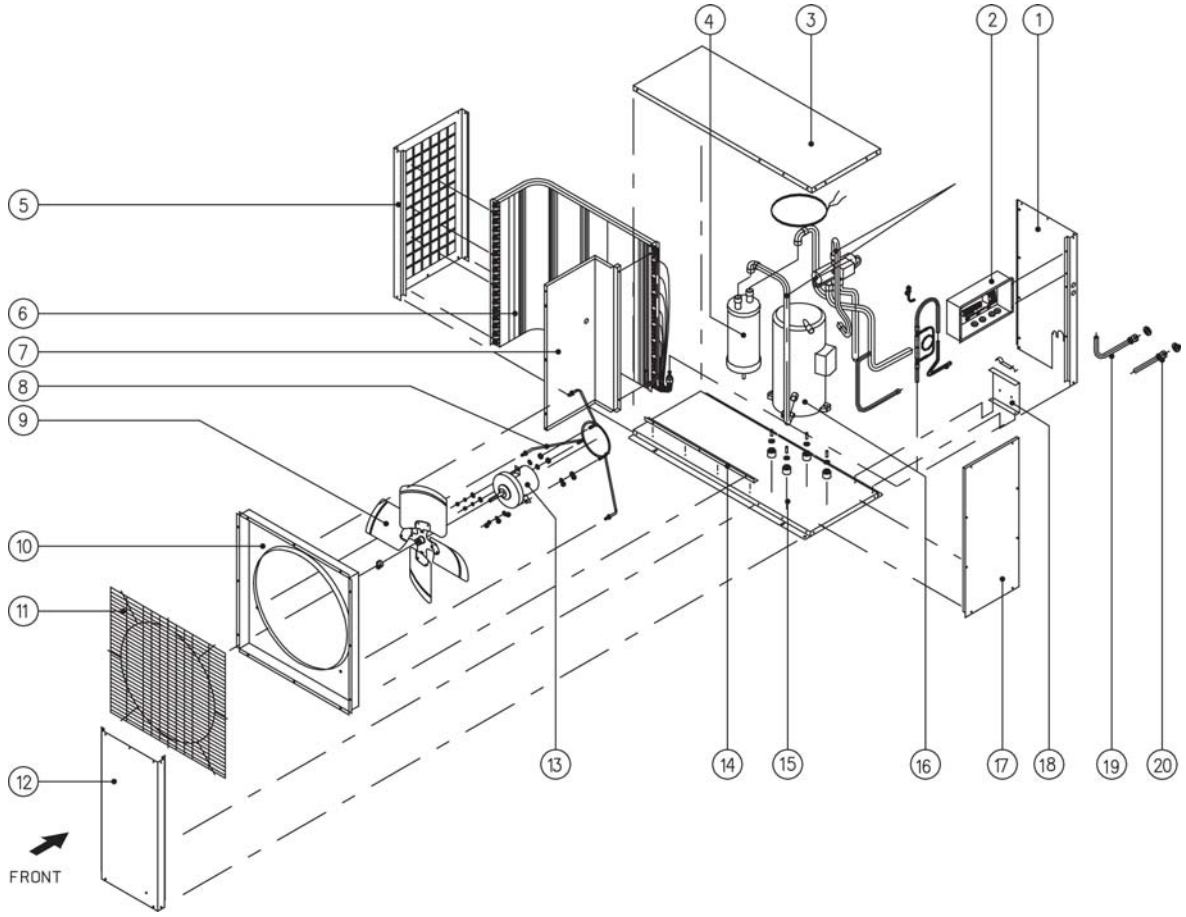
Parts Not In Diagram

	FILTER, AAF R29
	HANDSET, WIRED SEQ LCD
	CONTROL MODULE

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

HEATPUMP MODEL
HORIZONTAL AIR DISCHARGE

MODEL : MMC075CR



NO	DESCRIPTION
1	STRUC. BACK R
2	ASSY, TER. BOX
3	TOP PANEL
4	ACCUMULATOR
5	STRUC. FRONT L
6	ASSY, COIL
7	PARTITION
8	BRACKET, FAN MOTOR
9	PROPELLER FAN
10	ORIFICE PLATE
11	FAN GUARD
12	STRUC. FRONT R
13	MOTOR

NO	DESCRIPTION
14	ORIFICE SUPT. PLATE
15	ASSY, BASE PAN
16	COMPRESSOR
17	SERVICE PANEL
18	VALVE PLATE
19	ACESS VALVE
20	ACESS VALVE

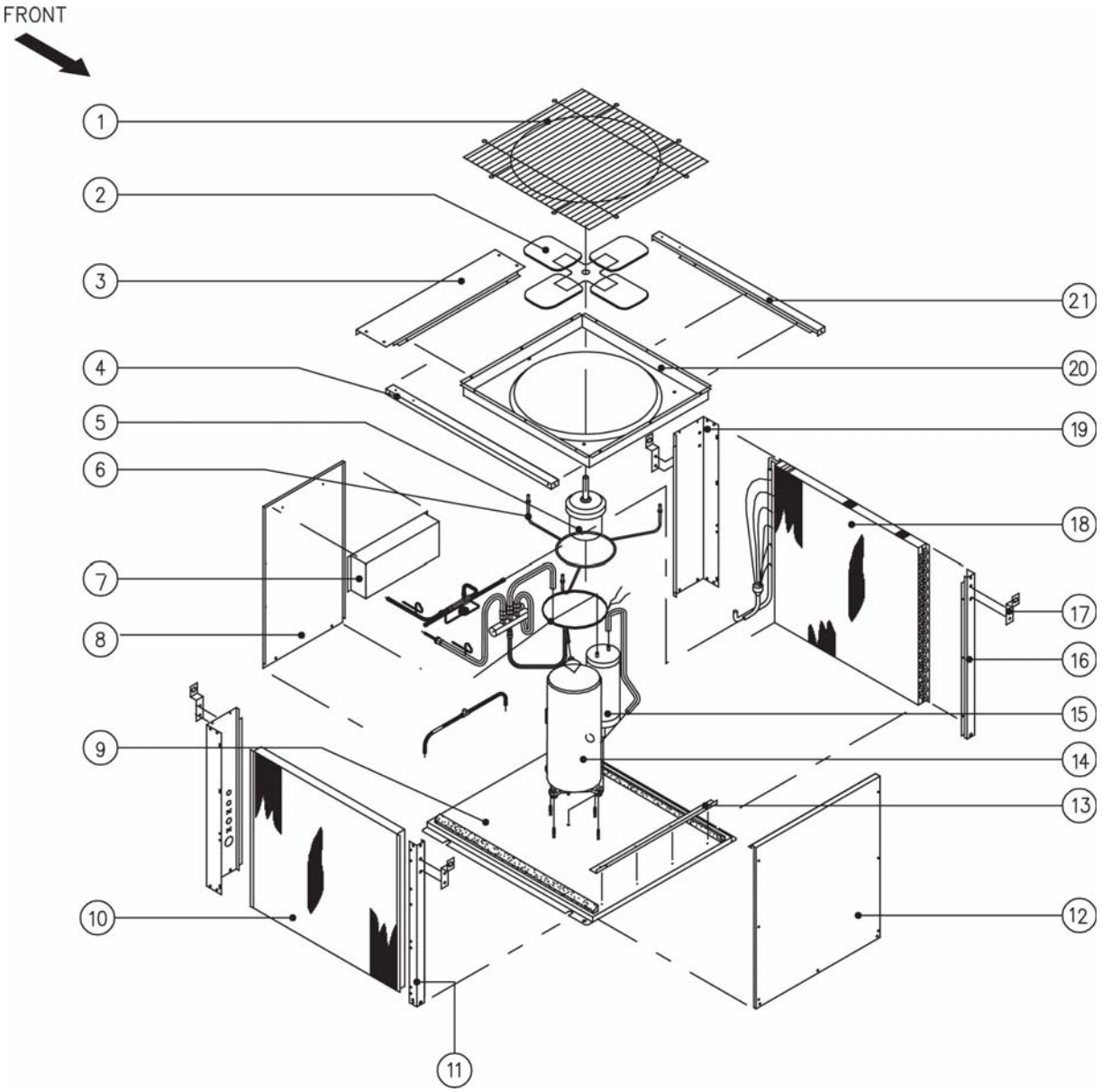
Parts Not In Diagram

	4-WAY VALVE
	TXV VALVE
	PHASE PROTECTOR
	CAPACITOR
	PRESS. SWITCH, 426PSI

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

VERTICAL DISCHARGE

MODEL : MMC100 / 125 BR



VERTICAL DISCHARGE

MODEL : MMC100 / 125 BR

NO	DESCRIPTION
1	FAN GUARD
	MMC100BR
	MMC125BR
2	PROPELLER FAN
	MMC100BR
	MMC125BR
3	PANEL, TOP F
4	STRUC, TOP R
5	MOTOR
	MMC100BR
	MMC125BR
6	BRACKET, FAN MOTOR
	MMC100BR
	MMC125BR
7	ASSY,TERMINAL BOARD
	MMC100BR
	MMC125BR
8	ASSY, BASE PAN
9	ASSY, STRUC. FRONT R.
10	ASSY, COIL R
	MMC100BR
	MMC125BR
11	ASSY, STRUC. BACK R
	MMC100BR
	MMC125BR
12	T/B PANEL
13	SUPT, ORIFICE PLATE

NO	DESCRIPTION
14	COMPRESSOR
	MMC100BR
	MMC125BR
15	ACCUMULATOR
16	ASSY, STRUC. BACK L
	MMC100BR
	MMC125BR
17	HOISTING BRACKET
18	ASSY, COIL L
	MMC100BR
	MMC125BR
19	ASSY, STRUC. FRONT L
21	PLATE, ORIFICE
	MMC100BR
	MMC125BR
21	STRUC, TOP L

Parts Not In Diagram

	PANEL, SERVICE T
	ASSY, ACCESS VALVE
	PRESS. SWITCH, 426PSI
	PRESS. SWITCH, 7PSI
	PHASE PROTECTOR, PP1.03
	VALVE, REV 4 WAY
	FILTER DRIER
	VALVE, TXV
	MMC100BR, TCLE 7.5HCA
	MMC125BR, TCLE 10HCA

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

Products manufactured in an ISO certified facility.
This document contains the most current product information as of this printing.