

Air Conditioning
Technical Data

FDA-A



> FDA125A5VEB

TABLE OF CONTENTS

FDA-A

1	Features	2
2	Specifications	3
	Technical Specifications	3
	Electrical Specifications	4
3	General Characteristics	5
4	Safety device settings	6
5	Options	7
6	Dimensional drawings	8
7	Centre of gravity	9
8	Piping diagrams	10
9	Wiring diagrams	11
	Wiring Diagrams - Single Phase	11
10	Sound data	12
	Sound Power Spectrum	12
	Sound Pressure Spectrum	13
11	Fan characteristics	14

1 Features

ESP up to 200, ideal for large sized spaces

- High external static pressure up to 200Pa facilitates extensive duct and grille network
- Unified indoor unit range for R-32 and R-410A
- Combining with R-32 Bluevolution technology, reduces environmental impact with 68% compared to R-410A, leads directly to lower energy consumption thanks to its high energy efficiency and has up to lower 16% refrigerant charge
- Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- Discretely concealed in the wall: only the suction and discharge grilles are visible
- Reduced energy consumption thanks to specially developed DC fan motor
- Flexible installation, as the air suction direction can be altered from rear to bottom suction
- Standard built-in drain pump with 625mm lift increases flexibility and installation speed



Home leave operation



Fan only



Auto cooling-heating changeover



Fan speed steps



Dry programme



Air filter



Weekly timer



Wired remote control



Centralised control



Online controller via app



Auto-restart



Self diagnosis



Drain pump kit



Twin/triple/double twin application

2 Specifications

2-1 Technical Specifications				FDA125A	
Casing	Colour			Unpainted	
	Material			Galvanised steel	
Dimensions	Unit	Height/Width/Depth	mm	300/1,400/700	
	Packed unit	Height/Width/Depth	mm	355/1,620/900	
Required ceiling void >			mm	350	
Weight	Unit		kg	45	
	Packed unit		kg	53	
Decoration panel	Model			BYBS125DJW1	
	Colour			White (10Y9/0.5)	
	Dimensions	HeightxWidthxDepth	mm	55x1,500x500	
	Weight		kg	6.5	
Heat exchanger	Inside length		mm	1,140	
	Outside length		mm	1,140	
	Rows	Quantity		3	
	Fin pitch		mm	1.75	
	Passes	Quantity		11	
	Face area		m ²	0.383	
	Stages	Quantity		16	
	Empty tubeplate hole	Quantity		0	
	Tube type			ø7 Hi-XSS	
	Fin	Type			Symmetric waffle louvre
Air filter	Type			Resin net	
Fan	Type			Sirocco fan	
	Quantity			3	
	Air flow rate	Cooling	High	m ³ /min	39.0
			Low	m ³ /min	28.0
		Heating	High	m ³ /min	39.0
			Low	m ³ /min	28.0
	External static pressure	High	Pa		200
Nom.		Pa		50	
Fan motor	Quantity			1	
	Model			Brushless DC motor	
	Drive			Direct drive	
	Speed	Steps		9	
		Cooling	High/Low	rpm	1,218/920
			Heating	High/Low	rpm
	Output	Max	W		350
Sound power level	Cooling		dBA	66	
Sound pressure level	Cooling	High/Low	dBA	40/33	
	Heating	High/Low	dBA	40/33	
Control systems	Infrared remote control			BRC4C65 / BRC4C66	
	Wired remote control			BRC1D528 / BRC1E53A7 / BRC1E53B7 / BRC1E53C7	
Refrigerant	Type			R-32 / R-410A	
Piping connections	Liquid	Type/OD	mm	Flare connection/9,52	
	Gas	Type/OD	mm	Flare connection/15.90	
	Drain			VP25 (I.D. 25/O.D. 32)	
	Heat insulation			Both liquid and gas pipes	
Drain-up height			mm	625	
Safety devices	Item	01/02/03		PC board fuse/PC board fuse (fan driver)/Drain pump fuse	

Standard Accessories : Screws; Quantity : 16;

Standard Accessories : Washer; Quantity : 8;

Standard Accessories : Hose band; Quantity : 1;

Standard Accessories : Drain hose; Quantity : 1;

2 Specifications

- Standard Accessories : General safety precautions; Quantity : 1;
- Standard Accessories : Installation and operation manual; Quantity : 1;
- Standard Accessories : Wire for common power supply; Quantity : 2;
- Standard Accessories : Sealing material (drain hose); Quantity : 1;
- Standard Accessories : Sealing material; Quantity : 2;
- Standard Accessories : Thermal insulation tube (liquid); Quantity : 1;
- Standard Accessories : Thermal insulation tube (gas); Quantity : 1;

2

2-2 Electrical Specifications			FDA125A
Power supply	Phase		1~
	Frequency	Hz	50/60
	Voltage	V	220-240/220

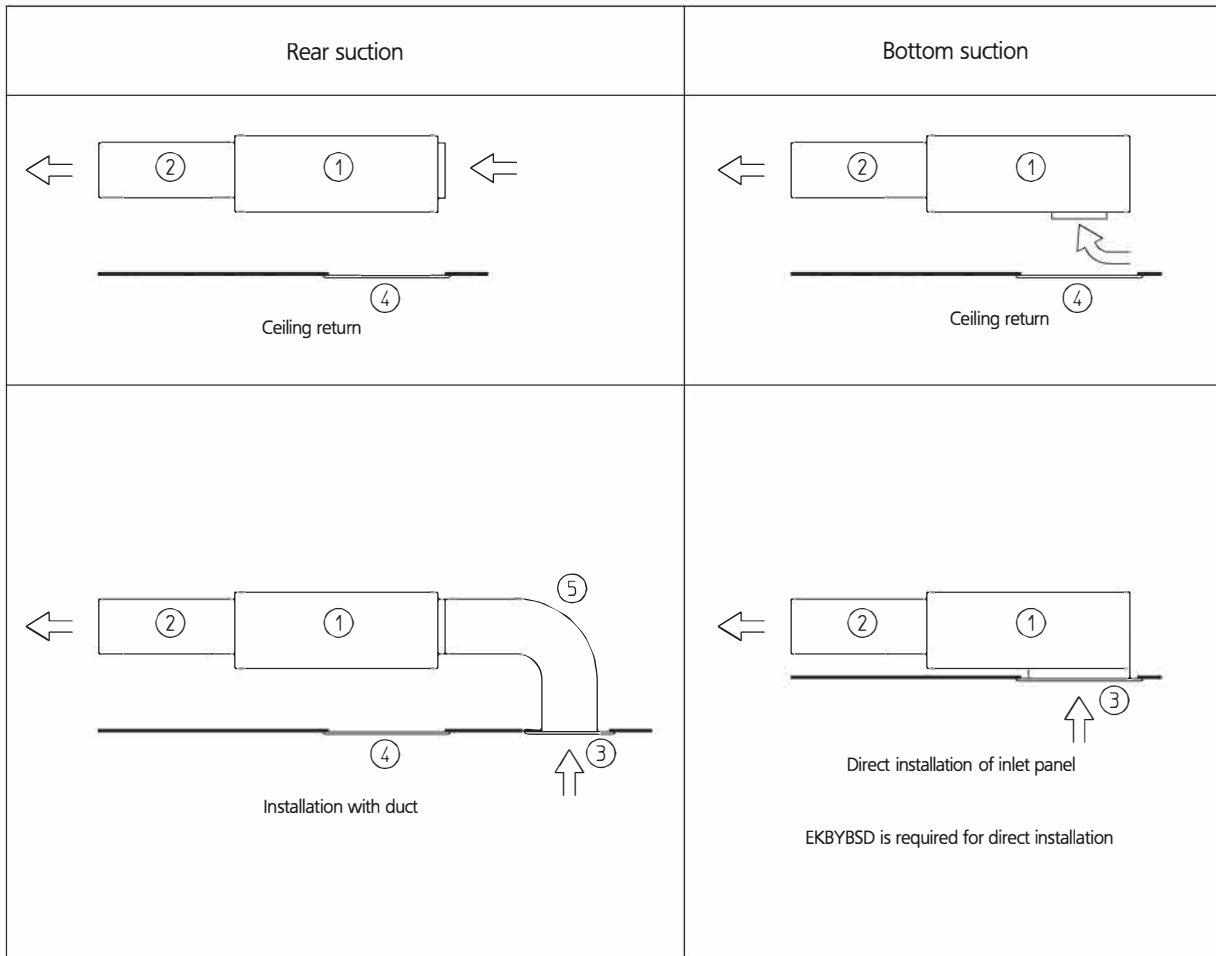
Notes

See separate drawing for electrical data

3 General Characteristics

3 - 1 General characteristics

FDA125A



Wide variety of installation methods

Number	Description	
1	Main body	
2	Air outlet duct	Field supply
3	Inlet panel	Optional accessory
4	Access panel	Optional accessory
5	Air inlet duct	Field supply

3TW31183-1A

4 Safety device settings

4 - 1 Safety Device Settings

FDA125A

4

Safety devices		FDA125A5VEB
PCB fuse		---
PCB fuse (fan driver)		250V, 6.3A
Fan motor overcurrent protection	Nominal	---
Fan motor thermal protector	Maximum	---
Drain pump fuse		145°C

4D110677

5 Options

5 - 1 Options

FDA-A

Option kit		FDA125A5VEB
Decoration panel		BYBS125D ④
Air discharge adaptor for round ducts		KDAJ25K140A
Decoration panel option		EKBYBSD
Remote control	Wired	BRC1D528
		BRC1E53A7 ⑤
		BRC1E53B7 ⑥
	Wireless	BRC1E53C7 ⑦ ⑩
		BRC4C65 BRC4C66
Simplified remote control (with operation mode selector button)		BRC2E52C7 ⑧ ⑩
Simplified remote control (without operation mode selector button)		BRC3E52C7 ⑧ ⑩
Optional PCB for external electric heaters, humidifiers and/or hour meters		EKRP1B2A ① ② ③
Adaptor for wiring (interlock for fresh air intake fan)		KRP1C64 ③
Wiring adaptor for electrical appendices		KRP2A51 ③
Remote sensor		KRCS01-4B
Central remote control		DCS302CA51
Unified ON/OFF controller		DCS301BA51
Schedule timer		DST301BA51
Remote "ON/OFF" and "forced OFF" kit		EKROR03
Mounting plate for adaptor PCB		KRP4A96
Digital input adaptor		BRP7A54 ③ ⑧

Notes

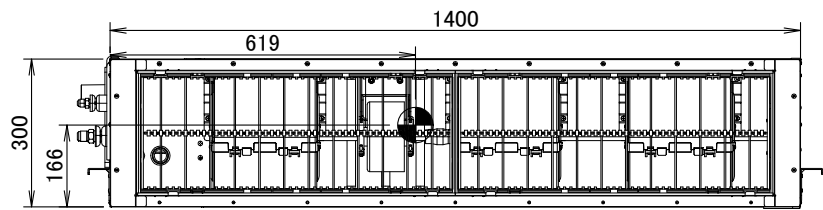
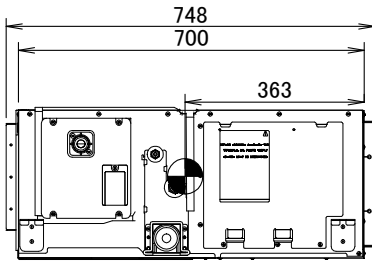
- ①: Electric heaters and humidifiers are field-supplied. Do not install them inside the equipment (refer to installation manual EKRP1B2A).
- ②: When installing electric heaters, an optional PCB for external electric heaters (EKRP1B2A) is required for each indoor unit.
- ③: These options require mounting plate KRP4A96.
Maximally 2 optional PCBs can be mounted.
- ④: For directly mounting the decoration panel on the unit, decoration panel option EKBYBSD is required.
- ⑤: Included languages are: English, German, French, Italian, Spanish, Portuguese, and Dutch.
- ⑥: Included languages are: English, Czech, Croatian, Hungarian, Slovenian, Romanian, and Bulgarian.
- ⑦: Included languages are: English, Russian, Greek, Turkish, Polish, Albanian, and Slovak.
- ⑧: Only possible in combination with BRC2/3E52C7 or BRC1E53A/B/C7.
- ⑨: Included languages are:
Language pack 1: English, German, French, Dutch, Spanish, Italian, and Portuguese.
With PC cable EKPCAB3 in combination with the Updater PC software, you can additionally change the language to:
Language pack 2: English, Bulgarian, Croatian, Czech, Hungarian, Romanian, and Slovenian.
Language pack 3: English, Greek, Polish, Russian, Serbian, Slovak, and Turkish.
- ⑩: Language pack 3 of controller BRC1E53C7 is different from that of controller BRC2/3E52C7.

3D110863

7 Centre of gravity

7 - 1 Centre of Gravity

FDA-A



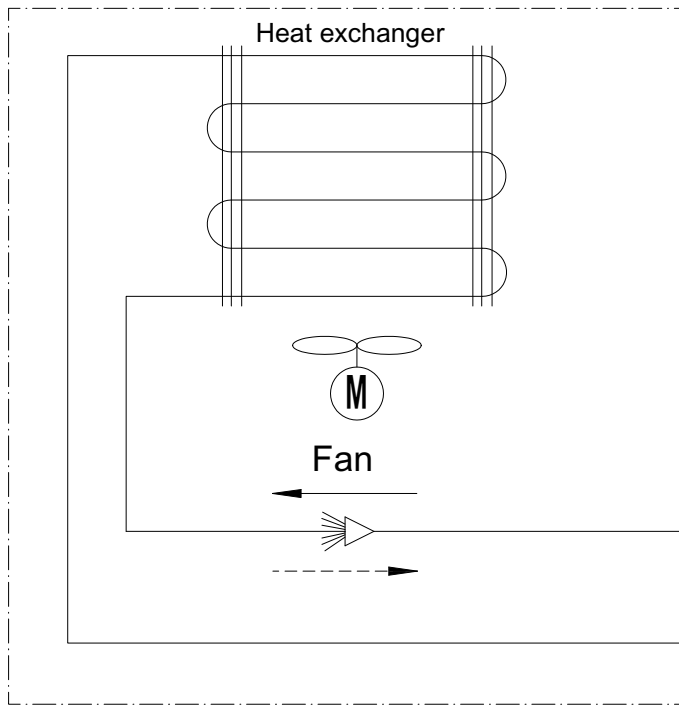
4D110787

8 Piping diagrams

8 - 1 Piping Diagrams

FDA-A

Indoor unit



Piping connections Ø

Model	Gas	Liquid
FDA125A5VEB	Ø 15.90	Ø 9.52

Liquid pipe connection port

Gas pipe connection port

Refrigerant flow
 Cooling ———→
 Heating - - - - -→

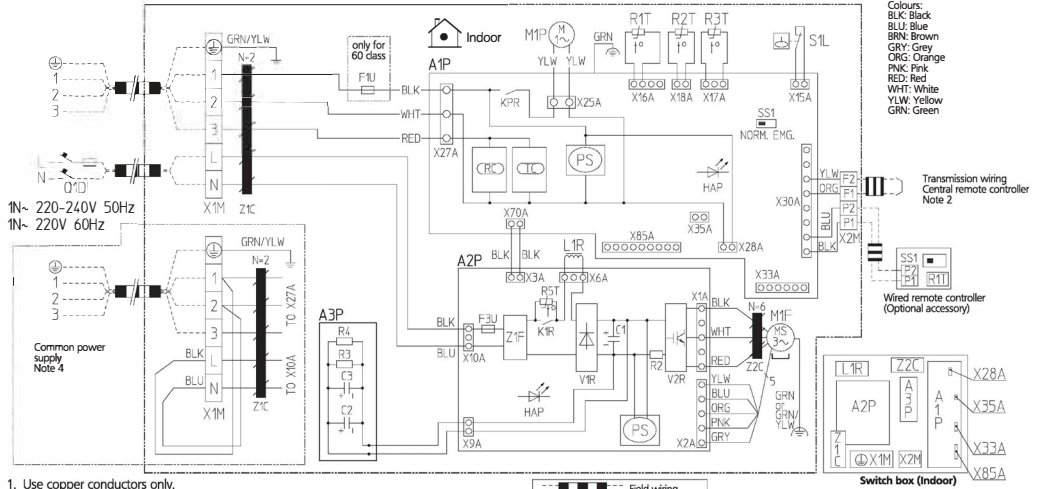
3D110675

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

FDA125A

- Indoor unit**
- A1P : Printed circuit board
 - A2P : Printed circuit board (Fan)
 - A3P : Printed circuit board (Capacitor)
 - C1,C2,C3 : Capacitor
 - F1U : Fuse (T, 5A, 250V)
 - F3U : Fuse (T, 6.3A, 250V)
 - HAP : Light emitting diode (Service monitor-green)
 - KPR,K1R : Magnetic relay
 - L1R : Reactor
 - M1F : Motor (Fan)
 - M1P : Motor (Drain pump)
 - PS : Switching power supply
 - Q1DI : Earth leak detector
 - R2 : Current sensing device
 - R3,R4 : Resistor (Electric discharge)
 - R1T : Thermistor (Suction air)
 - R2T : Thermistor (Liquid)
 - R3T : Thermistor (Coil)
 - R5T : Thermistor NTC (current limiting)
 - SS1 : Selector switch (emergency)
 - S1L : Floatswitch
 - V1R : Diode bridge
 - V2R : Power module
 - X1M : Terminal strip (Power supply)
 - X2M : Terminal strip (Control)
 - Z1C,Z2C : Noise filter (Ferrite core)
 - Z1F : Noise filter
 - Z2F : Signal receiver circuit
 - Z3F : Signal transmission circuit
- Connector optional accessory**
- X28A : Connector (Power supply for wiring)
 - X33A : Connector (for wiring)
 - X35A : Connector (Adapter)
 - X85A : Connector (For multi zoning)
- Wired remote controller**
- R1T : Thermistor (air)
 - SS1 : Selector switch (main/sub)



1. Use copper conductors only.
2. When using the central remote controller, see manual for connection to the unit.
3. The remote controller model varies according to the combination system. see technical materials and catalogues, etc. before connecting.
4. Refer to installation manual

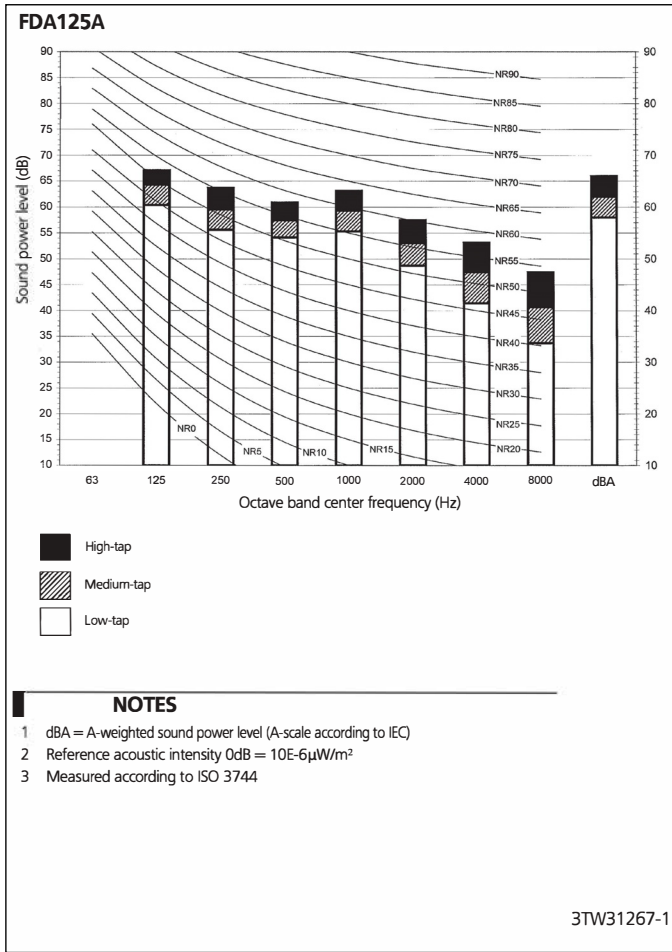
- L : Live
- N : Neutral
- : Connector
- : Wire clamp
- ⊕ : Protective earth (screw)

2TW31296-3

10 Sound data

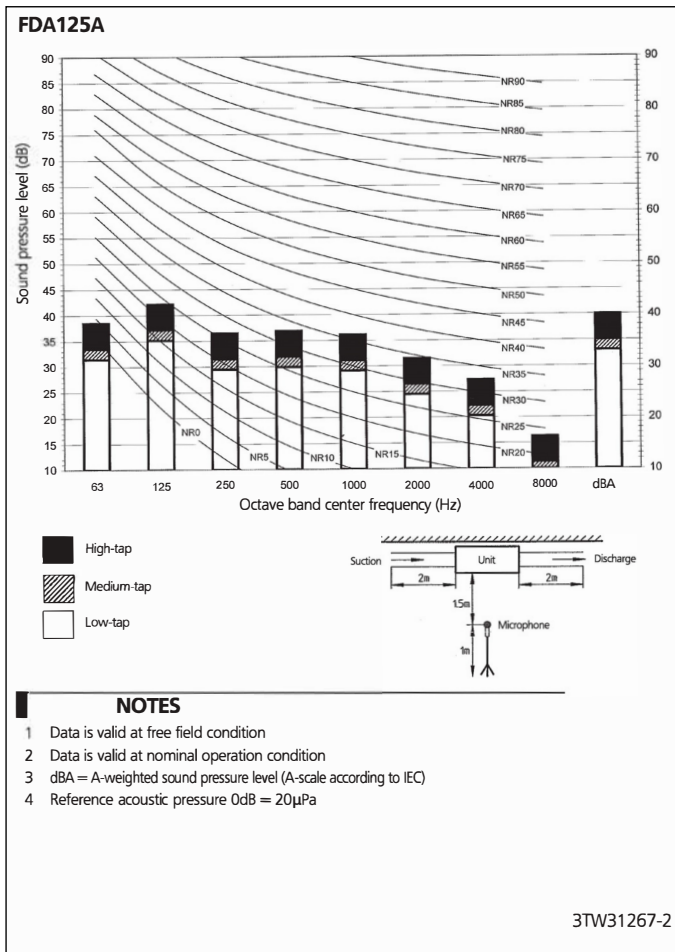
10 - 1 Sound Power Spectrum

10



10 Sound data

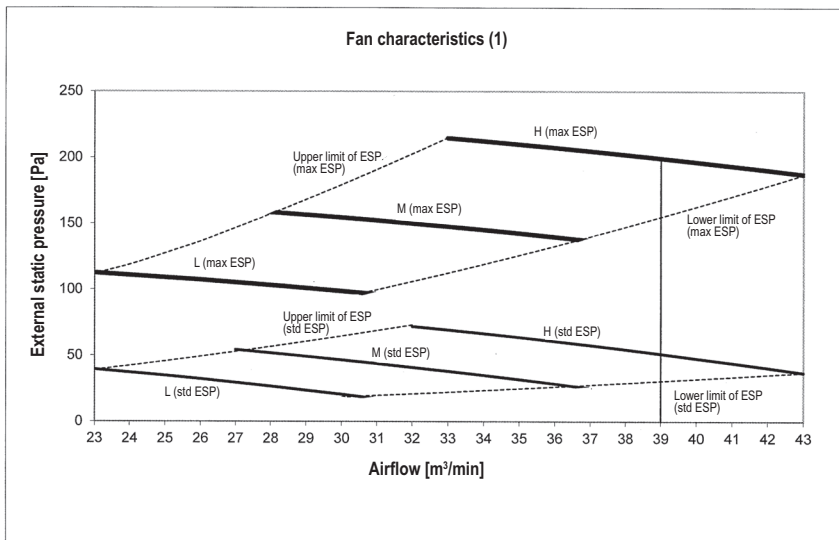
10 - 2 Sound Pressure Spectrum



11 Fan characteristics

11 - 1 Fan Characteristics

FDA125A

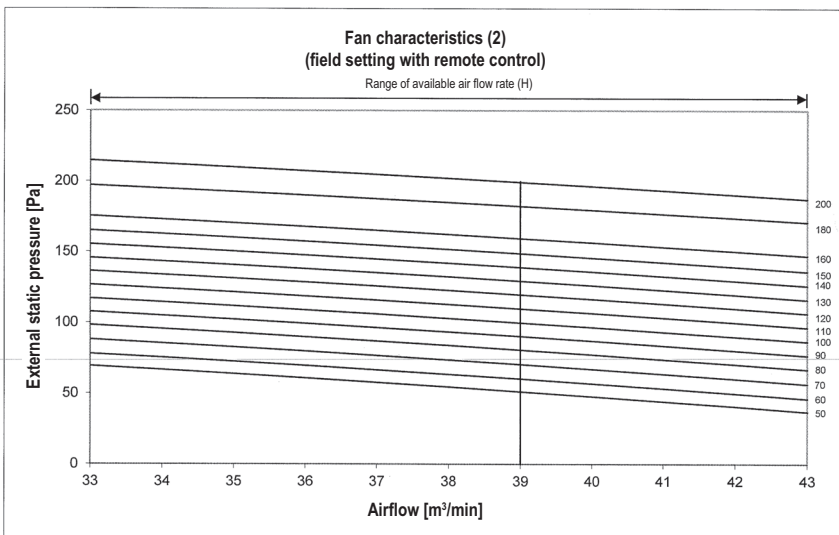


NOTES

1. Fan characteristics as shown are in "fan only" mode.
2. ESP: External static pressure

3D085254

FDA125A



NOTES

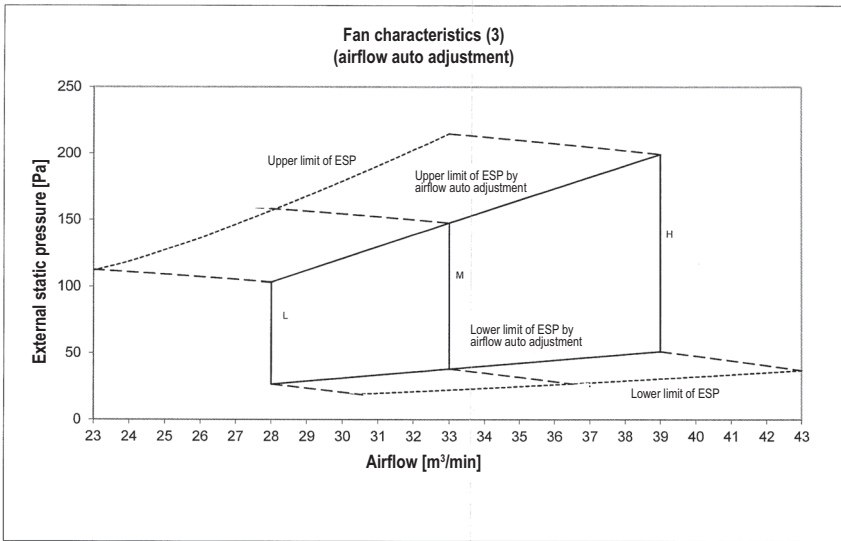
1. Fan characteristics as shown are in "fan only" mode.
2. ESP: External static pressure

3D085254

11 Fan characteristics

11 - 1 Fan Characteristics

FDA125A



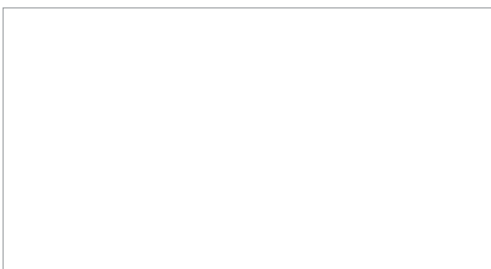
NOTES

1. Fan characteristics as shown are in "fan only" mode.
2. ESP: External static pressure

3D085254



Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende



EEDEN18 02/18



Daikin Europe N.V. participates in the Eurovent Certified Performance programme for Liquid Chilling Packages and Hydronic Heat Pumps, Fan Coil Units and Variable Refrigerant Flow systems. Check ongoing validity of certificate: www.eurovent-certification.com



The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V.. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.