

technical data



REQ-B8V3B_REQ-B8W1B

Pair Application

air conditioning systems

Split Sky Air

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REQ-B8V3B_REQ-B8W1B

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1 Features

- Outdoor units for pair application
- Daikin outdoor units are neat and sturdy and can be mounted easily on a roof or terrace or simply placed against an outside wall.
- Outdoor units are fitted with a scroll compressor, renowned for low noise and high energy efficiency.
- The piping connections can be accessed from underneath, front, side or rear.
- The service valves are hidden inside the casing.
- A special acryl precoated fin for anti-corrosion treatment on the heat exchanger ensures greater resistance against severe weather conditions



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2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B	
For combination indoor units + outdoor units	Indoor Units			FDEQ71B8V3B	FDEQ71B8W3B	FDEQ100B8V3B	FDEQ100B8W3B	FDEQ125B8V3B	
Nominal Capacity	Cooling	Standard	kW	7.1	7.1	9.8	9.8	12.2	
	Heating	Standard	kW	8	8	11.2	11.2	14.5	
Nominal input	Cooling	Standard	kW	2.79	2.68	3.98	3.94	4.67	
	Heating	Standard	kW	2.49	2.49	3.99	3.96	4.52	
For combination indoor units + outdoor units	EER	Cooling		2.54	2.65	2.46	2.49	2.61	
	COP	Heating		3.21	3.21	2.86	2.89	3.21	
	Energy Labeling Directive	Cooling			E	D	E	E	D
		Heating			C	C	C	D	C
	Annual energy consumption	kWh		1395	1340	1990	1970	2335	
Indoor Units				FCQ71B8V3B	FCQ71B8W3B	FCQ100B8V3B	FCQ100B8W3B	FCQ125B8V3B	
Nominal Capacity	Cooling	Standard	kW	7.1	7.1	10	10	12.5	
	Heating	Standard	kW	8	8	11.2	11.2	14.6	
Nominal input	Cooling	Standard	kW	2.72	2.66	3.83	3.56	4.66	
	Heating	Standard	kW	2.85	2.80	3.75	3.66	5.06	
For combination indoor units + outdoor units	EER	Cooling		2.61	2.67	2.61	2.81	2.68	
	COP	Heating		2.81	2.86	2.99	3.06	2.89	
	Energy Labeling Directive	Cooling			D	D	D	C	D
		Heating			D				
	Annual energy consumption	kWh		1360	1330	1915	1780	2330	
Indoor Units				FBQ71B8V3B	FBQ71B8W3B	FBQ100B8V3B	FBQ100B8W3B	FBQ125B8V3B	
Nominal Capacity	Cooling	Standard	kW	7.1	7.1	10	10	12.5	
	Heating	Standard	kW	8	8	11.2	11.2	14.5	
Nominal input	Cooling	Standard	kW	2.79	2.68	3.79	3.6	4.67	
	Heating	Standard	kW	2.49	2.49	3.91	3.87	4.52	
For combination indoor units + outdoor units	EER	Cooling		2.54	2.65	2.64	2.78	2.61	
	COP	Heating		3.21	3.21	2.86	2.89	3.21	
	Energy Labeling Directive	Cooling			E	D	D	C	D
		Heating			C	C	D	D	C
	Annual energy consumption	kWh		1395	1340	1885	1780	2335	
Indoor Units				FHQ71BVV1B	FHQ71BVV1B	FHQ100BVV1B	FHQ100BVV1B	FHQ125BVV1B	
Nominal Capacity	Cooling	Standard	kW	7.1	7.1	9.8	9.8	12.2	
	Heating	Standard	kW	8	8	11.2	11.2	14.5	
Nominal input	Cooling	Standard	kW	2.7	2.65	3.75	3.68	4.51	
	Heating	Standard	kW	2.85	2.8	4.13	4.01	5.16	
For combination indoor units + outdoor units	EER	Cooling		2.63	2.68	2.61	2.66	2.71	
	COP	Heating		2.81	2.86	2.71	2.79	2.81	
	Energy Labeling Directive	Cooling			D				
		Heating			D	D	E	E	D
	Annual energy consumption	kWh		1350	1325	1875	1840	2250	

2-2 TECHNICAL SPECIFICATIONS				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B
Casing	Colour			Daikin White				
	Material			Painted galvanized steel plate				
Dimensions	Unit	Height	mm	770	770	1170	1170	1170
		Width	mm	900	900	900	900	900
		Depth	mm	320	320	320	320	320
	Packing	Height	mm	900	900	1300	1300	1300
		Width	mm	980	980	980	980	980
		Depth	mm	420	420	420	420	420
Weight	Unit		kg	83	83	102	100	108
	Packed Unit		kg	87	87	107	105	113

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B
Heat Exchanger	Dimensions	Length	mm	857	857	857	857	857
		Nr of Rows		2	2	2	2	2
		Fin Pitch	mm	2.00	2.00	2.00	2.00	2.00
		Nr of Passes		6	6	10	10	10
		Face Area	m ²	0.641	0.641	0.980	0.980	0.980
		Nr of Stages		34	34	52	52	52
	Tube type		Hi-XSS cooling tube					
Fin	Type	Non-symmetric waffle louver						
	Treatment	Anti-corrosion treatment (PE)						
Fan	Type			Direct Drive Propeller				
	Discharge direction			Horizontal				
	Quantity			1	1	1	1	2
	Air Flow Rate (nominal at 230V)	Cooling	m ³ /min	48.0	48.0	55.0	55.0	89.0
		Heating	m ³ /min	43.0	43.0	50.0	50.0	80.0
	Motor	Quantity		1	1	1	1	1
Model		P47L11S						
Position						Lower		
Motor	Speed (nominal)	Steps	3	3	3	3	3	
Fan	Motor	Output	W	65	65	90	90	85
		Position						Upper
Motor	Speed (nominal)	Steps					3	
Fan	Motor	Output	W					65
Compressor	Quantity			1	1	1	1	1
	Motor	Model		JT90G-P4V1N@S	JT90G-YE	JT125G-P4V1@S	JT125G-YE	JT160G-YE
		Type		Hermetically sealed scroll compressor				
		Motor Output	W	2200	2200	3000	3000	3750
	Crankcase Heater	W	33	33	33	33	33	
Operation Range	Cooling	Min	°CDB	10.0	10.0	10.0	10.0	10.0
		Max	°CDB	46.0	46.0	46.0	46.0	46.0
	Heating	Min	°CWB	-10	-10	-10	-10	-10
		Max	°CWB	15	15	15	15	15
Sound Level (nominal)	Cooling	Sound Power	dB(A)	65.0	65.0	70.0	70.0	70.0
		Sound Pressure	dB(A)	53.0	53.0	57.0	57.0	57.0
Refrigerant	Type			R-410A				
	Charge	kg	2.5	2.5	3.6	3.6	3.6	
	Control			Expansion valve (electronic type)				
	Nr of Circuits			1	1	1	1	1
Refrigerant Oil	Type			Daphne FVC68D				
	Charged Volume	l	1.5	1.5	1.5	1.5	1.5	

2 Specifications

2-2 TECHNICAL SPECIFICATIONS			REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B	
Piping connections	Liquid (OD)	Quantity	1	1	1	1	1	
		Type	Flare connection					
		Diameter (OD) mm	9.52	9.52	9.52	9.52	9.52	
	Gas	Quantity	1	1	1	1	1	
		Type	Flare connection					
		Diameter (OD) mm	15.9	15.9	15.9	15.9	15.9	
	Drain	Quantity	3	3	3	3	3	
		Type	Hole					
		Diameter (OD) mm	26	26	26	26	26	
	Piping Length	Minimum	m	5	5	5	5	5
		Maximum	m	50	50	50	50	50
		Equivalent	m	70	70	70	70	70
		Chargeless	m	7.5	7.5	7.5	7.5	7.5
Installation height difference	Maximum	m	30.0	30.0	30.0	30.0	30.0	
	Max. internunit level difference	m	0.5	0.5	0.5	0.5	0.5	
Heat Insulation		Both liquid and gas pipes						
Defrost Method		Reversed cycle						
Defrost Control		Sensor for outdoor heat exchanger temperature						
Capacity Control Method		None						
Safety Devices		Reverse phase protector						
		PC board fuse						
		Overcurrent relay (compressor)						
		Low pressure switch						
		High pressure switch						
		Fan motor thermal protector						
Standard Accessories	Item	Declaration of conformity						
	Quantity	1	1	1	1	1		
	Item	Installation manual						
	Quantity	1	1	1	1	1		
Notes		Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings of this chapter.						
		The sound power level is an absolute value indicating the power which a sound source generates.						
		Sound values are measured in a semi-anechoic room.						
		In case of drain piping for outdoor unit, drain piping kit (option) is needed.						
		Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.						
		Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m						

2-3 ELECTRICAL SPECIFICATIONS			REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B
Power Supply	Name		V3	W1	V3	W1	W1
	Phase		1	3N	1	3N	3N
	Frequency	Hz	50	50	50	50	50
	Voltage	V	230	400	230	400	400
	Voltage range	Minimum	V	-10%			
		Maximum	V	+10%			
Current	Recommended fuses	A	32	16	40	16	20
Wiring connections	For Power Supply	Quantity	1	1	1	1	1
		Remark	3 wires (earth wire included)	5 wires (earth wire included)	3 wires (earth wire included)	5 wires (earth wire included)	5 wires (earth wire included)
	For connection with indoor	Quantity	1	1	1	1	1
		Remark	4 wires (earth wire included)				
Power Supply Intake		Outdoor unit only					

3 Electrical data

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REQ71B

Unit combination		Power supply					Compressor		OFM		IFM			
Indoor unit	Outdoor unit	Hz-Volts	Voltage range			MCA	TOCA	MFA	LRA	RLA	kW	FLA	kW	FLA
FCQ71	REQ71BV3	50-230	Max. 50Hz-253V Min. 50Hz-207V	16.6	23.3	32	75.5	12.2	0.065	0.6	0.045	0.7		
FHQ71	REQ71BV3	50-230		16.8	23.2	32	75.5	12.5	0.065	0.6	0.062	0.6		
FBQ71	REQ71BV3	50-230		17.4	23.5	32	75.5	12.7	0.065	0.6	0.125	0.9		
FDEQ71	REQ71BV3	50-230		15.4	23.5	32	75.5	11.1	0.065	0.6	0.125	0.9		
FCQ71	REQ71BW1	50-400/230	Max. 50Hz-440/253V Min. 50Hz-360/207V	7.3	11.3	16	41.1	4.8	0.065	0.6	0.045	0.7		
FHQ71	REQ71BW1	50-400/230		7.5	11.2	16	41.1	5.0	0.065	0.6	0.062	0.6		
FBQ71	REQ71BW1	50-400/230		8.1	11.5	16	41.1	5.3	0.065	0.6	0.125	0.9		
FDEQ71	REQ71BW1	50-400/230		6.8	11.5	16	41.1	4.2	0.065	0.6	0.125	0.9		

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SYMBOLS

- MCA : Min. Circuit Amps
- TOCA : Total Over Current Amps
- MFA : Max. Fuse Amps (see note 7)
- LRA : Locked Rotor Amps
- RLA : Rated Load Amps
- OFM : Outdoor Fan Motor
- IFM : Indoor Fan Motor
- FLA : Full Load Amps
- kW : Rated motor output

NOTES

1. RLA is based on the following conditions:
Indoor temp.: 27°CDB/19.5°CWB
Outdoor temp. : 35°CDB
2. TOCA means the total value of each OC set
3. Voltage range
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed operation range limits
4. Maximum allowable voltage unbalance between phases is 2%.
5. MCA/MFA
 $MCA = 1.25 \times RLA + \text{all FLA}$, $MFA = < 2.25 \times RLA + \text{all FLA}$
(next lower standard fuse rating Min. 16A)
6. Select wire size based on the larger value of MCA or TOCA
7. Instead of fuse, use circuit breaker
8. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books".
Finally, click on the document title of your choice.

3 Electrical data

REQ100B

Unit combination		Power supply					Compressor		OFM		IFM		
Indoor unit	Outdoor unit	Hz-Volts	Voltage range		MCA	TOCA	MFA	LRA	RLA	kW	FLA	kW	FLA
FCQ100	REQ100BV3	50-230	Max. 50Hz-253V Min. 50Hz-207V		23.8	34.8	40	98.5	17.6	0.090	0.8	0.090	1.0
FHQ100	REQ100BV3	50-230			25.3	34.5	40	98.5	19.0	0.090	0.8	0.130	0.7
FBQ100	REQ100BV3	50-230			23.2	34.8	40	98.5	17.1	0.090	0.8	0.135	1.0
FDEQ100	REQ100BV3	50-230			24.2	34.8	40	98.5	17.9	0.090	0.8	0.135	1.0
FCQ100	REQ100BW1	50-400/230	Max. 50Hz-440/253V Min. 50Hz-360/207V		9.2	11.8	16	48.2	5.9	0.090	0.8	0.090	1.0
FHQ100	REQ100BW1	50-400/230			9.4	11.5	16	48.2	6.3	0.090	0.8	0.130	0.7
FBQ100	REQ100BW1	50-400/230			8.9	11.8	16	48.2	5.7	0.090	0.8	0.135	1.0
FDEQ100	REQ100BW1	50-400/230			9.6	11.8	16	48.2	6.2	0.090	0.8	0.135	1.0

3TW26619-9

SYMBOLS

- MCA : Min. Circuit Amps
- TOCA : Total Over Current Amps
- MFA : Max. Fuse Amps (see note 7)
- LRA : Locked Rotor Amps
- RLA : Rated Load Amps
- OFM : Outdoor Fan Motor
- IFM : Indoor Fan Motor
- FLA : Full Load Amps
- kW : Rated motor output

NOTES

1. RLA is based on the following conditions:
Indoor temp.: 27°CDB/19.5°CWB
Outdoor temp. : 35°CDB
2. TOCA means the total value of each OC set
3. Voltage range
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed operation range limits
4. Maximum allowable voltage unbalance between phases is 2%.
5. MCA/MFA
 $MCA = 1.25 \times RLA + \text{all FLA}$, $MFA = < 2.25 \times RLA + \text{all FLA}$
(next lower standard fuse rating Min. 16A)
6. Select wire size based on the larger value of MCA or TOCA
7. Instead of fuse, use circuit breaker
8. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books".
Finally, click on the document title of your choice.

3 Electrical data

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REQ125B

Unit combination		Power supply					Compressor		OFM		IFM	
Indoor unit	Outdoor unit	Hz-Volts	Voltage range	MCA	TOCA	MFA	LRA	RLA	kW	FLA	kW	FLA
FCQ125	REQ125BW1	50-400/230	Max. 50Hz-440/253V Min. 50Hz-360/207V	12.4	15.3	20	63	8.1	0.065 + 0.085	0.6 + 0.7	0.09	1.0
FHQ125	REQ125BW1	50-400/230		12.3	15.0	20	63	8.2	0.065 + 0.085	0.6 + 0.7	0.13	0.7
FBQ125	REQ125BW1	50-400/230		12.2	15.7	20	63	7.6	0.065 + 0.085	0.6 + 0.7	0.225	1.4
FDEQ125	REQ125BW1	50-400/230		12.6	15.7	20	63	7.9	0.065 + 0.085	0.6 + 0.7	0.225	1.4

3TW26639-9

SYMBOLS

- MCA : Min. Circuit Amps
- TOCA : Total Over Current Amps
- MFA : Max. Fuse Amps (see note 7)
- LRA : Locked Rotor Amps
- RLA : Rated Load Amps
- OFM : Outdoor Fan Motor
- IFM : Indoor Fan Motor
- FLA : Full Load Amps
- kW : Rated motor output

NOTES

1. RLA is based on the following conditions:
Indoor temp.: 27°CDB/19.5°CWB
Outdoor temp. : 35°CDB
2. TOCA means the total value of each OC set
3. Voltage range
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed operation range limits
4. Maximum allowable voltage unbalance between phases is 2%.
5. MCA/MFA
 $MCA = 1.25 \times RLA + \text{all FLA}$, $MFA = < 2.25 \times RLA + \text{all FLA}$
(next lower standard fuse rating Min. 16A)
6. Select wire size based on the larger value of MCA or TOCA
7. Instead of fuse, use circuit breaker
8. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books".
Finally, click on the document title of your choice.

4 Safety device settings

REQ71~ 125B

Safety device	Model	REQ71BV3	REQ100BV3	REQ125BW1
		REQ71BW1	REQ100BW1	
Fan motor thermal protector		Off 135 ±5°C		
		On 95 ±15°C		
HPS		Off 4.15 $\begin{smallmatrix} +0 \\ -0.10 \end{smallmatrix}$ Mpa		
		On 3.2 $\begin{smallmatrix} +0.15 \\ -0.15 \end{smallmatrix}$ Mpa		
LPS		Off -0.03 $\begin{smallmatrix} +0.02 \\ -0.02 \end{smallmatrix}$ Mpa		
		On 0.05 $\begin{smallmatrix} +0.03 \\ -0.03 \end{smallmatrix}$ Mpa		
Max discharge temperature		By thermistor and software control		
Overcurrent relay		By overcurrent sensor and software control		

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5 Options

REQ71~125B

Name of option	Kit name		
	REQ71B	REQ100B	REQ125B
Central drain plug	KKPJ5F180		

4TW26599-1

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6 Capacity tables

6 - 1 Cooling capacity tables

FHQ71-125B + REQ71-100BV3 REQ71-125BW1

Cooling capacity table

Outdoor	Indoor		Outdoor temp. (°CDB)																	
	EWB (°C)	EDB (°C)	20			25			32			35			40			46		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
71	12.0	18.0	8.2	4.8	1.90	6.5	4.7	2.08	5.7	4.6	2.31	5.5	4.5	2.47	5.3	4.4	2.72	4.8	4.0	3.27
	14.0	20.0	6.8	4.8	1.93	6.5	4.7	2.10	6.0	4.6	2.35	5.9	4.5	2.52	5.5	4.4	2.77	5.2	4.0	3.32
	16.0	22.0	7.2	4.9	1.98	7.0	4.8	2.13	6.3	4.7	2.39	6.1	4.6	2.58	6.0	4.5	2.82	5.4	4.1	3.37
	18.0	25.0	7.7	5.1	2.01	7.5	4.9	2.18	7.2	4.8	2.45	6.8	4.7	2.62	6.4	4.5	2.89	5.9	4.3	3.42
	19.0	27.0	8.0	5.2	2.03	7.7	5.1	2.21	7.5	4.9	2.47	7.1	4.7	2.65	6.6	4.6	2.92	6.1	4.4	3.45
	19.5	27.0	8.0	5.2	2.04	7.5	5.1	2.22	7.4	4.8	2.48	7.2	4.7	2.66	6.7	4.6	2.92	6.2	4.4	3.46
22.0	30.0	8.7	5.2	2.08	8.5	5.2	2.36	8.0	5.1	2.53	7.9	4.8	2.71	7.4	4.7	2.98	6.7	4.4	3.55	
24.0	33.0	9.4	5.3	2.10	9.1	5.2	2.38	8.6	5.1	2.56	8.4	4.9	2.74	8.0	4.7	3.01	7.3	4.4	3.59	
100	12.0	18.0	8.2	6.0	2.60	8.1	6.7	2.84	7.8	6.5	3.25	7.8	6.4	3.43	7.1	6.0	3.81	6.8	5.1	4.27
	14.0	20.0	6.7	6.8	2.89	8.0	6.7	2.93	8.3	6.5	3.31	8.2	6.4	3.50	7.6	6.0	3.87	7.2	5.1	4.38
	16.0	22.0	9.9	6.8	3.89	8.8	6.8	3.98	8.8	6.8	3.37	8.7	6.5	3.90	8.2	6.1	3.94	7.5	5.8	4.42
	18.0	25.0	10.6	7.2	3.78	10.3	7.1	3.05	9.8	6.7	3.48	10.4	6.8	3.94	8.8	6.4	4.04	6.1	5.9	4.53
	18.0	27.0	10.0	7.3	3.78	10.6	7.2	3.01	9.9	6.8	3.48	10.8	6.7	3.93	9.2	6.2	4.08	6.4	6.0	4.58
	19.5	27.0	11.0	7.3	3.79	10.6	7.2	3.09	10.1	6.8	3.49	10.9	6.7	3.99	9.3	6.2	4.09	6.5	6.0	4.59
22.0	30.0	12.0	7.4	3.85	11.6	7.3	3.16	11.0	6.9	3.56	10.8	6.8	3.77	10.2	6.7	4.17	6.3	6.3	4.68	
24.0	33.0	12.8	7.5	3.88	12.5	7.4	3.19	11.7	7.1	3.60	11.4	6.9	3.80	10.9	6.8	4.21	10.0	6.4	4.73	
125	12.0	18.0	11.1	8.1	3.30	10.0	8.0	3.97	10.0	8.3	3.90	9.7	8.3	4.21	9.3	8.0	4.67	8.8	7.9	5.12
	14.0	20.0	11.8	8.1	3.40	11.4	8.0	3.64	10.7	8.3	4.00	10.4	8.2	4.28	9.8	8.0	4.75	9.1	7.9	5.27
	16.0	22.0	12.7	8.2	3.81	12.1	8.0	3.70	11.4	8.4	4.07	11.1	8.3	4.35	10.4	8.1	4.84	9.8	7.9	5.31
	18.0	25.0	13.3	8.5	3.99	13.0	8.1	3.79	12.1	8.7	4.17	11.9	8.0	4.49	11.2	8.1	4.89	10.3	7.9	5.44
	18.0	27.0	13.0	8.6	3.83	13.3	8.1	3.83	12.7	8.6	4.21	12.2	8.0	4.51	11.5	8.4	5.00	10.7	8.0	5.49
	19.5	27.0	13.5	8.6	3.84	13.5	8.1	3.84	12.8	8.6	4.23	12.4	8.7	4.53	11.7	8.4	5.02	10.8	8.0	5.51
22.0	30.0	14.1	8.7	3.71	14.2	8.4	3.92	13.7	8.0	4.31	13.4	8.0	4.62	12.8	8.7	5.12	11.8	8.2	5.62	
24.0	33.0	15.0	8.8	3.75	15.5	8.0	3.99	14.6	8.1	4.39	14.3	8.0	4.68	13.6	8.8	5.17	12.8	8.9	5.67	

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SYMBOLS

AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
DB*:	Dry bulb temp.	(°CDB)
TC:	Total cooling/heating capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC and SHC are shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- SHC is based on each EWB and EDB
SHC* = SHC correction for other dry bulb
SHC* = 0.29 x 60 x AFR (m³/min.) x (1-BF) x (DB*-EDB)/860
Add SHC* to SHC if SHC > TC, then TC equal SHC
- Direct interpolation is permissible. Do not extrapolate.
- Capacities are based on following conditions:
Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Air flow rate and BF are tabulated below.

Model		FHQ
71	AFR	17
	BF	0.1
100	AFR	24
	BF	0.14
125	AFR	30
	BF	0.13

- Add the following corrections to power input of each model.

Model	Supply	FHQ
71	V3	0.05
	W1	0
100	V3	0.07
	W1	0
125	W1	0

6 Capacity tables

6 - 1 Cooling capacity tables

FCQ71-125B + REQ71-100BV3 REQ71-125BW1

Cooling capacity table

Outdoor	Indoor		Outdoor temp. (°CDB)																	
	EWB (°C)	EDB (°C)	20			25			32			35			40			46		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
71	12.0	18.0	6.2	4.8	1.90	6.1	4.7	2.07	5.7	4.6	2.32	5.5	4.5	2.48	5.3	4.4	2.73	4.8	4.0	2.98
	14.0	20.0	6.6	4.8	1.94	6.5	4.7	2.11	6.0	4.6	2.36	5.9	4.5	2.53	5.5	4.4	2.78	5.2	4.0	3.03
	16.0	22.0	7.2	4.9	1.97	7.0	4.8	2.14	6.5	4.7	2.40	6.3	4.6	2.57	6.0	4.5	2.83	5.4	4.1	3.09
	18.0	25.0	7.7	5.1	2.02	7.5	4.9	2.19	7.2	4.8	2.46	6.8	4.7	2.63	6.4	4.5	2.90	5.9	4.3	3.16
	19.0	27.0	8.0	5.2	2.04	7.7	5.1	2.22	7.3	4.9	2.48	7.1	4.7	2.66	6.6	4.6	2.93	6.1	4.4	3.19
	19.5	27.0	8.0	5.2	2.05	7.9	5.1	2.22	7.4	4.9	2.49	7.2	4.7	2.67	6.7	4.6	2.94	6.2	4.4	3.20
	22.0	30.0	8.7	5.3	2.09	8.5	5.2	2.27	8.0	5.1	2.54	7.9	4.8	2.72	7.4	4.7	2.99	6.7	4.4	3.27
24.0	32.0	9.4	5.3	2.11	9.1	5.2	2.29	8.6	5.1	2.57	8.4	4.9	2.75	8.0	4.7	3.02	7.3	4.4	3.30	
100	12.0	18.0	8.4	7.0	2.51	8.3	6.9	2.78	8.1	6.7	3.14	7.8	6.6	3.32	7.5	6.2	3.68	6.8	5.9	4.13
	14.0	20.0	8.9	7.0	2.56	8.8	6.9	2.83	8.7	6.7	3.20	8.4	6.6	3.38	7.8	6.2	3.75	7.4	5.9	4.20
	16.0	22.0	10.1	7.1	2.60	9.8	7.0	2.88	9.1	6.8	3.26	8.9	6.7	3.44	8.5	6.3	3.81	7.7	6.0	4.28
	18.0	25.0	10.8	7.4	2.67	10.5	7.3	2.95	9.8	6.9	3.33	9.6	6.8	3.52	9.0	6.6	3.91	8.3	6.1	4.38
	19.0	27.0	11.1	7.5	2.69	10.8	7.4	2.98	10.1	7.0	3.37	10.0	6.9	3.56	9.4	6.7	3.94	8.6	6.2	4.43
	19.5	27.0	11.2	7.5	2.70	11.0	7.4	2.99	10.3	7.0	3.38	10.1	6.9	3.57	9.5	6.7	3.96	8.7	6.2	4.44
	22.0	30.0	12.2	7.6	2.76	11.8	7.5	3.05	11.2	7.1	3.45	11.0	7.0	3.64	10.4	6.9	4.04	9.5	6.5	4.53
24.0	32.0	13.0	7.7	2.78	12.7	7.6	3.08	11.9	7.3	3.48	11.6	7.1	3.68	11.1	7.0	4.08	10.2	6.6	4.57	
125	12.0	18.0	11.4	9.3	3.50	11.1	9.0	3.69	10.3	8.5	4.06	10.0	8.4	4.35	9.5	8.2	4.83	8.8	7.7	5.29
	14.0	20.0	12.1	9.3	3.56	11.7	9.0	3.76	11.0	8.5	4.14	10.7	8.4	4.43	10.1	8.2	4.91	9.4	7.7	5.39
	16.0	22.0	13.0	9.4	3.63	12.4	9.1	3.82	11.7	8.6	4.21	11.4	8.5	4.50	10.7	8.3	5.00	9.9	7.8	5.48
	18.0	25.0	13.6	9.7	3.71	13.3	9.3	3.92	12.4	8.9	4.31	12.1	8.8	4.61	11.5	8.5	5.12	10.6	8.1	5.61
	19.0	27.0	13.9	9.8	3.75	13.6	9.3	3.95	13.0	9.0	4.35	12.5	8.8	4.66	11.8	8.6	5.17	11.0	8.2	5.67
	19.5	27.0	14.1	9.8	3.76	13.8	9.3	3.97	13.1	9.0	4.37	12.7	8.9	4.68	12.0	8.6	5.19	11.2	8.2	5.69
	22.0	30.0	15.4	9.9	3.84	14.9	9.6	4.05	14.0	9.2	4.46	13.7	9.1	4.77	13.2	8.9	5.29	12.2	8.4	5.80
24.0	32.0	16.2	10.0	3.88	15.8	9.7	4.09	14.9	9.3	4.50	14.6	9.2	4.82	13.9	9.0	5.34	13.1	8.7	5.86	

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SYMBOLS

AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
DB*:	Dry bulb temp.	(°CDB)
TC:	Total cooling/heating capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC and SHC are shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- SHC is based on each EWB and EDB
SHC* = SHC correction for other dry bulb
SHC* = 0.29 x 60 x AFR (m³/min.) x (1-BF) x (DB*-EDB)/860
Add SHC* to SHC if SHC > TC, then TC equal SHC
- Direct interpolation is permissible. Do not extrapolate.
- Capacities are based on following conditions:
Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Air flow rate and BF are tabulated below.

Model		FCQ
71	AFR	18
	BF	0.1
100	AFR	28
	BF	0.16
125	AFR	31
	BF	0.07

- Add the following corrections to power input of each model.

Model	Supply	FCQ
71	V3	0.06
	W1	0
100	V3	0.27
	W1	0
125	W1	0

6 Capacity tables

6 - 1 Cooling capacity tables

FBQ71-125B + REQ71-100BV3 REQ71-125BW1

Cooling capacity table

Outdoor	Indoor		Outdoor temp. (°CDB)																	
	EWB (°C)	EDB (°C)	20			25			32			35			40			46		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
71	12.0	18.0	6.2	4.8	1.92	6.1	4.7	2.08	5.7	4.6	2.33	5.5	4.5	2.50	5.3	4.4	2.75	4.8	4.0	3.00
	14.0	20.0	6.6	4.8	1.95	6.5	4.7	2.12	6.0	4.6	2.38	5.9	4.5	2.55	5.5	4.4	2.80	5.2	4.0	3.06
	16.0	22.0	7.2	4.9	1.99	7.0	4.8	2.16	6.5	4.7	2.42	6.3	4.6	2.59	6.0	4.5	2.85	5.4	4.1	3.11
	18.0	25.0	7.7	5.1	2.03	7.5	4.9	2.21	7.2	4.8	2.48	6.8	4.7	2.65	6.4	4.5	2.92	5.9	4.3	3.18
	19.0	27.0	8.0	5.2	2.05	7.7	5.1	2.23	7.3	4.9	2.50	7.1	4.7	2.68	6.6	4.6	2.95	6.1	4.4	3.22
	19.5	27.0	8.0	5.2	2.06	7.9	5.1	2.24	7.4	4.9	2.51	7.2	4.7	2.69	6.7	4.6	2.96	6.2	4.4	3.23
	22.0	30.0	8.7	5.3	2.10	8.5	5.2	2.29	8.0	5.1	2.56	7.9	4.8	2.74	7.4	4.7	3.02	6.7	4.4	3.29
24.0	32.0	9.4	5.3	2.12	9.1	5.2	2.31	8.6	5.1	2.58	8.4	4.9	2.77	8.0	4.7	3.05	7.3	4.4	3.32	
100	12.0	18.0	8.4	7.0	2.54	8.3	6.9	2.82	8.1	6.7	3.18	7.8	6.6	3.36	7.5	6.2	3.72	6.8	5.9	4.18
	14.0	20.0	8.9	7.0	2.59	8.8	6.9	2.87	8.7	6.7	3.24	8.4	6.6	3.42	7.8	6.2	3.79	7.4	5.9	4.25
	16.0	22.0	10.1	7.1	2.63	9.8	7.0	2.92	9.1	6.8	3.29	8.9	6.7	3.48	8.5	6.3	3.86	7.7	6.0	4.33
	18.0	25.0	10.8	7.4	2.70	10.5	7.3	2.99	9.8	6.9	3.37	9.6	6.8	3.56	9.0	6.6	3.95	8.3	6.1	4.43
	19.0	27.0	11.1	7.5	2.72	10.8	7.4	3.02	10.1	7.0	3.41	10.0	6.9	3.60	9.4	6.7	3.99	8.6	6.2	4.48
	19.5	27.0	11.2	7.5	2.73	11.0	7.4	3.03	10.3	7.0	3.42	10.1	6.9	3.61	9.5	6.7	4.00	8.7	6.2	4.49
	22.0	30.0	12.2	7.6	2.79	11.8	7.5	3.09	11.2	7.1	3.48	11.0	7.0	3.68	10.4	6.9	4.08	9.5	6.5	4.58
24.0	32.0	13.0	7.7	2.82	12.7	7.6	3.12	11.9	7.3	3.52	11.6	7.1	3.72	11.1	7.0	4.12	10.2	6.6	4.62	
125	12.0	18.0	11.1	9.1	3.51	10.8	8.8	3.70	10.0	8.3	4.07	9.7	8.2	4.36	9.2	8.0	4.84	8.5	7.5	5.30
	14.0	20.0	11.8	9.1	3.57	11.4	8.8	3.77	10.7	8.3	4.14	10.4	8.2	4.44	9.8	8.0	4.92	9.1	7.5	5.40
	16.0	22.0	12.7	9.2	3.63	12.1	8.9	3.83	11.4	8.4	4.22	11.1	8.3	4.51	10.4	8.1	5.01	9.6	7.6	5.49
	18.0	25.0	13.3	9.5	3.72	13.0	9.1	3.92	12.1	8.7	4.32	11.8	8.6	4.62	11.2	8.3	5.13	10.3	7.9	5.63
	19.0	27.0	13.6	9.6	3.76	13.3	9.1	3.96	12.7	8.8	4.36	12.2	8.6	4.67	11.5	8.4	5.18	10.7	8.0	5.68
	19.5	27.0	13.8	9.6	3.77	13.5	9.1	3.98	12.8	8.8	4.38	12.4	8.7	4.69	11.7	8.4	5.20	10.9	8.0	5.70
	22.0	30.0	15.1	9.7	3.85	14.6	9.4	4.06	13.7	9.0	4.46	13.4	8.9	4.78	12.9	8.7	5.30	11.9	8.2	5.82
24.0	32.0	15.9	9.8	3.88	15.5	9.5	4.10	14.6	9.1	4.51	14.3	9.0	4.83	13.6	8.8	5.35	12.8	8.5	5.87	

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SYMBOLS

AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
DB*:	Dry bulb temp.	(°CDB)
TC:	Total cooling/heating capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC and SHC are shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- SHC is based on each EWB and EDB
SHC* = SHC correction for other dry bulb
SHC* = 0.29 x 60 x AFR (m³/min.) x (1-BF) x (DB*-EDB)/860
Add SHC* to SHC if SHC > TC, then TC equal SHC
- Direct interpolation is permissible. Do not extrapolate.
- Capacities are based on following conditions:
Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Air flow rate and BF are tabulated below.

Model		FBQ
71	AFR	19
	BF	0.11
100	AFR	27
	BF	0.2
125	AFR	35
	BF	0.14

- Add the following corrections to power input of each model.

Model	Supply	FBQ
71	V3	0.11
	W1	0
100	V3	0.19
	W1	0
125	W1	0

6 Capacity tables

6 - 1 Cooling capacity tables

FDEQ71-125B + REQ71-100BV3 REQ71-125BW1

Cooling capacity table

Outdoor	Indoor		Outdoor temp. (°CDB)																	
	EWB (°C)	EDB (°C)	20			25			32			35			40			46		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
71	12.0	18.0	6.2	4.8	1.92	6.1	4.7	2.08	5.7	4.6	2.33	5.5	4.5	2.50	5.3	4.4	2.75	4.8	4.0	3.00
	14.0	20.0	6.6	4.8	1.95	6.5	4.7	2.12	6.0	4.6	2.38	5.9	4.5	2.55	5.5	4.4	2.80	5.2	4.0	3.06
	16.0	22.0	7.2	4.9	1.99	7.0	4.8	2.16	6.5	4.7	2.42	6.3	4.6	2.59	6.0	4.5	2.85	5.4	4.1	3.11
	18.0	25.0	7.7	5.1	2.03	7.5	4.9	2.21	7.2	4.8	2.48	6.8	4.7	2.65	6.4	4.5	2.92	5.9	4.3	3.18
	19.0	27.0	8.0	5.2	2.05	7.7	5.1	2.23	7.3	4.9	2.50	7.1	4.7	2.68	6.6	4.6	2.95	6.1	4.4	3.22
	19.5	27.0	8.0	5.2	2.06	7.9	5.1	2.24	7.4	4.9	2.51	7.2	4.7	2.69	6.7	4.6	2.96	6.2	4.4	3.23
	22.0	30.0	8.7	5.3	2.10	8.5	5.2	2.29	8.0	5.1	2.56	7.9	4.8	2.74	7.4	4.7	3.02	6.7	4.4	3.29
24.0	32.0	9.4	5.3	2.12	9.1	5.2	2.31	8.6	5.1	2.58	8.4	4.9	2.77	8.0	4.7	3.05	7.3	4.4	3.32	
100	12.0	18.0	8.2	7.0	2.78	8.1	6.9	3.08	7.9	6.7	3.48	7.6	6.6	3.68	7.4	6.2	4.07	6.7	5.9	4.57
	14.0	20.0	8.7	7.0	2.83	8.6	6.9	3.14	8.5	6.7	3.54	8.2	6.6	3.74	7.6	6.2	4.15	7.3	5.9	4.65
	16.0	22.0	9.9	7.1	2.88	9.6	7.0	3.19	8.9	6.8	3.60	8.7	6.7	3.81	8.3	6.3	4.22	7.5	6.0	4.74
	18.0	25.0	10.6	7.4	2.95	10.3	7.3	3.27	9.6	6.9	3.69	9.4	6.8	3.90	8.8	6.6	4.32	8.1	6.1	4.85
	19.0	27.0	10.9	7.5	2.98	10.6	7.4	3.30	9.9	7.0	3.73	9.8	6.9	3.94	9.2	6.7	4.37	8.4	6.2	4.90
	19.5	27.0	11.0	7.5	2.99	10.8	7.4	3.31	10.1	7.0	3.74	9.9	6.9	3.95	9.3	6.7	4.38	8.5	6.2	4.91
	22.0	30.0	12.0	7.6	3.05	11.6	7.5	3.38	11.0	7.1	3.81	10.8	7.0	4.03	10.2	6.9	4.47	9.3	6.5	5.01
24.0	32.0	12.7	7.7	3.08	12.4	7.6	3.41	11.7	7.3	3.85	11.4	7.1	4.07	10.9	7.0	4.51	10.0	6.6	5.06	
125	12.0	18.0	11.1	9.1	3.51	10.8	8.8	3.70	10.0	8.3	4.07	9.7	8.2	4.36	9.2	8.0	4.84	8.5	7.5	5.30
	14.0	20.0	11.8	9.1	3.57	11.4	8.8	3.77	10.7	8.3	4.14	10.4	8.2	4.44	9.8	8.0	4.92	9.1	7.5	5.40
	16.0	22.0	12.7	9.2	3.63	12.1	8.9	3.83	11.4	8.4	4.22	11.1	8.3	4.51	10.4	8.1	5.01	9.6	7.6	5.49
	18.0	25.0	13.3	9.5	3.72	13.0	9.1	3.92	12.1	8.7	4.32	11.8	8.6	4.62	11.2	8.3	5.13	10.3	7.9	5.63
	19.0	27.0	13.6	9.6	3.76	13.3	9.1	3.96	12.7	8.8	4.36	12.2	8.6	4.67	11.5	8.4	5.18	10.7	8.0	5.68
	19.5	27.0	13.8	9.6	3.77	13.5	9.1	3.98	12.8	8.8	4.38	12.4	8.7	4.69	11.7	8.4	5.20	10.9	8.0	5.70
	22.0	30.0	15.1	9.7	3.85	14.6	9.4	4.06	13.7	9.0	4.46	13.4	8.9	4.78	12.9	8.7	5.30	11.9	8.2	5.82
24.0	32.0	15.9	9.8	3.88	15.5	9.5	4.10	14.6	9.1	4.51	14.3	9.0	4.83	13.6	8.8	5.35	12.8	8.5	5.87	

3TW26592-4

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
DB*:	Dry bulb temp.	(°CDB)
TC:	Total cooling/heating capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC and SHC are shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- SHC is based on each EWB and EDB
SHC* = SHC correction for other dry bulb
SHC* = 0.29 x 60 x AFR (m³/min.) x (1-BF) x (DB*-EDB)/860
Add SHC* to SHC if SHC > TC, then TC equal SHC
- Direct interpolation is permissible. Do not extrapolate.
- Capacities are based on following conditions:
Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Air flow rate and BF are tabulated below.

Model		FDEQ
71	AFR	19
	BF	0.11
100	AFR	27
	BF	0.2
125	AFR	35
	BF	0.14

- Add the following corrections to power input of each model.

Model	Supply	FDEQ
71	V3	0.11
	W1	0
100	V3	0.04
	W1	0
125	W1	0

6 Capacity tables

6 - 2 Heating capacity tables

FHQ71-125B + REQ71-100BV3 REQ71-125BW1

Heating capacity table

Outdoor	outdoor temperature (°CWB)													
	Indoor		-10		-5		0		6		10		15	
	EDB (°C)		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
71	16.0		6.3	2.35	6.8	2.44	7.3	2.53	8.1	2.62	8.7	2.71	/	/
	18.0		6.3	2.44	6.7	2.53	7.3	2.62	8.0	2.71	8.6	2.80	/	/
	20.0		6.3	2.53	6.7	2.62	7.3	2.71	8.0	2.80	8.6	2.89	9.3	2.98
	22.0		6.3	2.62	6.7	2.71	7.3	2.80	8.0	2.89	8.6	2.98	9.3	3.07
	24.0		6.2	2.71	6.6	2.80	7.2	2.89	7.9	2.98	8.5	3.07	9.2	3.16
100	16.0		8.7	3.37	9.5	3.48	10.3	3.58	11.4	3.69	12.1	3.80	/	/
	18.0		8.6	3.48	9.4	3.58	10.3	3.69	11.3	3.80	12.1	3.90	/	/
	20.0		8.6	3.69	9.3	3.80	10.1	3.90	11.2	4.01	11.9	4.12	12.9	4.22
	22.0		8.6	3.80	9.3	3.90	10.1	4.01	11.2	4.12	11.9	4.22	12.8	4.33
	24.0		8.5	3.90	9.3	4.01	9.9	4.12	11.0	4.22	11.7	4.33	12.8	4.44
125	16.0		11.4	4.30	12.4	4.52	13.3	4.62	14.8	4.73	15.8	4.95	/	/
	18.0		11.4	4.41	12.4	4.62	13.3	4.73	14.5	4.95	15.5	5.05	/	/
	20.0		11.4	4.62	12.2	4.83	13.3	5.05	14.5	5.16	15.4	5.27	16.6	5.49
	22.0		11.4	4.73	12.2	4.95	13.3	5.05	14.5	5.27	15.4	5.37	16.6	5.59
	24.0		11.2	4.83	12.2	5.05	13.2	5.27	14.4	5.37	15.4	5.59	16.3	5.80

3TW26592-7

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
EDB:	Entering dry bulb temp.	(°CDB)
WB:	Wet bulb temperature	(°CWB)
TC:	Total cooling/heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC is shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- Capacities are based on following conditions:
* outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB
* Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Direct interpolation is permissible. Do not extrapolate.
- Air flow rate and BF are tabulated below.

Model		FHQ
71	AFR	17
	BF	0.1
100	AFR	24
	BF	0.14
125	AFR	30
	BF	0.13

- Add the following corrections to power input of each model.

Model	Supply	FHQ
71	V3	0.05
	W1	0
100	V3	0.12
	W1	0
125	W1	0

6 Capacity tables

6 - 2 Heating capacity tables

6

FCQ71-125B + REQ71-100BV3 REQ71-125BW1

Heating capacity table

Outdoor	outdoor temperature (°CWB)													
	Indoor		-10		-5		0		6		10		15	
	EDB (°C)		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
71	16.0		6.3	2.35	6.8	2.44	7.3	2.53	8.1	2.62	8.7	2.71	/	/
	18.0		6.3	2.44	6.7	2.53	7.3	2.62	8.0	2.71	8.6	2.80	/	/
	20.0		6.3	2.53	6.7	2.62	7.3	2.71	8.0	2.80	8.6	2.89	9.3	2.98
	22.0		6.3	2.62	6.7	2.71	7.3	2.80	8.0	2.89	8.6	2.98	9.3	3.07
	24.0		6.2	2.71	6.6	2.80	7.2	2.89	7.9	2.98	8.5	3.07	9.2	3.16
100	16.0		8.7	3.08	9.5	3.18	10.3	3.27	11.4	3.37	12.1	3.47	/	/
	18.0		8.6	3.18	9.4	3.27	10.3	3.37	11.3	3.47	12.1	3.56	/	/
	20.0		8.6	3.37	9.3	3.47	10.1	3.56	11.2	3.66	11.9	3.76	12.9	3.85
	22.0		8.6	3.47	9.3	3.56	10.1	3.66	11.2	3.76	11.9	3.85	12.8	3.95
	24.0		8.5	3.56	9.3	3.66	9.9	3.76	11.0	3.85	11.7	3.95	12.8	4.05
125	16.0		11.5	4.22	12.5	4.43	13.4	4.53	14.7	4.64	15.7	4.85	/	/
	18.0		11.5	4.32	12.5	4.53	13.4	4.64	14.6	4.85	15.6	4.95	/	/
	20.0		11.5	4.53	12.3	4.74	13.4	4.95	14.6	5.06	15.5	5.17	16.7	5.38
	22.0		11.5	4.64	12.3	4.85	13.4	4.95	14.6	5.17	15.5	5.27	16.7	5.48
	24.0		11.3	4.74	12.3	4.95	13.3	5.17	14.5	5.27	15.5	5.48	16.4	5.69

3TW26592-5

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
EDB:	Entering dry bulb temp.	(°CDB)
WB:	Wet bulb temperature	(°CWB)
TC:	Total cooling/heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC is shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- | |
|--|
| |
|--|

 Shows nominal capacities
- Capacities are based on following conditions:
* outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB
* Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Direct interpolation is permissible. Do not extrapolate.
- Air flow rate and BF are tabulated below.

Model		FCQ
71	AFR	18
	BF	0.1
100	AFR	28
	BF	0.16
125	AFR	31
	BF	0.07

- Add the following corrections to power input of each model.

Model	Supply	FCQ
71	V3	0.06
	W1	0
100	V3	0.09
	W1	0
125	W1	0

6 Capacity tables

6 - 2 Heating capacity tables

FBQ71-125B + REQ71-100BV3 REQ71-125BW1

Heating capacity table

Outdoor	outdoor temperature (°CWB)													
	Indoor		-10		-5		0		6		10		15	
	EDB (°C)		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
71	16.0		6.3	2.09	6.8	2.17	7.3	2.25	8.1	2.33	8.7	2.41	/	/
	18.0		6.3	2.17	6.7	2.25	7.3	2.33	8.0	2.41	8.6	2.49	/	/
	20.0		6.3	2.25	6.7	2.33	7.3	2.41	8.0	2.49	8.6	2.57	9.3	2.65
	22.0		6.3	2.33	6.7	2.41	7.3	2.49	8.0	2.57	8.6	2.65	9.3	2.73
	24.0		6.2	2.41	6.6	2.49	7.2	2.57	7.9	2.65	8.5	2.73	9.2	2.81
100	16.0		8.7	3.26	9.5	3.36	10.3	3.46	11.4	3.56	12.1	3.67	/	/
	18.0		8.6	3.36	9.4	3.46	10.3	3.56	11.3	3.67	12.1	3.76	/	/
	20.0		8.6	3.56	9.3	3.67	10.1	3.76	11.2	3.87	11.9	3.98	12.9	4.07
	22.0		8.6	3.67	9.3	3.76	10.1	3.87	11.2	3.98	11.9	4.07	12.8	4.18
	24.0		8.5	3.76	9.3	3.87	9.9	3.98	11.0	4.07	11.7	4.18	12.8	4.28
125	16.0		11.4	3.77	12.4	3.96	13.3	4.05	14.6	4.14	15.6	4.33	/	/
	18.0		11.4	3.86	12.4	4.05	13.3	4.14	14.5	4.33	15.5	4.42	/	/
	20.0		11.4	4.05	12.2	4.23	13.3	4.42	14.5	4.52	15.4	4.62	16.6	4.81
	22.0		11.4	4.14	12.2	4.33	13.3	4.42	14.5	4.62	15.4	4.71	16.6	4.90
	24.0		11.2	4.23	12.2	4.42	13.2	4.62	14.4	4.71	15.4	4.90	16.3	5.08

3TW26592-6

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
EDB:	Entering dry bulb temp.	(°CDB)
WB:	Wet bulb temperature	(°CWB)
TC:	Total cooling/heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC is shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- Capacities are based on following conditions:
* outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB
* Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Direct interpolation is permissible. Do not extrapolate.
- Air flow rate and BF are tabulated below.

Model		FBQ
71	AFR	19
	BF	0.11
100	AFR	27
	BF	0.2
125	AFR	35
	BF	0.14

- Add the following corrections to power input of each model.

Model	Supply	FBQ
71	V3	0
	W1	0
100	V3	0.04
	W1	0
125	W1	0

6 Capacity tables

6 - 2 Heating capacity tables

6

FDEQ71-125B + REQ71-100BV3 REQ71-125BW1

Heating capacity table

Outdoor	outdoor temperature (°CWB)													
	Indoor		-10		-5		0		6		10		15	
	EDB (°C)		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
71	16.0		6.3	2.09	6.8	2.17	7.3	2.25	8.1	2.33	8.7	2.41	/	/
	18.0		6.3	2.17	6.7	2.25	7.3	2.33	8.0	2.41	8.6	2.49	/	/
	20.0		6.3	2.25	6.7	2.33	7.3	2.41	8.0	2.49	8.6	2.57	9.3	2.65
	22.0		6.3	2.33	6.7	2.41	7.3	2.49	8.0	2.57	8.6	2.65	9.3	2.73
	24.0		6.2	2.41	6.6	2.49	7.2	2.57	7.9	2.65	8.5	2.73	9.2	2.81
100	16.0		8.7	3.33	9.5	3.44	10.3	3.54	11.4	3.65	12.1	3.75	/	/
	18.0		8.6	3.44	9.4	3.54	10.3	3.65	11.3	3.75	12.1	3.85	/	/
	20.0		8.6	3.65	9.3	3.75	10.1	3.85	11.2	3.96	11.9	4.07	12.9	4.17
	22.0		8.6	3.75	9.3	3.85	10.1	3.96	11.2	4.07	11.9	4.17	12.8	4.27
	24.0		8.5	3.85	9.3	3.96	9.9	4.07	11.0	4.17	11.7	4.27	12.8	4.38
125	16.0		11.4	3.77	12.4	3.96	13.3	4.05	14.6	4.14	15.6	4.33	/	/
	18.0		11.4	3.86	12.4	4.05	13.3	4.14	14.5	4.33	15.5	4.42	/	/
	20.0		11.4	4.05	12.2	4.23	13.3	4.42	14.5	4.52	15.4	4.62	16.6	4.81
	22.0		11.4	4.14	12.2	4.33	13.3	4.42	14.5	4.62	15.4	4.71	16.6	4.90
	24.0		11.2	4.23	12.2	4.42	13.2	4.62	14.4	4.71	15.4	4.90	16.3	5.08

3TW26592-8

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
EDB:	Entering dry bulb temp.	(°CDB)
WB:	Wet bulb temperature	(°CWB)
TC:	Total cooling/heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor+outdoor fan motor)	

Caution:

TC is shown by kW
V3: 230 V [50 Hz]
W1: 400 V [50 Hz]

NOTES

- Ratings shown are net capacities. Influence of fan motor heat is included.
- Shows nominal capacities
- Capacities are based on following conditions:
* outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB
* Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Direct interpolation is permissible. Do not extrapolate.
- Air flow rate and BF are tabulated below.

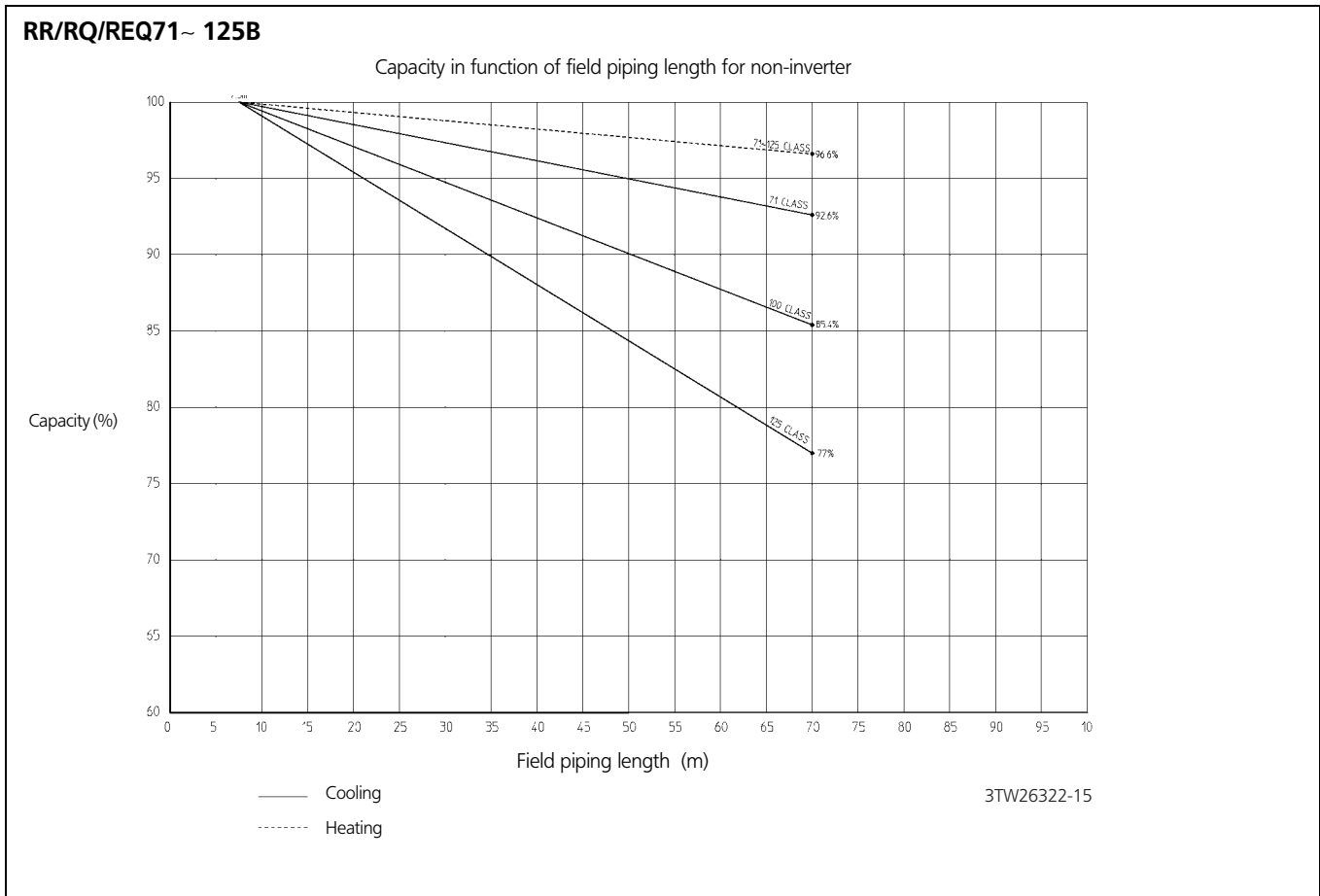
Model		FDEQ
71	AFR	19
	BF	0.11
100	AFR	27
	BF	0.2
125	AFR	35
	BF	0.14

- Add the following corrections to power input of each model.

Model	Supply	FDEQ
71	V3	0
	W1	0
100	V3	0.04
	W1	0
125	W1	0

6 Capacity tables

6 - 2 Heating capacity tables



7 Dimensional drawing & centre of gravity

7 - 1 Dimensional drawing

7

REQ71B

Hole for anchor bolt
4-M12

Top view dimensions: 140, 620, 140, 30, 350, 345, 355, 48, 15, 40, 30, 96, 30.

Front view dimensions: 30, 900, 770, 28, 89, 10, 89, 19, 54, 25, 34, 352, 54, 25, 19, 80, 84, 155, 145.

Bottom view dimensions: 70, 102, 117, 45, 376, 191, 71, 16, 15, 158.

unit (mm)

- 1 Gas pipe connection ϕ 15.9 flare
- 2 Liquid pipe connection - ϕ 9.5 flare
- 3 Service port (in the unit)
- 4 Grounding terminal M5 (in switch box)
- 5 Refrigerant piping intake
- 6 Power supply wiring intake (knock hole ϕ 34)
- 7 Control wiring intake (knock hole ϕ 27)
- 8 Drain outlet

3TW26324-1

REQ100B

Hole for anchor bolt
4-M12

Top view dimensions: 140, 620, 140, 30, 350, 345, 350, 48, 15, 40, 30, 56, 30.

Front view dimensions: 30, 900, 1170, 24, 89, 10, 89, 19, 54, 25, 40, 495, 54, 25, 19, 80, 84, 155, 145.

Bottom view dimensions: 70, 102, 117, 45, 376, 191, 71, 16, 15, 158.

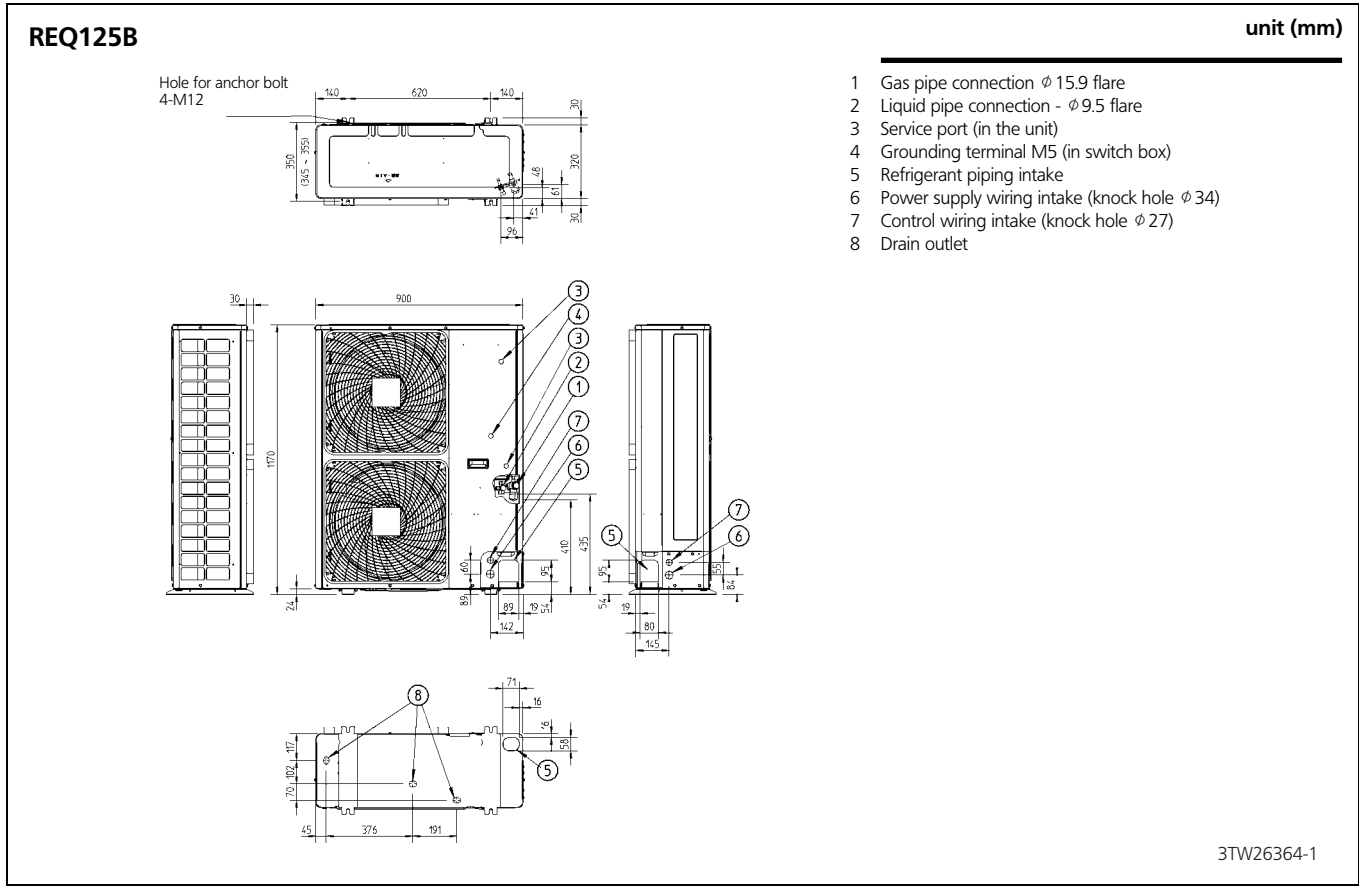
unit (mm)

- 1 Gas pipe connection ϕ 15.9 flare
- 2 Liquid pipe connection - ϕ 9.5 flare
- 3 Service port (in the unit)
- 4 Grounding terminal M5 (in switch box)
- 5 Refrigerant piping intake
- 6 Power supply wiring intake (knock hole ϕ 34)
- 7 Control wiring intake (knock hole ϕ 27)
- 8 Drain outlet

3TW26344-1

7 Dimensional drawing & centre of gravity

7 - 1 Dimensional drawing

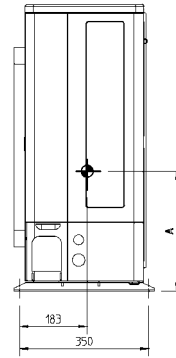
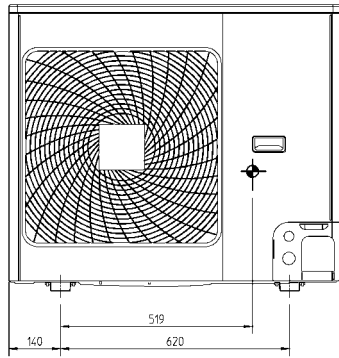


7 Dimensional drawing & centre of gravity

7 - 2 Centre of gravity

7

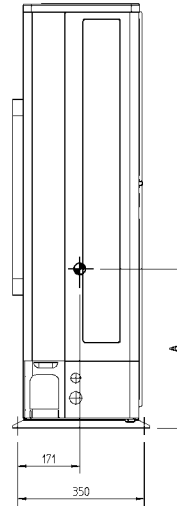
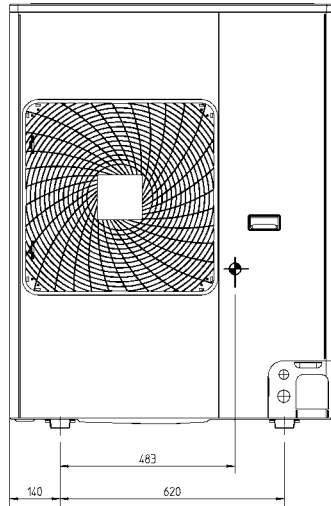
REQ71B



Model	A
REQ71B	267

3TW26329-5C

REQ100B



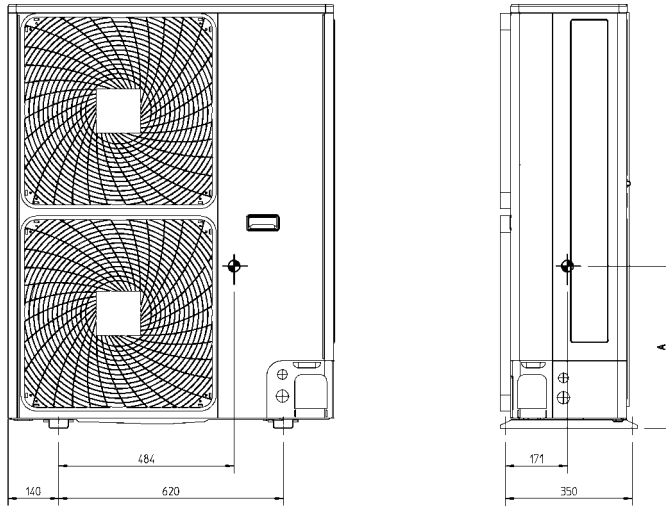
Model	A
REQ100B	390

3TW26349-5C

7 Dimensional drawing & centre of gravity

7 - 2 Centre of gravity

REQ125B

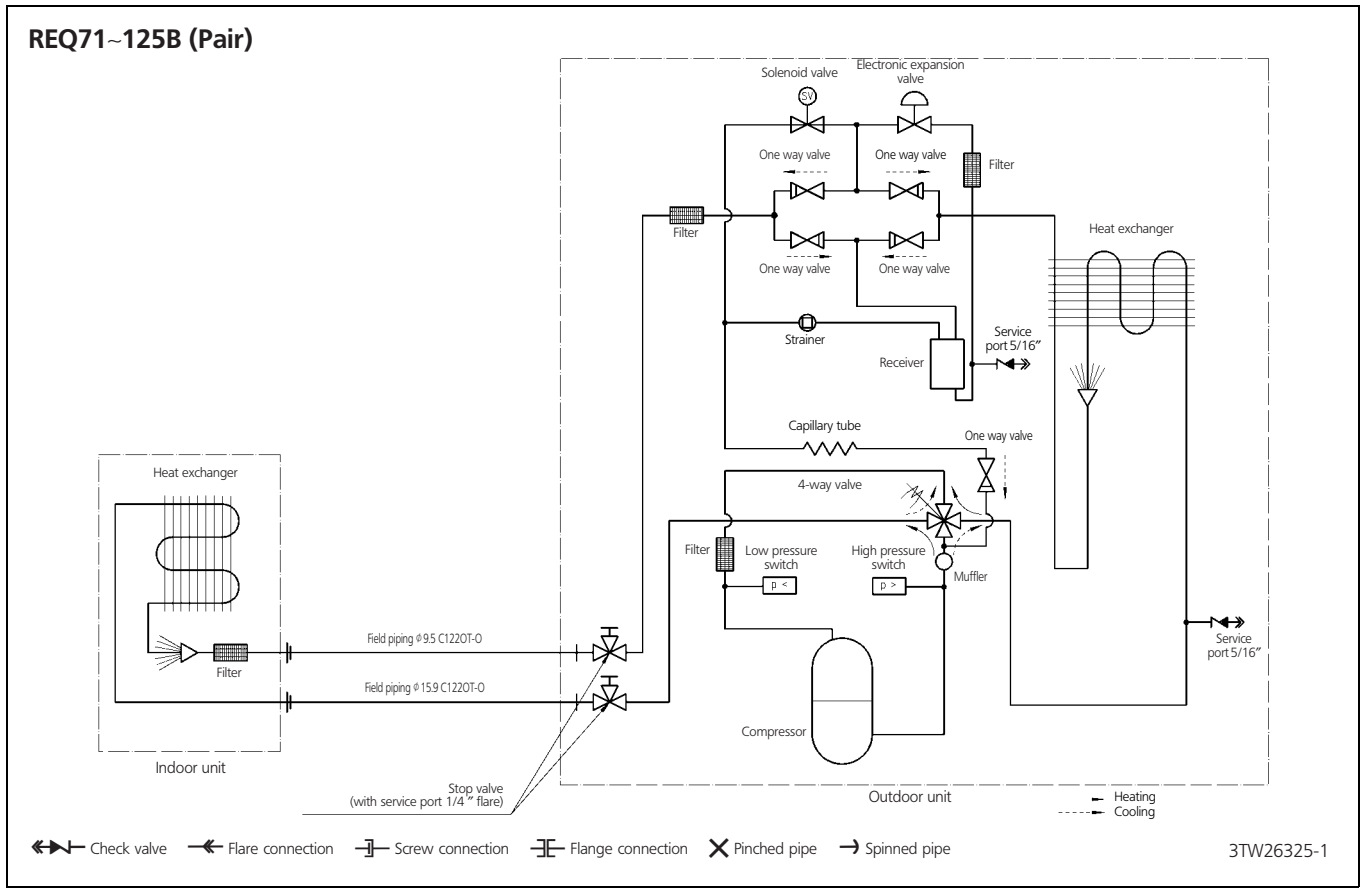


Model	A
REQ125B	390

3TW26369-5C

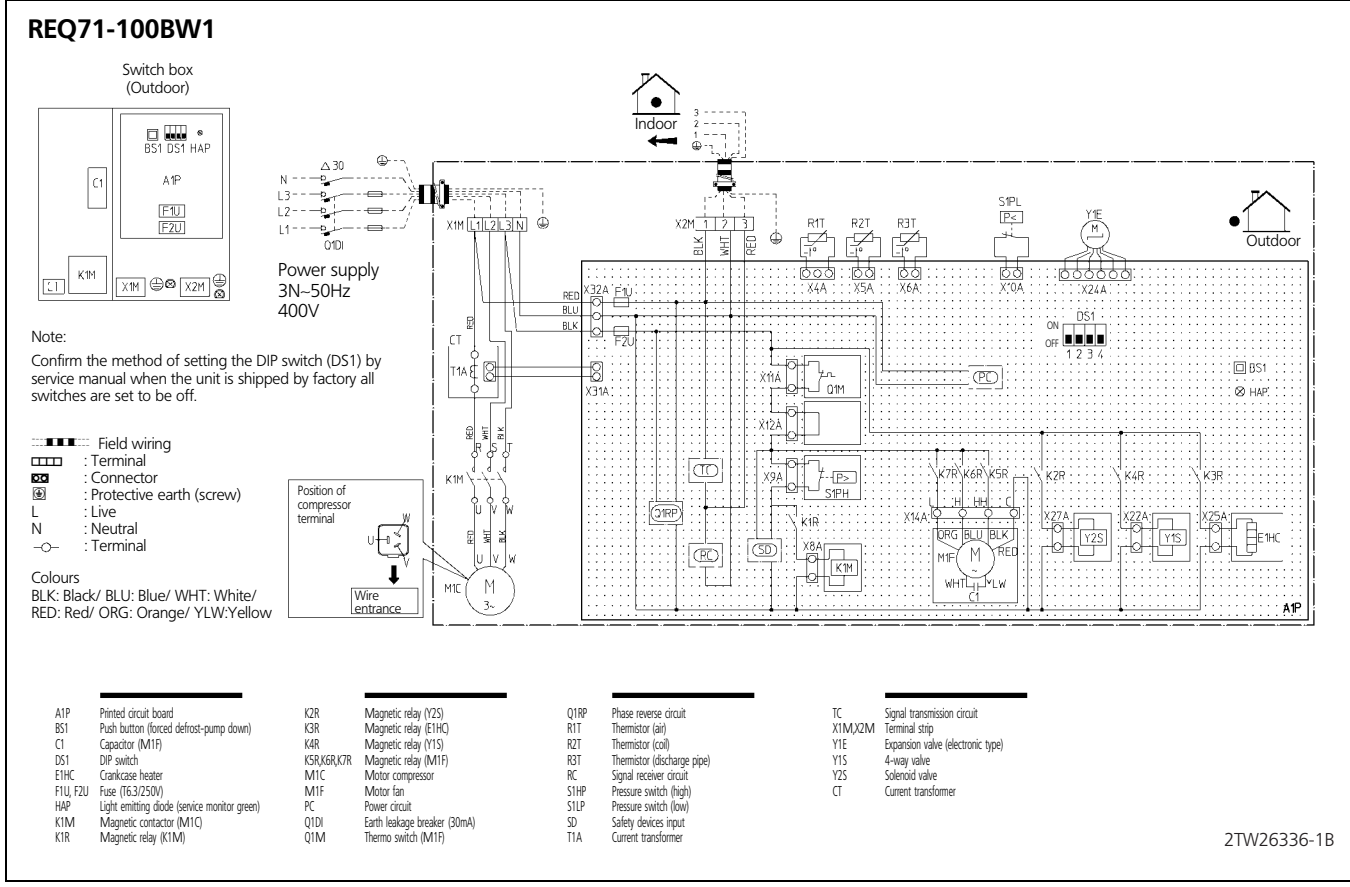
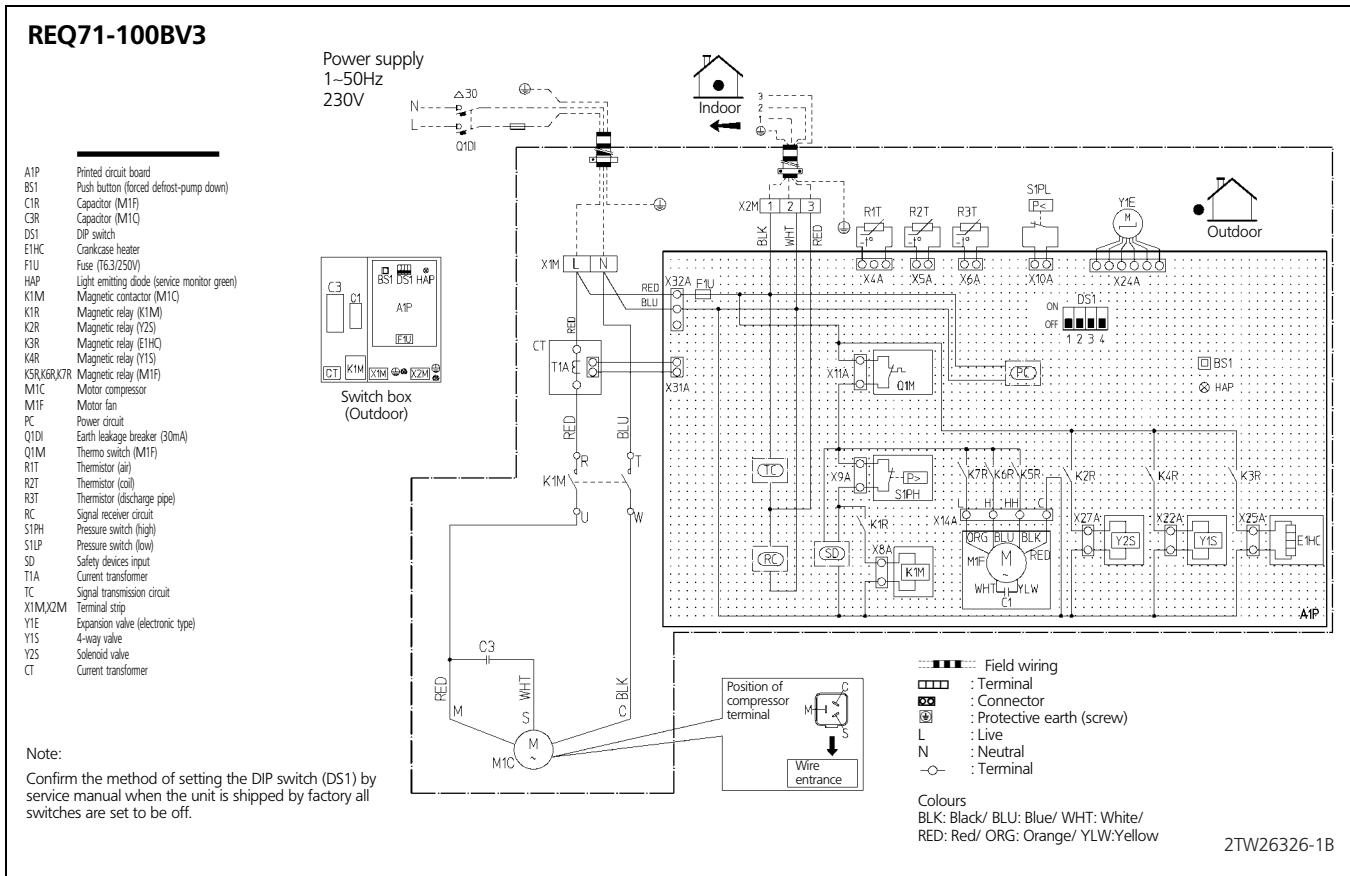
8 Piping diagram

8



9 Wiring diagram

9 - 1 Wiring diagram



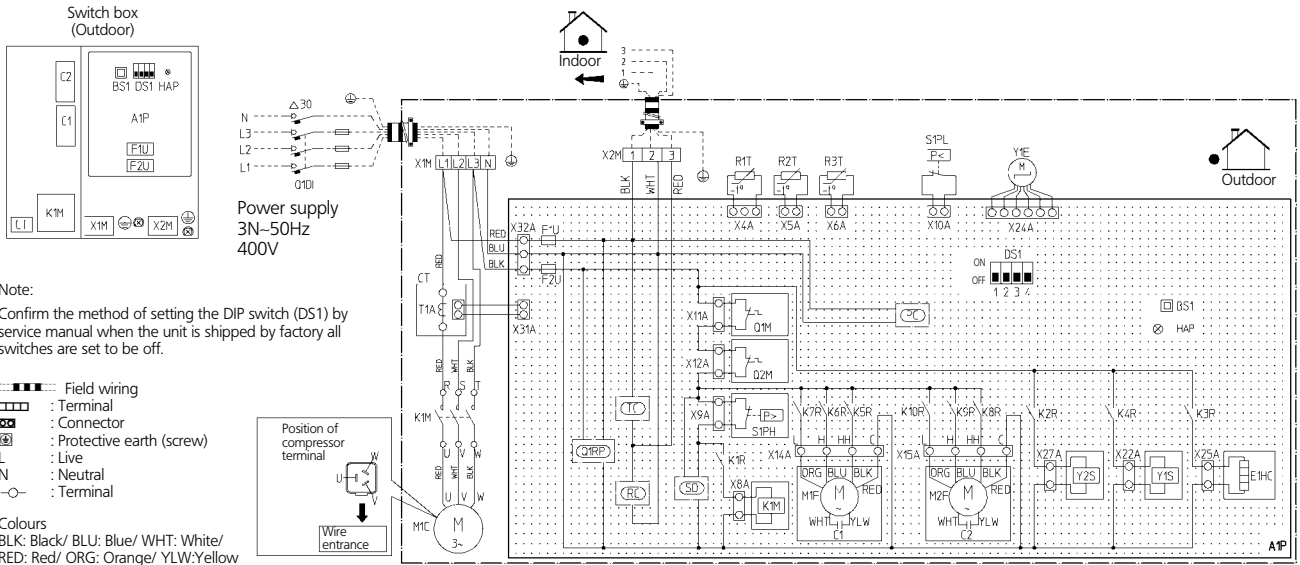
- | | | | | | | | |
|----------|--|-------------|------------------------------|------|-----------------------------|---------|-----------------------------------|
| A1P | Printed circuit board | K2R | Magnetic relay (Y2S) | Q1RP | Phase reverse circuit | TC | Signal transmission circuit |
| BS1 | Push button (forced defrost-pump down) | K3R | Magnetic relay (E1HC) | R1T | Thermistor (air) | X1M/X2M | Terminal strip |
| C1 | Capacitor (M1F) | K4R | Magnetic relay (Y1S) | R2T | Thermistor (coil) | Y1E | Expansion valve (electronic type) |
| DS1 | DIP switch | KSR/KGR/K7R | Magnetic relay (M1F) | R3T | Thermistor (discharge pipe) | Y1S | 4-way valve |
| E1HC | Crankcase heater | M1C | Motor compressor | RC | Signal receiver circuit | Y2S | Solenoid valve |
| F1U, F2U | Fuse (T6.3/250V) | M1F | Motor fan | S1PH | Pressure switch (high) | CT | Current transformer |
| HAP | Light emitting diode (service monitor green) | PC | Power circuit | S1PL | Pressure switch (low) | | |
| K1M | Magnetic contactor (M1C) | Q1DI | Earth leakage breaker (30mA) | SD | Safety devices input | | |
| K1R | Magnetic relay (K1M) | Q1M | Thermo switch (M1F) | T1A | Current transformer | | |

9 Wiring diagram

9 - 1 Wiring diagram

9

REQ125BW1



A1P	Printed circuit board
BS1	Push button (forced defrost-pump down)
C1	Capacitor (M1F)
C2	Capacitor (M2F)
DS1	DIP switch
E1HC	Crankcase heater
F1U, F2U	Fuse (T63/250V)
HAP	Light emitting diode (service monitor green)
K1M	Magnetic contactor (M1C)

K1R	Magnetic relay (K1M)
K2R	Magnetic relay (Y2S)
K3R	Magnetic relay (E1HC)
K4R	Magnetic relay (Y1S)
K5R, K6R, K7R	Magnetic relay (M1F)
K8R, K9R, K10R	Magnetic relay (M2F)
M1C	Motor compressor
M1F, M2F	Motor fan
PC	Power circuit

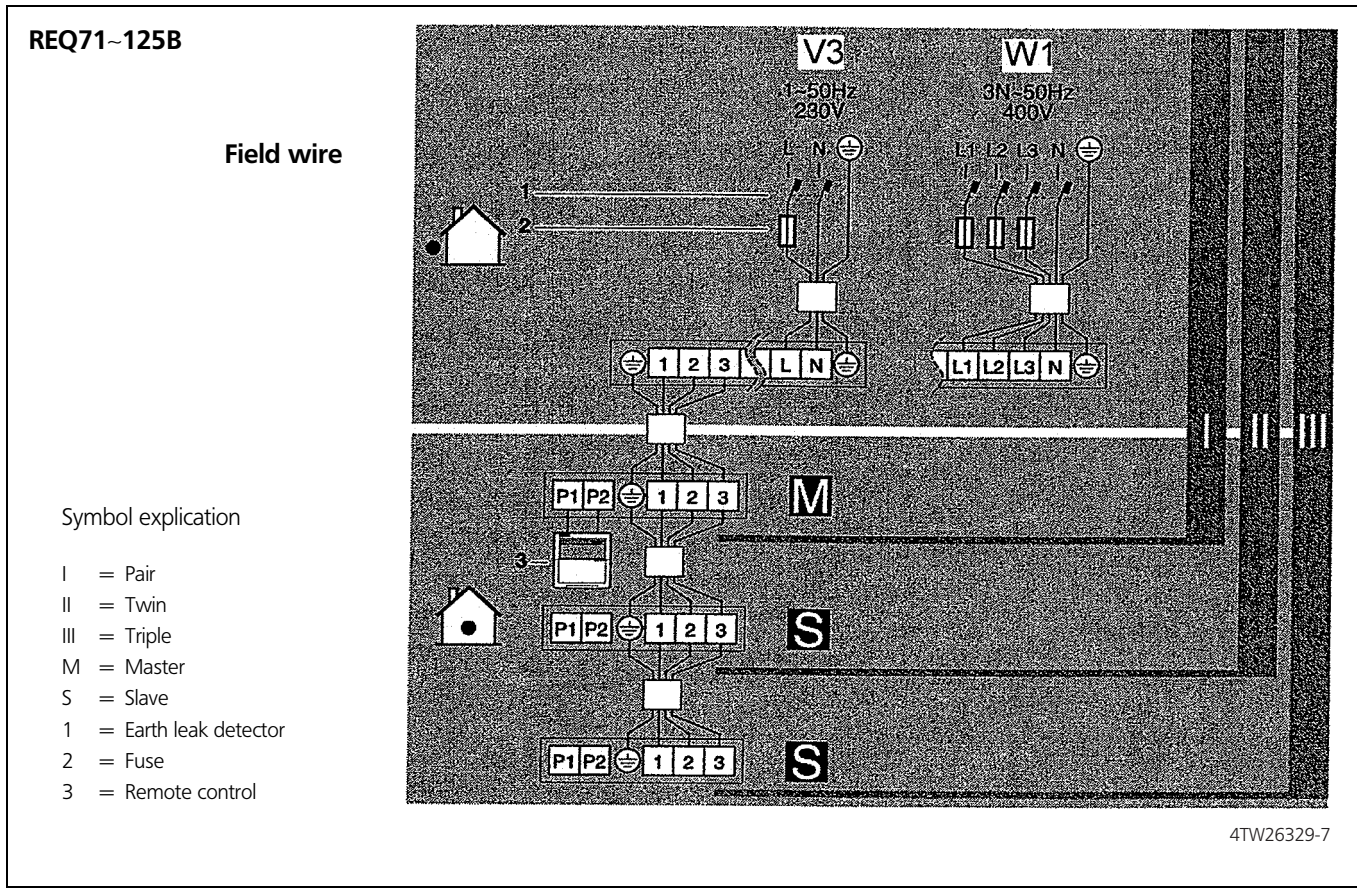
Q1D	Earth leakage breaker (30mA)
Q1M	Thermo switch (M1F)
Q2M	Thermo switch (M2F)
Q1RP	Phase reverse circuit
R1T	Thermistor (air)
R2T	Thermistor (coil)
R3T	Thermistor (discharge pipe)
RC	Signal receiver circuit
S1PH	Pressure switch (high)

S1LP	Pressure switch (low)
SD	Safety devices input
T1A	Current transformer
TC	Signal transmission circuit
X1M, X2M	Terminal strip
Y1E	Expansion valve (electronic type)
Y1S	4-way valve
Y2S	Solenoid valve
CT	Current transformer

2TW26366-1B

9 Wiring diagram

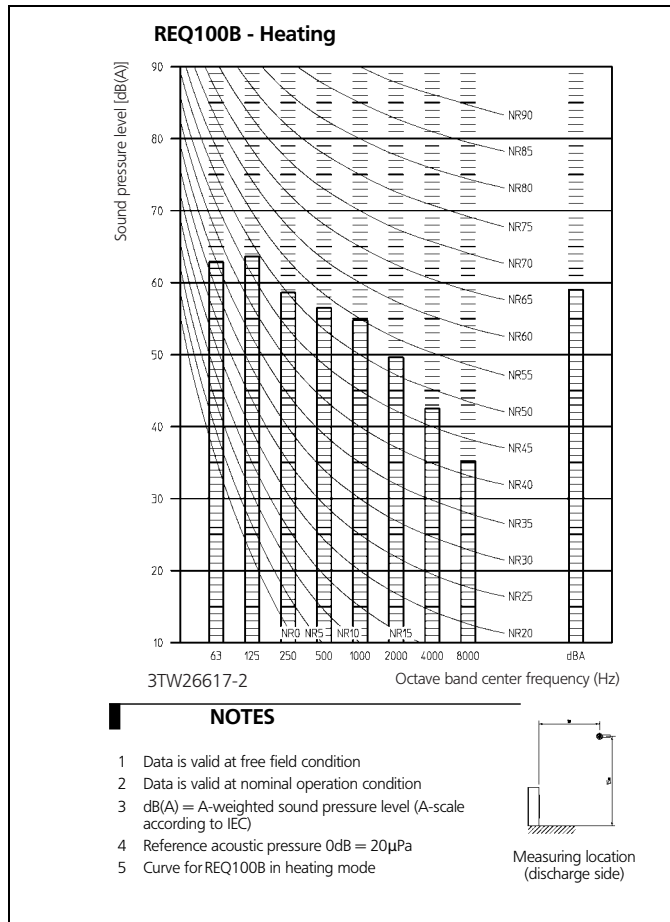
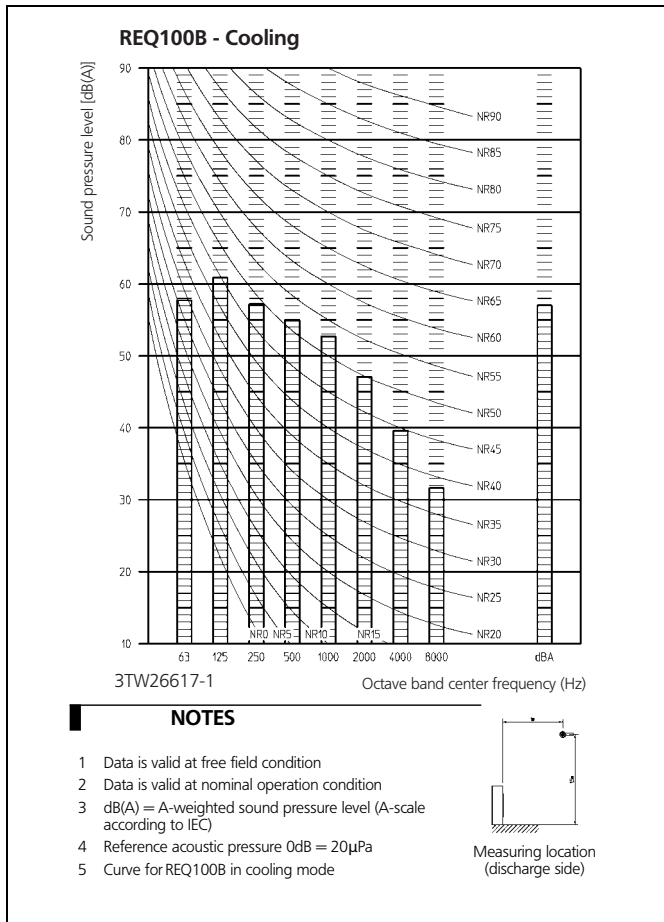
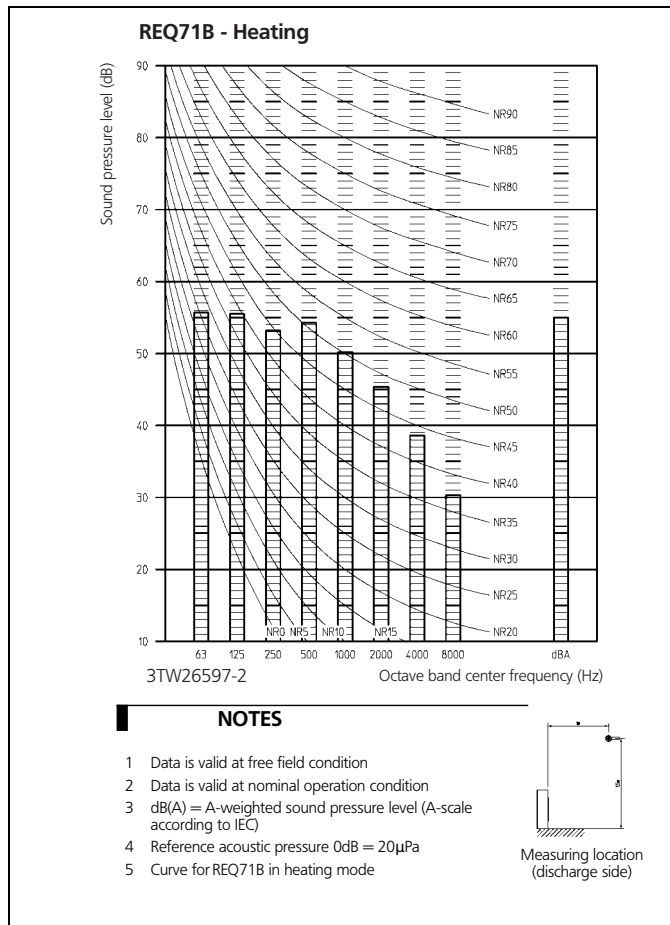
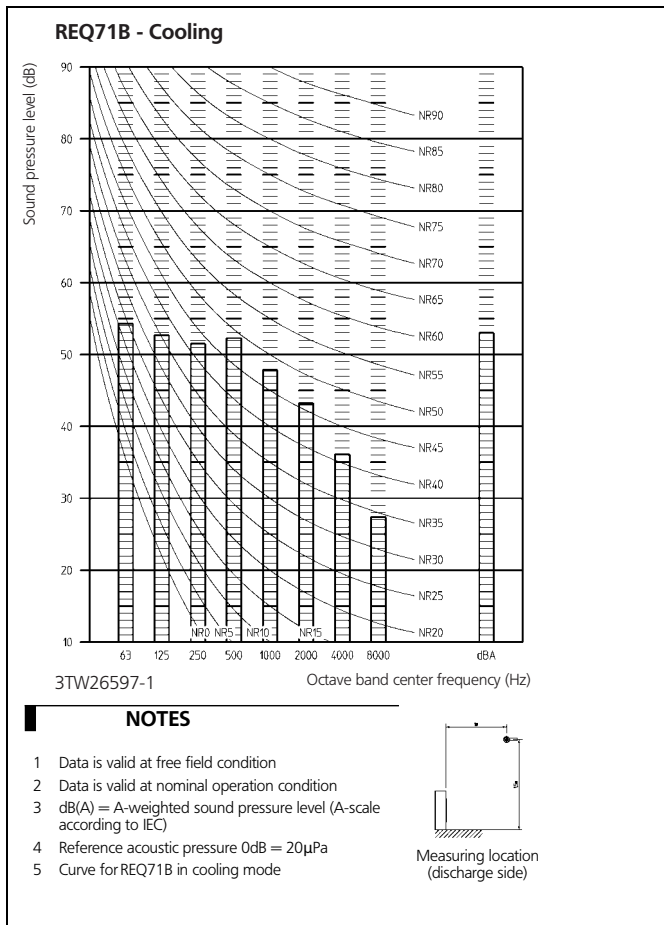
9 - 2 External connection diagram



10 Sound data

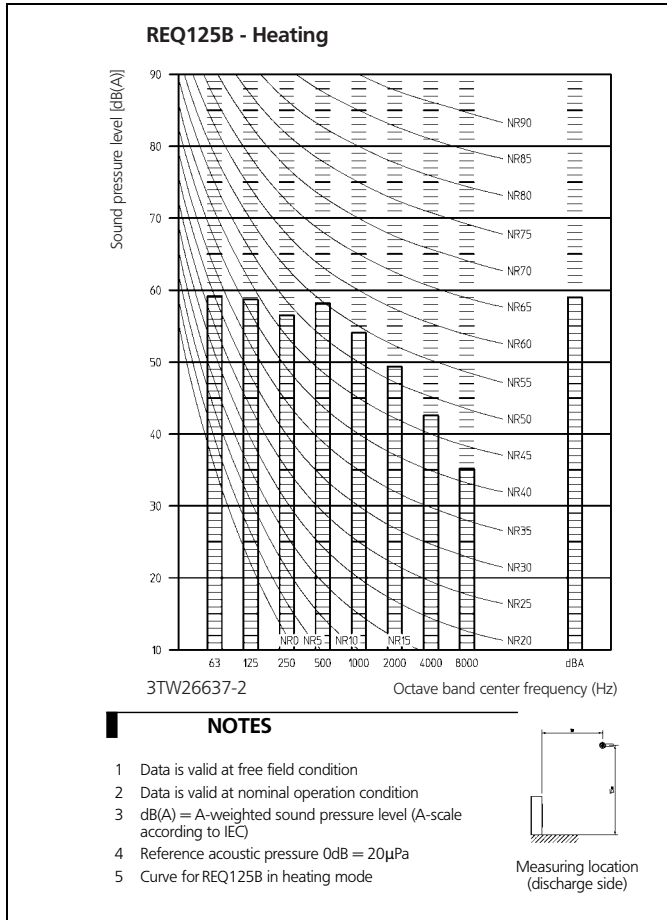
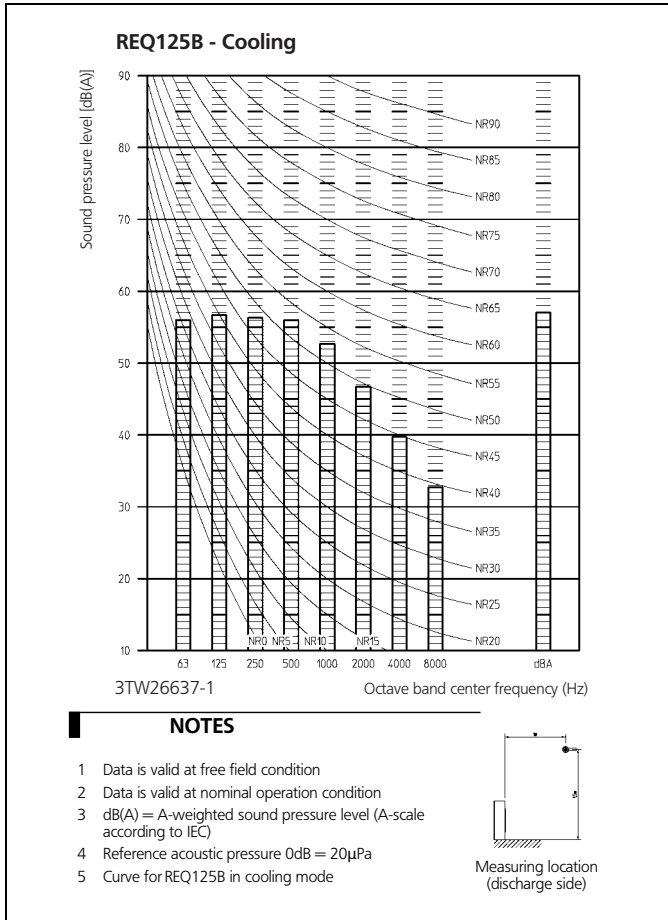
10 - 1 Sound pressure spectrum

10



10 Sound data

10 - 1 Sound pressure spectrum

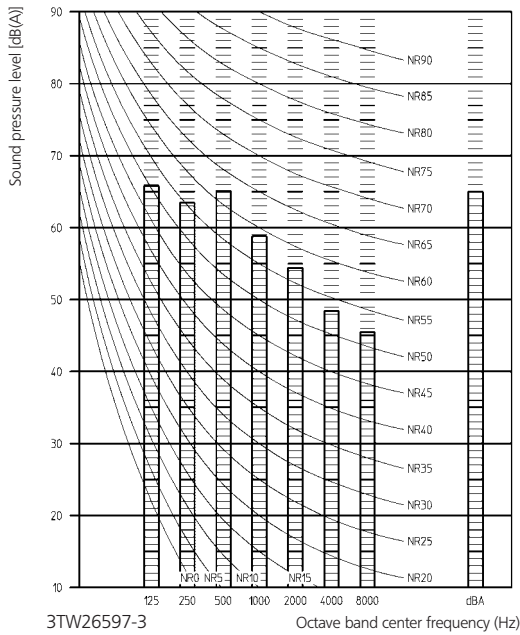


10 Sound data

10 - 2 Sound power spectrum

10

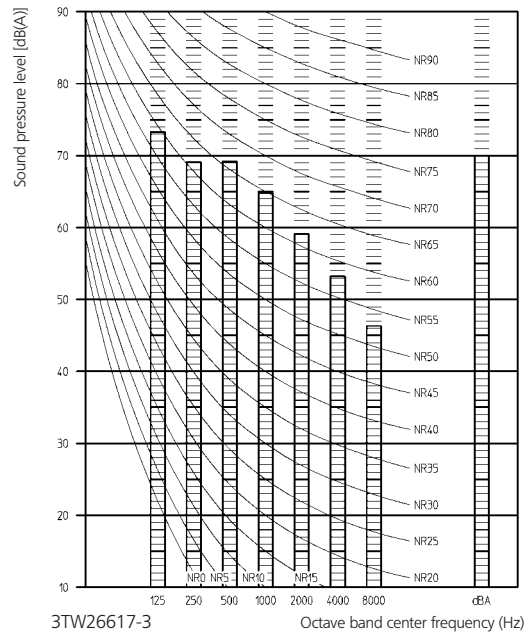
REQ71B - Cooling



NOTES

- 1 Data is valid at free field condition
- 2 Data is valid at nominal operation condition
- 3 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20μPa
- 5 Curve for REQ71B in cooling mode

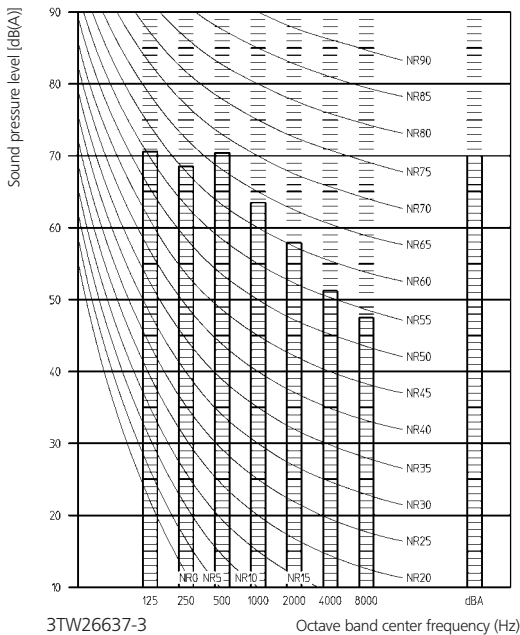
REQ100B - Cooling



NOTES

- 1 Data is valid at free field condition
- 2 Data is valid at nominal operation condition
- 3 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20μPa
- 5 Curve for REQ100B in cooling mode

REQ125B - Cooling



NOTES

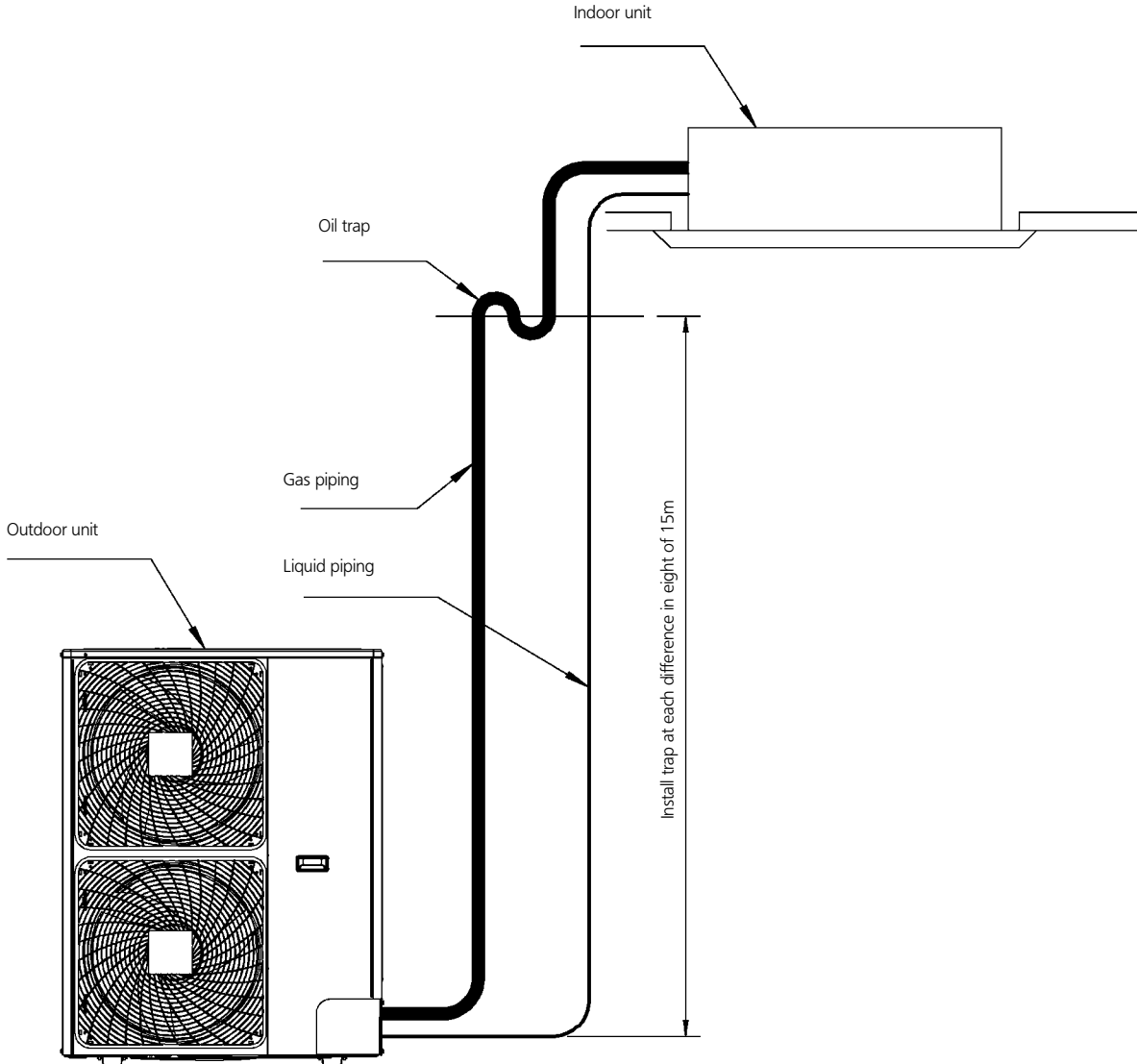
- 1 Data is valid at free field condition
- 2 Data is valid at nominal operation condition
- 3 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20μPa
- 5 Curve for REQ125B in cooling mode

11 Installation

11 - 1 Installation method

REQ71~ 125B

Oil trap



NOTE:

Since there is fear of the oil held inside the riser piping flowing back into the compressor when stopped and causing liquid compression phenomenon, or cases of deterioration of oil return, it will be necessary to provide a trap at an appropriate place in the riser gas piping.

A trap is not necessary when the outdoor unit is installed in a higher position than the indoor unit.

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11 Installation

11 - 2 Service space

11

REQ71~ 125B

A. Non stacked installation

		←	→	↖	↗	↙	↘	A	B1	B2	C	D1	D2	E	L1/L2	
	✓							≥50(100)								
	✓		✓	✓				≥100	≥100		≥100					
	✓								≥100				≤500	≥1000		
	✓	✓	✓	✓				≥150	≥150		≥150		≤500	≥1000		
	✓											≥500				
	✓											≥500		≥1000		
	✓							L1<L2	≥50(100)				≥500		≥1000	
	✓							L2<L1	≥50(100)				≥500		≥1000	
	✓							L1<L2	L1≤H	≥150(250)	≤500		≥750		≥1000	0<L1≤1/2H 0<L1≤1/2H
	✓							L2<L1	L2≤H	≥50(100) ≥100(200)		≥500(1000)	≥500	≥1000	0<L2≤1/2H 1/2H<L2≤H	
	✓	✓	✓	✓				≥200	≥200(300)		≥1000					
	✓							≥200	≥200(300)		≥1000					
	✓											≥1000				
	✓	✓	✓	✓						≤500		≥1000				
	✓							L1<L2	≥200(300)		≤500	≥1000		≥1000		
	✓							L2<L1	≥150(250) ≥200(300)			≥1000(1500)		≥1000	0<L2≤1/2H 1/2H<L2≤H	
	✓							L1<L2	L1≤H	≥200(300)	≤500		≥1000		≥1000	0<L1≤1/2H 1/2H<L1≤H
	✓							L2<L1	L2≤H	≥150(250) ≥200(300)		≥1000(1500)	≤500	≥1000	0<L2≤1/2H 1/2H<L2≤H	
	✓							L1<L2	L1≤H				≥1250		≥1000	
	✓							L2<L1	L2≤H				≥1250		≥1000	

Legend

- ← Suction side obstacle
- Discharge side obstacle
- ↖ Left side obstacle
- ↗ Right side obstacle
- ↙ Top side obstacle
- ↘ Obstacle is present

1 In these cases, close the bottom of the installation frame to prevent discharged air from being bypassed.

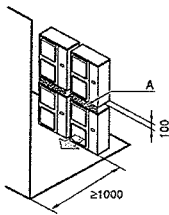
2 In these cases, only 2 units can be installed.

This situation is not allowed.

Figures between () indicate the dimensions only for the 100-125 class models.

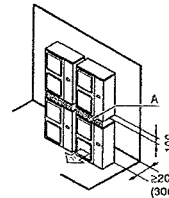
B. Stacked installation

1. Obstacles exist in front of the outlet side



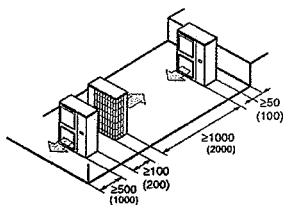
Do not stack more than one unit.
About 100mm is required as the dimension for laying the upper outdoor unit's drain pipe.
Get the portion A sealed so that air from the outlet does not bypass.

2. Obstacles exist in front of the air inlet

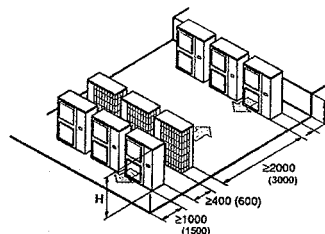


C. Multiple-row installation

1. Installation of one unit per row



2. Installing multiple units (2 units or more) in lateral connection per row



Relation of dimensions of H, A, and L are shown in the table below.

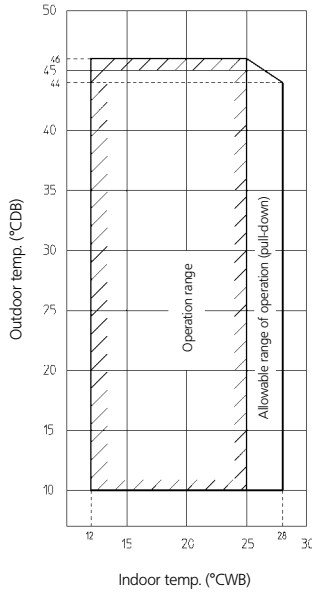
	L	A
L ≤ H	0 < L ≤ 1/2 H	150 (250)
	1/2 H < L	200 (300)
H < L	Installation impossible	

3TW25149-4A

12 Operation range

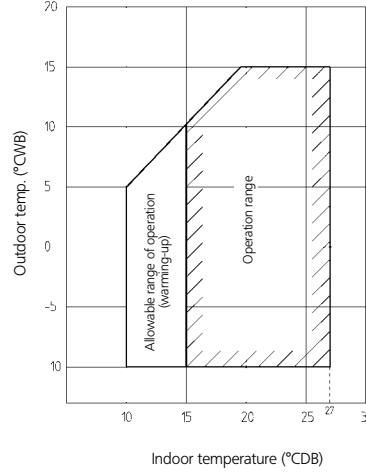
REQ71~125B

Cooling



Model name		
REQ71BV3	REQ100BV3	REQ125BW1
REQ71BW1	REQ100BW1	

Heating



Notes:

- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.

3TW26593-1

Split - Sky Air

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DAIKIN EUROPE N.V.

Zandvoordestraat 300
B-8400 Ostend - Belgium
www.daikineurope.com

