

EN

DUCTED UNITS



EBH
EDS



EURAPO

INTEGRATED
COMFORT
SYSTEMS

EBH | EDS HIGH PRESSURE UNITS

EBH high pressure ducted units and EDS Double Skin units, thanks to their high pressure fan decks, permit to satisfy every request of heating and cooling applications in big environments, where ducted air distribution is requested. They are suitable for horizontal installation.

These are units for COOLING and HEATING applications; they are fed with cold and hot water and used according to their relevant performance features. EBH and EDS units are components of cooling and/or heating systems; consequently, they are without any safety devices on the water circuit. These units have been designed for temperatures up to 75 °C. .

EDS
HIGH PRESSURE UNIT



EBH
HIGH PRESSURE UNIT

EBH features

- **6 SIZES** for horizontal ducted installation, 2 and 4 pipe system.
- **HIGH PRESSURE:** they are designed for ducted installation with external static pressure up to 300 Pa.
- **STRUCTURE** is realized in galvanized metal sheet, insulated internally; in order to facilitate all maintenance operations, the structure is divided in three separate and independent sections (condensate tray, fan deck, air filter).
- **HEAT EXCHANGERS** can have 2, 3 or 4 rows, made by copper pipes and aluminium fin pack; 5-row coils are available for sizes 060 and 070. Up to size 050 all coils are provided with air vent valves. For sizes 060 and 070, the air vent valve is supplied only with the valve kit (optional).
- **REVERSIBLE WATER CONNECTIONS:** these high-pressure units can be ordered with right (standard) or left water connections; it is possible to reverse the water connections on site, if necessary.
- **FAN DECK** is composed by a 3 speed motor and two centrifugal galvanized steel scrolls. All motors are provided with a permanently connected capacitor and thermal protection of the windings with automatic reset.
- **CONDENSATE TRAY** is realized in galvanized steel with water discharge pipes on both sides.
- **AIR FILTER** consists of a washable polyester acrylic fibre, pleated and protected by a metal frame. The filter section can be easily removed for cleaning and maintenance. Filtration class G3.
- **ELECTRIC PANEL** is composed by a terminal board with screw terminals contained in an ABS plastic box (IP30). A supporting relay is supplied as standard starting from size 040.
- **4 BRACKETS** are supplied along with the unit, to fix it to the ceiling.

EBH
UNIT WITH AIR SUPPLY
PLENUM



EDS features

- **9 SIZES** for horizontal ducted installation, 2 pipe system.
- **HIGH PRESSURE:** they are designed for ducted installation with external static pressure up to 300 Pa.
- **DOUBLE SKIN STRUCTURE** is composed by insulated 25 mm thick panels, colour RAL9002, and aluminium supporting frame.
- **HEAT EXCHANGERS** can have 2, 3 or 4 rows, made by copper pipes and aluminium fin pack; 5-row coils are available for sizes 060 and 070. Up to size 050 all coils are provided with air vent valves.
- **NOT REVERSIBLE WATER CONNECTIONS:** EDS units can be ordered with right (standard) or left water connections.
- **FAN DECK** is composed by a 3 speed motor and two centrifugal galvanized steel scrolls. All motors are provided with a permanently connected capacitor and thermal protection of the windings with automatic reset.
- **CONDENSATE TRAY** is realized in galvanized steel with water discharge pipe located on the water connections' side.
- **AIR FILTER** consists of a washable polyester acrylic fibre, pleated and protected by a metal frame. The filter section can be easily removed for cleaning and maintenance. Filtration class G3.
- **ELECTRIC PANEL** is composed by a terminal board with screw terminals contained in a high protection box (IP44). A supporting relay is supplied as standard starting from size 040.
- **4 BRACKETS** are supplied along with the unit, to fix it to the ceiling.

EDS
HIGH PRESSURE UNIT





HIGH PRESSURE UNIT **EDS**

The big advantages of the EURAPO high pressure units are:

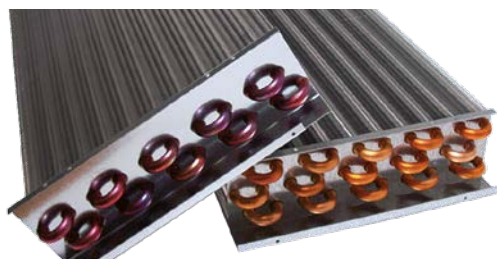
- quiet operation
- reliability
- excellent quality/price ratio
- high coefficient of performance
- sturdiness and solid construction
- accurate choice of each single component
- environmentally friendly sandwich panels (EDS model)
- high protection electric panel (IP44), available also on EBH models
- easy installation and maintenance operations



EBH WITH VALVE

Accessories for EBH units:

- **VALVE KIT** 3 way 4-port regulating valves with ON/OFF or modulating actuators, provided with copper connection kit and insulation shell (supplied loose).
- **CONDENSATE PUMP** with 6 m maximum head.
- **CONDENSATE TRAY** in stainless steel.
- **SPECIAL FILTER** made of washable polyester acrylic fibre, filtration class F5.
- **ADDITIONAL COILS** for hot water with 2 or 3 rows, for units to be installed in 4-pipe systems.
- **DISTRICT COOLING COILS**: Heat exchangers with a reduced number of circuits, suitable for applications where the water thermal head is about 9 °C.
- **ELECTRIC HEATER** it is an additional section to be mounted on the air outlet, provided with all necessary safety thermostats. The heating capacity is different from size to size, up to 9 kW.
- **AIR DELIVERY/AIR INTAKE PLENUM** with several frontal spigots.
- **RAL 9001 PAINTING** with oven dried epoxy powders. All RAL colours are available.
- **REGULATING SYSTEMS**: the whole range of EURAPO regulators is available: fan speed selectors, electro-mechanical controllers, electronic controllers with microprocessor, digital regulators with a centralized supervision system communicating via Bus based on standard protocols. For more information, please either refer to the specific EURAPO technical literature or visit the official web site www.eurapo.it.



Additional coils



Electric heater



Valve kit



Condensate pump



Air delivery/air intake plenum



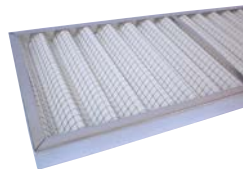
RAL 9001 painting

Accessories for EDS units:

- **VALVE KIT** 3 way 4-port regulating valves with ON/OFF or modulating actuators, provided with copper connection kit.
- **CONDENSATE PUMP** with 6 m maximum head.
- **SPECIAL FILTER** made of washable polyester acrylic fibre, filtration class F5.
- **DISTRICT COOLING COILS:** Heat exchangers with a reduced number of circuits, suitable for applications where the water thermal head is about 9 °C.
- **ELECTRIC HEATER** it is an additional section to be mounted on the air outlet, provided with all necessary safety thermostats. The heating capacity is different from size to size, up to 9 kW.
- **AIR DELIVERY/AIR INTAKE PLENUM** with several frontal spigots.
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Valve kit



Special filter



Electric heater



Air delivery/air intake plenum







Display console



Analogue plus console



Technical data EBH UNIT:

STANDARD TECHNICAL DATA AT DIFFERENT Pa OF EXTERNAL STATIC PRESSURE-ASYNCHRONOUS								
Models		EBH 020	EBH 030	EBH 040	EBH 050	EBH 060 (4)	EBH 070 (4)	
MAX External static pressure [Pa]		125	175	200	250	300	300	
Total cooling capacity [kW]	(1) 	MAX	6,95	9,49	11,80	13,72	23,44	27,62
		MED	5,90	8,23	10,40	12,60	20,94	25,56
		MIN	4,30	7,11	8,91	11,36	16,37	23,55
Heating capacity [kW]	(2) 	MAX	7,08	11,40	14,30	17,40	27,46	34,03
		MED	6,20	9,62	12,20	15,53	24,05	30,96
		MIN	4,55	8,20	10,40	13,90	18,00	28,05
Air volume [m³/h]		MAX	1145	1910	2680	3250	4414	5548
		MED	920	1520	2130	2870	3750	4936
		MIN	620	1205	1655	2470	2649	4374
Sound pressure level [dB(A)]	(3)	MAX	53	54	58	61	65	70
		MED	47	50	52	57	62	68
		MIN	37	46	46	54	54	65
Absorbed current [A]		MAX	0,72	1,76	2,03	2,85	7,50	8,19
		MED	0,52	1,45	1,64	2,39	4,29	7,61
		MIN	0,32	1,30	1,28	2,06	2,61	6,85
Power input [W]		MAX	171	352	451	588	1060	1801
		MED	119	305	361	512	790	1631
		MIN	72	267	274	440	543	1446
N° rows (standard)		4	4	4	4	4	4	
Power supply [V-ph-Hz]		230-1-50/60						

(1) Air temperature: 27 °C d.b.,
47% rel. humidity - Water temperature: 7/12 °C

(2) Air temperature: 20 °C,
50% rel. humidity - Water inlet temperature:
45/50 °C.

(3) Pressure level in open field at 1 m distance.
(4) Performances are out of scope Eurovent FCP.

**In order to select the EBH or EDS ducted
fancoil with District Cooling coils, please
use the EURAPO software for selection.**

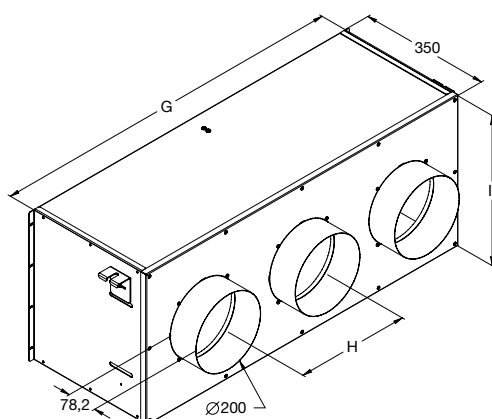
Technical data EDS UNIT:

STANDARD TECHNICAL DATA 50 Pa EXTERNAL STATIC PRESSURE-ASYNCHRONOUS											
Models		EDS 004	EDS 006	EDS 008	EDS 020	EDS 030	EDS 040	EDS 050	EDS 060	EDS 070	
MAX External static pressure [Pa]		50	50	50	125	175	200	250	300	300	
Total cooling capacity [kW]	(1)	MAX	2,54	3,10	4,13	7,33	9,77	12,85	13,64	24,06	27,13
		MED	1,87	2,40	3,54	5,51	7,73	10,25	12,14	21,52	25,08
		MIN	1,10	1,61	2,69	3,28	6,63	8,25	10,83	16,80	23,09
Heating capacity [kW]	(2)	MAX	2,65	3,61	4,77	7,89	12,09	15,21	17,14	25,09	31,95
		MED	1,97	2,77	4,07	5,75	9,21	11,79	14,96	22,09	29,16
		MIN	1,07	1,70	3,16	3,37	7,75	9,30	13,13	16,74	26,50
Air volume [m³/h]		MAX	400	596	848	1383	2230	3026	3472	4414	5548
		MED	283	432	693	932	1577	2162	2894	3750	4936
		MIN	143	245	506	494	1273	1598	2438	2649	4374
Sound pressure level [dB(A)]	(3)	MAX	42	44	46	53	56	56	60	65	70
		MED	40	41	44	46	50	51	57	62	68
		MIN	38	39	41	42	48	47	54	54	65
Absorbed current [A]		MAX	0,26	0,35	0,46	0,84	2,28	2,37	3,98	7,50	8,19
		MED	0,21	0,28	0,37	0,53	1,20	1,69	2,81	4,29	7,61
		MIN	0,15	0,19	0,29	0,31	1,00	1,29	2,21	2,61	6,85
Power input [W]		MAX	59	80	102	187	352	511	666	1060	1801
		MED	46	62	84	121	235	365	557	790	1631
		MIN	33	44	65	69	191	267	456	543	1446
N° rows (standard)		4	4	4	4	4	4	4	4	4	
Power supply [V-ph-Hz]		230-1-50/60									

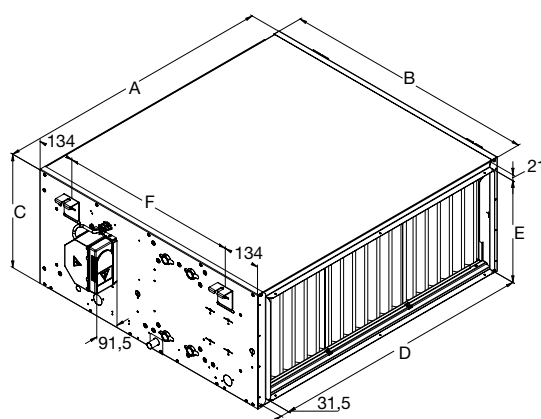


Dimensions [mm] EBH UNIT

Model	A	B	C	D	E	F	G	H	I	Connections	Spigots
020+030	990	902	408	927	366	634	963	307	404	G 1/2" F	3
040+050	1240	902	408	1177	366	634	1213	300	404	G 1/2" F	4
060+070	1635	1160	518	1572	476	892	1608	311	514	G 1" M	5

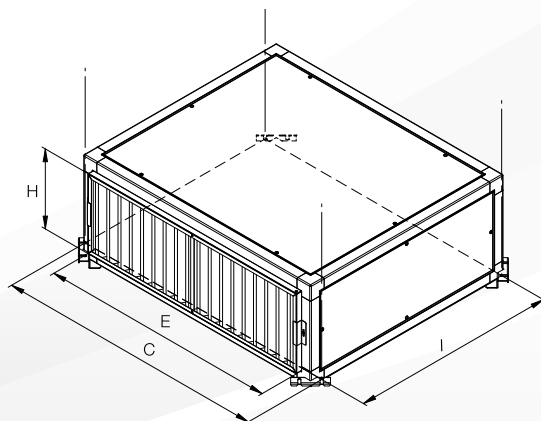
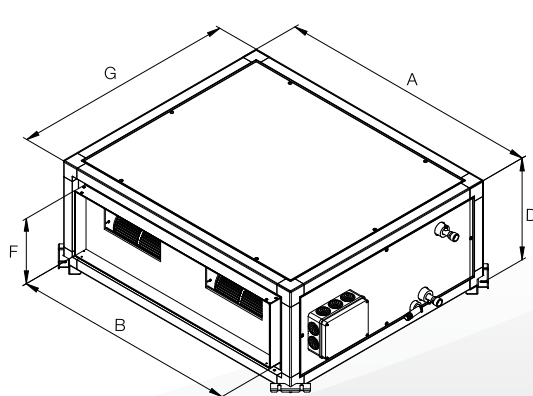


OPTIONAL PLENUM



Dimensions [mm] EDS UNIT

Model	A	B	C	D	E	F	G	H	I	Connections
004	882	742	924	390	799	250	855	306	798	G 3/4" M
006+008	1007	867	1049	390	924	250	855	306	798	G 3/4" M
020+030	1132	992	1174	440	1049	300	855	357	798	G 3/4" M
040+050	1382	1242	1424	440	1299	300	855	357	798	G 3/4" M
060+070	1777	1637	1819	550	1694	410	1030	467	978	G 1" M

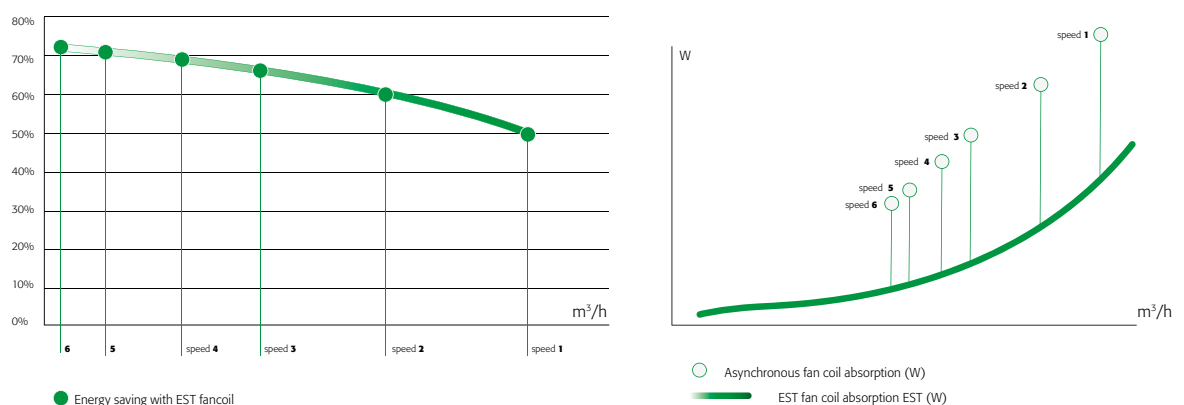




EST (Energy Saving Technology) is applied to the **EURAPO** fan coil units and cassette units. It permits to obtain extremely low electrical absorption and a continuous modulation of the air flow, constantly related to the concrete need of energy in the room.

EST technology is composed by a brushless motor combined to a dedicated electronic device (inverter), managed by specific regulators developed by **EURAPO**.

In comparison to the traditional units equipped with asynchronous three-speed-motors, the fan coil and cassette units with brushless motors can obtain a considerable **energy saving**, by reducing the power consumption **up to 70%**.



Thanks to the step-less modulation of the fan speeds it is possible to accurately regulate the air volume in a very precise way, in strict relation to the real need of air conditioning in the room. Oscillations in the temperature and relative humidity are reduced at lowest level: a guarantee for the **highest comfort in the room**.

The possibility to reach very low air volumes makes the units **extremely quiet** at the **lowest motor revolutions**. **EST** technology is designed in particular for offices, hospitals, nursing homes and hotels.

It is available for the **EURAPO** range of fan coil units, cassette units and ducted units.

Technical data HIGH PRESSURE UNIT ESTEBH



STANDARD TECHNICAL DATA AT DIFFERENT Pa OF EXTERNAL STATIC PRESSURE-EST

Models		ESTEBH 020	ESTEBH 030	ESTEBH 040	ESTEBH 050	ESTEBH 060 (4)	
MAX External static pressure [Pa]		125	175	200	250	300	
Total cooling capacity [kW]	(1)	MAX	6,75	9,94	13,64	14,40	23,16
		MED	5,62	8,13	11,22	13,25	17,84
		MIN	4,23	7,11	8,43	11,90	11,16
Heating capacity [kW]	(2)	MAX	7,07	11,52	16,24	18,07	27,08
		MED	5,65	9,07	12,87	16,25	19,99
		MIN	4,11	7,81	9,35	14,37	11,70
Air volume [m³/h]		MAX	1040	1948	2848	3217	4337
		MED	796	1471	2160	2834	2999
		MIN	549	1241	1484	2442	1609
Sound pressure level [dB(A)]	(3)	MAX	54	57	60	64	68
		MED	47	50	55	61	62
		MIN	38	46	46	58	59
Absorbed current [A]		MAX	1,08	1,12	1,85	2,17	3,93
		MED	0,58	0,68	0,97	1,59	2,12
		MIN	0,29	0,53	0,53	1,12	0,56
Power input [W]		MAX	161	261	405	478	771
		MED	75	132	196	341	351
		MIN	36	91	82	234	96
N° rows (standard)		4	4	4	4	4	
Power supply [V-ph-Hz]		230-1-50/60					

(1) Air temperature: 27 °C d.b.,
47% rel. humidity - Water temperature: 7/12 °C

(2) Air temperature: 20 °C, 50% rel. humidity
Water inlet temperature: 45/40 °C

(3) Pressure level in open field at 1 m distance.

In order to select the EBH or EDS ducted fancoil with District Cooling coils, please use the EURAPO software for selection.

Technical data HIGH PRESSURE UNIT ESTEDS



STANDARD TECHNICAL DATA 50 Pa EXTERNAL STATIC PRESSURE-EST

Models		ESTEDS 004	ESTEDS 008	ESTEDS 020	ESTEDS 030	ESTEDS 040	ESTEDS 050	ESTEDS 060	
MAX External static pressure MAX [Pa]		50	50	125	175	200	250	300	
Total cooling capacity [kW]	(1)	9 V	4,32	4,36	8,33	8,96	12,65	14,37	23,77
		7 V	3,58	3,64	7,04	7,77	11,30	13,01	20,93
		6 V	2,37	2,44	5,07	7,11	10,77	11,71	18,39
Air volume [m³/h]		9 V	798	914	1659	1961	2956	3787	4337
		7 V	619	718	1301	1589	2500	3223	3599
		6 V	367	443	836	1402	2333	2739	2999
Sound pressure level [dB(A)]	(3)	9 V	50	49	57	57	61	63	68
		7 V	46	45	54	54	58	60	66
		6 V	43	42	48	52	56	57	62
Absorbed current [A]		9 V	0,55	0,65	1,90	1,48	1,79	3,05	3,93
		7 V	0,40	0,44	1,23	0,96	1,28	2,24	2,93
		6 V	0,24	0,26	0,61	0,97	1,03	1,65	2,12
Power input [W]		9 V	61	69	231	233	372	616	771
		7 V	42	48	146	159	257	430	541
		6 V	24	27	71	130	221	294	351
N° rows (standard)		4	4	4	4	4	4	4	
Power supply [V-ph-Hz]		230-1-50/60							
<i>ESTEDS unit is available for cooling operation only.</i>									



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