

Water terminal unit

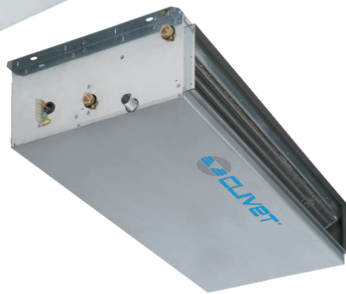
Uncased horizontal and vertical indoor installation

Ductable

Capacity from 6 to 20,2 kW



ELFODuct MP INV



ELFODuct MP INH



ELFODuct

The **ELFODuct MP** are the new generation air-treatment water terminal units ideal for installations where ducted air distribution is necessary. The units are designed for installation in suspended ceilings or lining walls and are characterized by their compactness and extremely low noise levels.

The advantages of the new series are:

- ▶ Version for 2 and 4-pipe systems;
- ▶ Version for horizontal installations in suspended ceilings and version for vertical installations in lining walls;
- ▶ High energy efficiency thanks to the configuration with fan deck with DC Brushless motor;
- ▶ Available head up to **120 Pa**;
- ▶ Very low sound levels;
- ▶ Internal exchanger with large exchange surface, easily reversed water connections even on construction site;
- ▶ Complete accessories range for the full installation;
- ▶ Complete range of electromechanical and electronic thermostats and serial port RS485 with MODBUS protocol.

functions and features



Cool & heat



Vertical: uncased



Horizontal: uncased



Water

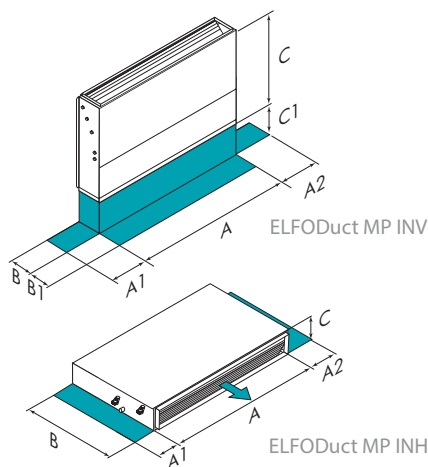


ELFOControl⁺



DC Motor

dimensions and clearances



Size – ELFODUCT MP			15	21	25	31	41	51	61	71
CC2-INV	A - Length	mm	880	880	880	1280	1280	1280	1680	1680
CC2-INV	B - Width	mm	250	250	250	250	250	250	250	250
CC2-INV	C - Height	mm	600	600	600	600	600	600	600	600
CC2-INV	A1	mm	400	400	400	400	400	400	400	400
CC2-INV	A2	mm	200	200	200	200	200	200	200	200
CC2-INV	B1	mm	250	250	250	250	250	250	250	250
CC2-INV	C1	mm	100	100	100	100	100	100	100	100
CC2-INV	Operating weight	kg	34	35	37	48	50	53	65	68
CC2-INV	A - Length	mm	880	880	880	1280	1280	1280	1680	1680
CC2-INH	B - Width	mm	575	575	575	575	575	575	575	575
CC2-INH	C - Height	mm	250	250	250	250	250	250	250	250
CC2-INH	A1	mm	400	400	400	400	400	400	400	400
CC2-INH	A2	mm	200	200	200	200	200	200	200	200
CC2-INH	Operating weight	kg	34	35	37	48	50	53	65	68
CC4-INV	A - Length	mm	880	880	-	1280	1280	1680	1680	-
CC4-INV	B - Width	mm	250	250	-	250	250	250	250	-
CC4-INV	C - Height	mm	600	600	-	600	600	600	600	-
CC4-INV	A1	mm	400	400	-	400	400	400	400	-
CC4-INV	A2	mm	200	200	-	200	200	200	200	-
CC4-INV	B1	mm	250	250	-	250	250	250	250	-
CC4-INV	C1	mm	100	100	-	100	100	100	100	-
CC4-INV	Operating weight	kg	36	37	-	51	53	67	69	-
CC4-INH	A - Length	mm	880	880	-	1280	1280	1680	1680	-
CC4-INH	B - Width	mm	250	250	-	250	250	250	250	-
CC4-INH	C - Height	mm	575	575	-	575	575	575	575	-
CC4-INH	A1	mm	400	400	-	400	400	400	400	-
CC4-INH	A2	mm	200	200	-	200	200	200	200	-
CC4-INH	Operating weight	kg	36	37	-	51	53	67	69	-

CAUTION! For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

CC2-INV 2 pipes-Vertical uncased version
 CC2-INH 2 pipes-Horizontal uncased version
 CC4-INV 4-pipe-Vertical uncased version
 CC4-INH 4-pipe-Horizontal uncased version

versions and configurations

VERSION:

- ▶ **INH** Horizontal uncased version (Standard)
- ▶ **INV** Vertical uncased version

WATER FITTINGS:

- ▶ **DX** Water fittings to the right (Standard)
- ▶ **SX** Water fittings to the left

COIL CONFIGURATION:

- ▶ **CC2** Coil configuration for 2-pipe system (Standard)
- ▶ **CC4** Coil configuration for 4-pipe system (sizes 15÷21, 31÷61)

RETURN:

- ▶ **RP** Rear intake (Standard)
- ▶ **R3** Downward air return
- ▶ **RF** Front air inlet

technical data

Size – ELFODUCT MP		15	21	25	31	41	51	61	71
2-pipe									
HIGH SPEED									
Airflow	m3/h	1.100	1.200	1.150	2.100	2.300	2.200	3.100	2.950
▶ Cooling capacity	(1) kW	6,01	7,48	8,59	10,30	12,90	15,00	17,20	20,20
Sensible capacity	(1) kW	4,57	5,56	6,16	8,10	9,95	11,10	13,30	14,90
Water flow-rate	(1) l/h	1.034	1.287	1.477	1.772	2.219	2.580	2.958	3.474
Water pressure drop	(1) kPa	28,70	37,80	32,40	21,00	33,10	25,10	23,10	22,00
▶ Heating capacity	(2) kW	6,55	7,90	8,30	11,70	14,40	15,20	19,40	20,40
Water flow-rate	(2) l/h	1.127	1.359	1.428	2.012	2.477	2.614	3.337	3.509
Water pressure drop	(2) kPa	29,60	36,70	26,30	23,60	35,80	22,30	25,50	19,50
Total power input	W	179	179	179	330	330	330	409	409
MEDIUM SPEED									
Airflow	m3/h	913	1.008	978	1.953	2.139	2.068	2.821	2.714
▶ Cooling capacity	(1) kW	5,35	6,71	7,77	9,85	12,33	14,44	16,22	19,18
Sensible capacity	(1) kW	4,00	4,91	5,49	7,69	9,45	10,62	12,43	14,04
Water flow-rate	(1) l/h	921	1.155	1.336	1.694	2.121	2.483	2.790	3.299
Water pressure drop	(1) kPa	22,80	30,50	26,50	19,20	30,20	23,20	20,50	19,90
▶ Heating capacity	(2) kW	5,79	7,04	7,46	11,15	13,73	14,59	18,23	19,31
Water flow-rate	(2) l/h	996	1.211	1.283	1.918	2.361	2.510	3.136	3.321
Water pressure drop	(2) kPa	23,20	29,10	21,20	21,40	32,50	20,60	22,50	17,50
Total power input	W	138	138	138	290	290	290	340	340
LOW SPEED									
Airflow	m3/h	715	792	782	1.617	1.771	1.760	2.170	2.154
▶ Cooling capacity	(1) kW	4,60	5,78	6,76	8,76	10,97	13,06	13,79	16,62
Sensible capacity	(1) kW	3,36	4,13	4,67	6,72	8,25	9,46	10,30	11,90
Water flow-rate	(1) l/h	791	994	1.163	1.507	1.887	2.247	2.371	2.859
Water pressure drop	(1) kPa	16,80	22,60	20,10	15,20	23,90	19,00	14,80	14,90
▶ Heating capacity	(2) kW	4,93	6,01	6,44	9,85	12,12	13,12	15,34	16,58
Water flow-rate	(2) l/h	848	1.033	1.107	1.694	2.085	2.257	2.638	2.852
Water pressure drop	(2) kPa	16,80	21,20	15,80	16,70	25,30	16,60	15,90	12,90
Total power input	W	128	128	128	283	283	283	305	305
No. of supply fans	-	1	1	1	2	2	2	3	3
4-pipe									
HIGH SPEED									
Airflow	m3/h	1.050	1.140	-	2.000	2.170	2.670	2.930	-
▶ Cooling capacity	(1) kW	5,83	7,22	-	9,96	12,40	13,20	16,60	-
Sensible capacity	(1) kW	4,42	5,35	-	7,83	9,53	10,40	12,80	-
Water flow-rate	(1) l/h	1.003	1.242	-	1.713	2.133	2.270	2.855	-
Water pressure drop	(1) kPa	27,00	35,30	-	19,60	30,60	13,20	21,40	-
▶ Heating capacity	(3) kW	5,88	6,20	-	10,31	10,84	13,78	14,58	-
Water flow-rate	(3) l/h	505	533	-	887	933	1.185	1.254	-
Water pressure drop	(3) kPa	30,70	33,60	-	27,90	30,40	25,90	28,40	-
Total power input	W	175	175	-	330	330	409	409	-
MEDIUM SPEED									
Airflow	m3/h	893	980	-	1.880	2.040	2.456	2.725	-
▶ Cooling capacity	(1) kW	5,27	6,57	-	9,59	11,93	12,53	15,87	-
Sensible capacity	(1) kW	3,94	4,80	-	7,49	9,12	9,80	12,15	-
Water flow-rate	(1) l/h	907	1.131	-	1.649	2.053	2.156	2.730	-
Water pressure drop	(1) kPa	22,10	29,20	-	18,20	28,30	11,90	19,60	-
▶ Heating capacity	(3) kW	5,28	5,61	-	9,90	10,41	13,04	13,90	-
Water flow-rate	(3) l/h	454	482	-	851	895	1.121	1.195	-
Water pressure drop	(3) kPa	24,80	27,50	-	25,70	28,00	23,20	25,80	-
Total power input	W	138	138	-	290	290	340	340	-
LOW SPEED									
Airflow	m3/h	704	775	-	1.600	1.758	1.922	2.168	-
▶ Cooling capacity	(1) kW	4,55	5,68	-	8,67	10,88	10,77	13,77	-
Sensible capacity	(1) kW	3,32	4,06	-	6,67	8,20	8,22	10,32	-
Water flow-rate	(1) l/h	783	978	-	1.492	1.872	1.852	2.369	-
Water pressure drop	(1) kPa	16,50	21,90	-	14,90	23,50	8,80	14,80	-
▶ Heating capacity	(3) kW	4,52	4,80	-	8,90	9,44	11,09	11,95	-
Water flow-rate	(3) l/h	388	413	-	765	812	954	1.028	-
Water pressure drop	(3) kPa	18,10	20,20	-	20,80	23,00	16,80	19,10	-
Total power input	W	128	128	-	283	283	305	305	-
No. of supply fans	-	1	1	-	2	2	3	3	-
Standard power supply	V	220-240/1/50							
Type of supply fan	(4)	CFG							
H Sound pressure level	(5) dB(A)	58	59	59	62	63	63	62	62
M Sound pressure level	(5) dB(A)	53	54	54	60	61	61	59	59
L Sound pressure level	(5) dB(A)	47	48	48	54	55	55	52	52
H Sound power level	(5) dB(A)	69	70	70	73	74	74	73	73
M Sound power level	(5) dB(A)	64	65	65	71	72	72	70	70
L Sound power level	(5) dB(A)	58	59	59	65	66	66	63	63

Notes

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Airflow with free outlet (0 Pa static pressure)

- (1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
- (2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C

(3) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C

(4) CFG = AC centrifugal fan

(5) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field.

accessories

- ▶ **VEC** High efficiency EC fan
- ▶ **TRM** Terminal block with minimum water temperature clickson
- ▶ **TRP** Terminal block with closing cover IP40
- ▶ **TRMP** Terminal block with closing cover IP40 and minimum water temperature clickson
- ▶ **CTSP1** CLIVET TALK TERMINAL SPACE electronics with RS485 Modbus serial port
- ▶ **CPVM** Control additional card of 0-10V valve and EC fan (available only with options: CTSP1)
- ▶ **2V2** ON/OFF 2-way valve kit for 2-pipe system
- **2V2X** ON/OFF 2-way valve kit for 2-pipe system
- ▶ **2V4** ON/OFF 2-way valve kit for 4-pipe system (sizes 015.0÷021.0, 031.0÷061.0)
- **2V4X** ON/OFF 2-way valve kit for 4-pipe system (sizes 015.0÷021.0, 031.0÷061.0)
- ▶ **3V2** 3-way valve kit for 2-pipe type "on/off" system
- **3V2X** 3-way valve kit for 2-pipe type "on/off" system
- ▶ **3V4** 3-way valve kit for 4-pipe system type "on/off" (sizes 015.0÷021.0, 031.0÷061.0)
- **3V4X** 3-way valve kit for 4-pipe system type "on/off" (sizes 015.0÷021.0, 031.0÷061.0)
- ▶ **10V4** 0-10V 3-way valve kit for 4-pipe system (sizes 015.0÷021.0, 031.0÷061.0)
- **10V4X** 0-10V 3-way valve kit for 4-pipe system (sizes 015.0÷021.0, 031.0÷061.0)
- ▶ **10V2** 0-10V 3-way valve kit for 2-pipe system
- **10V2X** 0-10V 3-way valve kit for 2-pipe system
- **KIB22X** Water and balancing kit for 2-way valve and 2-pipe installation
- **KIB24X** Water and balancing kit for 2-way valve and 4-pipe installation (sizes 015.0÷021.0, 031.0÷061.0)
- **KIB32X** Water and balancing kit for 3-way valve and 2-pipe installation
- **KIB34X** Water and balancing kit for 3-way valve and 4-pipe installation (sizes 015.0÷021.0, 031.0÷061.0)
- ▶ **BRO** Auxiliary drain pan in galvanized steel with thermal insulation
- **BROX** Auxiliary drain pan in galvanized steel with thermal insulation
- ▶ **BRV** Auxiliary condensate collection pan (vertical installation)
- **BRVX** Auxiliary condensate collection pan (vertical installation)
- ▶ **CDP** Condensate drain pump
- **CDPX** Condensate drain pump
- ▶ **FAPS** EU3 flat air filter (Eurovent 4/5) not ductable
- **FAPSX** EU3 flat air filter (Eurovent 4/5) not ductable
- ▶ **SFCF** Air filter section (ductable) with EU3 flat air filter (Eurovent 4/5)
- **SFCFX** Air filter section (ductable) with EU3 flat air filter (Eurovent 4/5)
- **SFHEX** Air filter section (ductable) with EU5 air filter (Eurovent 4/5)
- **HIDE2X** Remote control with E/1 +3V +on/off for wall installation
- **HIDE3X** Plurifunctional remote control for wall installation
- **HIDE4X** Plurifunctional room control for 0-10V valves
- **HIDT2X** HID-T2 electronic room control
- **HIDT3X** HID-T3 electronic room control
- **HIDT18X** HIDT18X electronic room control for wall installation
- **PTABX** Remote probe for room air temperature for electromechanical thermostats.
- **DCPX** Control device for more units with a single room control.
- **EH230X** Heating section with electrical heaters 230V with safety thermostat
- **EH400X** Heating section with electrical heaters 400V with safety thermostat
- ▶ **RE700** 0.7 kW integrated electric heater with safety thermostat and power electric panel
- ▶ **RE1000** 1.0 kW integrated electric heater with safety thermostat and power electric panel
- ▶ **RE1500** 1.5 kW integrated electric heater with safety thermostat and power electric panel
- ▶ **RE2000** 2.0 kW integrated electric heater with safety thermostat and power electric panel
- **MCRX** Mixing and recirculating chamber
- **PR90AX** 90° air intake plenum
- **PCCRIX** Air intake plenum with circular fittings
- **PGFRIX** Air intake plenum with flexible joint
- **PMAX** Straight section for both air intake / supply outlets
- **P90MAX** 90° section for air supply outlet
- **PCCMAX** Section with spigots "Ø" with variable diameter and internal insulation for air supply outlet
- **PGFMAX** Anti-vibration section for supply outlet
- **SILMAX** Labyrinth noise level attenuator section for both air intake / supply outlets
- **CUFMX** Air outlet casing with bird-proof grill
- **CUFAX** Air intake casing with bird-proof grill and EU3 air filter (Eurovent 4/5)
- **S230X** ON/OFF 230v servomotor for mixing and recirculation chamber
- **GMX** Outlet grille
- **GRAX** Return grille with filter
- **TMX** Hot water min. temperature thermostat

Key to symbols and notes

- Accessories separately supplied

For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

