



technical data



REQ-B7

Pair Application

air conditioning systems

Split Sky Air

Split - Sky Air



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment



Daikin units comply with the European regulations that guarantee the safety of the product.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

Specifications are subject to change without prior notice.

DAIKIN EUROPE N.V.

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

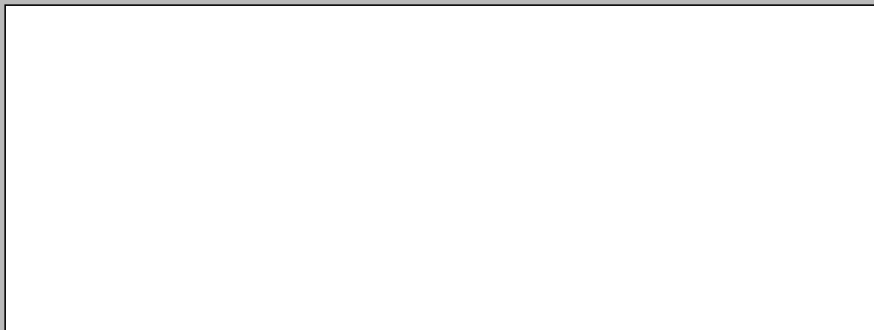


TABLE OF CONTENTS

REQ-B7

1	Features.....	2
2	Specifications.....	3
	Technical Specifications	3
	Electrical Specifications	5
	Electrical data	6
	Safety device settings	9
3	Options	10
4	Capacity tables.....	11
	Cooling capacity tables	11
	Heating capacity tables	15
5	Dimensional drawing & centre of gravity.....	19
	Dimensional drawing	19
	Centre of gravity	21
6	Piping diagram.....	23
7	Wiring diagram	24
	Wiring diagram	24
	External connection diagram	26
8	Sound data.....	27
	Sound pressure spectrum	27
	Sound power spectrum	29
9	Installation.....	30
	Installation method	30
10	Operation range	32

1 Features

1

- 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



2 Specifications

2-1 TECHNICAL SPECIFICATIONS				REQ71B7V3B	REQ71B7W1B	REQ100B7V3B	REQ100B7W1B	REQ125B7W1B	
Casing	Colour			Daikin White					
	Material			Painted galvanized steel plate					
Dimensions	Packing	Height	mm	900	900	1300	1300	1300	
		Width	mm	980	980	980	980	980	
		Depth	mm	420	420	420	420	420	
	Unit	Height	mm	770	770	1170	1170	1170	
		Width	mm	900	900	900	900	900	
		Depth	mm	320	320	320	320	320	
Weight	Machine Weight		kg	83	83	102	100	108	
	Gross Weight		kg	87	87	107	105	113	
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)		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 at 230V)	Steps	3	3	3	3	3		
Fan	Motor	Output	W	65	65	90	90	85	
		Drive			direct drive				
	Position						Upper		
Motor	Speed (nominal at 230V)	Steps					3		
Fan	Motor	Output	W					65	
		Drive						direct drive	
Compressor	Quantity			1	1	1	1	1	
	Motor	Model		JT90G-V1N	JT90G-YE	JT125G-V1N	JT125G-YE	JT160G-YE	
		Type		Hermetically sealed scroll compressor					
		Motor Output	W	2200	2200	3000	3000	3750	
		Starting Method		Direct					
		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	-10.0	-10.0	-10.0	-10.0	-10.0	
		Max	°CWB	15.0	15.0	15.0	15.0	15.0	
Sound Level (nominal)	Cooling	Sound Power	dBA	65.0	65.0	70.0	70.0	70.0	
		Sound Pressure	dBA	53.0	53.0	57.0	57.0	57.0	
Refrigerant	Type			R-410A					
	Charge		kg	2.50	2.50	3.60	3.60	3.60	
	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	

2-1 TECHNICAL SPECIFICATIONS			REQ71B7V3B	REQ71B7W1B	REQ100B7V3B	REQ100B7W1B	REQ125B7W1B	
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			

2 Specifications

2-2 ELECTRICAL SPECIFICATIONS			REQ71B7V3B	REQ71B7W1B	REQ100B7V3B	REQ100B7W1B	REQ125B7W1B
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
Current	Recommended fuses	A	32	16	40	16	20
Voltage range	Minimum	V	207	360	207	360	360
	Maximum	V	253	440	253	440	440
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				

NOTES

- 1 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.
- 2 The sound power level is an absolute value indicating the power which a sound source generates.
- 3 Sound values are measured in a semi-anechoic room.
- 4 In case of drain piping for outdoor unit, drain piping kit (option) is needed.
- 5 Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.
- 6 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 Specifications

2 - 3 Electrical data

2

REQ71B7

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	REQ71B7V3B	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	REQ71B7V3B	50-230		16.8	23.2	32	75.5	12.5	0.065	0.6	0.062	0.6
FBQ71	REQ71B7V3B	50-230		17.4	23.5	32	75.5	12.7	0.065	0.6	0.125	0.9
FDEQ71	REQ71B7V3B	50-230		15.4	23.5	32	75.5	11.1	0.065	0.6	0.125	0.9
FCQ71	REQ71B7W1B	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	REQ71B7W1B	50-400/230		7.5	11.2	16	41.1	5.0	0.065	0.6	0.062	0.6
FBQ71	REQ71B7W1B	50-400/230		8.1	11.5	16	41.1	5.3	0.065	0.6	0.125	0.9
FDEQ71	REQ71B7W1B	50-400/230		6.8	11.5	16	41.1	4.2	0.065	0.6	0.125	0.9

3TW26599-9

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://www.daikineurope.com/extranet>, select "Daikin Documentation" and select "conditional connection", "the requested product type" and "English" from the drop down lists, click the search button.
Finally, click on the document title of your choice.

2 Specifications

2 - 3 Electrical data

REQ100B7

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	REQ100B7V3B	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	REQ100B7V3B	50-230		25.3	34.5	40	98.5	19.0	0.090	0.8	0.130	0.7
FBQ100	REQ100B7V3B	50-230		23.2	34.8	40	98.5	17.1	0.090	0.8	0.135	1.0
FDEQ100	REQ100B7V3B	50-230		24.2	34.8	40	98.5	17.9	0.090	0.8	0.135	1.0
FCQ100	REQ100B7W1B	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	REQ100B7W1B	50-400/230		9.4	11.5	16	48.2	6.3	0.090	0.8	0.130	0.7
FBQ100	REQ100B7W1B	50-400/230		8.9	11.8	16	48.2	5.7	0.090	0.8	0.135	1.0
FDEQ100	REQ100B7W1B	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://www.daikineurope.com/extranet>, select "Daikin Documentation" and select "conditional connection", "the requested product type" and "English" from the drop down lists, click the search button.
Finally, click on the document title of your choice.

2 Specifications

2 - 3 Electrical data

2

REQ125B7

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	REQ125B7W1B	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	REQ125B7W1B	50-400/230		12.3	15.0	20	63	8.2	0.065 + 0.085	0.6 + 0.7	0.13	0.7
FBQ125	REQ125B7W1B	50-400/230		12.2	15.7	20	63	7.6	0.065 + 0.085	0.6 + 0.7	0.225	1.4
FDEQ125	REQ125B7W1B	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://www.daikineurope.com/extranet>, select "Daikin Documentation" and select "conditional connection", "the requested product type" and "English" from the drop down lists, click the search button.
Finally, click on the document title of your choice.

2 Specifications

2 - 4 Safety device settings

REQ71~125B7

Safety device	Model	REQ71B7V3B	REQ100B7V3B	REQ125B7W1B
		REQ71B7W1B	REQ100B7W1B	
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		

4TW26321-2B

3 Options

3 REQ71~125B7

Name of option	Kit name		
	REQ71B7	REQ100B7	REQ125B7
Central drain plug	KKPJ5F180		

4TW26599-1

4 Capacity tables

4 - 1 Cooling capacity tables

FBQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

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

3TW26592-2

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
 $SHC^* = SHC \text{ correction for other dry bulb}$
 $SHC^* = 0.29 \times 60 \times AFR \text{ (m}^3\text{/min.)} \times (1 - BF) \times (DB^* - EDB) / 860$
 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

4 Capacity tables

4 - 1 Cooling capacity tables

4 FCQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

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	

3TW26592-1

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

4 Capacity tables

4 - 1 Cooling capacity tables

FDEQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

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

4 Capacity tables

4 - 1 Cooling capacity tables

4 FHQ71-125BUV1B + REQ71-100B7V3B REQ71-125B7W1B

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	2.06	5.7	4.6	2.31	5.5	4.5	2.47	5.3	4.4	2.72	4.8	4.0	2.97
	14.0	20.0	6.6	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	3.02
	16.0	22.0	7.2	4.9	1.96	7.0	4.8	2.13	6.5	4.7	2.39	6.3	4.6	2.56	6.0	4.5	2.82	5.4	4.1	3.07
	18.0	25.0	7.7	5.1	2.01	7.5	4.9	2.19	7.2	4.8	2.45	6.8	4.7	2.62	6.4	4.5	2.89	5.9	4.3	3.15
	19.0	27.0	8.0	5.2	2.03	7.7	5.1	2.21	7.3	4.9	2.47	7.1	4.7	2.65	6.6	4.6	2.92	6.1	4.4	3.18
	19.5	27.0	8.0	5.2	2.04	7.9	5.1	2.22	7.4	4.9	2.48	7.2	4.7	2.66	6.7	4.6	2.92	6.2	4.4	3.19
	22.0	30.0	8.7	5.3	2.08	8.5	5.2	2.26	8.0	5.1	2.53	7.9	4.8	2.71	7.4	4.7	2.98	6.7	4.4	3.25
24.0	32.0	9.4	5.3	2.10	9.1	5.2	2.28	8.6	5.1	2.56	8.4	4.9	2.74	8.0	4.7	3.01	7.3	4.4	3.29	
100	12.0	18.0	8.2	6.8	2.60	8.1	6.7	2.88	7.9	6.5	3.25	7.6	6.4	3.43	7.3	6.0	3.81	6.6	5.7	4.27
	14.0	20.0	8.7	6.8	2.65	8.6	6.7	2.93	8.5	6.5	3.31	8.2	6.4	3.50	7.6	6.0	3.87	7.2	5.7	4.35
	16.0	22.0	9.9	6.9	2.69	9.6	6.8	2.98	8.9	6.6	3.37	8.7	6.5	3.56	8.3	6.1	3.94	7.5	5.8	4.42
	18.0	25.0	10.6	7.2	2.76	10.3	7.1	3.05	9.6	6.7	3.45	9.4	6.6	3.64	8.8	6.4	4.04	8.1	5.9	4.53
	19.0	27.0	10.9	7.3	2.78	10.6	7.2	3.08	9.9	6.8	3.48	9.8	6.7	3.68	9.2	6.5	4.08	8.4	6.0	4.58
	19.5	27.0	11.0	7.3	2.79	10.8	7.2	3.09	10.1	6.8	3.49	9.9	6.7	3.69	9.3	6.5	4.09	8.5	6.0	4.59
	22.0	30.0	12.0	7.4	2.85	11.6	7.3	3.16	11.0	6.9	3.56	10.8	6.8	3.77	10.2	6.7	4.17	9.3	6.3	4.68
24.0	32.0	12.8	7.5	2.88	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	9.1	3.39	10.8	8.8	3.57	10.0	8.3	3.93	9.7	8.2	4.21	9.2	8.0	4.67	8.5	7.5	5.12
	14.0	20.0	11.8	9.1	3.45	11.4	8.8	3.64	10.7	8.3	4.00	10.4	8.2	4.28	9.8	8.0	4.75	9.1	7.5	5.21
	16.0	22.0	12.7	9.2	3.51	12.1	8.9	3.70	11.4	8.4	4.07	11.1	8.3	4.36	10.4	8.1	4.84	9.6	7.6	5.31
	18.0	25.0	13.3	9.5	3.59	13.0	9.1	3.79	12.1	8.7	4.17	11.8	8.6	4.46	11.2	8.3	4.95	10.3	7.9	5.43
	19.0	27.0	13.6	9.6	3.63	13.3	9.1	3.83	12.7	8.8	4.21	12.2	8.6	4.51	11.5	8.4	5.00	10.7	8.0	5.49
	19.5	27.0	13.8	9.6	3.64	13.5	9.1	3.84	12.8	8.8	4.23	12.4	8.7	4.53	11.7	8.4	5.02	10.9	8.0	5.51
	22.0	30.0	15.1	9.7	3.71	14.6	9.4	3.92	13.7	9.0	4.31	13.4	8.9	4.62	12.9	8.7	5.12	11.9	8.2	5.62
24.0	32.0	15.9	9.8	3.75	15.5	9.5	3.96	14.6	9.1	4.35	14.3	9.0	4.66	13.6	8.8	5.17	12.8	8.5	5.67	

3TW26592-3

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

4 Capacity tables

4 - 2 Heating capacity tables

FBQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

Heating capacity table

Outdoor	Indoor	outdoor temperature (°CWB)											
	EDB	-10		-5		0		6		10		15	
	(°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

4 Capacity tables

4 - 2 Heating capacity tables

4 FCQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

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

4 Capacity tables

4 - 2 Heating capacity tables

FDEQ71-125B7V3B + REQ71-100B7V3B REQ71-125B7W1B

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 (comp.+indoor+outdoor fan motor)	(kW)

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

4 Capacity tables

4 - 2 Heating capacity tables

4 FHQ71-125BUV1B + REQ71-100B7V3B REQ71-125B7W1B

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	14.6	4.73	15.6	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.

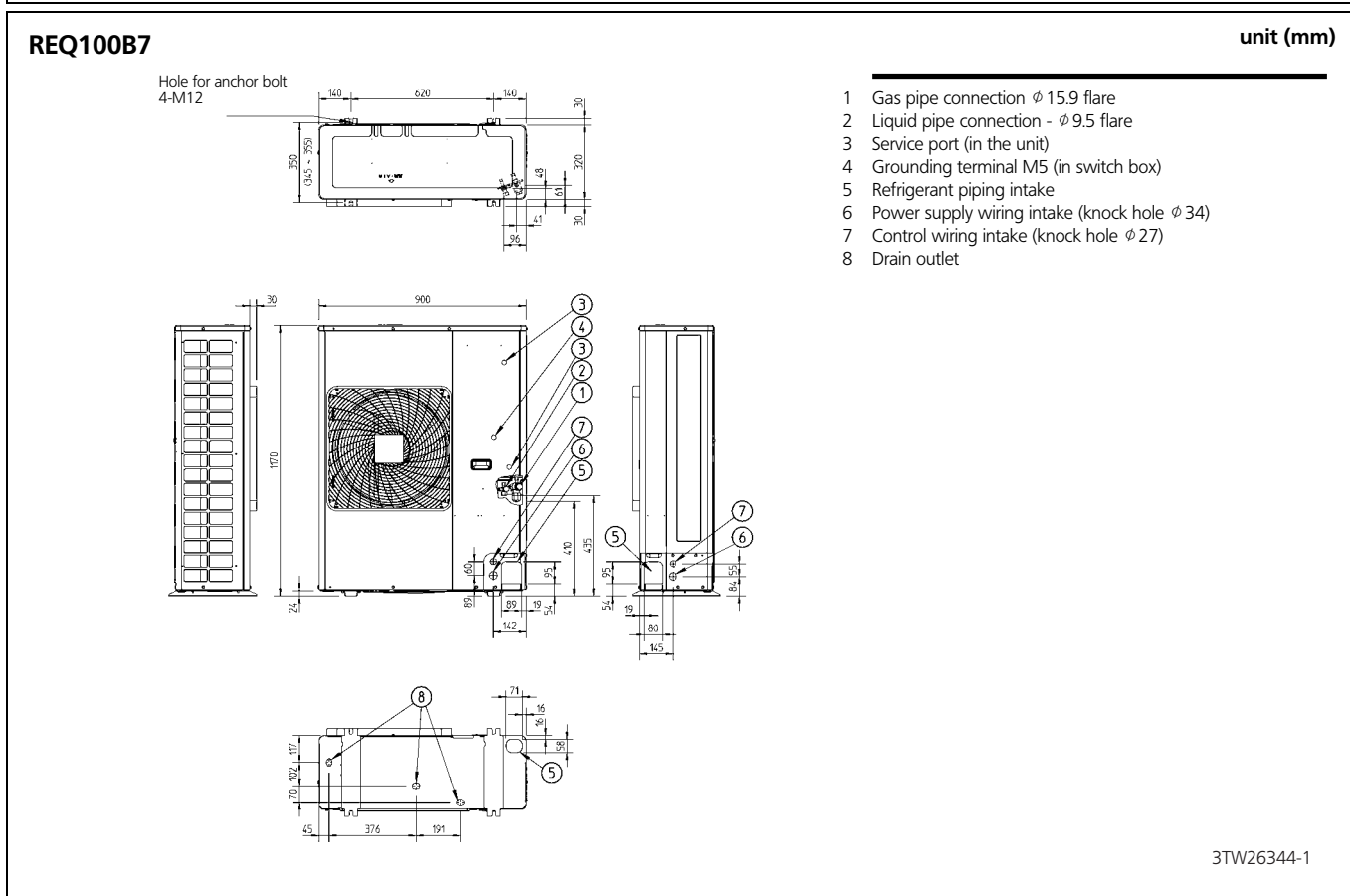
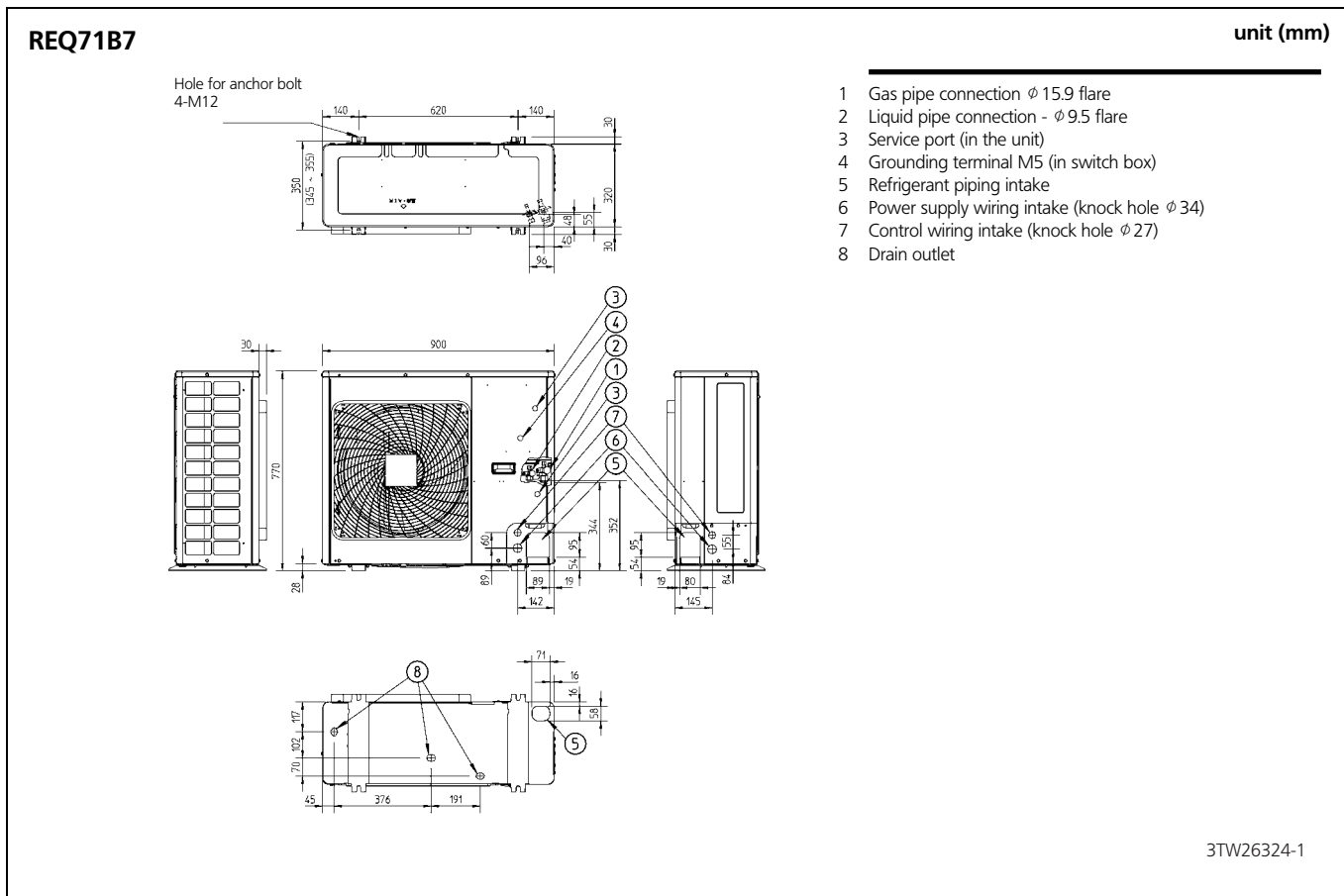
Model		FHQ
71	AFR	17
	BF	0.1
100	AFR	24
	BF	0.14
125	AFR	30
	BF	0.13

- 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

5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing



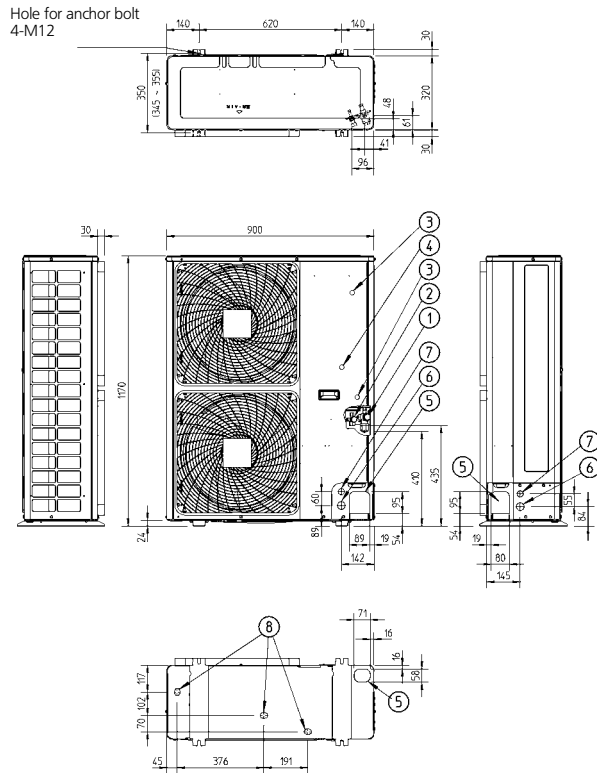
5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

5

REQ125B7

unit (mm)



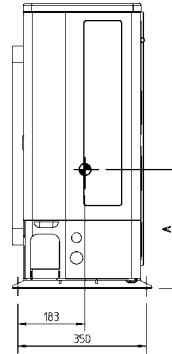
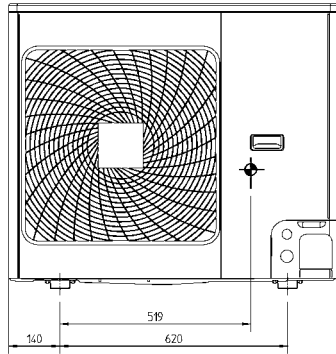
- 1 Gas pipe connection ϕ 15.9 flare
- 2 Liquid pipe connection - ϕ 9.5 flare
- 3 Service port (in the unit)
- 4 Grounding terminal M5 (in switch box)
- 5 Refrigerant piping intake
- 6 Power supply wiring intake (knock hole ϕ 34)
- 7 Control wiring intake (knock hole ϕ 27)
- 8 Drain outlet

3TW26364-1

5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

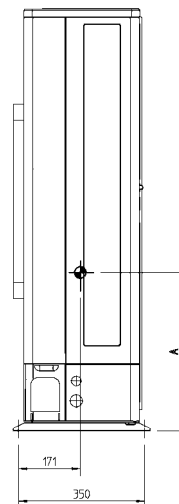
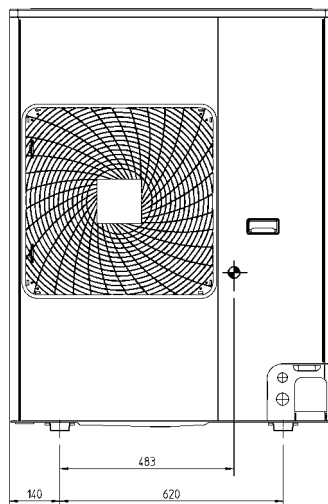
REQ71B7



Model	A
REQ71B7	267

3TW26329-5C

REQ100B7



Model	A
REQ100B7	390

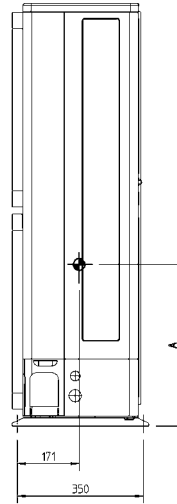
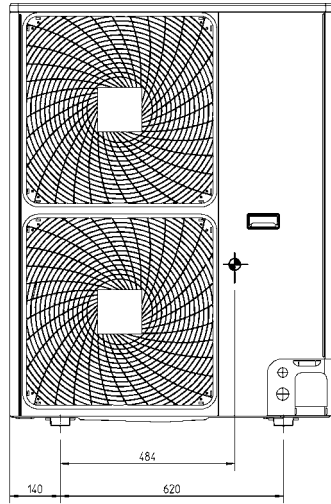
3TW26349-5C

5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

5

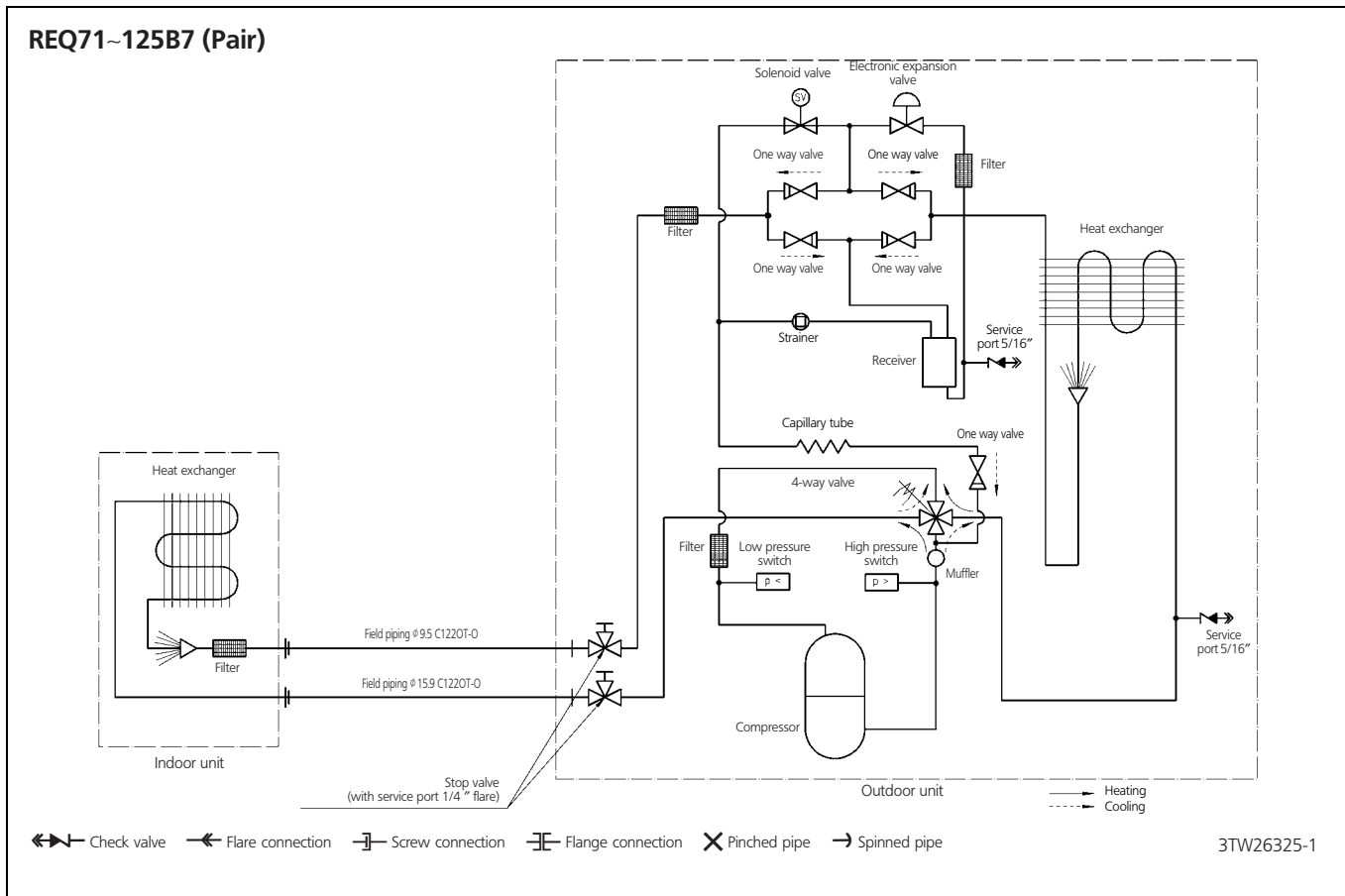
REQ125B7



Model	A
REQ125B7	390

3TW26369-5C

6 Piping diagram



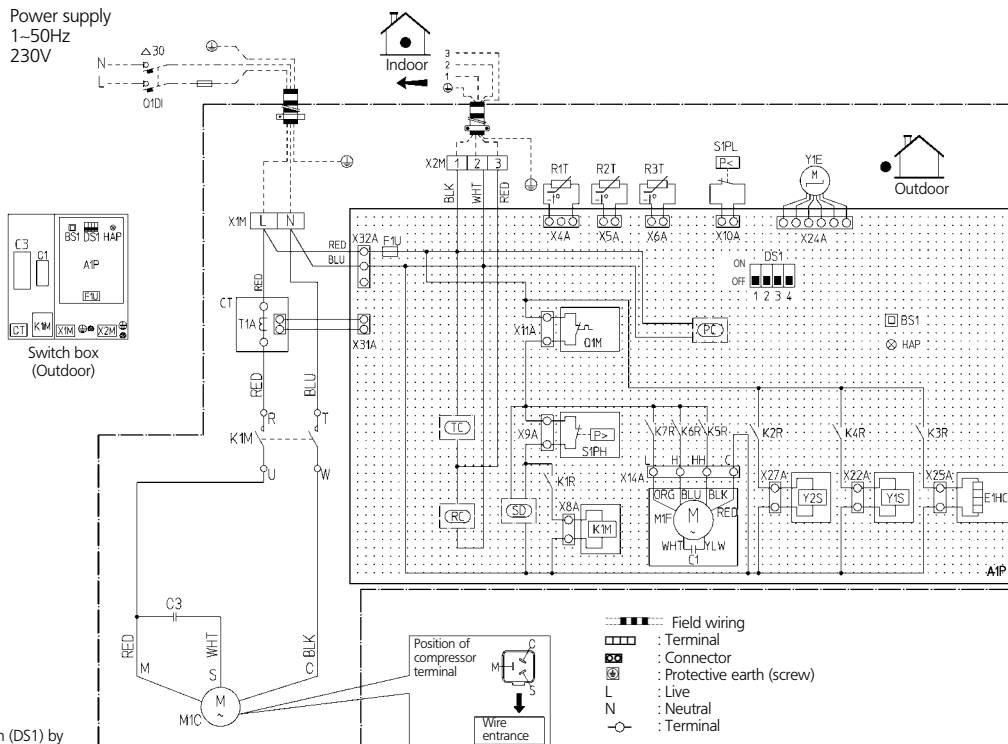
7 Wiring diagram

7 - 1 Wiring diagram

7

REQ71-100B7V3B

- A1P Printed circuit board
- BS1 Push button (forced defrost-pump down)
- C1R Capacitor (M1F)
- C3R Capacitor (M1C)
- DS1 DIP switch
- E1HC Crankcase heater
- F1U Fuse (T6.3/250V)
- 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)
- M1C Motor compressor
- M1F Motor fan
- PC Power circuit
- Q1DI Earth leakage breaker (30mA)
- Q1M Thermo switch (M1F)
- 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



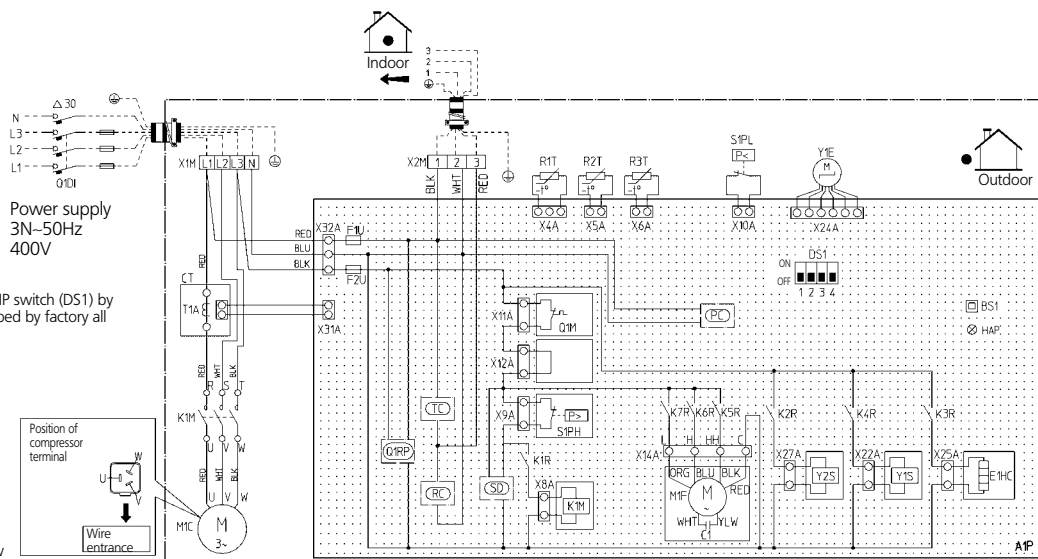
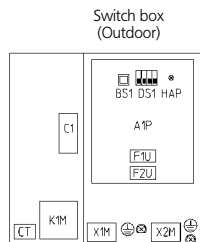
Note:
Confirm the method of setting the DIP switch (DS1) by service manual when the unit is shipped by factory all switches are set to be off.

- Field wiring
- Terminal
- Connector
- Protective earth (screw)
- Live
- Neutral
- Terminal

Colours
BLK: Black/ BLU: Blue/ WHT: White/
RED: Red/ ORG: Orange/ YLW:Yellow

2TW26326-1B

REQ71-100B7W1B



Note:
Confirm the method of setting the DIP switch (DS1) by service manual when the unit is shipped by factory all switches are set to be off.

- Field wiring
- Terminal
- Connector
- Protective earth (screw)
- Live
- Neutral
- Terminal

Colours
BLK: Black/ BLU: Blue/ WHT: White/
RED: Red/ ORG: Orange/ YLW:Yellow

2TW26336-1B

- A1P Printed circuit board
- BS1 Push button (forced defrost-pump down)
- C1 Capacitor (M1F)
- DS1 DIP switch
- E1HC Crankcase heater
- F1U, F2U Fuse (T6.3/250V)
- HAP Light emitting diode (service monitor green)
- K1M Magnetic contactor (M1C)
- K1R Magnetic relay (K1M)

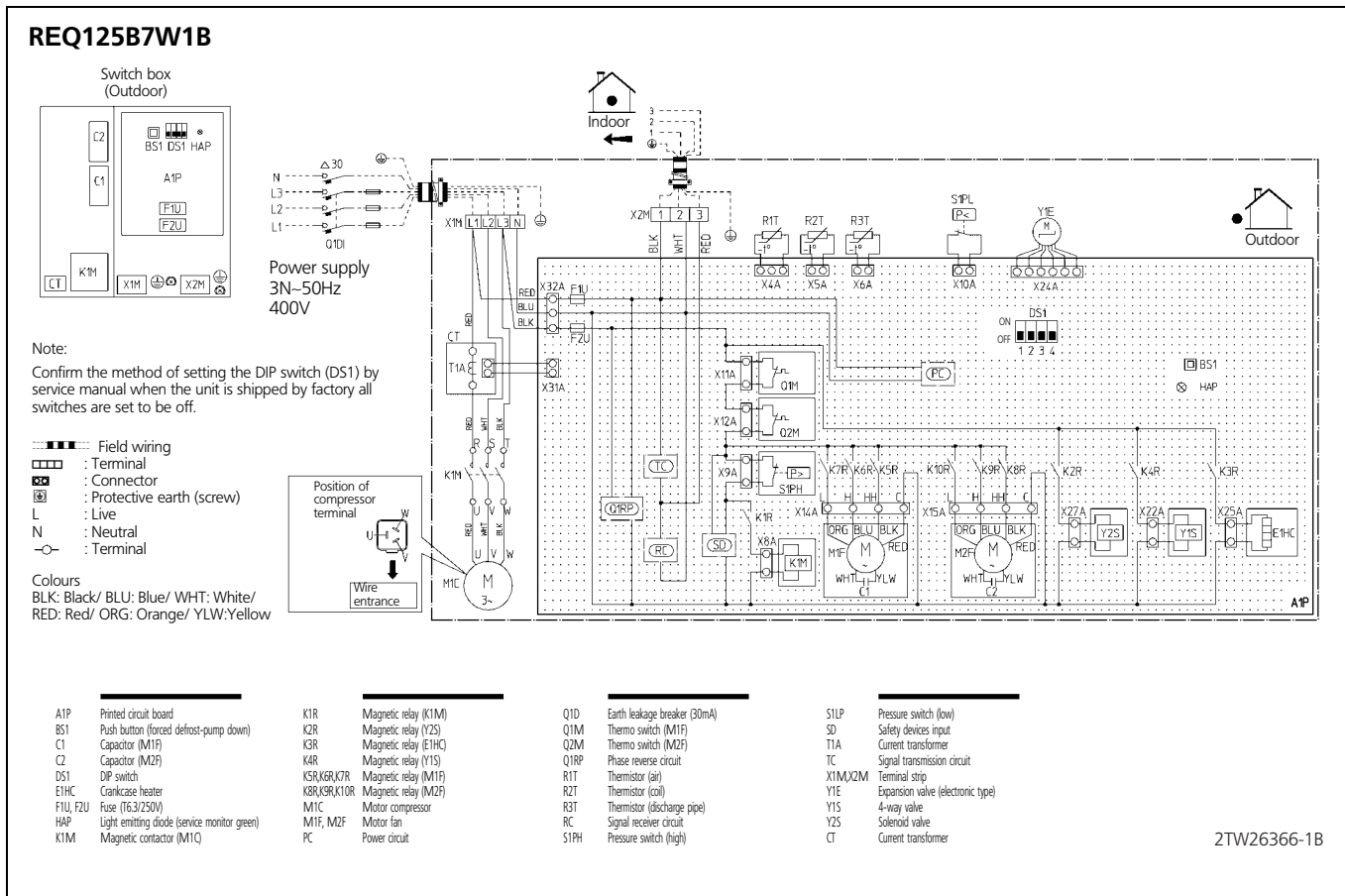
- K2R Magnetic relay (Y2S)
- K3R Magnetic relay (E1HC)
- K4R Magnetic relay (Y1S)
- K5R,K6R,K7R Magnetic relay (M1F)
- M1C Motor compressor
- M1F Motor fan
- PC Power circuit
- Q1DI Earth leakage breaker (30mA)
- Q1M Thermo switch (M1F)

- 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

7 Wiring diagram

7 - 1 Wiring diagram



7 Wiring diagram

7 - 2 External connection diagram

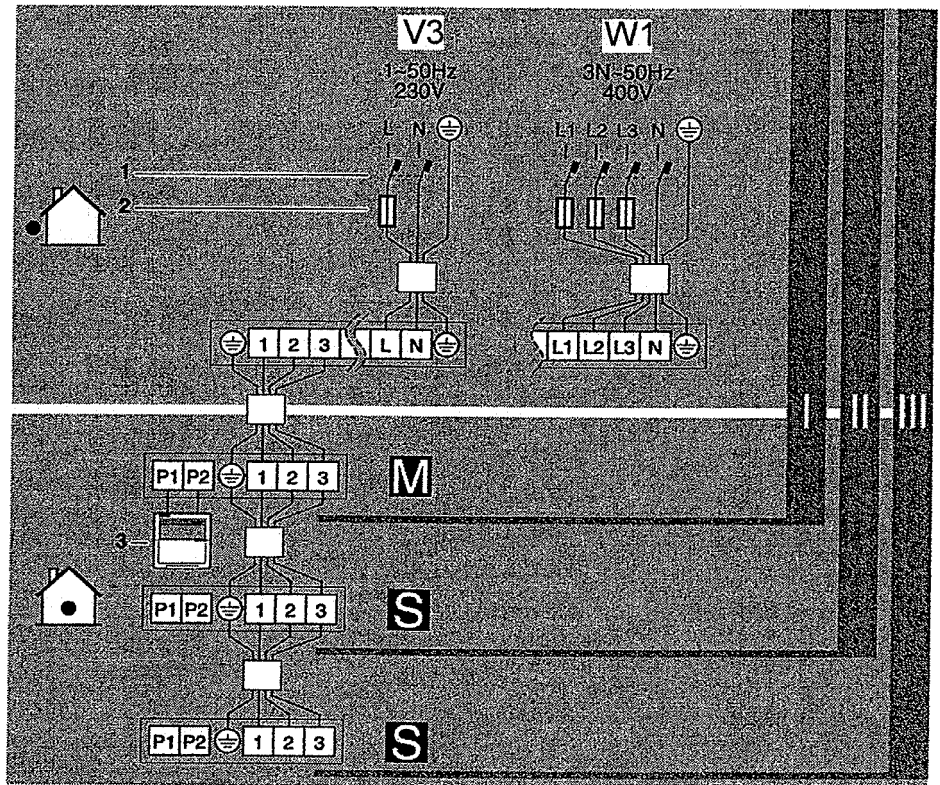
7

REQ71~125B7

Field wire

Symbol explication

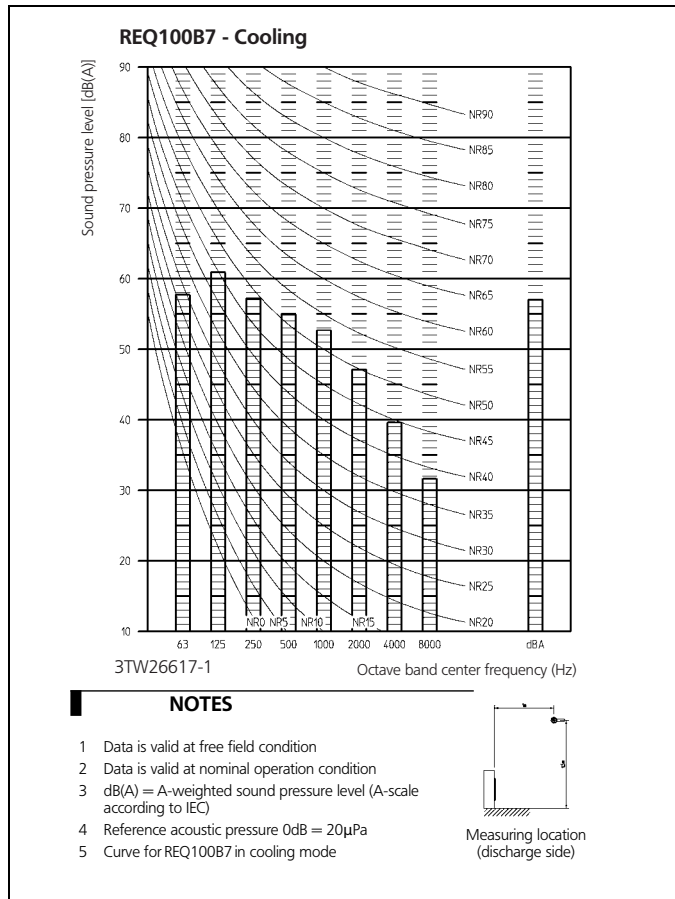
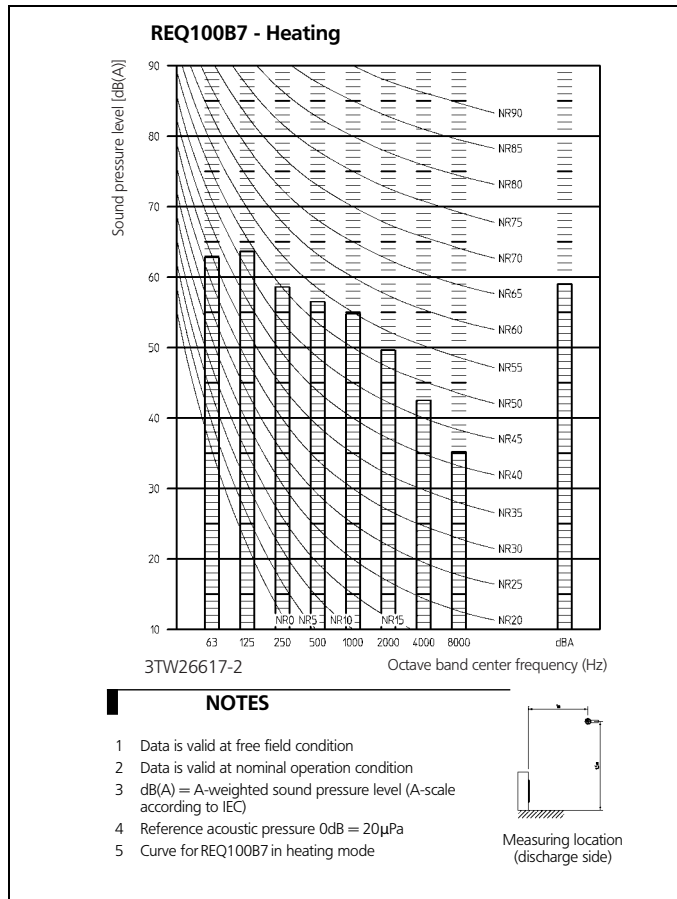
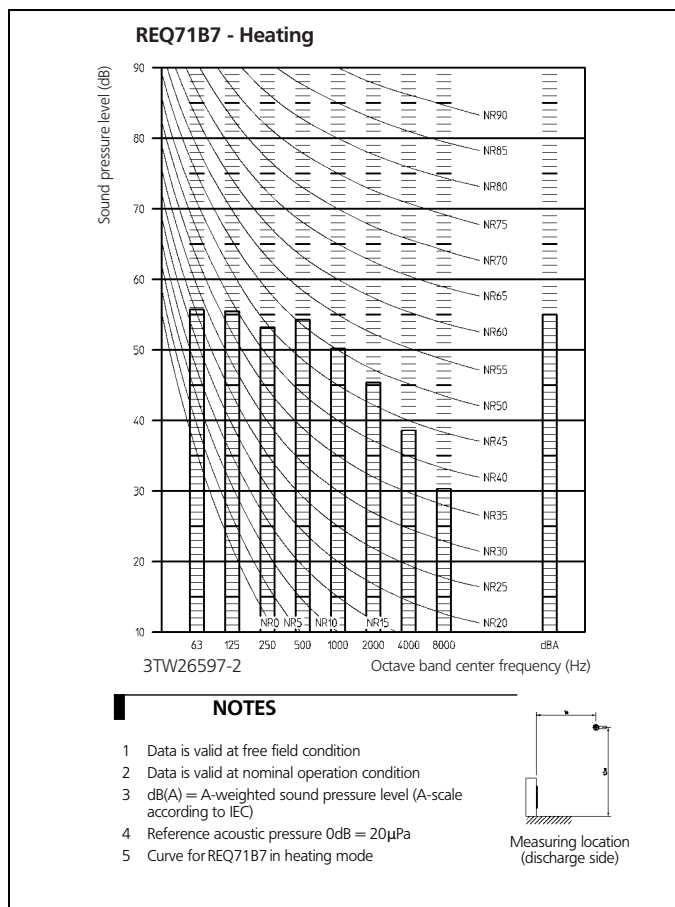
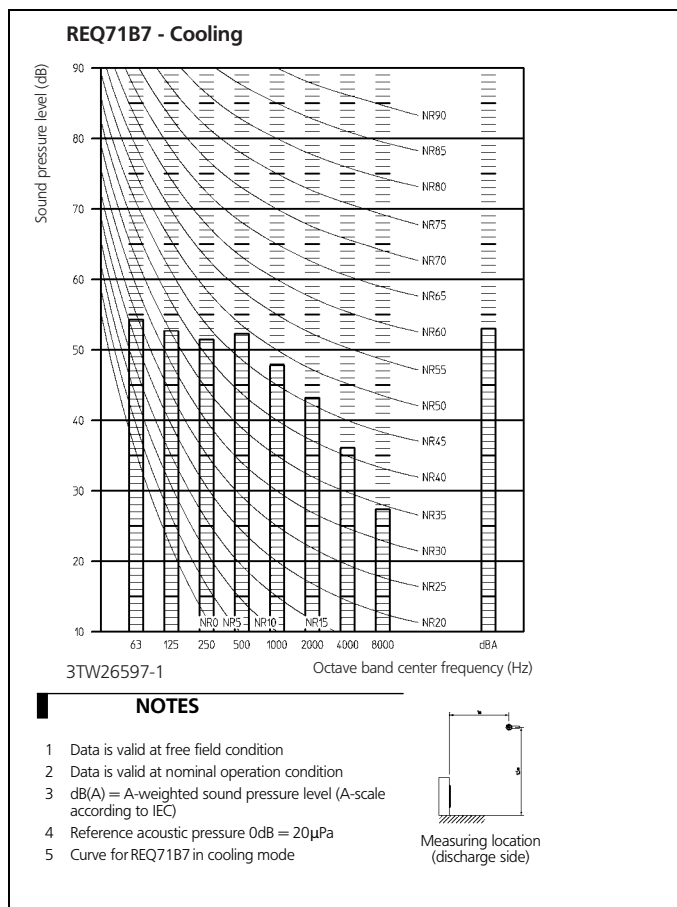
- I = Pair
- II = Twin
- III = Triple
- M = Master
- S = Slave
- 1 = Earth leak detector
- 2 = Fuse
- 3 = Remote control



4TW26329-7

8 Sound data

8 - 1 Sound pressure spectrum

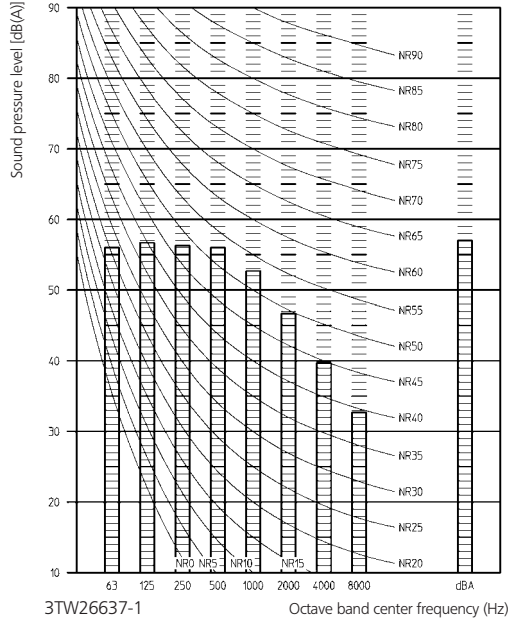


8 Sound data

8 - 1 Sound pressure spectrum

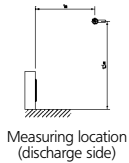
8

REQ125B7 - Cooling

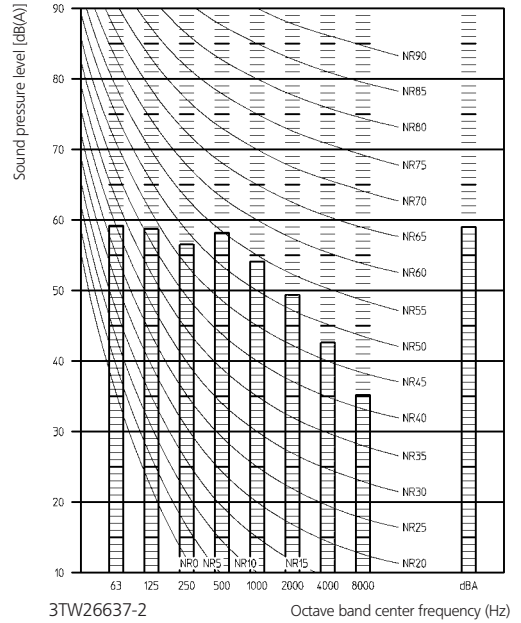


NOTES

- 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 $0dB = 20\mu Pa$
- 5 Curve for REQ125B7 in cooling mode

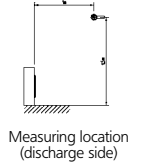


REQ125B7 - Heating



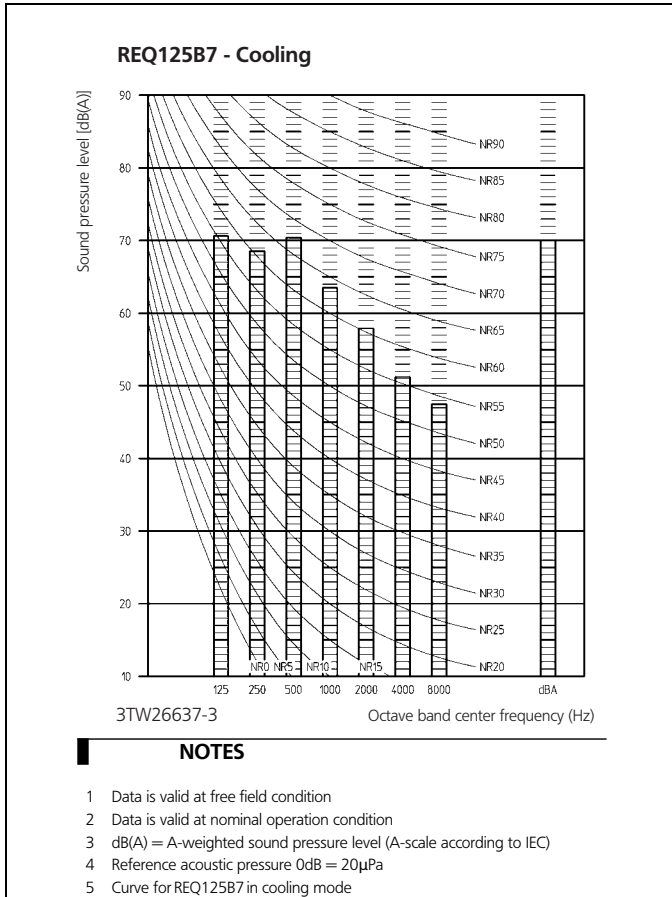
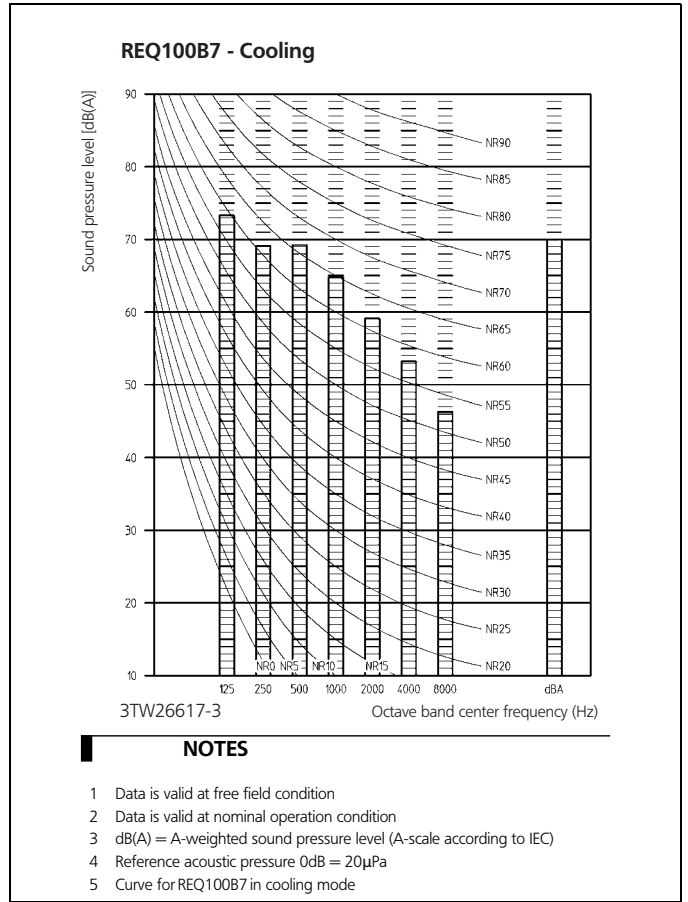
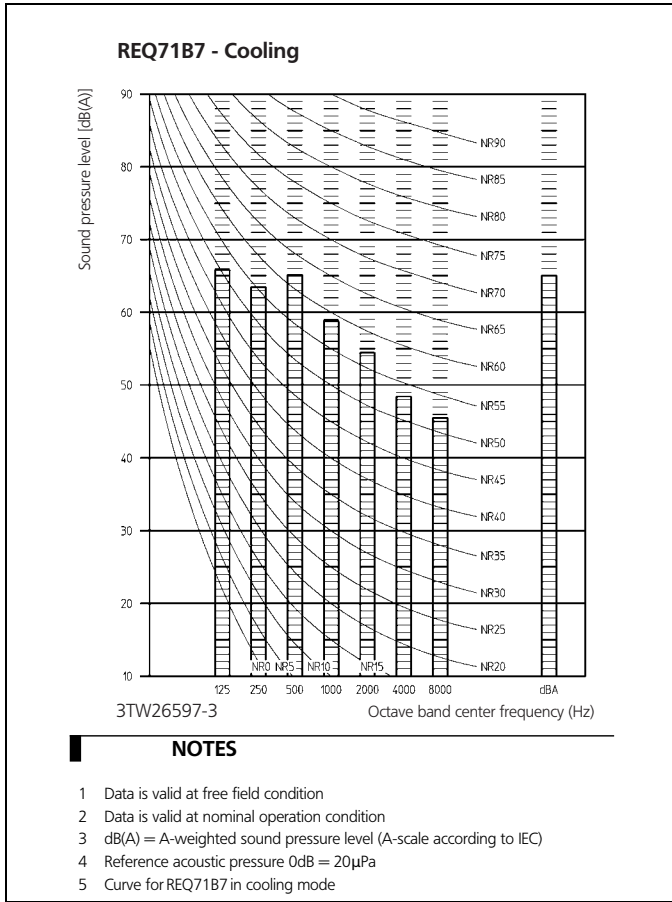
NOTES

- 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 $0dB = 20\mu Pa$
- 5 Curve for REQ125B7 in heating mode



8 Sound data

8 - 2 Sound power spectrum



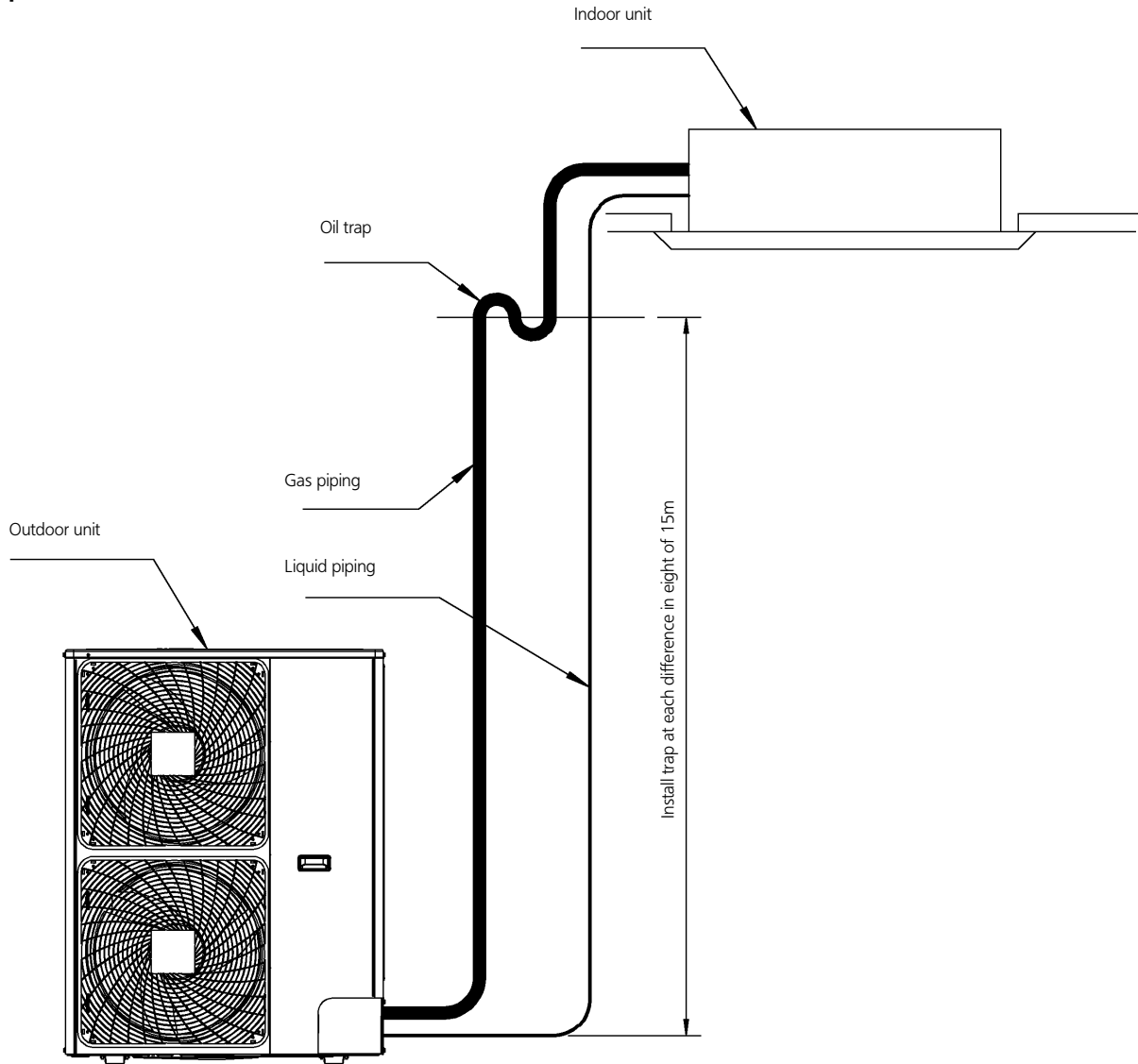
9 Installation

9 - 1 Installation method

9

REQ71~125B7

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.

4TW25149-8

9 Installation

9 - 1 Installation method

REQ71~125B7

A. Non stacked installation

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

Legend

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

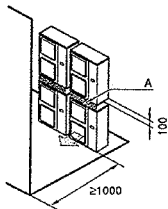
- 1 In these cases, close the bottom of the installation frame to prevent discharged air from being bypassed.
- 2 In these cases, only 2 units can be installed.

This situation is not allowed.

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

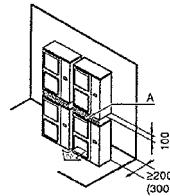
B. Stacked installation

1. Obstacles exist in front of the outlet side



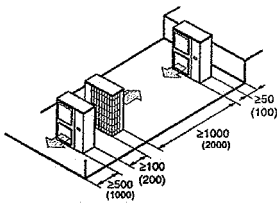
Do not stack more than one unit.
About 100mm is required as the dimension for laying the upper outdoor unit's drain pipe.
Get the portion A sealed so that air from the outlet does not bypass.

2. Obstacles exist in front of the air inlet

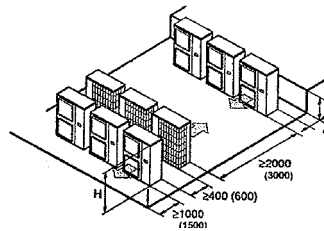


C. Multiple-row installation

1. Installation of one unit per row



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



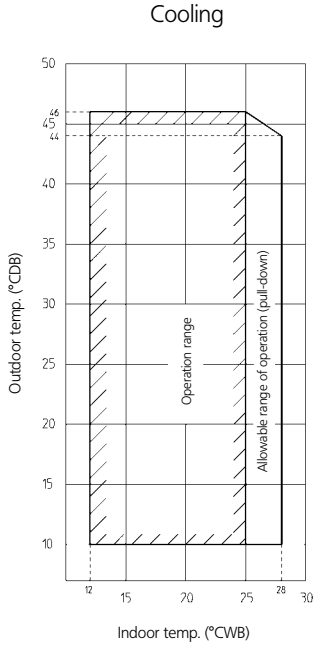
Relation of dimensions of H, A, and L are shown in the table below.

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

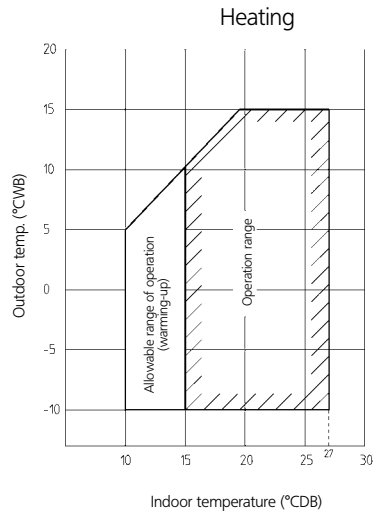
10 Operation range

10

REQ71~125B7



Model name		
REQ71B7V3B	REQ100B7V3B	REQ125B7W1B
REQ71B7W1B	REQ100B7W1B	



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