Air conditioning fan heaters with ON/OFF motor

AREO 8 - 101 kW

Hygrothermal comfort in the industrial and commercial sectors

In line with recent regulatory developments regarding energy efficiency, Galletti is updating its offering of fan heaters for heating and cooling systems to be used in industrial and commercial environments of any volume.
The new AREO, which was designed to meet the stringent requirements of the ERP Directive, retains unchanged the distinctive aspects of the original design, that is, extreme reliability and sturdiness.
AREO's cover, which is made of pre-painted steel sheet, possesses an original design with a rounded shape that enhances its aesthetic form.
The AREO range consists of 18 models that, limited to the only heating version, can be either wall mounted (horizontal air flow) or ceiling mounted (vertical air flow). The cooling version is equipped with a new system in order to collect condensation and further insulation inside the cover.
The units are available in 6 sizes with 2-, 3- or 4-row heat exchangers ensuring an efficient performance with hot water supplied by a boiler or heat pump (4-row models).

2 pipes systems | Vertical installation | Horizontal installation (not for AERO C) | Heating | Cooling (only for AERO C)

PLUS

- Low sound levels
- Wide operating range (up to 60 °C intake air)
- Axial fan with blades with an aerodynamic profile (HyBlade® technology)
- Electric motor, class F, approved for continuous operation
- Wide operating range (up to 60 °C intake air)

AVAILABLE VERSIONS

Single-phase and three-phase power supply.

AREO P
Fan heaters for hot water heating, with side water connections.

AREO H
Fan heaters for hot water heating, with vertical water connections, for replacement of indoor units installed in existing systems.

AREO S
Fan heaters for steam heating, with vertical water connections.

AREO L
Fan heaters for hot water heating, equipped with air-curtain diffuser, ceiling mounted.

AREO C
Single phase power supplied fan heaters suitable either for heating or cooling mode, equipped with asynchronus electric motor and side water connections, wall mounted.

MAIN COMPONENTS

Fan drive assembly
The motor and fan are a single integrated unit optimized to achieve maximum aeraulic efficiency. In fact, conformity to ERP2017 is guaranteed, even for the versions with single-phase power supply.

Electric motor
Tropicalized motor directly coupled to an external rotor, standard, with the following features:
- equipped with internal thermal protection
- windings in class F
- protection rating IP54
- maintenance-free ball bearings

Axial fan
With blades with an optimized aerodynamic profile (HyBlade® technology), statically balanced, inserted in a housing that enhances aeraulic performance and minimizes noise.

Cabinet
Made of pre-painted steel sheet, complete with ABS corners, and manually adjustable aluminum baffles located on the air outlet for optimum distribution in the room to be heated.

Safety cage
Made of electrogalvanised steel wire, it supports the motor and is fixed to the cabinet by means of vibration-damping supports.

Heat exchanger
Made of copper pipes and aluminium fins of high thermal conductivity to optimize heat exchange.

RVM regulator for ventilation speed adjustment in single phase power supplied models
The speed regulator RVM can vary the effective value on the load by controlling the wave shape caused by a TRIAC. This accessory can be used only coupled to single phase power supplied models, and allows a fan heater manual ventilation speed adjustment depending on different needs. The device is also equipped with special filters in order to suppress noise induced on the supplied line or irradiated from the equipment and a minimum speed manually adjustable trimmer. This accessory is yet included with AREO C cooling series.

ACCESSORIES

Elecromechanical control panels	
CST	Delta/star switch for installation in electrical box
CSTP	Delta/star switch with box wall mounted
RVM	RVM manual power regulator for monophase power supply FAN HEATERS
TA2	Electromechanical room thermostat with summer/winter selection
Power interface and regulating louver controllers	
CSD	Recess mounted controller for opening and closing the SM motor-driven regulating louver
Accessories	
VA	Auxiliary tray for collecting condensate
Fixation templates	
DFC	Template for column installation
DFO	Adjustable template for wall/column installation
DFP	Template for wall installation
Protective grill for gyms (ball shield)	
R	Protective net for gyms
Diffusors	
DO	Two-row adjustable fin diffuser
LA	Air curtain diffuser
External air intake	
PAE	External air intake
PAEM	Manual mixing louver
PAEMM	Motor driven mixer louver, 24 V power supply with spring return
External air intake rain protection grille	
GR	Air intake grille with subframe

RATED TECHNICAL DATA AREO P - HEATING MODE

AREO P			12	12	13	13	14	14
Power supply		V-ph-Hz	230 - 1 - 50					
no. of poles			4	6	4	6	4	6
Motor conncections			Mono	Mono	Mono	Mono	Mono	Mono
Rated air flow		m^3/h	1280	1000	1140	900	1040	800
Heating capacity	(1)	kW	9,77	8,48	12,4	10,7	14,2	11,9
Water flow	(1)	l/h	863	749	1097	946	1252	1047
Water pressure drop	(1)	kPa	29	23	22	17	17	12
Sound power level	(2)	dB(A)	64	59	64	59	65	60
Power input		W	69	49	69	50	70	51

AREO P			22	22	23	23	24	24
Power supply		V-ph-Hz	230 - 1 - 50					
no. of poles			4	6	4	6	4	6
Motor conncections			Mono	Mono	Mono	Mono	Mono	Mono
Rated air flow		m^3/h	3020	2100	2630	1850	2600	1800
Heating capacity	(1)	kW	19,9	16,2	25,6	20,6	28,9	22,9
Water flow	(1)	l/h	1754	1432	2256	1820	2555	2022
Water pressure drop	(1)	kPa	23	16	29	20	19	13
Sound power level	(2)	dB(A)	76	64	76	65	77	65
Power input		W	198	110	210	114	212	120

AREO P			32	32	32	33	33	33
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			4	4	6	4	4	6
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	4500	4300	3200	4150	4000	2900
Heating capacity	(1)	kW	35,6	34,7	29,2	39,5	38,6	31,8
Water flow	(1)	l/h	3143	3060	2579	3486	3411	2806
Water pressure drop	(1)	kPa	20	19	14	18	17	12
Sound power level	(2)	dB(A)	76	76	69	76	76	69
Power input		W	320	315	175	340	330	180

AREO P			34	34	34	42	42	42
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			4	4	6	4	4	6
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	4050	3900	2800	6900	7100	5600
Heating capacity	(1)	kW	45,1	44,0	35,6	53,4	54,3	47,4
Water flow	(1)	l/h	3980	3886	3145	4718	4793	4185
Water pressure drop	(1)	kPa	29	28	19	37	38	30
Sound power level	(2)	dB(A)	77	77	70	75	73	67
Power input		W	345	340	182	623	650	450

AREO P			43	43	43	44	44	44
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			4	4	6	4	4	6
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	6400	6550	5300	6200	6400	5150
Heating capacity	(1)	kW	59,6	60,4	53,2	66,8	68,1	59,5
Water flow	(1)	l/h	5259	5329	4695	5894	6009	5250
Water pressure drop	(1)	kPa	36	37	30	23	24	19
Sound power level	(2)	dB(A)	74	74	68	75	75	69
Power input		W	635	690	465	655	700	470

(1) Water temperature 85°C / 75°C, air temperature 15°C - 100% of the max speed
(2) Sound power measured according to standards ISO 3741 - 100% of the max speed

RATED TECHNICAL DATA AREO P - HEATING MODE

AREO P			52	52	52	53	53	53
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			6	4	6	6	4	6
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	6400	8200	6800	6200	7900	6450
Heating capacity	(1)	kW	48,6	55,9	50,3	60,8	70,2	62,3
Water flow	(1)	l/h	4294	4934	4445	5373	6202	5497
Water pressure drop	(1)	kPa	17	22	18	19	25	20
Sound power level	(2)	dB(A)	69	75	71	69	76	72
Power input		W	370	725	760	374	732	775

AREO P			54	54	54	62	62	62
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			6	4	6	6	6	8
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	5900	7600	6200	8600	8900	7100
Heating capacity	(1)	kW	66,2	77,4	68,3	85,7	87,5	76,2
Water flow	(1)	l/h	5852	6834	6033	7567	7722	6731
Water pressure drop	(1)	kPa	21	27	22	21	22	17
Sound power level	(2)	dB(A)	71	77	73	70	71	66
Power input		W	380	755	780	555	565	360

AREO P			63	63	63	64	64	64
Power supply		V-ph-Hz	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50	230 - 1 - 50	400 - 3 - 50	400 - 3 - 50
no. of poles			6	6	8	6	6	8
Motor conncections			Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	7695	8300	6500	7500	7650	6000
Heating capacity	(1)	kW	79,3	101	86,4	99,6	101	85,8
Water flow	(1)	l/h	7002	8943	7626	8795	8913	7571
Water pressure drop	(1)	kPa	18	30	23	29	29	22
Sound power level	(2)	dB(A)	69	72	67	71	72	67
Power input		W	560	575	380	582	590	390

(1) Water temperature 85°C / 75°C, air temperature 15°C - 100% of the max speed
(2) Sound power measured according to standards ISO 3741 - 100% of the max speed

RATED TECHNICAL DATA AREO C - HEATING MODE

AREO C			12	12	13	13	14	14	22	22	23
Power supply		V-ph-Hz	230 - 1 - 50								
no. of poles			4	6	4	6	4	6	4	6	4
Air flow rate max heating		m^3/h	1280	1000	1140	900	1040	800	3020	2100	2630
Heating capacity	(1)	kW	9,77	8,48	12,4	10,7	14,2	11,9	19,9	16,2	25,6
Water flow	(1)	l/h	863	749	1097	946	1252	1047	1754	1432	2256
Water pressure drop	(1)	kPa	29	23	22	17	17	12	23	16	29
Sound power level	(2)	dB(A)	64	59	64	59	65	60	76	64	76
Power input	(3)	W	67	49	69	50	70	51	198	110	210

AREO C			23	24	24	32	33	34	42	43	44
Power supply		V-ph-Hz	230 - 1 - 50								
no. of poles			6	4	6	4	4	4	4	4	4
Air flow rate max heating		m^3/h	1850	2600	1800	4500	4150	4050	6900	6400	6200
Heating capacity	(1)	kW	20,6	28,9	22,9	35,6	39,5	45,1	53,4	59,6	66,8
Water flow	(1)	l/h	1820	2555	2022	3143	3486	3980	4718	5259	5894
Water pressure drop	(1)	kPa	20	19	13	20	18	29	37	36	23
Sound power level	(2)	dB(A)	65	77	65	76	76	77	75	74	75
Power input	(3)	W	114	212	120	320	340	345	623	635	655

AREO C			52	53	54	62	63	64
Power supply		V-ph-Hz	230 - 1 - 50					
no. of poles			6	6	6	6	6	6
Air flow rate max heating		m^3/h	6400	6200	5900	8600	7695	7500
Heating capacity	(1)	kW	48,6	60,8	66,3	85,7	79,3	99,6
Water flow	(1)	l/h	4294	5373	5852	7567	8802	8795
Water pressure drop	(1)	kPa	17	19	21	21	29	29
Sound power level	(2)	dB(A)	69	69	71	70	69	71
Power input	(3)	W	370	374	380	555	560	582

(1) Water temperature 85°C / 75°C, air temperature 15°C - 100% of the max speed
(2) Sound power measured according to standards ISO 3741 - 100% of the max speed
(3) Measured at 100% of the max speed

RATED TECHNICAL DATA AREO C - COOLING MODE

AREO C			12	12	13	13	14	14	22	22	23
Power supply		V-ph-Hz	230 - 1 - 50								
no. of poles			4	6	4	6	4	6	4	6	4
Air flow rate max cooling		m^3/h	898	898	808	808	718	718	1602	1602	1411
Heating capacity	(1)	kW	7,87	7,87	10,0	10,0	11,2	11,2	13,4	13,4	17,3
Water flow	(1)	l/h	695	695	884	884	988	988	1184	1184	1527
Water pressure drop	(1)	kPa	18	18	13	13	10	10	9	9	15
Total cooling capacity	(2)	kW	2,30	2,30	2,82	2,82	3,15	3,15	3,61	3,61	5,00
Sensible cooling capacity	(2)	kW	1,81	1,81	2,23	2,23	2,45	2,45	3,08	3,08	3,91
Water flow	(2)	l/h	395	395	482	482	541	541	620	620	860
Water pressure drop	(2)	kPa	9	9	6	6	5	5	4	4	7
Sound power level	(3)	dB(A)	53	54	53	54	54	55	58	59	63
Power input	(4)	W	33	34	33	34	33	34	95	81	95

AREO C			23	24	24	32	33	34	42	43	44
Power supply		V-ph-Hz	230 - 1 - 50								
no. of poles			6	4	6	4	4	4	4	4	4
Air flow rate max cooling		m^3/h	1411	1373	1373	2485	2292	2237	3738	3467	3359
Heating capacity	(1)	kW	17,3	19,1	19,1	22,9	25,4	29,1	35,1	39,2	43,9
Water flow	(1)	l/h	1527	1686	1686	2024	2242	2569	3098	3460	3875
Water pressure drop	(1)	kPa	15	5	5	5	5	8	7	7	3
Total cooling capacity	(2)	kW	5,00	5,23	5,23	5,72	7,22	9,65	9,72	12,4	13,1
Sensible cooling capacity	(2)	kW	3,91	4,20	4,20	5,23	6,12	7,50	7,85	8,69	10,3
Water flow	(2)	l/h	860	898	898	982	1239	1656	1668	2123	2255
Water pressure drop	(2)	kPa	7	2	2	1	1	4	2	3	1
Sound power level	(3)	dB(A)	60	59	60	63	63	64	62	61	62
Power input	(4)	W	81	95	81	153	153	153	400	400	400

AREO C			52	53	54	62	63	64
Power supply		V-ph-Hz	230 - 1 - 50					
no. of poles			6	6	6	6	6	6
Air flow rate max cooling		m^3/h	3072	3001	2832	4730	4232	4125
Heating capacity	(1)	kW	31,1	38,6	42,4	55,7	48,0	64,7
Water flow	(1)	l/h	2745	3406	3743	4197	4240	5715
Water pressure drop	(1)	kPa	10	11	11	8	8	8
Total cooling capacity	(2)	kW	8,92	10,5	14,8	14,5	18,9	22,4
Sensible cooling capacity	(2)	kW	7,64	8,50	11,4	12,4	14,3	16,8
Water flow	(2)	l/h	1304	1800	2022	2490	3237	3853
Water pressure drop	(2)	kPa	4	5	6	2	4	4
Sound power level	(3)	dB(A)	53	53	55	57	56	58
Power input	(4)	W	272	272	272	335	335	335

(1) Water temperature 85°C / 75°C, air temperature 15°C - max speed avaible in cooling mode
(2) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) - max speed avaible in cooling mode
(3) Sound power measured according to standards ISO 3741 - max speed available in cooling mode
(4) Measured at max speed available in cooling mode
All data reported in the table above refer to maximum allowed ventilation speed in order to avoid the drag of the condensation drops generated in the heat exchanger.

RATED TECHNICAL DATA AREO H - HEATING MODE

AREO H			13	13	23	23	33	33	33	43
Power supply		V-ph-Hz	230 - 1 - 50	230 - 1 - 50	230 - 1 - 50	230 - 1 - 50	230 - 1 - 50	400 - 3 - 500	400 - 3 - 500	230 - 1 - 50
no. of poles			4	6	4	6	4	4	6	4
Motor conncections			Mono	Mono	Mono	Mono	Mono	Delta	Star	Mono
Rated air flow		m^3/h	1083	855	2499	1758	3943	3800	2755	6080
Heating capacity	(1)	kW	10,2	8,89	21,3	17,3	33,2	32,5	26,9	50,4
Water flow	(1)	l/h	905	785	1882	1529	2935	2871	2376	4454
Water pressure drop	(1)	kPa	13	10	19	13	12	11	8	25
Sound power level	(2)	dB(A)	64	59	76	65	74	76	69	75
Power input		W	69	50	210	114	340	330	180	635

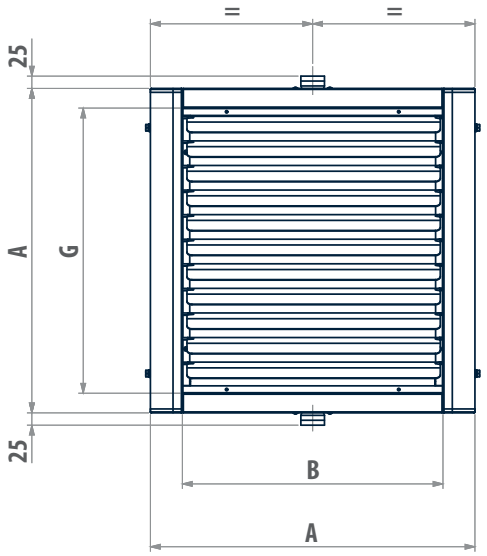
(1) Water temperature 85°C / 75°C, air temperature 15°C - 100% of the max speed
(2) Sound power measured according to standards ISO 3741 - 100% of the max speed

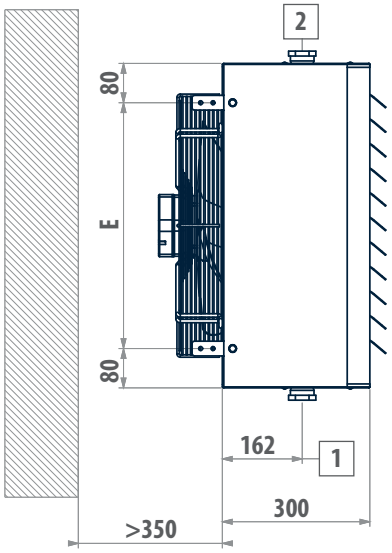
AREO H			43	43	53	53	53	63	63	63
Power supply		V-ph-Hz	400 - 3 - 500	400 - 3 - 500	230 - 1 - 50	400 - 3 - 500	400 - 3 - 500	230 - 1 - 50	400 - 3 - 500	400 - 3 - 500
no. of poles			4	6	6	4	6	6	6	8
Motor conncections			Delta	Star	Mono	Delta	Star	Mono	Delta	Star
Rated air flow		m^3/h	6223	5035	5890	7505	6128	8100	7885	6175
Heating capacity	(1)	kW	51,1	45,2	56,2	64,8	57,5	99,7	80,5	69,2
Water flow	(1)	l/h	4512	3991	4960	5720	5079	8802	7106	6112
Water pressure drop	(1)	kPa	25	20	16	20	16	29	19	15
Sound power level	(2)	dB(A)	77	70	69	76	72	70	71	66
Power input		W	690	465	375	732	775	560	575	380

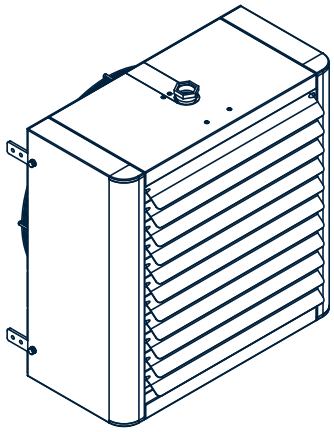
(1) Water temperature 85°C / 75°C, air temperature 15°C - 100% of the max speed
(2) Sound power measured according to standards ISO 3741 - 100% of the max speed

DIMENSIONAL DRAWINGS

AREO H - AREO S







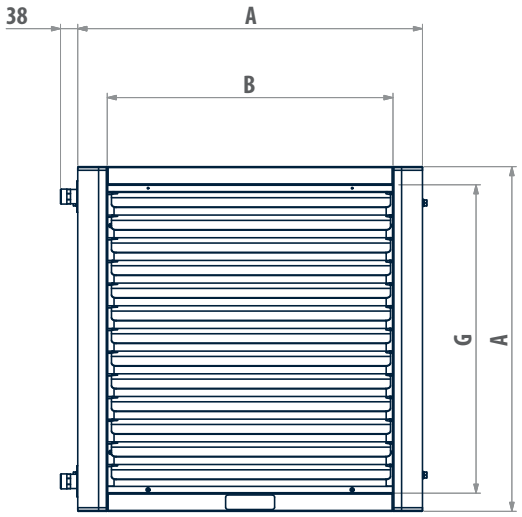
LEGEND	
1	Water inlet connection female gas
2	Water outlet connection female gas

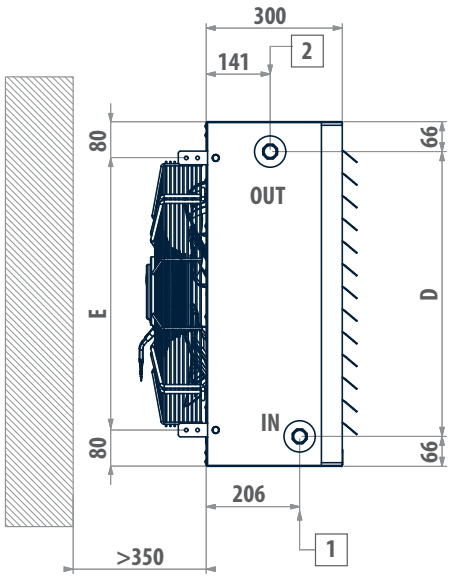
AREO H	A	B	E	G	1	2	
	mm	mm	mm	mm	"	"	kg
13	460	330	300	380	1 1/4	1 1/4	20
23	560	430	400	480	1 1/4	1 1/4	26
33	660	530	500	580	1 1/4	1 1/4	35
43	760	630	600	680	1 1/4	1 1/4	41
53	860	730	700	780	1 1/4	1 1/4	52
63	960	830	800	880	1 1/4	1 1/4	61

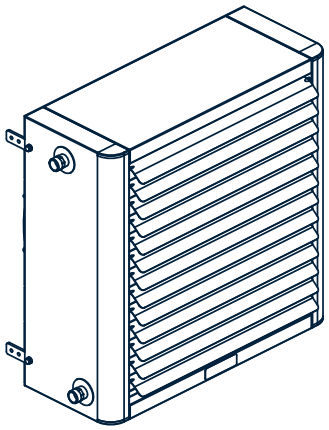
AREO S	A	B	E	G	1	2	
	mm	mm	mm	mm	"	"	kg
12	460	330	300	380	1 1/4	1 1/4	20
22	560	430	400	480	1 1/4	1 1/4	26
32	660	530	500	580	1 1/4	1 1/4	35
42	760	630	600	680	1 1/4	1 1/4	41
52	860	730	700	780	1 1/4	1 1/4	52
62	960	830	800	880	1 1/4	1 1/4	61

DIMENSIONAL DRAWINGS

AREO P - AREO L







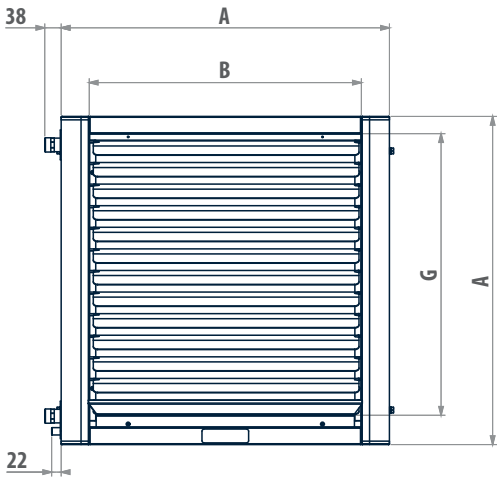
LEGEND	
1	Water inlet connection male gas
2	Water outlet connection male gas

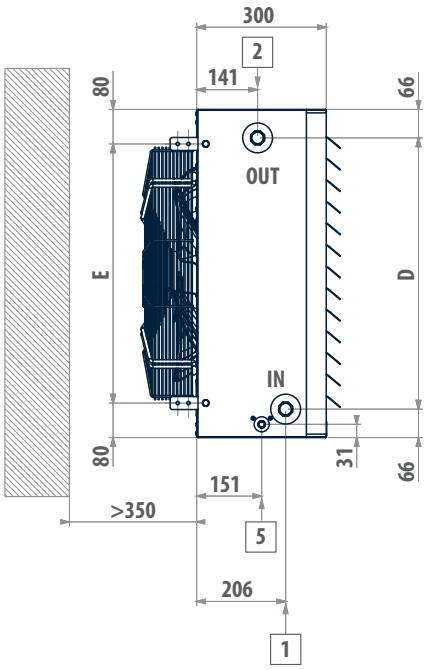
AREO P	A	B	D	E	G	1	2	
	mm	mm	mm	mm	mm	"	"	kg
12 - 13 - 14	460	330	300	380	380	3/4	3/4	20-20-21
22 - 23 - 24	560	430	400	480	480	3/4	3/4	26-26-27
32 - 33 - 34	660	530	500	580	580	1	1	34-35-37
42 - 43 - 44	760	630	600	680	680	1	1	40-41-44
52 - 53 - 54	860	730	700	780	780	1 1/4	1 1/4	50-52-55
62 - 63 - 64	960	830	800	880	880	1 1/4	1 1/4	58-61-64

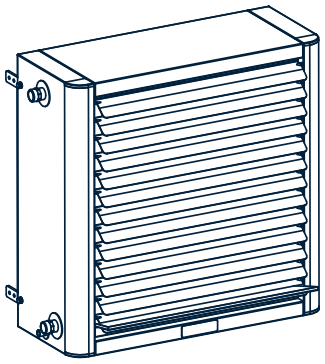
AREO L	A	B	D	E	G	1	2	
	mm	mm	mm	mm	mm	"	"	kg
32 - 33	660	530	500	580	580	1	1	34-35
42 - 43	760	630	600	680	680	1	1	40-41
52 - 53	860	730	700	780	780	1 1/4	1 1/4	50-52
62 - 63	960	830	800	880	880	1 1/4	1 1/4	58-61

DIMENSIONAL DRAWINGS

AREO C







LEGEND	
1	Water inlet connection male gas
2	Water outlet connection male gas
5	Condensate drainage ø 17 mm

AREO C	A	B	D	E	G	1	2	
	mm	mm	mm	mm	mm	"	"	kg
12 - 13 - 14	460	330	300	380	380	3/4	3/4	20-20-21
22 - 23 - 24	560	430	400	480	480	3/4	3/4	26-26-27
32 - 33 - 34	660	530	500	580	580	1	1	34-35-37
42 - 43 - 44	760	630	600	680	680	1	1	40-41-44
52 - 53 - 54	860	730	700	780	780	1 1/4	1 1/4	50-52-55
62 - 63 - 64	960	830	800	880	880	1 1/4	1 1/4	58-61-64