

DUCTABLE AIR TREATMENT UNITS

DUCTABLE AIR TREATMENT UNITS WITH CENTRIFUGAL FANS



ETD 52

ETD... Series

Cooling capacity from 4 to 51 kW

The ductable air treatment units of ETD series are able to meet the several and different requirements of conditioning market

These units are equipped with centrifugal fans and are planned for the direct installation on duct

Available versions:

ETD... standard version

Made up of:

STRUCTURE

Made in galvanized steel plate, with a gauge which an excellent solidity and functionality and including anchorage slotted holes for a safe and simple fixing.

Internally, on contact with air flow, it is covered by sound-proofing and thermo protective material of very good quality.

HEAT EXCHANGER COIL

With copper pipes and aluminium fins, fixed on pipes through mechanical expansion, with special and innovative profile for a higher exchanging power. Manifolds are on the left side of the unit (considering the air discharge side) and made up of copper with male gas screwed connections and completed with two air vent valves.

If desired, it is possible to have the manifolds on the right side.

Under the coil it is drain pan.

FAN

Centrifugal fan with double intake, horizontally developed impellers of aluminium, balanced both statically and dynamically, and 1 Ph direct connected motor with overcharge protection.

3 rotation speeds

Accessories

AD	Hydraulic connections / manifolds on the right side
BC	Auxiliary hot water coil for 4-pipes installation
FX	Air filter
Fxa	Air filter with activated carbon
JA	Straight plenum on air discharge
JB	90° insulated plenum on air discharge
JC	90° plenum on air inlet
JE	Plenum on air inlet with spigots and air filter
JF	Insulated plenum on air discharge with spigots
JG	Antivibrating joint
JH	Straight Plenum on air inlet
JI	Connection flange
K22	ON/OFF 2-way valves for 2-pipe systems
K32	ON/OFF 3-ways valves for 2-pipe systems
K24	ON/OFF 2-way valves for 4-pipe systems
K34	ON/OFF 3-ways valves for 4-pipe systems
PB	Condensing water pump
PR	Fresh air inlet (max 33%)
RE	Electric heaters
SI	Interface card for the control of max 4 units with only one thermostat (one card and one thermostat every 4 units)
T0	Water low temperature thermostat
T3	Remote control with manual ON/OFF switch, summer/winter manual switch, 3 speed selection
T4	Programmable remote electronic control
T5	Programmable electronic control with infrared remote control (not usable with RE)
V2	Shut-off valves for 2-pipe systems
V4	Shut-off valves for 4-pipe systems

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ETD... Technical data

MODELS (Size)	ETD...	12	22	32	42	52	62	72
2 pipes version								
Total cooling capacity 1)	kW	4,01	7,05	9,20	10,56	13,09	27,81	50,64
Sensible cooling capacity 1)	kW	3,25	5,64	7,36	8,63	11,02	21,13	39,50
Water flow rate 1)	l/s	0,192	0,337	0,441	0,508	0,627	1,332	2,425
Heating capacity 2)	kW	4,97	8,51	11,21	12,80	16,82	32,43	60,11
Water flow rate 2)	l/s	0,192	0,337	0,441	0,508	0,627	1,332	2,425
Pressure drop cooling operation 1)	kPa	20	31	34	32	36	34	40
Pressure drop heating operation 2)	kPa	17	27	29	28	31	29	34
Heating capacity 3)	kW	8,32	14,20	18,72	21,35	28,25	53,88	100,07
Water flow rate 3)	l/s	0,199	0,340	0,448	0,511	0,677	1,290	2,396
Pressure drop heating operation 3)	kPa	16	24	27	25	32	24	30
Electric heaters capacity 4)	kW	4,5	9	9	12	12	18	24
Absorbed current 4)	A	6,84	13,67	13,67	18,23	18,23	27,35	36,46
Air flow rate 5)	m ³ /h	837	1.423	1.951	2.131	3.002	4.678	9.250
Fans speed 5)	rpm	1.360	1.360	1.200	1.207	1.382	806	822
Sound pressure level - minimum speed 6)	dB(A)	63	58	61	58	62	69	71
Sound pressure level - medium speed 6)	dB(A)	67	65	68	65	69	73	76
Sound pressure level - maximum speed 6)	dB(A)	68	69	70	69	74	78	81
MODELS (Size)	ETD...	14	24	34	44	54	64	74
4 pipes version								
Total cooling capacity 1)	kW	3,60	6,35	8,29	9,55	12,26	24,99	45,56
Sensible cooling capacity 1)	kW	3,11	5,33	7,05	8,02	10,56	20,19	37,79
Water flow rate 1)	l/s	0,173	0,304	0,397	0,457	0,587	1,197	2,182
Heating capacity 2)	kW	4,18	7,00	9,15	10,54	13,99	38,83	70,20
Water flow rate 2)	l/s	0,100	0,168	0,219	0,252	0,335	0,930	1,681
Pressure drop cooling operation 1)	kPa	16	24	28	25	31	27	32
Pressure drop heating operation 2)	kPa	27	23	36	21	34	33	36
Heating capacity 3)	kW	2,56	4,28	5,59	6,44	8,55	23,73	42,90
Water flow rate 3)	l/s	0,124	0,207	0,271	0,312	0,414	1,150	2,079
Pressure drop heating operation 3)	kPa	46	39	62	36	58	56,0	62
Air flow rate 5)	m ³ /h	795	1.352	1.853	2.024	2.852	4.444	8.788
Fans speed 5)	rpm	1.365	1.365	1.205	1.214	1.387	810	832
Sound pressure level - minimum speed 6)	dB(A)	63	58	61	59	61	69	71
Sound pressure level - medium speed 6)	dB(A)	67	65	68	66	68	73	76
Sound pressure level - maximum speed 6)	dB(A)	68	69	70	70	73	78	81
Common data								
Electrical fan motor power 7)	W	162	218	322	340	582	1.320	2.600
Absorbed current 7)	A	0,72	0,97	1,43	1,51	2,58	5,86	11,54
Cooling coil water connections	Ø gas M	1/2"	1/2"	3/4"	3/4"	1"	1 1/4"	1 1/2"
Heating coil water connections	Ø gas M	1/2"	1/2"	1/2"	1/2"	3/4"	1"	1 1/4"
Cooling coil water volume	l	1,36	2,18	2,63	3,25	3,79	9,38	14,44
Heating coil water volume	l	0,45	0,73	0,88	1,08	1,26	4,69	7,22
Length	mm	738	1.088	1.188	1.428	1.428	1.481	2.168
Width	mm	591	591	591	591	591	910	910
Height	mm	299	299	323	323	373	674	674
Weight 2 pipes units	kg	28	36	41	46	57	117	192
Weight 4 pipes units	kg	30	38	44	49	61	130	210
Power supply 230 V/50 Hz / 1Ph + N + T								

- 1) Room temperature 27 °C dry bulb and 19 °C wet bulb - water 7/12 °C
- 2) Room temperature 20 °C - inlet water temperature 50 °C
- 3) Room temperature 20 °C - water to the coil 70/60 °C
- 4) Electric heaters are optional and are not available on 4 pipes version
- 5) Maximum speed and cleaned filter
- 6) Measured according to ISO 23741
- 7) Maximum absorbed value