

VED 530-741IEU

Fan coil unit for ducted installations



- **Horizontal installation**
- **Large range of available static pressure**
- **Inspectable ventilation group**



DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying. Designed to maintain the set temperature over time, ensuring very low sound levels. Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures. Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation. Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Brushless motor with continuous speed variation 0-100%. Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.

VERSIONS

IEU EC Brushless fan

OPTIONS

- Without options
- W** Electric connection and water connection on the same side
- TL** Electronic control board for 120V power supply
- TH** Electronic control board for 240V power supply

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room. The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Air filter easily removed and cleaned.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement. The unit is supplied with the delivery connection supplied.

CONFIGURATOR

Field	Description
1,2,3	VED
4	Size 5,7
5	main heat exchanger
3	3-row coil
4	4-row coil
6	Secondary heat exchanger
0	Without coil
1	1-row coil for heating only (1)
2	2-row coil for heating only (2)
7,8,9	Version
IEU	EC Brushless fan
10	Options
.	Without options
TH	Electronic control board for 240V power supply (not compatible with "W" version).
TL	Electronic control board for 120V power supply (not compatible with "W" version). Horizontal installation only.
W	Electric connection and water connection on the same side (3)

(1) 1-row secondary coil is available with 4-row main coil only

(2) 2-row secondary coil is available with 3-row main coil only

(3) W option is not available with TL or TH options

ACCESSORIES

Control panels

TX24: Wall-mounting thermostat for controlling 2/4 tube fan coils with brushless motors.

Installation accessories

BCV: Condensate drip.

RDA_V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

ACCESSORIES COMPATIBILITY (IEU WITH/OR OPTIONS TH E TL)

Control panels

Accessory	VED530IEU	VED540IEU	VED730IEU	VED740IEU
TX24

Accessory	VED532IEU	VED541IEU	VED732IEU	VED741IEU
TX24

Wall mounting and duct type installation accessories

Condensate drip

Accessory	VED530IEU	VED540IEU	VED730IEU	VED740IEU
BCV45
BCV67

Accessory	VED532IEU	VED541IEU	VED732IEU	VED741IEU
BCV45
BCV67

Straight suction coupling

Accessory	VED530IEU	VED540IEU	VED730IEU	VED740IEU
RDA450V
RDA670V

Accessory	VED532IEU	VED541IEU	VED732IEU	VED741IEU
RDA450V
RDA670V

90° suction coupling.

Accessory	VED530IEU	VED540IEU	VED730IEU	VED740IEU
RPA450V
RPA670V

Accessory	VED532IEU	VED541IEU	VED732IEU	VED741IEU
RPA450V
RPA670V

ACCESSORY COMPATIBILITY (WITH IEU VERSION AND W OPTION)

Wall mounting and duct type installation accessories

Straight suction coupling

Accessory	VED530IEUW	VED540IEUW	VED730IEUW	VED740IEUW
RDA450V
RDA670V

Accessory	VED532IEUW	VED541IEUW	VED732IEUW	VED741IEUW
RDA450V	.	.	.	.
RDA670V	.	.	.	.

90° suction coupling.

Accessory	VED530IEUW	VED540IEUW	VED730IEUW	VED740IEUW
RPA450V	.	.	.	.
RPA670V	.	.	.	.

Accessory	VED532IEUW	VED541IEUW	VED732IEUW	VED741IEUW
RPA450V	.	.	.	.
RPA670V	.	.	.	.

PERFORMANCE SPECIFICATIONS

2-pipe

	VED530IEUW			VED540IEUW			VED730IEUW			VED740IEUW		
	1	2	3	1	2	3	1	2	3	1	2	3
	L	M	H	L	M	H	L	M	H	L	M	H

Heating performance 158 °F / 140 °F (1)

Heating capacity	MBH	47.8	56.1	59.9	52.4	63.4	67.9	72.2	86.5	98.9	78.0	94.3	108.1
Water flow rate system side	gpm	5.3	6.4	6.8	5.9	7.2	7.7	8.2	9.8	11.2	8.8	10.7	12.2
Pressure drop system side	ft H ₂ O	4.35	6.02	7.00	6.02	8.36	9.70	12.71	18.40	22.42	8.70	12.04	15.39

Heating performance 113 °F / 104 °F (2)

Heating capacity	MBH	23.4	27.9	29.8	26.1	31.5	33.7	35.9	43.0	48.5	38.6	47.8	53.9
Water flow rate system side	gpm	5.2	6.2	6.6	5.8	7.0	7.5	8.0	9.5	10.8	8.6	10.6	12.0
Pressure drop system side	ft H ₂ O	4.68	6.36	7.03	7.03	8.36	10.04	12.71	17.40	22.08	8.70	11.04	15.39

Cooling performances 44.6 °F / 53.6 °F (3)

Cooling capacity	MBH	20.6	24.7	25.2	24.9	28.6	29.6	34.9	40.8	45.9	40.2	47.7	53.6
Sensible cooling capacity	MBH	15.7	19.0	20.5	16.8	20.4	21.0	28.4	33.2	37.7	27.9	33.2	37.3
Water flow rate system side	gpm	4.6	5.5	5.6	5.5	6.4	6.6	7.8	9.1	10.2	8.9	10.6	11.9
Pressure drop system side	ft H ₂ O	4.01	6.36	7.03	6.36	8.36	9.37	11.71	15.39	19.40	9.03	12.38	15.05

Fan

Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter		
Number	no.	2			2			3			3		
Air flow rate	cfm	659	824	895	647	812	883	965	1,201	1,418	942	1,177	1,388
High static pressure	in wg	0.12	0.20	0.22	0.12	0.20	0.22	0.12	0.20	0.27	0.12	0.20	0.27
Input power	kW	0.12	0.16	0.21	0.12	0.16	0.21	0.15	0.24	0.37	0.15	0.24	0.37
Signal 0-10V	%	66	76	62	62	76	90	62	76	90	62	76	90

Duct type fan coil sound data (4)

Sound power level (inlet + radiated)	dB(A)	53.0	59.0	62.0	53.0	59.0	62.0	62.0	66.0	68.0	62.0	66.0	68.0
Sound power level (outlet)	dB(A)	49.0	55.0	58.0	49.0	55.0	58.0	58.0	62.0	64.0	58.0	62.0	64.0

Diameter hydraulic fittings

Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"		
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Power supply

Power supply	V/Ph/Hz	110-240V/1/60Hz			110-240V/1/60Hz			110-240V/1/60Hz			110-240V/1/60Hz		
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(1) Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F

(2) Room air temperature 68 °F d.b.; Water (in/out) 113 °F/104 °F

(3) Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F

(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

The unit is supplied with nipples for hydraulic connections.

4-pipe

		VED532IEU			VED541IEU			VED732IEU			VED741IEU		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 149 °F / 131 °F (1)													
Heating capacity	MBH	32.6	39.1	41.2	22.8	26.0	26.9	51.0	60.1	67.5	36.0	40.5	44.2
Water flow rate system side	gpm	3.7	4.4	4.7	2.6	2.9	3.0	5.8	6.8	7.6	4.1	4.6	5.0
Pressure drop system side	ft H ₂ O	3.68	5.35	6.02	6.36	8.03	8.70	5.35	7.03	8.70	5.69	7.03	8.36
Cooling performances 44.6 °F / 53.6 °F (2)													
Cooling capacity	MBH	20.6	24.7	25.2	24.9	28.6	29.6	34.9	40.8	45.9	40.2	47.7	53.6
Sensible cooling capacity	MBH	15.7	19.0	20.5	16.8	20.4	21.0	28.4	33.2	37.7	27.9	33.2	37.3
Water flow rate system side	gpm	4.6	5.5	5.6	5.5	6.4	6.6	7.8	9.1	10.2	8.9	10.6	11.9
Pressure drop system side	ft H ₂ O	4.01	6.36	7.03	6.36	8.36	9.37	11.71	15.39	19.40	9.03	12.38	15.05
Fan													
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter		
Number	no.	2			2			3			3		
Air flow rate	cfm	624	800	859	624	800	859	942	1,177	1,383	942	1,177	1,383
High static pressure	in wg	0.12	0.20	0.22	0.12	0.20	0.22	0.12	0.20	0.27	0.12	0.20	0.27
Input power	kW	0.11	0.16	0.18	0.11	0.16	0.18	0.14	0.24	0.36	0.14	0.24	0.36
Signal 0-10V	%	66	84	90	66	84	90	62	76	90	64	78	90
Duct type fan coil sound data (3)													
Sound power level (inlet + radiated)	dB(A)	53.0	59.0	62.0	53.0	59.0	62.0	62.0	66.0	68.0	62.0	66.0	68.0
Sound power level (outlet)	dB(A)	49.0	55.0	58.0	49.0	55.0	58.0	58.0	62.0	64.0	58.0	62.0	64.0
Diameter hydraulic fittings													
Main heat exchanger	∅	3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	∅	1/2"			1/2"			1/2"			1/2"		
Power supply													
Power supply	V/Ph/Hz	110-240V/1/60Hz			110-240V/1/60Hz			110-240V/1/60Hz			110-240V/1/60Hz		

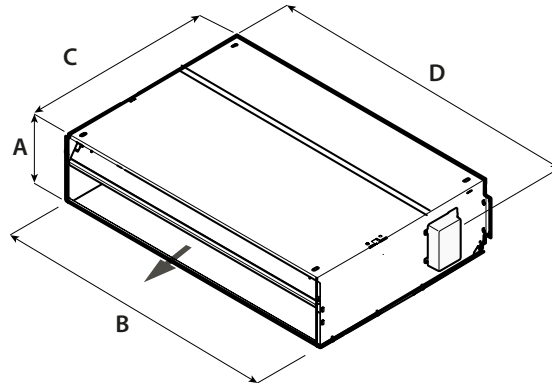
(1) Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F

(2) Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F

(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

The unit is supplied with nipples for hydraulic connections.

DIMENSIONS



2-pipe

		VED530IEU	VED540IEU	VED730IEU	VED740IEU
Dimensions and weights					
A	in	11.8	11.8	13.8	13.8
B	in	44.6	44.6	60.4	60.4
C	in	29.0	29.0	31.1	31.1
D	in	47.5	47.5	63.3	63.3
		VED530IEUW	VED540IEUW	VED730IEUW	VED740IEUW
Dimensions and weights					
A	in	11.8	11.8	13.8	13.8
B	in	44.6	44.6	60.4	60.4
C	in	29.0	29.0	31.1	31.1
D	in	51.6	51.6	67.2	67.2

4-pipe

		VED532IEU	VED541IEU	VED732IEU	VED741IEU
Dimensions and weights					
A	in	11.8	11.8	13.8	13.8
B	in	44.6	44.6	60.4	60.4
C	in	29.0	29.0	31.1	31.1
D	in	47.5	47.5	63.3	63.3
		VED532IEUW	VED541IEUW	VED732IEUW	VED741IEUW
Dimensions and weights					
A	in	11.8	11.8	13.8	13.8
B	in	44.6	44.6	60.4	60.4
C	in	29.0	29.0	31.1	31.1
D	in	51.6	51.6	67.2	67.2

Aermec reserves the right to make any modifications deemed necessary.
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