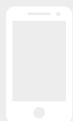


Global Product Range



Air curtains
Radiant heaters
Fan heaters
Convector
Controls



Welcome!

At Frico we are proud to offer energy efficient products that improve the indoor environment.

Our product development focuses on achieving maximum performance with the lowest possible energy consumption, and continuing pursuit of our core values: trust, competence and care.

This catalogue gives you an overview of the Frico global product range. If you want more complete information about the products or to see the full range available at your market, we invite you to contact us or visit our website <https://planetaklimata.com.ua/>.

We look forward to hearing from you!



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CREATING IDEAL
ENVIRONMENTS

FRICO





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Design and specifications
are subject to change
without notice.



Good reasons to choose Frico

More than 85 years experience in developing products for the varied Nordic climate has provided us with a unique knowledge bank. This is our foundation when creating today's energy efficient solutions for a comfortable indoor climate.

Leading technology and design

Today Frico is the leading supplier of air curtains, radiant heaters and fan heaters in Europe, and the products are designed according to good Scandinavian tradition. As market leaders we run development and offer both electrical and water heated products and also air curtains without heat. For our air curtains the Thermozone Technology guarantees efficient separation with minimum use of energy and a low sound level.

Keeping our promises

Frico has access to one of Europe's most modern and advanced air and sound laboratories. It helps us to ensure that our products deliver what we promise. We regularly carry out tests and measurements during the development of new products, but also to improve existing products. The measurements are carried out according to the AMCA and ISO standards.

Frico Academy

Frico Academy is an important platform for networking and sharing inspiration and knowledge between us and our distributors around the world. Through the Frico Academy we share our knowledge on theory and technology, as well as product knowledge and experience in manufacturing and product development.

Frico saves energy

Thanks to our broad product range and our many years of experience, Frico is able to help you save energy. By offering total solutions, including both complete heating systems and products for additional heating, we can generate a comfortable indoor climate at a low energy cost. Our regulation systems for different levels ensure that you never use more energy than is required. Through our parent company, Systemair, we also possess knowledge about ventilation and can provide appropriate solutions.

Climate-smart

At Frico, we are proud to be able to offer energy-efficient products for a better indoor climate. In our product development work, the focus is on achieving the greatest possible function with the least possible energy consumption – without compromising on our core values of trust, competence and design.

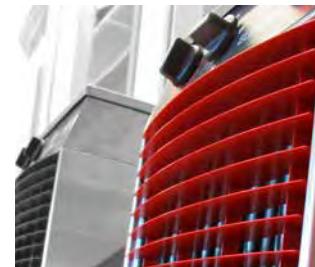
This means that our products not only manage the local climate in business complexes, industrial buildings, offices or summer cottages; with optimum energy efficiency, we ensure that our products are climate-smart.

Ecodesign Regulation

Ecodesign Regulation (EU) 2015/1188 concerning local space heaters does not apply to all application areas. The Regulation applies when an installation is intended to provide thermal comfort for people in the premises. The Regulation does not apply to heating installations of a more technical nature e.g. in engineering/utility rooms, in production processes, frost protection, etc. The Regulation also does not apply to installations in vehicles, offshore or outdoors.

Many of Frico's products can be used as both local space heaters (as defined in (EU) 2015/1188) and for technical heating purposes. It is up to the installer responsible for the installation to assess whether the Ecodesign Regulation is applicable or not. Control solutions for installations not covered by the Ecodesign Regulation are listed in a separate table.





Energy efficient products for a comfortable indoor climate

Air curtains

It makes sound economic sense to create an efficient and invisible door that keeps the heat inside. Air curtains can be even more effective when used in air conditioned or cold storage buildings.

Thermozone technology with its precisely adjusted air velocity gives even protection throughout the opening. Frico air curtains provide the most efficient separation with the lowest possible energy consumption, regardless of whether it is the heat or the cold that you want to keep inside.

The air curtain units should be positioned as close to the door opening as possible and cover its whole width. The recommended installation height given for our air curtains varies depending on the relevant premises.

Radiant heaters

Frico radiant heaters imitate the sun, the most comfortable and efficient heat source available. The heat is emitted only when the rays hit a surface and the room temperature can thus be lowered while occupants experience a comfortable environment. This makes radiant heaters well suited not only for total heating but also for zone and spot heating, for example to avoid cold draughts from windows.

Radiant heaters are easy to install and require minimum maintenance. They heat directly when switched on and give no air movement.

Fan heaters

We are proud of the worldwide fame Frico fan heaters have gained. They are reliable and are designed for long life. Our range covers all needs. The investment cost is low compared to other heating systems.

Frico fan heaters are compact, silent and light weight. They are available for electrical heating as well as for water heating.

Ceiling fans

Ceiling fans force over-heated air from the ceiling down to the occupation zone in premises with high ceilings so that the heat is maximally exploited. The ceiling fans can also be run in reverse, so that cold air can circulate through the room giving it a cooler feel.

Convector

Convection is the term for the rotating air movement where the air is affected by a heat source. The air is heated - rises upwards - cools and comes back to then be reheated. This gives good comfort through good heat distribution and the warm air flow directed upwards can be used to counteract cold drafts from large glass surfaces.

Thermostats and controls

The key to energy efficient heating and good comfort is the combination of heating products and good controls. Frico offers a wide range of thermostats and controls, read more under each product or in the Frico Catalogues.

The product selection guide at site helps you to find the right product and to easily collate all technical data, accessories and heating calculations to your documents.



PA1508 ⚡



Horizontal mounting

- For small openings
- Length: 0,8 m
- Built-in control.

⚡ Electrical heat - PA1508 (IP20)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
3791	PA1508E02	1/2	270/400	66	39/50	230V~	790x154x167
3792	PA1508E03	2/3	270/400	66	39/50	230V~	790x154x167
3793	PA1508E05	3/4,5	270/400	66	39/50	230V~	790x154x167

Portier ⚡



Horizontal mounting

- Recommended installation height 2,5 m
- Lengths: 1 and 1,5 m

✳️ Ambient, no heat - Portier A (IP21)

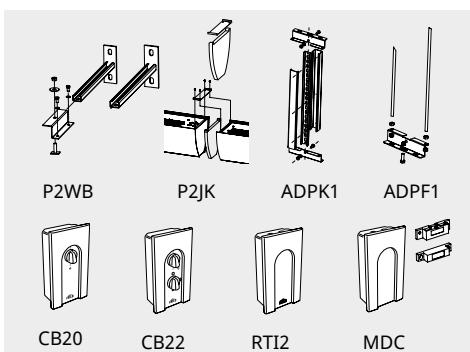
Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
2163	PS210A	0	1000/1300	70	44/54	230V~	1020x280x291
2351	PS215A	0	1300/2000	72	46/56	230V~	1530x280x291

⚡ Electrical heat - Portier E (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
2164	PS210E03	1,5/3	950/1200	66	44/50	230V~/400V3N~*	1020x280x291
2140	PS210E06	3/6	950/1200	66	44/50	400V3N~*	1020x280x291
2077	PS210E09	4,5/9	950/1200	66	44/50	400V3N~*	1020x280x291
2085	PS215E09	4,5/9	1200/1900	66	39/50	400V3N~*	1530x280x291
2079	PS215E14	6,7/13,5	1200/1900	66	39/50	400V3~ + 230V~	1530x280x291

*) Alternative 400 V3~ + 230 V~ (operating supply) if the current is greater than 16 A. Applies when connecting several units.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.



Art.nr	Type	Description
Accessories		
10695	P2WB	Wall mounting kit (2 pcs)
10696	P2JK	Joining kit (1 pc)
10727	ADPK1	Suspension kit (2 pcs)
10728	ADPF1	Suspension brackets (4 pcs)
Controls		
10737	CB20	Control box Portier A, IP44
10738	CB22	Control box Portier E, IP44
10231	RTI2	Electronic 2-step thermostat, IP44
11600	MDC	MDC, magnetic door contact with time relay, IP44

ADA



Horizontal mounting

- For air conditioned premises
- Recommended installation height: 2,5 m
- Lengths: 0,9 and 1,2 m
- Built in control, high/low speed

Ambient, no heat - ADA (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
5984	ADA090H	0	800/1150	70	43/54	900x236x218
5985	ADA120H	0	1100/1400	67	44/51	1200x236x218

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.

AR200



Recessed mounting

- Recommended installation height 2,5 m
- Lengths: 1, 1,5 and 2 m

Ambient, no heat - AR200 A (IP20)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
3261	AR210A	0	650/1200	66	34/50	230V~	1042x198x432
3262	AR215A	0	950/1750	66	34/50	230V~	1552x198x432
3260	AR220A	0	1300/2400	70	40/54	230V~	2042x198x432

Electrical heat - AR200 E (IP20)

Art.nr	Type	Output steps 400V3N~ [kW]	Output steps 230V~ [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
3263	AR210E09	3	-	650/1200	66	34/50	400V3N~	1042x198x432
		6/9	-				400V3N~	
		-	3				230V~	
		-	3/5				230V~	
3264	AR215E11	4,5	-	950/1750	66	34/50	400V3N~	1552x198x432
		6,8/11,3	-				400V3N~	
		-	4,5				230V~	
		-	4,5/6,8				230V~	
3265	AR220E18	6	-	1300/2400	70	40/54	400V3N~	2042x198x432
		12/18	-				400V3N~	
		-	6				230V~	
		-	6/10				230V~	

AR200E is delivered as 9 kW, 11 kW and 18 kW (400V3N-) models, but they are convertible to 230V~ and different outputs as shown in above table.

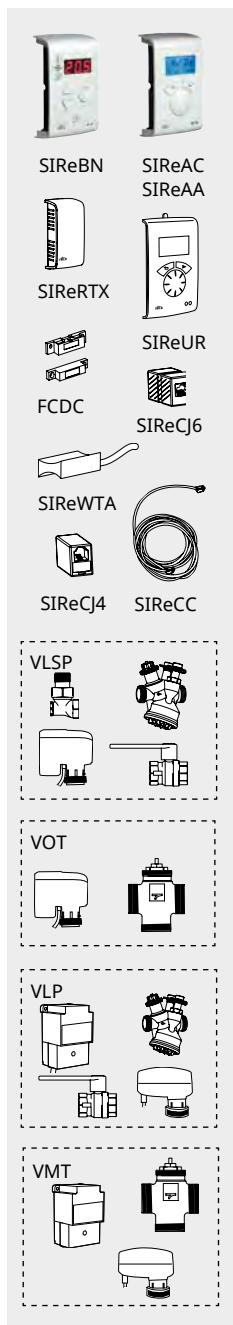
Water heat - AR200 W (IP20)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
2435	AR210W	6,6	700/1000	64	41/49	0,5	1042x198x432
2436	AR215W	10	1000/1600	66	37/50	0,9	1552x198x432
2437	AR220W	13	1400/2000	69	44/53	1,1	2042x198x432

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Controls AR200



Art.nr	Type	Description
Control system SIRe		
33481	SIReBN	Control system SIRe Basic
33488 / 33489	SIReACY / SIReACZ*	Control system SIRe Competent
33490 / 33491	SIReAAY / SIReAAZ*	Control system SIRe Advanced
74061	SIReB1XAE	External control board for AR200E
74062	SIReB1XAW	External control board for AR200A/W
Accessories		
17495	FCDC	Additional door contact
17539	SIReRTX	External room temperature sensor, NTC10KΩ
17538	SIReUR	Kit for recessed installation IP30
17613	SIReWTA	Return water sensor RJ11 (4p/4c) 3 m IP65
17616	SIReCJ4	Used to join two RJ11 (4/4)
17615	SIReCJ6	Used to join two RJ12 (6/6)
17542	SIReCC603	Modular cable RJ12 (6/6) 3 m
17543	SIReCC605	Modular cable RJ12 (6/6) 5 m
17544	SIReCC610	Modular cable RJ12 (6/6) 10 m
17545	SIReCC615	Modular cable RJ12 (6/6) 15 m
17773	SIReCC640	Modular cable RJ12 (6/6) 40 m
17546	SIReCC403	Modular cable RJ11 (4/4) 3 m
17547	SIReCC405	Modular cable RJ11 (4/4) 5 m
17548	SIReCC410	Modular cable RJ11 (4/4) 10 m
17549	SIReCC415	Modular cable RJ11 (4/4) 15 m
Water control - Used with SIRe Basic and Competent		
79379	VLSP15LF	Pressure independent valve system on/off DN15 , low flow
79380	VLSP15NF	Pressure independent valve system on/off DN15
79381	VLSP20	Pressure independent valve system on/off DN20
79382	VLSP25	Pressure independent valve system on/off DN25
79417	VLSP32	Pressure independent valve system on/off DN32
19031	VOT15	Three way control valve and actuator on/off DN15 Kvs 1,7
19032	VOT20	Three way control valve and actuator on/off DN20 Kvs 2,5
19033	VOT25	Three way control valve and actuator on/off DN25 Kvs 4,5
Water control - Used with SIRe Advanced		
79375	VLP15LF	Pressure independent and modulating valve system DN15 , low flow
79376	VLP15NF	Pressure independent and modulating valve system DN15
79377	VLP20	Pressure independent and modulating valve system DN20
79378	VLP25	Pressure independent and modulating valve system DN25
19034	VMT15	Three way control valve and modulating actuator, DN15, Kvs 1,7
19035	VMT20	Three way control valve and modulating actuator, DN20, Kvs 2,5
19036	VMT25	Three way control valve and modulating actuator, DN25, Kvs 4,5

*) SIReXXY communicates in Swedish, Norwegian, English, German, French, Spanish, Dutch, Italian, Danish and Finnish.

SIReXXZ communicates in Russian, Ukrainian, Polish, Czech, Slovak, Romanian, Hungarian, Turkish, Portuguese and English.

PA2200C



Horizontal mounting

- Recommended installation height 2,2 m
- Lengths: 1, 1,5 and 2 m
- Remote control and integrated regulation.

Ambient, no heat - PA2200C A (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
8051	PA2210CA	0	900/1200	67	42/51	230V~	1050x210x345
8220	PA2215CA	0	1150/1800	67	40/52	230V~	1560x210x345
8659	PA2220CA	0	1800/2400	68	43/53	230V~	2050x210x345

Electrical heat - PA2200C E (IP20)

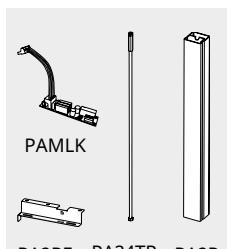
Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
8040	PA2210CE03	2/3	900/1200	67	42/51	230V~	1050x210x345
8042	PA2210CE05	3,3/5	900/1200	67	42/51	400V3~	1050x210x345
19422	PA2210CE08	5/8	900/1200	67	42/51	400V3~	1050x210x345
8158	PA2215CE08	4/8	1150/1800	67	40/52	400V3~	1560x210x345
8668	PA2215CE12	8/12	1150/1800	67	40/52	400V3~	1560x210x345
8454	PA2220CE10	5/10	1800/2400	69	43/53	400V3~	2050x210x345
8749	PA2220CE16	10/16	1800/2400	69	43/53	400V3~	2050x210x345

Water heat - PA2200C W (IP21)

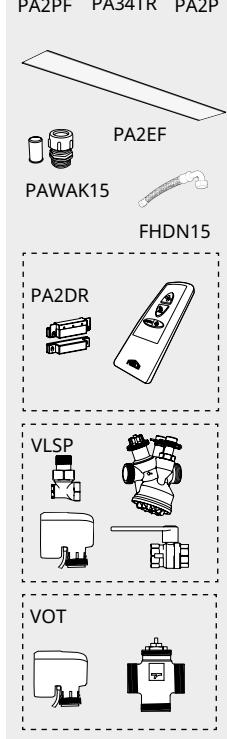
Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
8052	PA2210CW	6,9	700/1200	67	39/52	0,38	1050x210x345
8222	PA2215CW	11,1	1000/1750	68	37/53	0,81	1560x210x345
8660	PA2220CW	14,4	1400/2400	68	40/53	0,74	2050x210x345

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.



Art.nr	Type	Description	PA2210C	PA2215C	PA2220C
Accessories					
19415	PA2PF15	Ceiling mounting brackets (4x)	•	•	
19417	PA2PF20	Ceiling mounting brackets (6x)		•	
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)		•	
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)		•	
18690	PAMLK	Motor alarm board	•	•	•
14875	PA2EF10	External intake filter	•		
14876	PA2EF15	External intake filter		•	
14877	PA2EF20	External intake filter		•	
27279	PAWAK15	Water connection kit DN15	•	•	•
77179	FHDN15	Flexible hoses DN15 (2x)	•	•	•
Control					
15662	PA2DR	Door switch control			
Water control					
79379	VLSP15LF	Pressure independent valve system on/off DN15 , low flow			
79380	VLSP15NF	Pressure independent valve system on/off DN15			
79381	VLSP20	Pressure independent valve system on/off DN20			
79382	VLSP25	Pressure independent valve system on/off DN25			
19031	VOT15	Three way control valve and actuator on/off DN15 Kvs 1,7			
19032	VOT20	Three way control valve and actuator on/off DN20 Kvs 2,5			
19033	VOT25	Three way control valve and actuator on/off DN25 Kvs 4,5			



PA3200C 

Horizontal mounting

- Recommended installation height 3,2 m
- Lengths: 1, 1,5 and 2 m
- Remote control and integrated regulation.

 Ambient, no heat - PA3200C A (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
19802	PA3210CA	0	1100/1750	73	46/57	230V~	1068x256x458
19805	PA3215CA	0	1700/2750	74	46/59	230V~	1578x256x458
19808	PA3220CA	0	2300/3500	75	50/60	230V~	2068x256x458

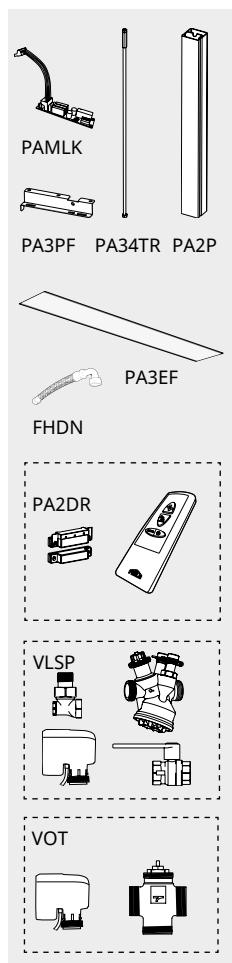
 Electrical heat - PA3200C E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
19801	PA3210CE08	5/8	1100/1750	72	46/57	400V3~	1068x256x458
19804	PA3215CE12	8/12	1700/2750	75	46/59	400V3~	1578x256x458
19807	PA3220CE16	10/16	2300/3500	76	50/60	400V3~	2068x256x458

 Water heat - PA3200C W (IP21)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
19809	PA3210CW	14	1050/1700	70	45/55	1,3	1068x256x458
19810	PA3215CW	24	1850/2700	73	46/57	2,1	1578x256x458
19811	PA3220CW	31	2200/3300	74	49/58	2,7	2068x256x458

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.



Art.nr	Type	Description	PA3210C	PA3215C	PA3220C
Accessories					
25256	PA3PF15	Ceiling mounting brackets (4x)	•	•	
25257	PA3PF20	Ceiling mounting brackets (6x)		•	
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)		•	
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)		•	
18690	PAMLK	Motor alarm board	•	•	•
18746	PA3EF10	External intake filter	•		
18747	PA3EF15	External intake filter		•	
18748	PA3EF20	External intake filter			•
18055	FHDN20	Flexible hoses DN20 350 mm (2x)	•	•	•
88906	FHDN2010	Flexible hoses DN20 1 m (2x)	•	•	•
Control					
15662	PA2DR	Door switch control			
Water control					
79379	VLSP15LF	Pressure independent valve system on/off DN15, low flow			
79380	VLSP15NF	Pressure independent valve system on/off DN15			
79381	VLSP20	Pressure independent valve system on/off DN20			
79382	VLSP25	Pressure independent valve system on/off DN25			
19031	VOT15	Three way control valve and actuator on/off DN15 Kvs 1,7			
19032	VOT20	Three way control valve and actuator on/off DN20 Kvs 2,5			
19033	VOT25	Three way control valve and actuator on/off DN25 Kvs 4,5			

AR3200C



Recessed mounting

- Recommended installation height AR3200CA/E: 3,2 m
- Recommended installation height AR3200CW: 2,8 m
- Lengths: 1, 1,5 and 2 m

Ambient, no heat - AR3200C A (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
48350	AR3210CA	0	1000/1800	73	43/57	230V~	1078x256x525
48354	AR3215CA	0	1600/2900	73	43/57	230V~	1588x256x525
48358	AR3220CA	0	2100/3900	76	44/60	230V~	2078x256x525

Electrical heat - AR3200C E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage [V]	LxHxD [mm]
48346	AR3210CE03	2/3	1000/1800	73	43/57	230V~	1078x256x525
48347	AR3210CE05	3,3/5	1000/1800	73	43/57	230V~/400V3N~	1078x256x525
48348	AR3210CE08	5/8	1000/1800	73	43/57	400V3N~	1078x256x525
48351	AR3215CE08	4/8	1600/2900	73	43/57	400V3N~	1588x256x525
48352	AR3215CE12	8/12	1600/2900	73	43/57	400V3N~	1588x256x525
48355	AR3220CE10	5/10	2100/3900	76	44/60	400V3N~	2078x256x525
48356	AR3220CE16	10/16	2100/3900	76	44/60	400V3N~	2078x256x525

Water heat - AR3200C W (IP21)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
48349	AR3210CW	14	1000/1500	69	44/53	1,1	1078x256x525
48353	AR3215CW	24	1700/2600	72	48/56	1,7	1588x256x525
48357	AR3220CW	30	2500/3150	72	50/56	2,3	2078x256x525

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.



Art.nr	Type	Description	AR3210C	AR3215C	AR3220C
Accessories					
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)		•	
18059	PA34CB15	Ceiling brackets (4x)	•	•	
18060	PA34CB20	Ceiling brackets (6x)		•	
18065	PA34VD15	Vibration dampers (4x)	•	•	
18066	PA34VD20	Vibration dampers (6x)		•	
18690	PAMLK	Motor alarm board	•	•	•
77179	FHDN15	Flexible hoses DN15 (2x)	•	•	•
Controls					
15662	PA2DR	Door switch control			
Water control					
79379	VLSP15LF	Pressure independent valve system on/off DN15 , low flow			
79380	VLSP15NF	Pressure independent valve system on/off DN15			
79381	VLSP20	Pressure independent valve system on/off DN20			
79382	VLSP25	Pressure independent valve system on/off DN25			
79417	VLSP32	Pressure independent valve system on/off DN32			
19031	VOT15	Three way control valve and actuator on/off DN15 Kvs 1,7			
19032	VOT20	Three way control valve and actuator on/off DN20 Kvs 2,5			
19033	VOT25	Three way control valve and actuator on/off DN25 Kvs 4,5			

Pamir 2500



Horizontal mounting

- Recommended installation height 2,5 m
- Lengths: 1, 1,5 and 2 m

Ambient, no heat - Pamir 2500 A (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
246826	PAF2510A	0	900/1300	70	43/53	1050x210x345
246830	PAF2515A	0	1250/2100	71	44/54	1560x210x345
246834	PAF2520A	0	1800/2600	72	44/55	2050x210x345

Electrical heat* - Pamir 2500 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
246823	PAF2510E05	1,7/3,3/5,0	900/1450	68	42/51	400V3~	1050x210x345
246824	PAF2510E08	3,0/5,0/8,0	900/1450	68	42/51	400V3~	1050x210x345
246827	PAF2515E08	2,7/5,3/8,0	1400/2200	69	40/52	400V3~	1560x210x345
246828	PAF2515E12	4,0/8,0/12	1400/2200	69	40/52	400V3~	1560x210x345
246831	PAF2520E10	3,4/6,6/10	1800/2900	70	43/53	400V3~	2050x210x345
246832	PAF2520E16	6,0/10/16	1800/2900	70	43/53	400V3~	2050x210x345

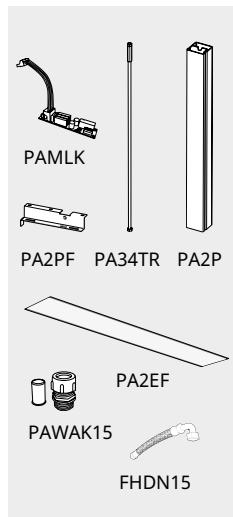
*) Also available with 230V3~, contact Frico for more information.

Water heat - Pamir 2500 W (IP21)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
246825	PAF2510W	4,7	900/1300	69	42/53	0,7	1050x210x345
246829	PAF2515W	9,2	1250/2100	70	41/54	1,1	1560x210x345
246833	PAF2520W	11	1800/2600	71	43/55	1,4	2050x210x345

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Pamir 2500 A and W are approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.



Accessories

Art.nr	Type	Description	PAF2510	PAF2515	PAF2520
19415	PA2PF15	Ceiling mounting brackets (4x)	•	•	
19417	PA2PF20	Ceiling mounting brackets (6x)			•
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)			•
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)			•
18690	PAMLK	Motor alarm board	•	•	•
14875	PA2EF10	External intake filter	•		
14876	PA2EF15	External intake filter		•	
14877	PA2EF20	External intake filter			•
27279	PAWAK15	Water connection kit DN15	•	•	•
77179	FHDN15	Flexible hoses DN15 (2x)	•	•	•

Controls Pamir 2500

FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

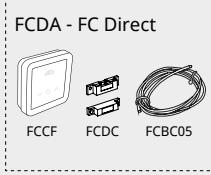
FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

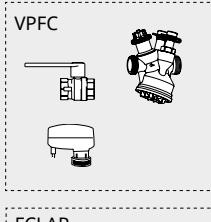
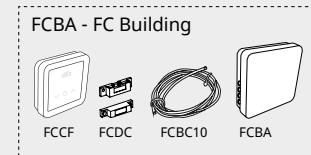
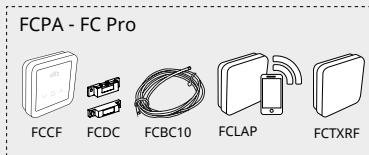
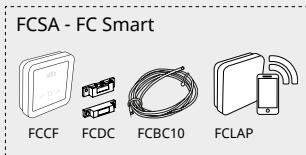
* Requires outdoor temp signal

Controls

Art.nr	Type	Description
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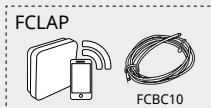


74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system



Valve systems for FC Control

Art.nr	Type	Description
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238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32



Accessories FC Control

Art.nr	Type	Description
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74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

Pamir 3500 ⚡⚡



Horizontal mounting

- Recommended installation height 3,5 m
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control



Vertical mounting

- Recommended installation width 5 m (2 units, one on each side)
- Lengths: 1,5, 2 and 2,5 m
- EC motor and stepless airflow control

⚡ Ambient, no heat - Pamir 3500 A (IP24**)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
189577	PAFEC3510A	0	900/1800	75	44/60	1039x270x525
189581	PAFEC3515A	0	1400/2700	78	46/63	1549x270x525
189585	PAFEC3520A	0	1900/3500	79	47/64	2039x270x525
189589	PAFEC3525A	0	2350/4400	80	47/65	2549x270x525

⚡ Electrical heat - Pamir 3500 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
189576	PAFEC3510E08	2,7/5,4/8,1	900/1800	76	44/60	400V3~	1039x270x525
189580	PAFEC3515E12	3,9/7,8/12	1400/2700	79	46/63	400V3~	1549x270x525
189584	PAFEC3520E16	5,4/11/16	1900/3500	80	47/64	400V3~	2039x270x525
189588	PAFEC3525E20	6,6/13/20	2350/4400	81	47/65	400V3~	2549x270x525

● Water heat - Pamir 3500 WL (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
189579	PAFEC3510WL	11	850/1700	75	42/59	1,5	1039x270x525
189583	PAFEC3515WL	18	1350/2600	77	45/61	2,4	1549x270x525
189587	PAFEC3520WL	24	1800/3400	78	45/62	3,2	2039x270x525
189591	PAFEC3525WL	31	2250/4300	80	47/64	4,0	2549x270x525

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

● Water heat - Pamir 3500 WH (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
189578	PAFEC3510WH	9,9	850/1700	75	42/59	1,1	1039x270x525
189582	PAFEC3515WH	15	1350/2600	77	45/61	1,6	1549x270x525
189586	PAFEC3520WH	21	1800/3400	78	45/62	2,2	2039x270x525
189590	PAFEC3525WH	26	2250/4300	80	47/64	2,7	2549x270x525

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

● Water heat - Pamir 3500 WLL (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
189594	PAFEC3510WLL	6,8	800/1600	74	42/58	2,0	1039x270x525
189592	PAFEC3515WLL	10	1250/2500	76	44/60	4,1	1549x270x525
189593	PAFEC3520WLL	15	1700/3300	77	44/61	5,6	2039x270x525
189595	PAFEC3525WLL	19	2100/4200	79	46/63	8,3	2549x270x525

*) Applicable at water temperature 40/30 °C, air temperature, in +18 °C.

**) Horizontal mounting and vertical mounting to the right (seen from the inside): IP24.

Vertical mounting to the left (seen from the inside): IP21.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Controls Pamir 3500

FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FCDA - FC Direct



FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

* Requires outdoor temp signal

Controls

Art.nr Type Description

74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system

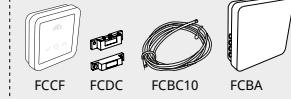
FCSA - FC Smart



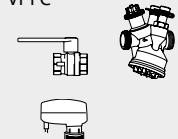
FCPA - FC Pro



FCBA - FC Building



VPFC



FCLAP



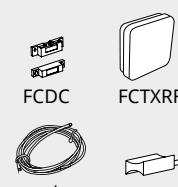
FCRTX



FCOTX



FCDC



FCBC/FCSC



Valve systems for FC Control

Art.nr Type Description

238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32

Accessories FC Control

Art.nr Type Description

74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

Accessories Pamir 3500



Art.nr	Type	Description	PAFEC 3510	PAFEC 3515	PAFEC 3520	PAFEC 3525
Horizontal mounting						
18044	PA34WB15	Wall brackets 400 mm (2x)	•	•		
18045	PA34WB20	Wall brackets 400 mm (3x)		•		
18046	PA34WB30	Wall brackets 400 mm (4x)			•	
214951	PAWBL15	Wall brackets 560 mm (2x)	•	•		
214952	PAWBL20	Wall brackets 560 mm (3x)		•		
214953	PAWBL30	Wall brackets 560 mm (4x)			•	
18059	PA34CB15	Ceiling brackets (4x)	•	•		
18060	PA34CB20	Ceiling brackets (6x)		•		
18061	PA34CB30	Ceiling brackets (8x)			•	
18062	PA34WS15	Wire suspension kit (4x)	•	•		
18063	PA34WS20	Wire suspension kit (6x)		•		
18064	PA34WS30	Wire suspension kit (8x)			•	
18056	PA34TR15	Threaded bars (4x)	•	•		
18057	PA34TR20	Threaded bars (6x)		•		
18058	PA34TR30	Threaded bars (8x)			•	
18065	PA34VD15	Vibration dampers (4x)	•	•		
18066	PA34VD20	Vibration dampers (6x)		•		
18067	PA34VD30	Vibration dampers (8x)			•	
110759	PA3JK	Joining kit	•	•	•	•
Outlet extension for recessed installation						
19085	PA3XT10	130-200 mm	•			
19086	PA3XT15	130-200 mm		•		
19087	PA3XT20	130-200 mm			•	
19088	PA3XT25	130-200 mm				•
Vertical mounting						
110759	PA3JK	Vertikal kit	•	•	•	•
10028	AXP300	Collision protection	•	•	•	•
Design kit for wall mounting						
110834	PA3DW10		•			
110835	PA3DW15			•		
110836	PA3DW20				•	
110837	PA3DW25					•
Design kit for ceiling mounting						
13552	PA3DCS	200-300 mm (1x)	(2x)	(2x)	(3x)	(4x)
13553	PA3DCM	300-500 mm (1x)	(2x)	(2x)	(3x)	(4x)
13555	PA3DCL	500-900 mm (1x)	(2x)	(2x)	(3x)	(4x)
13556	PA3DXT	Extension, 420 mm (1x)	•	•	•	•
Design kit for vertical mounting						
110751	PA3VDW15			•		
110752	PA3VDW20				•	
110753	PA3VDW25					•
Unit with water heating						
19064	PA34EF10	External intake filter	•			
19065	PA34EF15	External intake filter		•		
19066	PA34EF20	External intake filter			•	
19067	PA34EF25	External intake filter				•
18055	FHDN20	Flexible hoses DN20 350 mm (2x)	•	•	•	•
88906	FHDN2010	Flexible hoses DN20 1 m (2x)	•	•	•	•
17597	DTV200S	Filter pressure guard	•	•	•	•

Pamir 4200



Horizontal mounting

- Recommended installation height 4,2 m
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control



Vertical mounting

- Recommended installation width 6 m (2 units, one on each side)
- Lengths: 1,5, 2 and 2,5 m
- EC motor and stepless airflow control

Ambient, no heat - Pamir 4200 A (IP24**)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
230355	PAFEC4210A	0	1200/2400	78	46/62	1039x295x611
230360	PAFEC4215A	0	1800/3500	79	47/64	1549x295x611
230365	PAFEC4220A	0	2300/4700	81	48/65	2039x295x611
230370	PAFEC4225A	0	3100/6150	83	50/67	2549x295x611

Electrical heat - Pamir 4200 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
230356	PAFEC4210E12	3,9/7,8/12	1200/2400	78	46/62	400V3~	1039x295x611
230361	PAFEC4215E18	6,0/12/18	1800/3500	80	47/64	400V3~	1549x295x611
230366	PAFEC4220E24	7,8/16/24	2300/4700	81	48/65	400V3~	2039x295x611
230371	PAFEC4225E30	9,9/20/30	3100/6150	83	50/67	400V3~	2549x295x611

Water heat - Pamir 4200 WL (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230358	PAFEC4210WL	15	1100/2300	78	45/62	1,9	1039x295x611
230363	PAFEC4215WL	23	1700/3400	80	46/64	3,0	1549x295x611
230368	PAFEC4220WL	32	2200/4600	81	47/65	4,1	2039x295x611
230373	PAFEC4225WL	41	2800/5750	83	49/67	5,2	2549x295x611

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Water heat - Pamir 4200 WH (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230357	PAFEC4210WH	13	1100/2300	78	45/62	1,3	1039x295x611
230362	PAFEC4215WH	19	1700/3400	80	46/64	2,0	1549x295x611
230367	PAFEC4220WH	27	2200/4600	81	47/65	2,7	2039x295x611
230372	PAFEC4225WH	33	2800/5750	83	49/67	3,8	2549x295x611

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

Water heat - Pamir 4200 WLL (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230359	PAFEC4210WLL	9,3	1000/2200	77	45/61	2,5	1039x295x611
230364	PAFEC4215WLL	14	1600/3300	79	46/63	4,7	1549x295x611
230369	PAFEC4220WLL	19	2100/4450	80	46/64	7,5	2039x295x611
230374	PAFEC4225WLL	24	2700/5600	82	48/66	9,6	2549x295x611

*) Applicable at water temperature 40/30 °C, air temperature, in +18 °C.

**) Horizontal mounting and vertical mounting to the right (seen from the inside): IP24.
Vertical mounting to the left (seen from the inside): IP21.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Controls and accessories Pamir 4200, see pages 17-18.

Pamir 5000



Horizontal mounting

- Recommended installation height 5 m
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control



Vertical mounting

- Recommended installation width 7 m (2 units, one on each side)
- Lengths: 1,5, 2 and 2,5 m
- EC motor and stepless airflow control

Ambient, no heat - Pamir 5000 A (IP24**)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
230375	PAFEC5010A	0	900/2950	80	34/66	1039x295x611
230379	PAFEC5015A	0	1350/4200	84	35/68	1549x295x611
230383	PAFEC5020A	0	1700/5900	86	39/70	2039x295x611
230387	PAFEC5025A	0	2150/7200	87	41/71	2549x295x611

Electrical heat - Pamir 5000 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
230376	PAFEC5010E12	3,9/7,8/12	900/2950	80	34/66	400V3~	1039x295x611
230380	PAFEC5015E18	6,0/12/18	1350/4200	84	35/68	400V3~	1549x295x611
230384	PAFEC5020E24	7,8/16/24	1700/5900	86	39/70	400V3~	2039x295x611
230388	PAFEC5025E30	9,9/20/30	2150/7200	87	41/71	400V3~	2549x295x611

Water heat - Pamir 5000 WL (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230378	PAFEC5010WL	17	650/2700	82	32/66	1,9	1039x295x611
230382	PAFEC5015WL	26	1150/3950	82	33/66	3,0	1549x295x611
230386	PAFEC5020WL	35	1550/5400	83	35/67	4,1	2039x295x611
230390	PAFEC5025WL	46	1850/6900	85	37/69	5,2	2549x295x611

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Water heat - Pamir 5000 WH (IP24**)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230377	PAFEC5010WH	14	650/2700	82	32/66	1,3	1039x295x611
230381	PAFEC5015WH	21	1150/3950	82	33/66	2,0	1549x295x611
230385	PAFEC5020WH	30	1550/5400	83	35/67	2,7	2039x295x611
230389	PAFEC5025WH	37	1850/6900	85	37/69	3,8	2549x295x611

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

**) Horizontal mounting and vertical mounting to the right (seen from the inside): IP24.

Vertical mounting to the left (seen from the inside): IP21.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Controls Pamir 4200/Pamir 5000

FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

* Requires outdoor temp signal

Controls

Art.nr	Type	Description
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74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system



FCSA - FC Smart



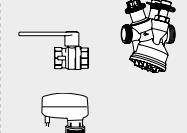
FCPA - FC Pro



FCBA - FC Building



VPFC



FCLAP



FCRTX



FCOTX



FCDC



Valve systems for FC Control

Art.nr	Type	Description
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238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32

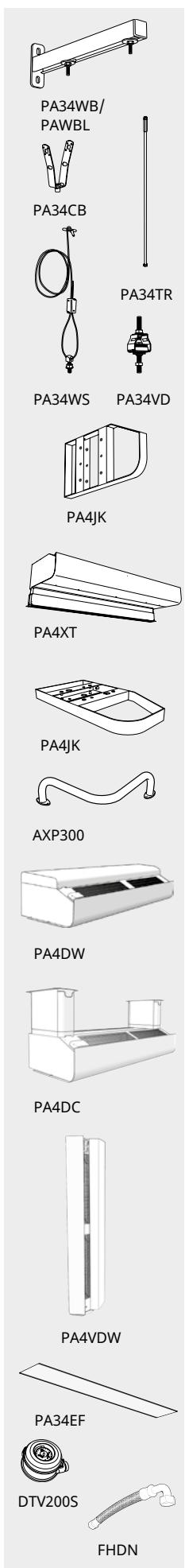
Accessories FC Control

Art.nr	Type	Description
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74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

Accessories Pamir 4200/Pamir 5000



Art.nr	Type	Description	PAFEC 42/5010	PAFEC 42/5015	PAFEC 42/5020	PAFEC 42/5025
Horizontal mounting						
18044	PA34WB15	Wall brackets 400 mm (2x)	•	•		
18045	PA34WB20	Wall brackets 400 mm (3x)			•	
18046	PA34WB30	Wall brackets 400 mm (4x)			•	
214951	PAWBL15	Wall brackets 560 mm (2x)	•	•		
214952	PAWBL20	Wall brackets 560 mm (3x)			•	
214953	PAWBL30	Wall brackets 560 mm (4x)			•	
18059	PA34CB15	Ceiling brackets (4x)	•	•		
18060	PA34CB20	Ceiling brackets (6x)			•	
18061	PA34CB30	Ceiling brackets (8x)			•	
18062	PA34WS15	Wire suspension kit (4x)	•	•		
18063	PA34WS20	Wire suspension kit (6x)			•	
18064	PA34WS30	Wire suspension kit (8x)			•	
18056	PA34TR15	Threaded bars (4x)	•	•		
18057	PA34TR20	Threaded bars (6x)			•	
18058	PA34TR30	Threaded bars (8x)			•	
18065	PA34VD15	Vibration dampers (4x)	•	•		
18066	PA34VD20	Vibration dampers (6x)			•	
18067	PA34VD30	Vibration dampers (8x)			•	
110760	PA4JK	Joining kit	•	•	•	•
Outlet extension for recessed installation						
19090	PA4XT10	130-200 mm	•			
19091	PA4XT15	130-200 mm		•		
19092	PA4XT20	130-200 mm			•	
19093	PA4XT25	130-200 mm				•
Vertical mounting						
110760	PA4JK	Vertikal kit	•	•	•	•
10028	AXP300	Collision protection	•	•	•	•
Design kit for wall mounting						
110838	PA4DW10		•			
110839	PA4DW15			•		
110840	PA4DW20				•	
110841	PA4DW25					•
Design kit for ceiling mounting						
13557	PA4DCS	200-300 mm (1x)	(2x)	(2x)	(3x)	(4x)
13559	PA4DCM	300-500 mm (1x)	(2x)	(2x)	(3x)	(4x)
13560	PA4DCL	500-900 mm (1x)	(2x)	(2x)	(3x)	(4x)
13561	PA4DXT	Extension, 420 mm (1x)	•	•	•	•
Design kit for vertical mounting						
110754	PA4VDW15			•		
110755	PA4VDW20				•	
110756	PA4VDW25					•
Unit with water heating						
19064	PA34EF10	External intake filter		•		
19065	PA34EF15	External intake filter			•	
19066	PA34EF20	External intake filter			•	
19067	PA34EF25	External intake filter				•
18055	FHDN20	Flexible hoses DN20 350 mm (2x)	•	•	•	•
88906	FHDN2010	Flexible hoses DN20 1 m (2x)	•	•	•	•
17597	DTV200S	Filter pressure guard	•	•	•	•

Sierra ⚡



Horizontal mounting

- Recommended installation height 3,5 m
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control



Vertical mounting

- Recommended installation width 5 m (2 units, one on each side)
- Lengths: 2 and 2,5 m
- EC motor and stepless airflow control

⚡ Ambient, no heat - Sierra A (IP20)

Type	Output	Airflow	Sound power	Sound pressure	LxHxD
	[kW]	[m³/h]	[dB(A)]	[dB(A)]	H*¹ [mm] V*² [mm]
SIFEC10A-H	0	900/1850	77	46/61	1124x393x363
SIFEC15A-H	0	1400/2750	79	48/63	1624x393x363
SIFEC20A-H/V	0	1850/3600	82	48/66	2124x393x363
SIFEC25A-H/V	0	2400/4500	83	49/67	2624x393x363

*¹) Horizontal mounting

*²) Vertical mounting

⚡ Electrical heat - Sierra E (IP20)

Type	Output steps	Airflow	Sound power	Sound pressure	Voltage heat	LxHxD
	[kW]	[m³/h]	[dB(A)]	[dB(A)]	[V]	H*¹ [mm] V*² [mm]
SIFEC10E8-H	2,7/5,4/8,1	900/1850	77	46/61	400V3~	1124x393x363
SIFEC15E12-H	3,9/7,8/12	1400/2750	79	48/63	400V3~	1624x393x363
SIFEC20E16-H/V	5,4/11/16	1850/3600	82	48/66	400V3~	2124x393x363
SIFEC25E20-H/V	6,6/13/20	2400/4500	83	49/67	400V3~	2624x393x363

*¹) Horizontal mounting

*²) Vertical mounting

💧 Water heat - Sierra WL (IP20)

Type	Output*³	Airflow	Sound power	Sound pressure	Water volume	LxHxD
	H*¹ V*²	[kW] [kW]	[m³/h]	[dB(A)]	[l]	H*¹ [mm] V*² [mm]
SIFEC10WL-H	8,5		850/1700	77	46/61	2,0
SIFEC15WL-H	14		1250/2600	79	48/63	3,2
SIFEC20WL-H/V	22	21	1650/3300	82	48/66	4,3
SIFEC25WL-H/V	28	25	2200/4250	83	49/67	5,4

*¹) Horizontal mounting

*²) Vertical mounting

*³) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

💧 Water heat - Sierra WH (IP20)

Type	Output*³	Airflow	Sound power	Sound pressure	Water volume	LxHxD
	H*¹ V*²	[kW] [kW]	[m³/h]	[dB(A)]	[l]	H*¹ [mm] V*² [mm]
SIFEC10WH-H	11		850/1700	77	46/61	1,1
SIFEC15WH-H	15		1250/2600	79	48/63	1,9
SIFEC20WH-H/V	20	28	1650/3300	82	48/66	2,5
SIFEC25WH-H/V	26	32	2200/4250	83	49/67	3,3

*¹) Horizontal mounting

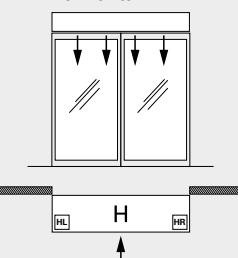
*²) Vertical mounting

*³) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

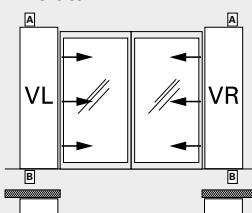
Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Connections

Horizontal



Vertical



Product key Sierra

Type - Unit shape - Connections position - Material / Colour

Example: SIFEC20WL - VL - A - P

Type	See technical specifications
Unit shape	HL (Horizontal, connections on the left) HR (Horizontal, connections on the right) VL (Vertical left) or VR (Vertical right) seen from inside
Connection position	A or B, see sketch
Material/Colour	P = Polished stainless steel B = Brushed stainless steel MP = Mirror polished stainless steel State RAL code = Powder coating RAL State NCS code = Powder coating NCS

Controls and accessories Sierra

Controls		
Art.nr	Type	Description
74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system

FCSA - FC Smart	FCPA - FC Pro	FCBA - FC Building
 FCCF  FCDC  FCBC10  FCLAP	 FCCF  FCDC  FCBC10  FCLAP  FCTXRF	 FCCF  FCDC  FCBC10  FCBA

VPFC	Valve systems for FC Control	
Art.nr	Type	Description
238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32

FCLAP	Accessories FC Control	
Art.nr	Type	Description
74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

Accessories Sierra		
Art.nr	Type	Description
251886	SIFWB	Wall bracket in brushed stainless steel
251887	SIFWP	Wall bracket in polished stainless steel
251888	SIFWBM	Wall bracket in mirror polished stainless steel
18059	PA34CB15	Ceiling brackets for SIFEC10/15-H (4x)
18060	PA34CB20	Ceiling brackets for SIFEC20-H (6x)
18061	PA34CB30	Ceiling brackets for SIFEC25-H (8x)
18062	PA34WS15	Wire suspension kit for SIFEC10/15-H (4x)
18063	PA34WS20	Wire suspension kit for SIFEC20-H (6x)
18064	PA34WS30	Wire suspension kit for SIFEC25-H (8x)
18056	PA34TR15	Threaded bars for SIFEC10/15-H (4x)
18057	PA34TR20	Threaded bars for SIFEC20-H (6x)
18058	PA34TR30	Threaded bars for SIFEC25-H (8x)
18065	PA34VD15	Vibration dampers for SIFEC10/15-H (4x)
18066	PA34VD20	Vibration dampers for SIFEC20-H (6x)
18067	PA34VD30	Vibration dampers for SIFEC25-H (8x)
FE10234	SIFEH	Extension hood for SIFEC20/25-V
10028	AXP300	Collision protection for SIFEC20/25-V
237568	FH1020	Flexible hoses, DN20, inside/outside thread, 1 m, for SIFECxxWL-H (2x)
330955	FH1025	Flexible hoses, DN25, inside/outside thread, 1 m, for SIFECxxWL-V (2x)

Arden 3500



Recessed mounting

- Recommended installation height 3,5 m
- Lengths: 1, 1,5 and 2 m
- EC motor and stepless airflow control

Ambient, no heat - Arden 3500 A (IP20)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
190544	ARFEC3510A	0	1000/1900	76	43/60	1057x302x646
190548	ARFEC3515A	0	1550/3000	78	44/62	1567x302x646
190552	ARFEC3520A	0	2250/3800	79	45/63	2073x302x646

Electrical heat - Arden 3500 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
190545	ARFEC3510E09	4,5/9,0	1000/1900	76	43/60	400V3~	1057x302x646
190549	ARFEC3515E14	7,0/14	1550/3000	78	44/62	400V3~	1567x302x646
190553	ARFEC3520E18	9,0/18	2250/3800	79	45/63	400V3~	2073x302x646

Water heat - Arden 3500 W (IP20)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
190546	ARFEC3510W	8,3	1000/1900	75	43/59	1,3	1057x302x646
190550	ARFEC3515W	12	1500/2800	76	43/60	2,1	1567x302x646
190554	ARFEC3520W	17	2100/3700	77	45/61	2,9	2073x302x646

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Water heat - Arden 3500 WLL (IP20)

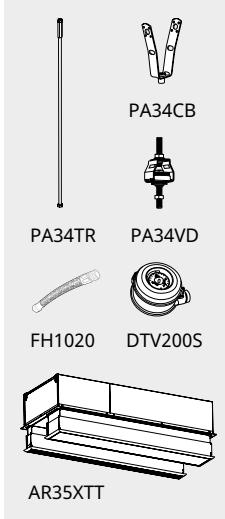
Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
190547	ARFEC3510WLL	8,0	1000/1900	75	43/59	2,6	1057x302x646
190551	ARFEC3515WLL	12	1500/2800	76	43/60	4,2	1567x302x646
190555	ARFEC3520WLL	16	2100/3700	77	45/61	5,8	2073x302x646

*) Applicable at water temperature 40/30 °C, air temperature, in +18 °C.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Accessories

Art.nr	Type	Description	ARFEC 3510	ARFEC 3515	ARFEC 3520
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)			•
18059	PA34CB15	Ceiling brackets (4x)	•	•	
18060	PA34CB20	Ceiling brackets (6x)			•
18065	PA34VD15	Vibration dampers (4x)	•	•	
18066	PA34VD20	Vibration dampers (6x)			•
237568	FH1020	Flexible hoses DN20 1 m (2x)	•	•	•
17597	DTV200S	Filter pressure guard	•	•	•
19070	AR35XTT10	Outlet/inlet extension 130-210 mm	•		
19071	AR35XTT15	Outlet/inlet extension 130-210 mm		•	
19072	AR35XTT20	Outlet/inlet extension 130-210 mm			•



Arden 4200



Recessed mounting

- Recommended installation height 4,2 m
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control

Ambient, no heat - Arden 4200 A (IP20)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
230283	ARFEC4210A	0	1300/2500	74	41/58	1067x296x851
230287	ARFEC4215A	0	1950/3650	76	43/60	1577x296x851
230291	ARFEC4220A	0	2500/4900	78	44/62	2067x296x851
230295	ARFEC4225A	0	3200/6350	81	46/65	2579x296x851

Electrical heat - Arden 4200 E (IP20)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	LxHxD [mm]
230284	ARFEC4210E12	3,9/7,8/12	1300/2500	74	41/58	400V3~	1067x296x851
230288	ARFEC4215E18	6,0/12/18	1950/3650	76	43/60	400V3~	1577x296x851
230292	ARFEC4220E24	7,8/16/24	2500/4900	78	44/62	400V3~	2067x296x851
230296	ARFEC4225E30	9,9/20/30	3200/6350	81	46/65	400V3~	2579x296x851

Water heat - Arden 4200 W (IP20)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230285	ARFEC4210W	15	1200/2400	73	40/57	1,9	1067x296x851
230289	ARFEC4215W	23	1700/3400	75	42/59	3,0	1577x296x851
230293	ARFEC4220W	32	2300/4700	76	44/60	4,0	2067x296x851
230297	ARFEC4225W	41	2800/5750	79	46/63	5,1	2579x296x851

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Water heat - Arden 4200 WLL (IP20)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	LxHxD [mm]
230286	ARFEC4210WLL	9,6	1100/2300	72	40/56	3,1	1067x296x851
230290	ARFEC4215WLL	14	1600/3300	74	42/58	4,7	1577x296x851
230294	ARFEC4220WLL	19	2200/4600	75	43/59	7,5	2067x296x851
230298	ARFEC4225WLL	24	2700/5600	78	45/62	9,6	2579x296x851

*) Applicable at water temperature 40/30 °C, air temperature, in +18 °C.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.



Accessories

Art.nr	Type	Description	ARFEC 4210	ARFEC 4215	ARFEC 4220	ARFEC 4225
18056	PA34TR15	Threaded bars (4x)	•	•		
18057	PA34TR20	Threaded bars (6x)			•	
18058	PA34TR30	Threaded bars (8x)			•	
18059	PA34CB15	Ceiling brackets (4x)	•	•		
18060	PA34CB20	Ceiling brackets (6x)			•	
18061	PA34CB30	Ceiling brackets (8x)			•	
18065	PA34VD15	Vibration dampers (4x)	•	•		
18066	PA34VD20	Vibration dampers (6x)			•	
18067	PA34VD30	Vibration dampers (8x)			•	
237568	FH1020	Flexible hoses DN20 1 m (2x)	•	•	•	•
17597	DTV200S	Filter pressure guard	•	•	•	•
88060	AR42XTT10	Outlet/inlet extension 130-210 mm	•			
88061	AR42XTT15	Outlet/inlet extension 130-210 mm		•		
88062	AR42XTT20	Outlet/inlet extension 130-210 mm			•	
88063	AR42XTT25	Outlet/inlet extension 130-210 mm				•

Controls Arden 3500/Arden 4200

FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

* Requires outdoor temp signal

Controls

Art.nr	Type	Description
--------	------	-------------

74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system



FCSA - FC Smart



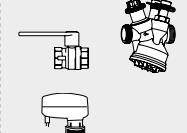
FCPA - FC Pro



FCBA - FC Building



VPFC



FCLAP



FCRTX



FCOTX



FCDC



Valve systems for FC Control

Art.nr	Type	Description
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238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32

Accessories FC Control

Art.nr	Type	Description
--------	------	-------------

74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

PAEC2500



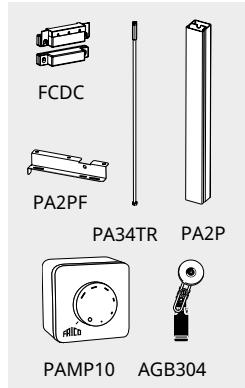
Horizontal mounting

- For cold rooms and entrances
- Recommended installation height for entrances: 2,5 m
- Installation height for cold storage: up to 4 m
- Lengths: 1, 1,5 and 2 m
- EC motor and stepless airflow control

Ambient, no heat - PAEC2500 A (IP44)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
84620	PAEC2510A	0	1400	70	33/53	1050x210x345
84621	PAEC2515A	0	2100	72	37/55	1560x210x345
84622	PAEC2520A	0	2800	71	34/54	2050x210x345

Approved for 200-240V, 50/60Hz. Product performance for 60Hz will differ from stated data.



Art.nr	Type	Description	PAEC2510	PAEC2515	PAEC2520
Controls					
87675	PAMP10	External potentiometer	•	•	•
17495	FCDC	Door contact	•	•	•
10016	AGB304	Position limit switch, IP44	•	•	•
Accessories					
19415	PA2PF15	Ceiling mounting brackets (4x)	•	•	
19417	PA2PF20	Ceiling mounting brackets (6x)			•
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)			•
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)			•

PAEC3200



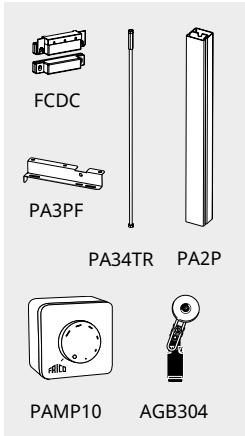
Horizontal mounting

- For cold rooms and entrances
- Recommended installation height for entrances: 3,2 m
- Installation height for cold storage: up to 5 m
- Lengths: 1, 1,5 and 2 m
- EC motor and stepless airflow control

Ambient, no heat - PAEC3200 A (IP44)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
77517	PAEC3210A	0	1950	74	40/58	1068x256x458
77518	PAEC3215A	0	2700	74	39/58	1578x256x458
77519	PAEC3220A	0	3800	77	43/61	2068x256x458

Approved for 200-240V, 50/60Hz. Product performance for 60Hz will differ from stated data.



Art.nr	Type	Description	PAEC3210	PAEC3215	PAEC3220
Controls					
87675	PAMP10	External potentiometer	•	•	•
17495	FCDC	Door contact	•	•	•
10016	AGB304	Position limit switch, IP44	•	•	•
Accessories					
25256	PA3PF15	Ceiling mounting brackets (4x)	•	•	
25257	PA3PF20	Ceiling mounting brackets (6x)			•
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)			•
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)			•

PAECS



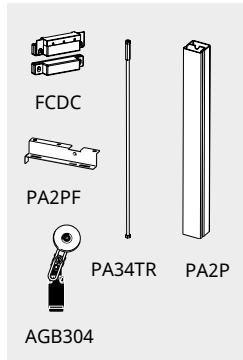
Horizontal mounting

- For cold rooms
- Installation height for cold storage: up to 4 m
- Lengths: 1, 1,5 and 2 m
- EC motor and stepless airflow control

Ambient, no heat - PAECS (IP44)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
154846	PAECS10	0	1450	77	44/62	1050x209x245
154847	PAECS15	0	2200	78	45/62	1560x209x245
154848	PAECS20	0	3100	83	51/67	2050x209x245

Approved for 200-240V, 50/60Hz. Product performance for 60Hz will differ from stated data.



Art.nr	Type	Description	PAECS10	PAECS15	PAECS20
Controls					
17495	FCDC	Door contact	•	•	•
10016	AGB304	Position limit switch, IP44	•	•	•
Accessories					
19415	PA2PF15	Ceiling mounting brackets (4x)	•	•	
19417	PA2PF20	Ceiling mounting brackets (6x)			•
18056	PA34TR15	Threaded bars (4x)	•	•	
18057	PA34TR20	Threaded bars (6x)			•
19568	PA2P15	Hanging brackets (2x)	•	•	
19569	PA2P20	Hanging brackets (3x)			•

ADA Cool



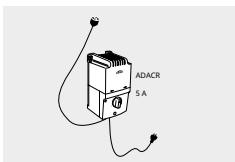
Horizontal mounting

- For cold rooms
- Recommended installation height for entrances: 2,5 m
- Installation height for cold storage: up to 3 m
- Lengths: 0,9 and 1,2 m

Ambient, no heat - ADA Cool (IP21)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	LxHxD [mm]
2348	ADAC090	0	1150	70	43/54	900x251x218
10775	ADAC120	0	1400	67	44/51	1200x251x218

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.



Controls

Art.nr	Type	Description
10774	ADACR	5-step fan speed control, max input: 5 A, IP30

Scand ⚡



Vertical mounting

- For revolving doors
- Height: 2,2 m
- EC motor and stepless airflow control

⚡ Electrical heat - Scand E (IP20)

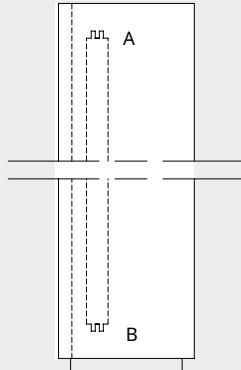
Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	HxWxD [mm]
SFFEC4E16	5,4/11/16	1850/3600	82	48/66	400V3~	2200x581x296
SFFEC6E24	7,8/16/24	2300/4700	83	50/67	400V3~	2200x581x296

● Water heat - Scand WL (IP20)

Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	HxWxD [mm]
SFFEC4WL	21	1650/3300	82	48/66	4,4	2200x581x296
SFFEC6WL	26	2200/4600	83	50/67	4,4	2200x581x296

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

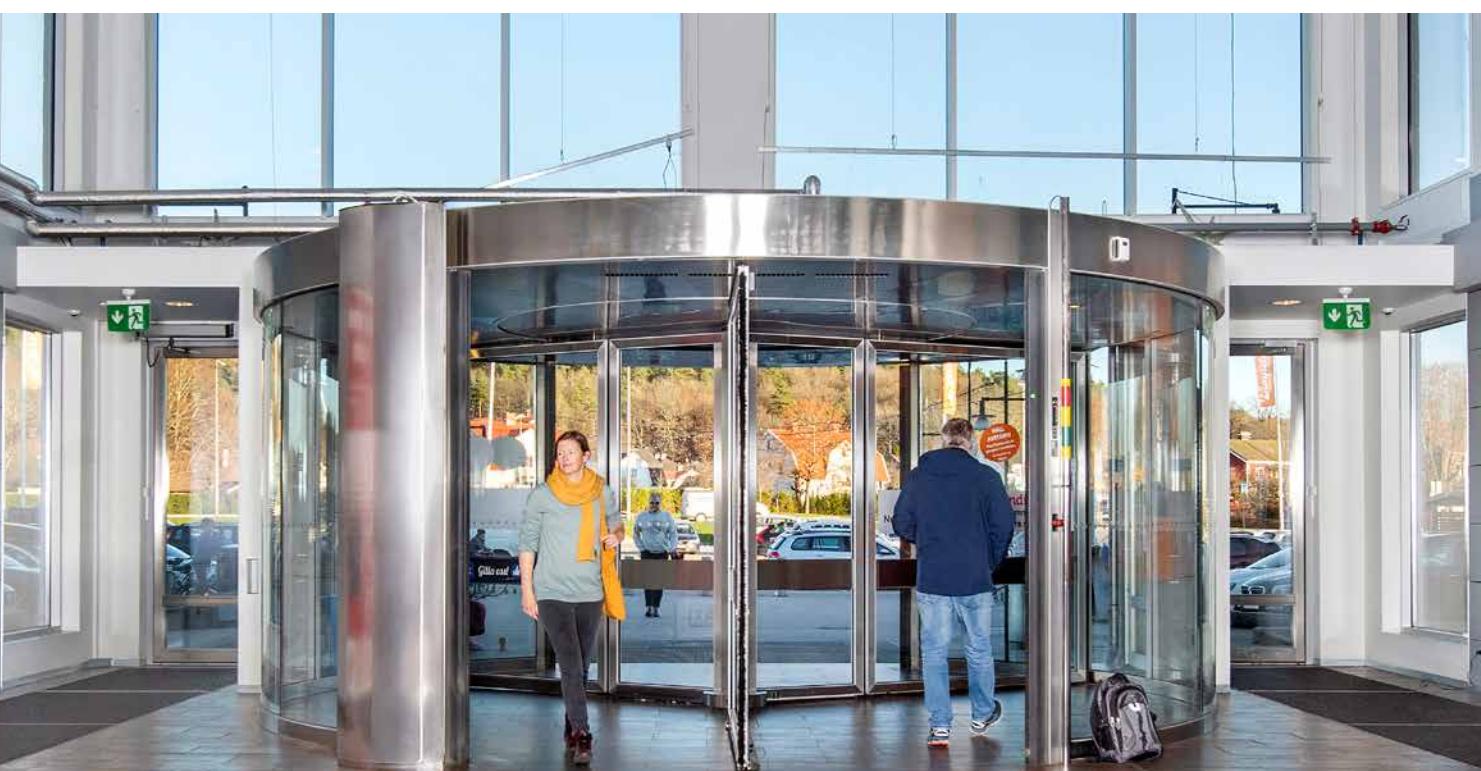
Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.



Product key Scand

Type - Connection position - Total height - Material / colour
Example: SFFEC6WL - A - 2800 - P

Type	See technical specifications
Connection position	A = from above B = from below
Total height	Min. height 2200 mm. Max height 3000 mm. Extension without fans.
Material/Colour	P = Polished stainless steel B = Brushed stainless steel MP = Mirror polished stainless steel State RAL code = Powder coating RAL State NCS code = Powder coating NCS



Ruwen



Horizontal mounting

- For revolving doors up to 3 meters
- Lengths: 1, 1,5, 2 and 2,5 m
- EC motor and stepless airflow control

Ambient, no heat - Ruwen A (IP20)

Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Length [mm]
RDFEC10A	0	1200/2400	78	46/62	1060
RDFEC15A	0	1800/3500	80	47/64	1560
RDFEC20A	0	2300/4700	81	48/65	2060
RDFEC25A	0	3100/6150	83	50/67	2560

Electrical heat - Ruwen E (IP20)

Type	Output steps [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Voltage heat [V]	Length [mm]
RDFEC10E12	3,9/7,8/12	1200/2400	78	46/62	400V3~	1060
RDFEC15E18	6,0/12/18	1800/3500	80	47/64	400V3~	1560
RDFEC20E24	7,8/16/24	2300/4700	81	48/65	400V3~	2060
RDFEC25E30	9,9/20/30	3100/6150	83	50/67	400V3~	2560

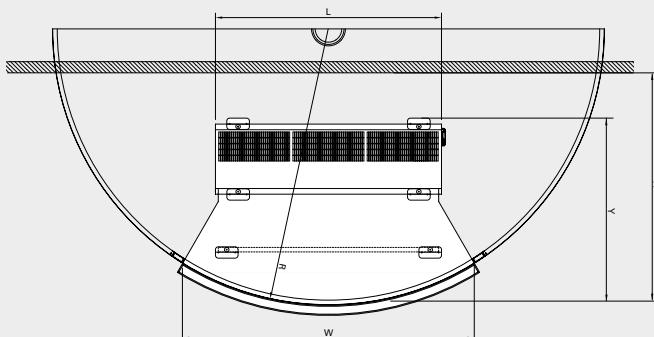
Water heat - Ruwen WL (IP20)

Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	Length [mm]
RDFEC10WL	10	1100/2300	78	45/62	2,2	1060
RDFEC15WL	16	1700/3400	80	46/64	3,4	1560
RDFEC20WL	23	2200/4600	81	47/65	4,5	2060
RDFEC25WL	30	2800/5750	83	49/67	5,7	2560

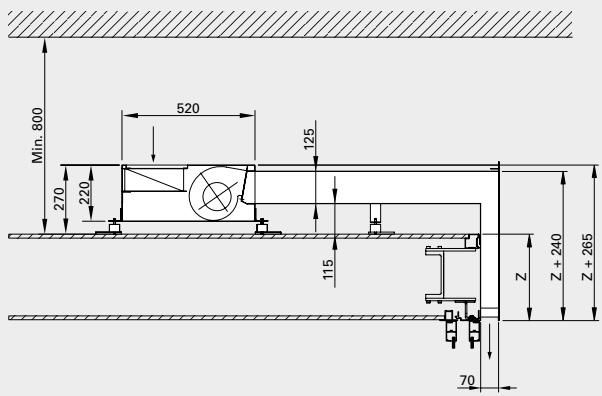
*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Top view



Side view



Product key Ruwen

Type - R - W - X - Z - Material / colour

Example: RDFEC20WL - 2500 - 2900 - 2350 - 500 - P

Type	See technical specifications
R	Radius of the revolving door
W	The opening width of the revolving door
X	Depth of the revolving door outside the wall
Z	The height between the inner ceiling of the revolving door (the position of the outlet of the duct) up to the outer roof of the revolving door (where the air curtain is mounted)

Material/Colour	P = Polished stainless steel B = Brushed stainless steel MP = Mirror polished stainless steel State RAL code = Powder coating RAL State NCS code = Powder coating NCS
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Y is variable, depending on the other dimensions in the product key

Controls and accessories Scand/Ruwen

FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FCDA - FC Direct



FCCF FCDC FCBC05

FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

* Requires outdoor temp signal

Controls

Art.nr	Type	Description
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74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system

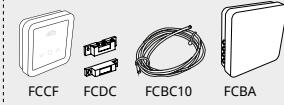
FCSA - FC Smart



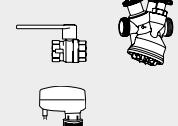
FCPA - FC Pro



FCBA - FC Building



VPFC



FCLAP



FCRTX



FCOTX



FCDC



FCBC/FCSC



Valve systems for FC Control

Art.nr	Type	Description
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238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15
238294	VPFC15NF	Pressure independent and modulating valve system, DN15
238295	VPFC20	Pressure independent and modulating valve system, DN20
238296	VPFC25	Pressure independent and modulating valve system, DN25
238297	VPFC32	Pressure independent and modulating valve system, DN32

Accessories FC Control

Art.nr	Type	Description
--------	------	-------------

74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

Please contact us to assemble a package suited to your specific needs.

Accessories Scand/Ruwen

Type	Description
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SFSEH	Extension hood for Scand 100-1000 mm
FH1025	Flexible hose DN25 för Ruwen/Scand, inside/outside thread, length 1 m
RDSB	Beam 40x80 mm for Ruwen, state length when ordering

AGI6000 ☀•



Horizontal mounting

- Recommended installation height 6 m
- Lengths: 1,2, 1,8, 2,4 and 3 m.

Vertical mounting

- Recommended installation width 8 m (2 units, one on each side)
- Lengths: 1,2, 1,8, 2,4 and 3 m.

Horizontal mounting - Recommended installation height 6 m

☀ Ambient, no heat - AGIH6000 A (IP54)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Amperage motor [A]	LxHxD [mm]
11448	AGIH6012A	0	6600	85	69	2,0	1200x485x730
11449	AGIH6018A	0	9600	87	71	2,8	1800x485x730
11450	AGIH6024A	0	12600	88	72	3,7	2400x485x730
11451	AGIH6030A	0	15600	89	73	4,7	3000x485x730

💧 Water heat - AGIH6000 WH, (IP54)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	Amperage motor [A]	LxHxD [mm]
11440	AGIH6012WH	39	6600	85	69	4,6	2,0	1200x485x730
11441	AGIH6018WH	58	9600	87	71	7,0	2,8	1800x485x730
11442	AGIH6024WH	78	12600	88	72	9,5	3,7	2400x485x730
11443	AGIH6030WH	97	15600	89	73	12,0	4,7	3000x485x730

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

◐ Water heat - AGIH6000 WL, (IP54)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	Amperage motor [A]	LxHxD [mm]
11444	AGIH6012WL	33	6600	85	69	6,6	2,0	1200x485x730
11445	AGIH6018WL	46	9600	87	71	10,1	2,8	1800x485x730
11446	AGIH6024WL	61	12600	88	72	14,0	3,7	2400x485x730
11447	AGIH6030WL	77	15600	89	73	17,6	4,7	3000x485x730

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Vertical mounting - Recommended installation width 8 m

☀ Ambient, no heat - AGIV6000 A (IP54)

Art.nr	Type	Output [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Amperage motor [A]	LxHxD [mm]
11428	AGIV6012A	0	6600	85	69	2,0	1250x485x730
11429	AGIV6018A	0	9600	87	71	2,8	1850x485x730
11430	AGIV6024A	0	12600	88	72	3,7	2450x485x730
11431	AGIV6030A	0	15600	89	73	4,7	3050x485x730

◐ Water heat - AGIV6000 WH, (IP54)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	Amperage motor [A]	LxHxD [mm]
11432	AGIV6012WH	39	6600	85	69	4,6	2,0	1250x485x730
11434	AGIV6018WH	58	9600	87	71	7,0	2,8	1850x485x730
11436	AGIV6024WH	78	12600	88	72	9,5	3,7	2450x485x730
11438	AGIV6030WH	97	15600	89	73	12,0	4,7	3050x485x730

*) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

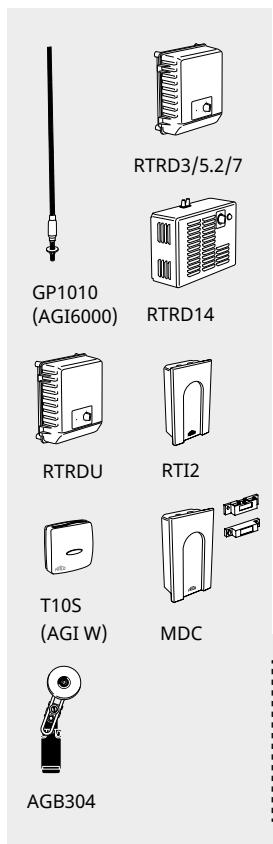
◐ Water heat - AGIV6000 WL, (IP54)

Art.nr	Type	Output* [kW]	Airflow [m³/h]	Sound power [dB(A)]	Sound pressure [dB(A)]	Water volume [l]	Amperage motor [A]	LxHxD [mm]
11433	AGIV6012WL	33	6600	85	69	6,6	2,0	1250x485x730
11435	AGIV6018WL	46	9600	87	71	10,1	2,8	1850x485x730
11437	AGIV6024WL	61	12600	88	72	14,0	3,7	2450x485x730
11439	AGIV6030WL	77	15600	89	73	17,6	4,7	3050x485x730

*) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

Accessories and controls AGI6000



Art.nr	Type	Description
Accessories		
27423	GP1010	Threaded bar, 1m (1x)
Controls		
32594	RTRD3	5-step fan speed control, 3 A, IP54
32399	RTRD5.2	5-step fan speed control, 5,2 A, IP54
10068	RTRD7	5-step fan speed control, 7 A, IP21
10065	RTRD14	5-step fan speed control, 14 A, IP21
10071	RTRDU7	5-step fan speed control high/low speed, 7 A, IP21
24727	T10S	Electronic thermostat, IP30
10231	RTI2	Electronic 2-step room thermostat, IP44
11600	MDC	Magnetic door contact with time relay, IP44
10016	AGB304	Position limit switch, IP44
Water control		
24733	VRS20	Valve kit DN20
24734	VRS25	Valve kit DN25'
24729	TVVS20	2-way control valve DN20
24730	TVVS25	2-way control valve DN25
10073	SD20	Actuator on/off

VRS20/25



UF600



Vertical mounting

- Air curtain with floor outlet for large industrial doorways
- The floor channel is cast in the floor.

Ambient, no heat - UF600, indoor installation (IP54)

Art.nr	Type	Output [kW]	Air velocity* [m/s]	Dimensions	Diameter
				floor channel [mm]	fans [mm]
79840	UF601 Indoor	2x4	30	600x600	500
79841	UF602 Indoor	2x7,5	35	750x750	630
79842	UF603 Indoor	2x11	38	750x750	630
79843	UF604 Indoor	2x15	38	750x750	630
79844	UF605 Indoor	2x18,5	40	750x750	630

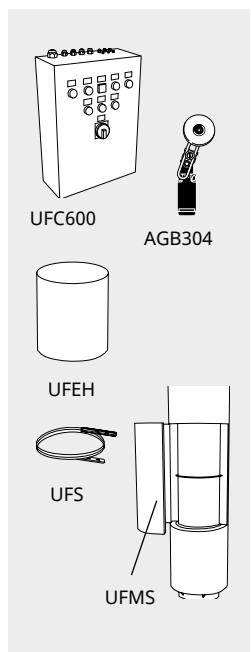
*) Depends on the design of the floor channel.

UF600 with
motor silencer

Ambient, no heat - UF600, outdoor installation (IP54)

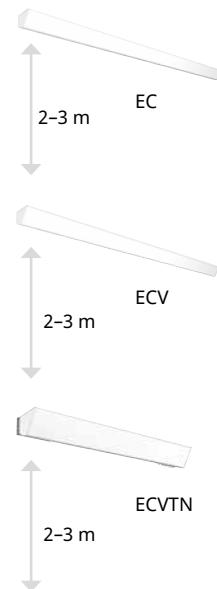
Art.nr	Type	Output [kW]	Air velocity* [m/s]	Dimensions	Diameter
				floor channel [mm]	fans [mm]
79845	UF601 Outdoor	2x4	30	600x600	500
79846	UF602 Outdoor	2x7,5	35	750x750	630
79847	UF603 Outdoor	2x11	38	750x750	630
79848	UF604 Outdoor	2x15	38	750x750	630
79849	UF605 Outdoor	2x18,5	40	750x750	630

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

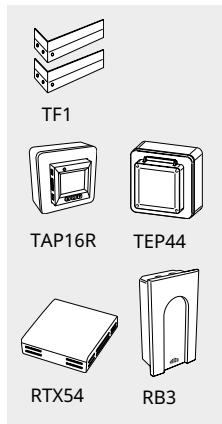


Art.nr	Type	Description
Controls		
935221	UFC601	Control box UF601
930934	UFC602	Control box UF602
935222	UFC603	Control box UF603
930961	UFC604	Control box UF604
935213	UFC605	Control box UF605
10016	AGB304	Position limit switch, IP44
Accessories		
95241	UFEH05	Pillar extension, Ø500 mm, length 500 mm, for UF601
95242	UFEH10	Pillar extension, Ø500 mm, length 1000 mm, for UF601
95243	UFEH15	Pillar extension, Ø500 mm, length 1500 mm, for UF601
95244	UFEH20	Pillar extension, Ø500 mm, length 2000 mm, for UF601
95245	UFEH605	Pillar extension, Ø630 mm, length 500 mm, for UF602-605
95246	UFEH610	Pillar extension, Ø630 mm, length 1000 mm, for UF602-605
95247	UFEH615	Pillar extension, Ø630 mm, length 1500 mm, for UF602-605
95248	UFEH620	Pillar extension, Ø630 mm, length 2000 mm, for UF602-605
84765	UFMS750	Motor silencer Ø750 mm, for UF601
84766	UFMS900	Motor silencer Ø900 mm, for UF602-605
84763	UFS750	Securing strip Ø750 mm, for UF601
84764	UFS900	Securing strip Ø900 mm, for UF602-605

Thermoplus EC/ECV/ECVTN ⚡



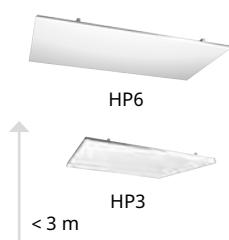
	Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxHxD [mm]
Thermoplus EC for dry rooms (IP20)						
10029	EC45021	450	230V~	180	1076x100x90	
10032	EC60021	600	230V~	180	1505x100x90	
10035	EC75021	750	230V~	180	1810x100x90	
10038	EC90021	900	230V~	180	2140x100x90	
10039	EC90031	900	400V2~	180	2140x100x90	
Thermoplus ECV for wet rooms (IP44)						
10041	ECV30021	300	230V~	180	870x100x90	
10044	ECV55021	550	230V~	180	1505x100x90	
10045	ECV55031	550	400V2~	180	1505x100x90	
10049	ECV70021	700	230V~	180	1810x100x90	
10050	ECV70031	700	400V2~	180	1810x100x90	
Thermoplus ECVTN for wet rooms, with built-in control (IP44)						
153948	ECVTN30021	300	230V~	180	870x100x90	
153949	ECVTN55021	550	230V~	180	1505x100x90	
153956	ECVTN70021	700	230V~	180	1810x100x90	



Art.nr	Type	Description
Accessories		
10114	TF1	Fixture for ceiling mounting (2 pcs)
Controls		
92790	TAP16R	Electronic thermostat, 16A, IP21
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
93012	RB3	Relaybox 400V3N~ (400V3~/V2~, 230V3~/V2~), 16A, IP44



Thermocassette HP ⚡

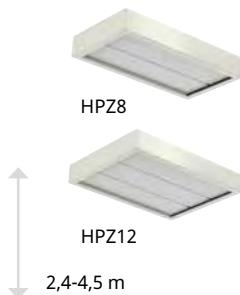


Thermocassette HP (IP55)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxWxH [mm]
145991	HP3N	300	230V~	100	593x593x80*
145992	HP6N	600	230V~	100	593x1193x80*

*) Height with brackets.

Thermocassette HPZ ⚡



Thermocassette HPZ (IP44). Built-in radiant heater

Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxWxH [mm]
146858	HPZ8	800	230V~	320	593x320x87
74756	HPZ12	1200	230V~	320	593x450x87

Accessories and controls HP/HPZ



Art.nr Type Description

Accessories

10088	HPWM	Wire mounting kit
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Controls

92790	TAP16R	Electronic thermostat, 16A, IP21
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205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
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93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
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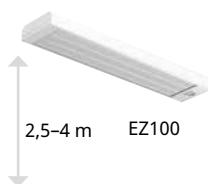
205550	SKG30	Black bulb sensor, NTC10KΩ, IP30
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Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188

5999	KRT1900	Capillary tube thermostat, IP55
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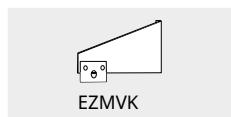
10214	KRTV19	Capillary tube thermostat with knob, IP44
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Elztrip EZ100 ⚡



EZ100 (IP44)

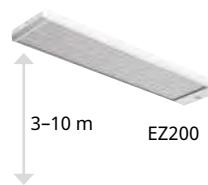
Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxHxW [mm]
14894	EZ106N	600	230V~	320	870x50x150
14895	EZ111N	1100	230V~	320	1470x50x150
14896	EZ115N	1500	230V~	320	1950x50x150



Accessories

Art.nr	Type	Description
10004	EZMVK	Mounting bracket

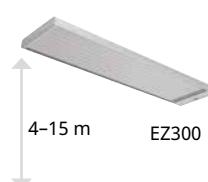
Elztrip EZ200 ⚡



EZ200 (IP44)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxHxW [mm]
11066	EZ208	800	230V~	320	683x64x282
11067	EZ212	1200	230V~	320	923x64x282
11068	EZ217	1700	230V~	320	1221x64x282
11069	EZ222	2200	230V~	320	1520x64x282
11724	EZ20831	800	400V2~	320	683x64x282
11725	EZ21231	1200	400V2~	320	923x64x282
11726	EZ21731	1700	400V2~	320	1221x64x282
11727	EZ22231	2200	400V2~	320	1520x64x282

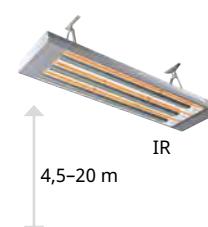
Elztrip EZ300 ⚡



EZ300 (IP44)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. surface temperature [°C]	Dimensions LxHxW [mm]
11070	EZ336	3600	230V3~/400V3N~	320	1670x63x420
11071	EZ345	4500	230V3~/400V3N~	320	2030x63x420

Industrial infrared heater IR ⚡



Industrial infrared heater IR (IP44)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. element temperature [°C]	Dimensions LxHxW [mm]
10012	IR3000	3000	400V3N~*	700	1125x83x358
10018	IR4500	4500	400V3N~*	700	1500x83x358
5940	IR6000	6000	400V3N~*	700	1875x83x358

*) Can also be connected 400V3~, but then without output steps. With neutral, one element tube at a time can be connected.

Accessories

Art.nr	Type	Description
10104	IRG3000	Protection grille for IR3000
10105	IRG4500	Protection grille for IR4500
10107	IRG6000	Protection grille for IR6000

Halogen infrared heater IRCF ⚡



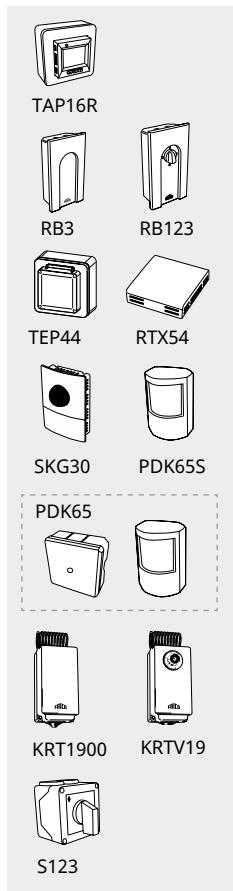
Halogen infrared heater IRCF (IP20)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. lamp temperature [°C]	Dimensions LxHxD [mm]
11909	IRCF1500	1500	230V~	2200	490x230x140
11910	IRCF3000	3000	230V~	2200	490x375x140
11911	IRCF4500	4500	230V~/400V3~	2200	490x515x140

Accessories

Art.nr	Type	Description
11919	KLRS15	Extra lamp
11915	IRCG1	Protection grille for IRCF1500. IRCF3000 requires 2 pcs, IRCF4500 requires 3 pcs.

Controls EZ100/EZ200/EZ300/IR/IRCF



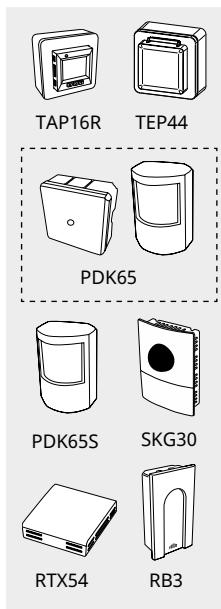
Art.nr	Type	Description	EZ100	EZ200	EZ300	IR	IRCF
92790	TAP16R	Electronic thermostat, 16A, IP21	•	•	•	•	•
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.	•	•	•	•	•
93044	RTX54	External room temperature sensor. Replaces internal senor. NTC10KΩ, IP54	•	•	•	•	•
205550	SKG30	Black bulb sensor, NTC10KΩ, IP30	•	•	•	•	•
211780	PDK65	Presence detector with power supply (up to 5 detectors), 230V~, max 2,3 kW, IP42/IP65	•	•	•	•	•
211781	PDK65S	Additional presence detector to PDK65, IP42	•	•	•	•	•
93012	RB3	Relaybox 400V3N~ (400V3~/V2~, 230V3~/V2~), 16A, IP44	•	•	•	•	•
205688	RB123	Relaybox with 3 step output control, 400V3N~, 16A, IP44	•	•	•	•	•
Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188							
5999	KRT1900	Capillary tube thermostat, IP55	•	•	•	•	•
10214	KRTV19	Capillary tube thermostat with knob, IP44	•	•	•	•	•
11733	S123	Manual switch for 1-2-3 steps, 20A, IP42	•	•	•	•	•

Infracalm INC



Infracalm INC with soft heat (IP24)

Art.nr	Type	Heat output	Voltage	Max. element temperature [°C]	Dimensions LxHxW [mm]
		[W]	[V]		
190090	INC05E	500	230V~	750	711x50x100
190091	INC10E	1000	230V~	750	1251x50x100
190092	INC10D	1000	400V2~	750	1251x50x100
190093	INC15E	1500	230V~	750	1756x50x100
190094	INC20E	2000	230V~	750	2181x50x100
190095	INC20D	2000	400V2~	750	2181x50x100



Art.nr Type Description

Controls outdoors

10739	CIRT	Stepless output control with timer, IP44
10740	CBT	Electronic timer, IP44

Controls indoors

92790	TAP16R	Electronic thermostat, 16A, IP21
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with external sensor.
205550	SKG30	Black bulb sensor, NTC10KΩ, IP30
211780	PDK65	Presence detector with power supply (up to 5 detectors), 230V~, max 2,3 kW, IP42/IP65
211781	PDK65S	Additional presence detector to PDK65, IP42
93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
93012	RB3	Relaybox 400V3N~ (400V3~/V2~, 230V3~/V2~), 16A, IP44



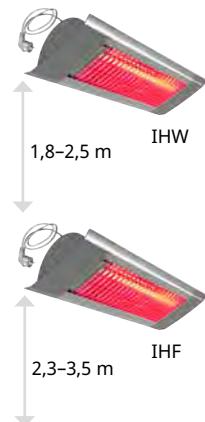
Carbon infrared heater IHC ♂



Carbon infrared heater IHC (IP44)

Art.nr	Type	Heat output [W]	Voltage [V]	Max.filament temperature [°C]	Dimensions LxHxW [mm]
19603	IHC12	1150	230V~	1200	500x77x169
19604	IHC18	1750	230V~	1200	676x77x169

Halogen infrared heater IH ♂



Art.nr	Type	Heat output [W]	Voltage [V]	Max.filament temperature [°C]	Dimensions LxHxW [mm]
Infrared heater IHW with wide heat distribution (IP44)					
11878	IHW10	1000	230V~	2200	500x77x169
11879	IHW15	1500	230V~	2200	500x77x169
11880	IHW20	2000	230V~	2200	676x77x169
Infrared heater IHF with directed heat distribution (IP44)					
11881	IHF10	1000	230V~	2200	500x77x169
11882	IHF15	1500	230V~	2200	500x77x169
11883	IHF20	2000	230V~	2200	676x77x169

Accessories and controls IHC/IH

IHP	IHP+IHT	IHUB	IHE	IHXH	IHXL	IHT+IHTW
KLS1KS	IHAF					
IHBD3	CBT					

Accessories

11884	IHUB	Universal bracket
18050	IHE	Ceiling bracket
16975	IHXH	Extension bracket for high level mounting
16976	IHXL	Extension bracket for low level mounting
11887	IHT	Triple bracket IHW10/15, IHF10/15 and IHC12
16974	IHTW	Wire kit (3 wires) for IHT
16970	IHP	Post for freestanding installation, 2,3 m
92865	KLS1KS	Bracket with velcro
93272	IHAF	Adapter mounting for KLS1KS

Spare lamps

220646	IHL1000	Spare lamp IHW10/IHF10
220647	IHL1500	Spare lamp IHW15/IHF15
206496	IHL2000	Spare lamp IHW20/IHF20
220648	IHC1200	Spare lamp IHC12
220649	IHC1800	Spare lamp IHC18

Controls

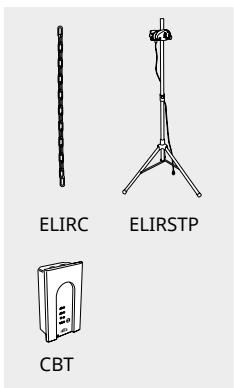
92867	IHBDS	Comfort controller for infrared heater, remote control with dimmer, 3000W, 230V~, IP65
10740	CBT	Electronic timer, IP44

Halogen infrared heater ELIR ⚡



Halogen infrared heater ELIR (IP65)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. lamp temperature [°C]	Dimensions LxHxW [mm]
10707	ELIR12	1200	230V~	2200	712x112x83



Art.nr Type Description

Accessories

10704	ELIRC	Chain for ceiling mounting, L: 2500 mm
27986	ELIRSTP	Floor stand for portable use, H: max. 2000 mm
10706	IREL12	Extra lamp 1200 W

Controls

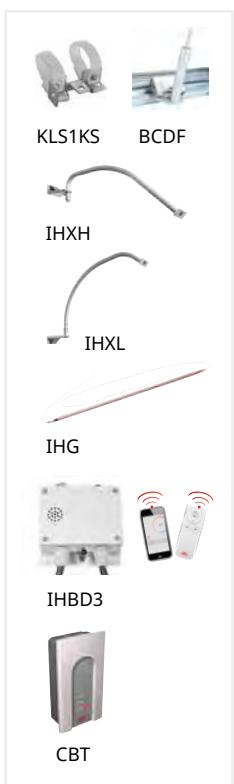
10740	CBT	Electronic timer, IP44
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Infralu IHAL ⚡



Infralu IHAL (IP67)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
154900	IHAL15S	1500	230V~	1800	Aluminium	610x140x97
154901	IHAL20S	2000	230V~	1800	Aluminium	610x140x97



Art.nr Type Description

Accessories

92865	KLS1KS	Bracket with velcro, silver
92847	BCDF20	Ceiling bracket, 200 mm, silver
16975	IHXH	Extension bracket for high level mounting
16976	IHXL	Extension bracket for low level mounting

Spare lamps

153370	IHG1500SL	Spare lamp IHAL15S
153371	IHG2000SL	Spare lamp IHAL20S

Controls

92867	IHBBD3	Comfort controller for infrared heater, remote control with dimmer, 3000W, 230V~, IP65
10740	CBT	Electronic timer, IP44

Infrasmart IHS ⚡



Infrasmart IHS IP67, with smart functions, with T bracket (IP67)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
92800	IHS15W67	1500	230V~	1800	White	710x125x104
92801	IHS15B67	1500	230V~	1800	Black	710x125x104
92802	IHS15G67	1500	230V~	1800	Grey	710x125x104
92803	IHS20W67	2000	230V~	1800	White	710x125x104
92804	IHS20B67	2000	230V~	1800	Black	710x125x104
92805	IHS20G67	2000	230V~	1800	Grey	710x125x104

Infrasmart IHS IP24, with smart functions (IP24)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
92806	IHS20W24	2000	230V~	1800	White	480x112x145
92807	IHS20B24	2000	230V~	1800	Black	480x112x145
92808	IHS20S24	2000	230V~	1800	Silver	480x112x145



Art.nr Type Description

Accessories

92865	KLS1KS	Bracket with velcro
92852	BCSF9010	Adapter mounting for KLS1KS for infrared heater with T bracket, white
92853	BCSF9005	Adapter mounting for KLS1KS for infrared heater with T bracket, black
92854	BCSF7016	Adapter mounting for KLS1KS for infrared heater with T bracket, grey
92848	BCDF209010	Ceiling bracket, 200 mm, white
92849	BCDF209005	Ceiling bracket, 200 mm, black
92850	BCDF207016	Ceiling bracket, 200 mm, grey
92847	BCDF20	Ceiling bracket, 200 mm, silver
92862	MB40402009010	Awning bracket for infrared heater with T bracket, 200 mm, white
92863	MB40402009005	Awning bracket for infrared heater with T bracket, 200 mm, black
92864	MB40402007016	Awning bracket for infrared heater with T bracket, 200 mm, grey
16975	IHXH	Extension bracket for high level mounting
16976	IHLX	Extension bracket for low level mounting
Spare lamps		
153370	IHG1500SL	Spare lamp IHS15W67/IHS15B67/IHS15G67
153371	IHG2000SL	Spare lamp IHS20W67/IHS20B67/IHS20G67
153372	IHG2024SL	Spare lamp IHS20W24/IHS20B24/IHS20S24

Infraglas IHG ⚡



Infraglas, with tinted ceramic glass front. Remote control with dimmer (model 1,2 kW only on/off) (IP65)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
154862	IHGB12SR	1200	230V~	1800	Black	585x80x170
154861	IHGW12SR	1200	230V~	1800	White	585x80x170
154874	IHGB15SR	1500	230V~	1800	Black	900x80x170
154873	IHGW15SR	1500	230V~	1800	White	900x80x170
154868	IHGB22SR	2200	230V~	1800	Black	900x80x170
154867	IHGW22SR	2200	230V~	1800	White	900x80x170

Art.nr Type Description

Accessories

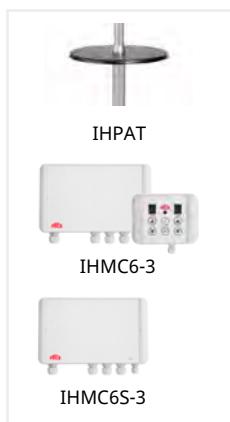
154863	CCIHGS12	Frame for recess mounting of Infraglas 1,2 kW, silver
154865	CCIHGS15	Frame for recess mounting of Infraglas 1,5 kW, silver
Spare lamps		
156181	IHGL1200SL	Spare lamp IHGB12SR
156182	IHGL1500SL	Spare lamp IHGB15SR
156183	IHGL2200SL	Spare lamp IHGB22SR

Infrapalm IHPA ⚡



Infrapalm IHPA (IP67)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
92838	IHPA30W	3000 (2x1500)	400V3N~	1800	White	1100x2500-2700
92839	IHPA30B	3000 (2x1500)	400V3N~	1800	Black	1100x2500-2700
92842	IHPA60W	6000 (3x2000)	400V3N~	1800	White	1100x2500-2700
92843	IHPA60B	6000 (3x2000)	400V3N~	1800	Black	1100x2500-2700



Art.nr Type Description

Accessories

92846	IHPAT	Table, black, 600x600x30 mm
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Spare lamps

153370	IHG1500SL	Spare lamp IHPA30
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153371	IHG2000SL	Spare lamp IHPA60
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Controls

92870	IHMC6-3	Central controller with keypad, 6000 W, 400V3~, IP65
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92872	IHMC6S-3	Central controller (slave), 6000 W, 400V3~, IP65
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Infratower IHA ⚡



Infratower (IP24)

Art.nr	Type	Heat output [W]	Voltage [V]	Max. filament temperature [°C]	Colour	Dimensions LxHxW [mm]
92820	IHA30BP	3000 (2x1500)	230V~	1800	Black	290x1245x320



K21 ⚡



K21

Portable fan heater K21 (IP21)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level* [dB(A)]	Voltage [V]	HxWxD [mm]
10667	K21	0/1/2	90	43	230V~	220x160x200

*) Conditions: Distance to the unit 5 metres.

Tiger ⚡



Tiger 2-9



Tiger 15



Tiger 20/30

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level*¹ [dB(A)]	Voltage [V]	HxWxD [mm]
Portable fan heater Tiger 2-9 kW (IP44)						
3082	P21	0/2	280	41	230V~	450x290x390
3083	P31	0/2/3	280	41	230V~	450x290x390
10680	P33	0/1,5/3	280	41	400V3N~	450x290x390
3118	P33-0*²	0/1,5/3	280	41	400V3~	450x290x390
3084	P3323	0/1,5/3	280	41	230V3~	450x290x390
10681	P53	0/2,5/5	480	40	400V3N~	450x290x390
3120	P53-0*²	0/2,5/5	480	40	400V3~	450x290x390
3086	P5323	0/2,5/5	480	40	230V3~	450x290x390
10742	P93	0/4,5/9	720	44	400V3N~	530x350x480
3121	P93-0*²	0/4,5/9	720	44	400V3~	530x350x480
3088	P9323	0/4,5/9	720	44	230V3~	530x350x480
Portable fan heater Tiger 15 kW (IP44)						
3091	P153	0/7,5/15	1120	47	400V3~	510x410x530
3090	P15323	0/7,5/15	1120	47	230V3~	510x410x530
Portable fan heater Tiger 20/30 kW (IP44)						
3123	P203	0/10/20	1900/2600	60	400V3~	590x630x600
3122	P2023	0/10/20	1900/2600	60	230V3~	590x630x600
3125	P303	0/10/20/30	1900/2600	60	400V3~	590x630x600
3124	P3023	0/10/20/30	1900/2600	60	230V3~	590x630x600
3198	P305*³	0/7,5/15/23	1900/2600	60	440V3~	590x630x600
			0/10/20/30		500V3~	

*¹) Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m².

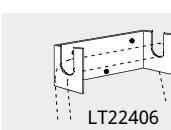
*²) These models do not have the 230V socket on the reverse and are equipped with P416-6 connectors.

*³) Can be connected to 440V3~ and 500V3~.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

Accessories

Art.nr	Type	Description
220400	LT22406	Wall bracket for storage of Tiger 2-15 kW



LT22406

Panther 6-15 ♂



Panther 6-15

Wall mounted fan heater Panther 6 – 15 kW (IP44)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level*¹ [dB(A)]	Voltage [V]	HxWxD [mm]
145461	SE06N	0/3/6	900/1300	39/47	400V3N~	520x450x510
145462	SE09N	0/4,5/9	900/1300	39/47	400V3N~	520x450x510
145463	SE12N	0/6/12	900/1300	39/47	400V3N~	520x450x510
145464	SE15N	0/7,5/15	900/1300	39/47	400V3N~	520x450x510
145465	SE135N*²	0/5/10 0/7/13,5	900/1300	39/47	440V3~ 500V3~	520x450x510

*¹) Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m².
At lowest/highest airflow.

*²) Can be connected to 440V3~ and 500V3~.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

Panther 20-30 ♂



Panther 20/30

Wall mounted fan heater Panther 20/30 kW (IP44)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level*¹ [dB(A)]	Voltage [V]	HxWxD [mm]
145466	SE20N	0/10/20	1900/2600	42/60	400V3N~	576x478x545
145468	SE30N	0/10/20/30	1900/2600	42/60	400V3N~	576x478x545
145469	SE305N*²	0/7,5/15/23 0/10/20/30	1900/2600	42/60	440V3~ 500V3~	576x478x545

*¹) Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m².
At lowest/highest airflow.

*²) Can be connected to 440V3~ and 500V3~.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

Accessories and controls Panther 6-15/Panter 20-30

	PLR15	
	PLR30	
	PP15N	
	PP20N	
	PP30N	
	TAP16R	
	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
	KRT2800	

Art.nr	Type	Description	SE06-15N/ SE135N	SE20N	SE30N/ SE305N
Accessories					
10274	PLR15	Air director		•	
10275	PLR30	Air director		•	•
Controls					
94730	PP15N	Control box, IP44		•	
94731	PP20N	Control box, IP44			•
94732	PP30N	Control box, IP44			•
92790	TAP16R	Electronic thermostat, 16A, IP21	•	•	•
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.	•	•	•
93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54	•	•	•
Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188					
94730	PP15N	Control box, IP44	•		
94731	PP20N	Control box, IP44		•	
94732	PP30N	Control box, IP44			•
10281	PTA01	Automatic temperature control, IP55	•	•	•
5989	KRT2800	Capillary tube thermostats, IP55	•	•	•

Cat ♂



Cat

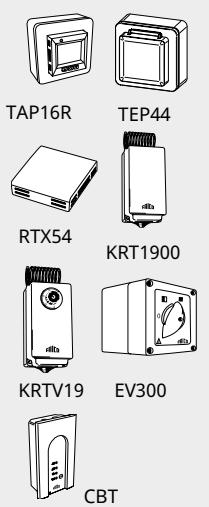
Wall mounted fan heater Cat (IP44)

Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level*1 [dB(A)]	Voltage [V]	HxWxD [mm]
145458	C3N	0/1,5/3	280	41	230V/400V3N~*2	255x335x276
145459	C5N	0/2,5/5	480	40	400V3N~	255x335x276
145460	C9N	0/4,5/9	720	44	400V3N~	315x405x335

*1) Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m².

*2) Supplied connected for 400V3N~. C3N can be connected for 230V~ and 400V3N~. Other models should not be connected for single phase, 230V~.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.



Art.nr Type Description

Controls

92790	TAP16R	Electronic thermostat, 16A, IP21
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
10037	EV300	Output selector, IP44

Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188

5999	KRT1900	Capillary tube thermostat, IP55
10214	KRTV19	Capillary tube thermostat with knob, IP44
10037	EV300	Output selector, IP44
10740	CBT	Electronic timer, IP44

Elektra ♂



Elektra C/V/H



Elektra C/V/H/F

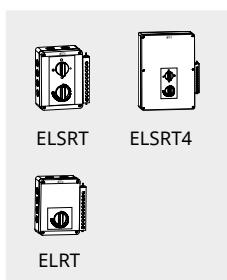
Art.nr	Type	Output steps [kW]	Airflow [m³/h]	Sound level* [dB(A)]	Voltage [V]	HxWxD [mm]
Wall mounted fan heater Elektra C, for corrosive environments (IP65)						
10864	ELC331	0/2/3	400	48	230V~	375x300x340
10865	ELC633	0/3/6	1000	55	400V3~	445x375x430
10866	ELC933	0/4,5/9	1000	55	400V3~	445x375x430
11395	ELC1533	0/7,5/15	1300	62	400V3~	445x375x430
Fan heater Elektra F, for rooms where there is a risk of fire Portabel use (IP65)						
10867	ELF331	0/2/3	400	48	230V~	375x300x340
10868	ELF633	0/3/6	700	53	400V3~	375x300x340
10869	ELF933	0/4,5/9	1000	55	400V3~	445x375x430
Fan heater Elektra V, for ships and offshore industry (IP44)						
11755	ELV331	0/2/3	400	48	230V~	375x300x340
11108	ELV3333	0/1,5/3	400	48	400V3~	375x300x340
10870	ELV3344	0/1,8/3,6	400	48	400/440V3~	375x300x340
11109	ELV5333	0/2,5/5	700	53	400V3~	375x300x340
10871	ELV6344	0/3/6	700	53	400/440V3~	375x300x340
Fan heater Elektra H, for rooms with high temperatures (IP44)						
10872	ELH633	0/3/6	1000	55	400V3N~	445x375x430
10873	ELH933	0/4,5/9	1000	55	400V3N~	445x375x430

*) Conditions: Distance to the unit 5 metres.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Controls

Art.nr	Type	Description
11089	ELSRT	Control panel and thermostat, for ELC/ELV, controls one fan heater, IP65
11821	ELSRT4	Control panel and thermostat, for ELC/ELV (not ELC1533), controls 4 fan heaters, IP65
11091	ELRT	Thermostat, for ELH, IP44



SWH ♦



SWH

Wall/ceiling mounted fan heater SWH (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Air flow [m³/s]	Sound level* ² [dB(A)]	Water volume [l]	HxDxW
4380	SWH02	11	0,31	40	1,3	525x515x360
4381	SWH12	17	0,56	48	1,5	600x535x410
4382	SWH22	29	0,94	55	2,7	725x680x437
4383	SWH32	44	1,44	51	3,8	850x820x552
4384	SWH33	53	1,23	50	5,2	850x820x552

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*²) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.

SWH EC ♦



SWH-EC

Wall/ceiling mounted fan heater with EC motor SWH EC (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Airflow [m³/s]	Sound level* ² [dB(A)]	Water volume [l]	HxDxW
74660	SWHEC02	11	0,28	40	1,3	525x515x430
74661	SWHEC12	17	0,56	48	1,5	600x535x425
74662	SWHEC22	29	0,94	56	2,7	725x680x405
74663	SWHEC32	44	1,44	51	3,8	850x820x550
74664	SWHEC33	53	1,25	50	5,2	850x820x550

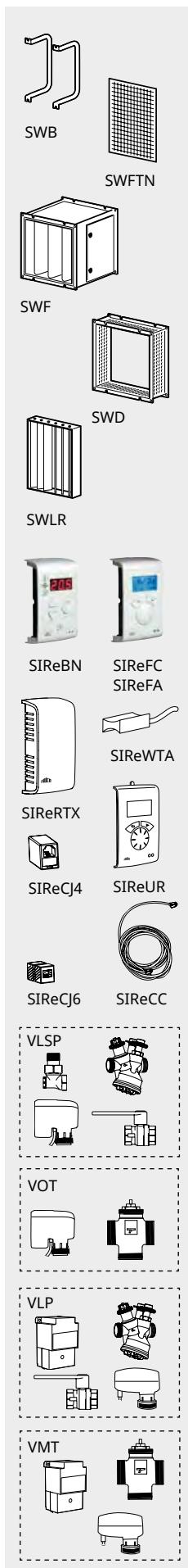
*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*²) Applies to fan position 4.

Approved for 200-240V, 50/60Hz. Product performance for 60Hz will differ from stated data.



Accessories and controls SWH/SWH EC



Art.nr	Type	Description
Accessories		
17577	SWB0	Mounting brackets SWH02
17578	SWB1	Mounting brackets SWH12
17579	SWB2	Mounting brackets SWH22
17580	SWB3	Mounting brackets SWH32/SWH33
111307	SWFTN02	Basic filter SWH02
111300	SWFTN1	Basic filter SWH12
111301	SWFTN2	Basic filter SWH22
111302	SWFTN3	Basic filter SWH32/SWH33
10113	SWF1	Filter section SWH12
10115	SWF2	Filter section SWH22
10117	SWF3	Filter section SWH32/SWH33
10108	SWEF1	Extra filter cassette EU3 SWH12
10110	SWEF2	Extra filter cassette EU3 SWH22
10111	SWEF3	Extra filter cassette EU3 SWH32/SWH33
10099	SWD1	Return air intake SWH12
10102	SWD2	Return air intake SWH22
10103	SWD3	Return air intake SWH32/SWH33
10132	SWLR1	Extra air director SWH12
10133	SWLR2	Extra air director SWH22
10134	SWLR3	Extra air director SWH32/SWH33
Control system SIRe		
33481	SIReBN	Control system SIRe Basic
33488 / 33489	SIReFCY / SIReFCZ*	Control system SIRe Competent for fan heaters
33490 / 33491	SIReFAY / SIReFAZ*	Control system SIRe Advanced for fan heaters
Accessories SIRe		
17539	SIReRTX	External room temperature sensor, NTC10KΩ
17538	SIReUR	Kit for recessed installation IP30
17613	SIReWTA	Return water sensor RJ11 (4p/4c) 3 m IP65
17616	SIReCJ4	Used to join two RJ11 (4/4)
17615	SIReCJ6	Used to join two RJ12 (6/6)
17542	SIReCC603	Modular cable RJ12 (6/6) 3 m
17543	SIReCC605	Modular cable RJ12 (6/6) 5 m
17544	SIReCC610	Modular cable RJ12 (6/6) 10 m
17545	SIReCC615	Modular cable RJ12 (6/6) 15 m
17773	SIReCC640	Modular cable RJ12 (6/6) 40 m
17546	SIReCC403	Modular cable RJ11 (4/4) 3 m
17547	SIReCC405	Modular cable RJ11 (4/4) 5 m
17548	SIReCC410	Modular cable RJ11 (4/4) 10 m
17549	SIReCC415	Modular cable RJ11 (4/4) 15 m
Water control - Used with SIRe Basic and Competent.		
79379	VLSP15LF	Pressure independent valve system on/off DN15 , low flow
79380	VLSP15NF	Pressure independent valve system on/off DN15
79381	VLSP20	Pressure independent valve system on/off DN20
79382	VLSP25	Pressure independent valve system on/off DN25
79417	VLSP32	Pressure independent valve system on/off DN32
19031	VOT15	Three way control valve and actuator on/off DN15 Kvs 1,7
19032	VOT20	Three way control valve and actuator on/off DN20 Kvs 2,5
19033	VOT25	Three way control valve and actuator on/off DN25 Kvs 4,5
Water control - Used with SIRe Advanced.		
79375	VLP15LF	Pressure independent and modulating valve system DN15 , low flow
79376	VLP15NF	Pressure independent and modulating valve system DN15
79377	VLP20	Pressure independent and modulating valve system DN20
79378	VLP25	Pressure independent and modulating valve system DN25
79416	VLP32	Pressure independent and modulating valve system DN32
19034	VMT15	Three way control valve and actuator on/off DN15 Kvs 1,7
19035	VMT20	Three way control valve and actuator on/off DN20 Kvs 2,5
19036	VMT25	Three way control valve and actuator on/off DN25 Kvs 4,5

*) SIRexxxY communicates in Swedish, Norwegian, English, German, French, Spanish, Dutch, Italian, Danish and Finnish.

SIRexxxZ communicates in Russian, Ukrainian, Polish, Czech, Slovak, Romanian, Hungarian, Turkish, Portuguese and English.

SWL

SWL

Wall/ceiling mounted Fan heater SWL (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Airflow [m³/s]	Sound level* ² [dB(A)]	Water volume [l]	HxWxD [mm]
39611	SWL02	12	0,18/0,31	30/43	1,3	470x518x308
39612	SWL12	19	0,40/0,68	41/54	1,5	545x538x344
39613	SWL22	31	0,61/1,10	46/59	2,7	671x691x357
39614	SWL32	50	1,18/1,79	46/56	3,8	798x828x517
39615	SWL33	64	1,02/1,63	47/53	5,2	798x828x517

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.*²) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.

SWS

SWS

Wall mounted fan heater SWS (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Air flow [m³/s]	Sound level* ² [dB(A)]	Water volume [l]	HxWxD [mm]
4974	SWS02	12	0,35	50	1,3	470x520x260
4975	SWS12	19	0,65	57	1,5	545x540x275
4976	SWS22	30	0,99	58	2,7	675x690x275
4977	SWS32	50	1,75	64	3,8	800x830x350
4978	SWS33	65	1,69	64	5,2	800x830x350

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.*²) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

SWS02/32/33 are approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data

Controls and accessories SWL/SWS

	TKS16		KRT1900
	RE1,5/3/7		CB20
	SD20		TVVS20/25
	TRVS20/25		
	SWB		SWSFT
	SWLR		

Art.nr	Type	Description	SWL	SWS
Controls				
11651	TKS16	Electronic thermostat, knob, 1-pole switch, IP30	•	•
5999	KRT1900	Capillary tube thermostat, IP55	•	•
10214	KRTV19	Capillary tube thermostat with knob, IP44	•	•
10737	CB20	Control box, 2 fan steps, IP44	•	•
18034	SWYD1	2-step change-over switch for air flow (Y/D)	•	
161206	S-DT 16	Thermal contact motor protection (400V3~)	•	
5000	RE1,5	5-step control 1,5 A IP54	•	
5001	RE3	5-step control 3 A IP54	•	
5003	RE7	5-step control 7 A IP54	•	
Water control				
24729	TVVS20	2-way valve DN20	•	•
24730	TVVS25	2-way valve DN25	•	•
19019	TRVS20	3-way control valve DN20	•	•
19020	TRVS25	3-way control valve DN25	•	•
10073	SD20	Actuator on/off 230V	•	•
Accessories				
17577	SWB0	Mounting brackets SWL02 / SWS02	•	•
17578	SWB1	Mounting brackets SWL12 / SWS12	•	•
17579	SWB2	Mounting brackets SWL22 / SWS22	•	•
17580	SWB3	Mounting brackets SWL32/33 / SWS32/33	•	•
27661	SWSFT02	Basic filter SWL02 / SWS02	•	•
27658	SWSFT1	Basic filter SWL12 / SWS12	•	•
27659	SWSFT2	Basic filter SWL22 / SWS22	•	•
27660	SWSFT3	Basic filter SWL32/33 / SWS32/33	•	•
10132	SWLR1	Extra air director SWL12	•	
10133	SWLR2	Extra air director SWL22	•	
10134	SWLR3	Extra air director SWL32/33	•	

SWX CS / CE / D / H



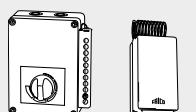
SWX CS / D



SWX CE



SWX H



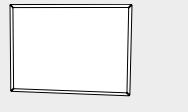
SWXRT KRT1900



TVV20/25 TVVS20/25



SD20



SWXCDFT
SWXHFT

Art.nr	Type	Heat output* ¹ [kW]	Air flow [m³/s]	Sound level* ² [dB(A)]	HxDxW [mm]	Weight [kg]
Fan heater SWX CS, for corrosive and damp environments. With water coil of stainless steel. (IP65)						
31148	SWXCS12	20	0,6	59	535x585x455	32
31149	SWXCS22	37	1,2	69	660x740x455	54
Fan heater SWX CE, for corrosive and damp environments. With epoxy coated water coil. (IP65)						
211773	SWXCE12	21	0,6	59	530x550x380	29
211774	SWXCE22	40	1,2	69	655x705x430	45
Fan heater SWX D, for dusty environments. (IP65)						
31150	SWXD13	15	0,6	59	535x585x455	32
31151	SWXD23	29	1,2	69	660x740x455	54
Fan heater SWX H, for rooms with high temperatures. (IP65)						
31154	SWXH13	12	0,5	57	530x550x380	28
31155	SWXH23	23	1,1	68	655x705x430	46

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

SWX H: Applicable at water temperature 80/60 °C, air temperature, in +40 °C.

*²) Conditions: Distance to the unit 5 metres.

Intended for water temperatures up to +150 °C and 16 bar. Max. surrounding temperature +70 °C.

Approved for 220V/1ph/60Hz (SWX22/23: max. surrounding temperature 40° C). Product performance for 220V/1ph/60Hz will differ from stated data.

Art.nr	Type	Description
Controls		
31572	SWXRT35	Room thermostat 0-35 °C, max. 2,7 A, IP65, for SWX C
31577	SWXRT70	Room thermostat 0-70 °C, max. 2,7 A, IP65, for SWX H
5999	KRT1900*	Capillary tube thermostat, IP55, for SWX D
Water control		
10638	TVV20*	2-way valve DN20 for SWX CS/CE/H
10086	TVV25*	2-way valve DN25 for SWX CS/CE/H
24729	TVVS20*	2-way valve DN20 for SWX D
24730	TVVS25*	2-way valve DN25 for SWX D
10073	SD20*	Actuator on/off 230V
Accessories		
31573	SWXCDFT1	Wire mesh filer for SWX CS12/D13
31574	SWXCDFT2	Wire mesh filer for SWX CS22/D23
31575	SWXHFT1	Wire mesh filer for SWX CE12/H13
31576	SWXHFT2	Wire mesh filer for SWX CE22/H23

*) Only for mounting outside corrosive and hot (above 50°C) zones.

SWX EX



SWX EX

SWX EX, for environments with a temporary explosion risk (Zone 1 and Zone 2). (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Air flow [m³/s]	Sound level* ² [dB(A)]	HxDxW [mm]	Weight [kg]
31152	SWXEX12	21	0,6	61	530x550x380	25
31153	SWXEX22	39	1,2	67	655x705x430	42

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*²) Conditions: Distance to the unit 5 metres.

Intended for water temperatures up to +125 °C and 16 bar. Max. surrounding temperature -20 - +40 °C.

Art.nr	Type	Description
Controls		
84760	Therm-atex	ATEX capillary tube thermostat for zones 1 and 2, IP66
75620	U-EK	Plastic housing ATEX IP65 for thermistor motor protection
Water control		
79381	VLSP20*	Sistema de válvulas independientes de la presión on/off DN20
79382	VLSP25*	Sistema de válvulas independientes de la presión on/off DN25

*) Only for mounting outside ATEX-classed zones.

SWT



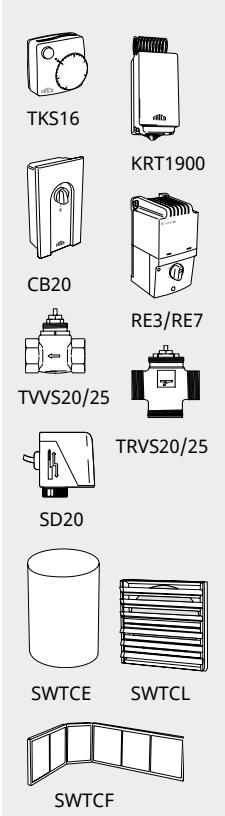
SWT

Ceiling mounted fan heater SWT (IP44)

Art.nr	Type	Heat output* ¹ [kW]	Air flow [m³/s]	Sound level* ² [dB(A)]	Water volume [l]	HxWxD [mm]
17564	SWT02	11	0,31	53	1,2	330x705x535
17565	SWT12	18	0,56	57	1,7	355x825x675
17566	SWT22	40	1,08	60	3,9	415x1135x735

*¹) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*²) Conditions: Distance to the unit 5 metres.



Art.nr	Type	Description
Controls		
11651	TKS16	Electronic thermostat, knob, 1-pole switch, IP30
5999	KRT1900	Capillary tube thermostat, IP55
10737	CB20	Control box 2 steps
5000	RE1,5	5-step change-over switch for air flow, max. 1,5A, IP54
5001	RE3	5-step change-over switch for air flow, max. 3A, IP54
5003	RE7	5-step change-over switch for air flow, max. 7A, IP54
Water control		
24729	TVVS20	2-way control valve DN20
24730	TVVS25	2-way control valve DN25
19019	TRVS20	3-way control valve DN20
19020	TRVS25	3-way control valve DN25
10073	SD20	Actuator on/off
Accessories		
17570	SWTCE02	Extension collar 350 mm to SWT02, increases the throw pattern to 4-7 m
17571	SWTCE12	Extension collar 350 mm to SWT12, increases the throw pattern to 5-8 m
17572	SWTCE22	Extension collar 350 mm to SWT22, increases the throw pattern to 7-12 m
17567	SWTCF02	Filter for SWT02
17568	SWTCF12	Filter for SWT12
17569	SWTCF22	Filter for SWT22
17573	SWTCL02	Air director for SWT02
17574	SWTCL12	Air director for SWT12
17575	SWTCL22	Air director for SWT22

Fan cooler SWK *



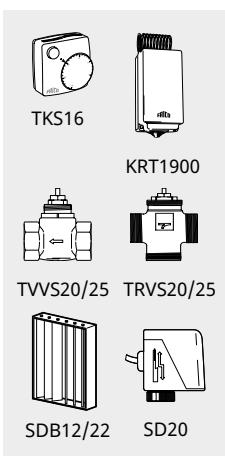
Fan cooler SWK (IP44)

Art.nr	Type	Cooling output (total)* ¹ [kW]	Airflow [m³/s]	Sound level* ² [dB(A)]	HxWxD [mm]
414653	SWK12	5,9	0,55	52	670x730x571
414654	SWK22	10,3	0,97	62	875x920x571

*¹) Applies at water temperature +6/12 °C, air temperature in +25 °C, relative humidity 50 %.

*²) Sound pressure (LpA). Conditions: Distance to the unit 5 metres.

Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.



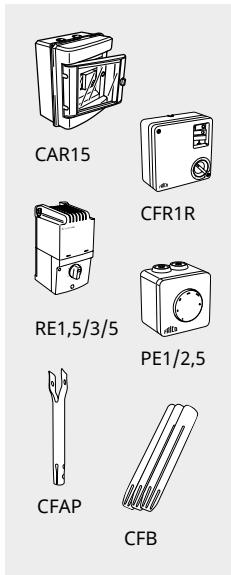
Art.nr	Type	Description
Accessories		
414655	SDB12	Extra air director SWK12
414656	SDB22	Extra air director SWK22
Controls		
11651	TKS16	Electronic thermostat, knob, 1-pole switch, IP30
5999	KRT1900	Capillary tube thermostat, IP55
24729	TVVS20	2-way valve DN20
24730	TVVS25	2-way valve DN25
19019	TRVS20	3-way control valve DN20
19020	TRVS25	3-way control valve DN25
10073	SD20	Actuator on/off 230V

Industrial ceiling fan ICF ⚡



Industrial ceiling fan ICF (IP20 / IP55)

Art.nr	Type	Output [W]	Airflow [m³/h]	Voltage [V]	Height x Ø [mm]
11800	ICF20	70	13500	230V~	545x1422
11729	ICF55	70	13500	230V~	545x1422



Art.nr Type Description

Controls

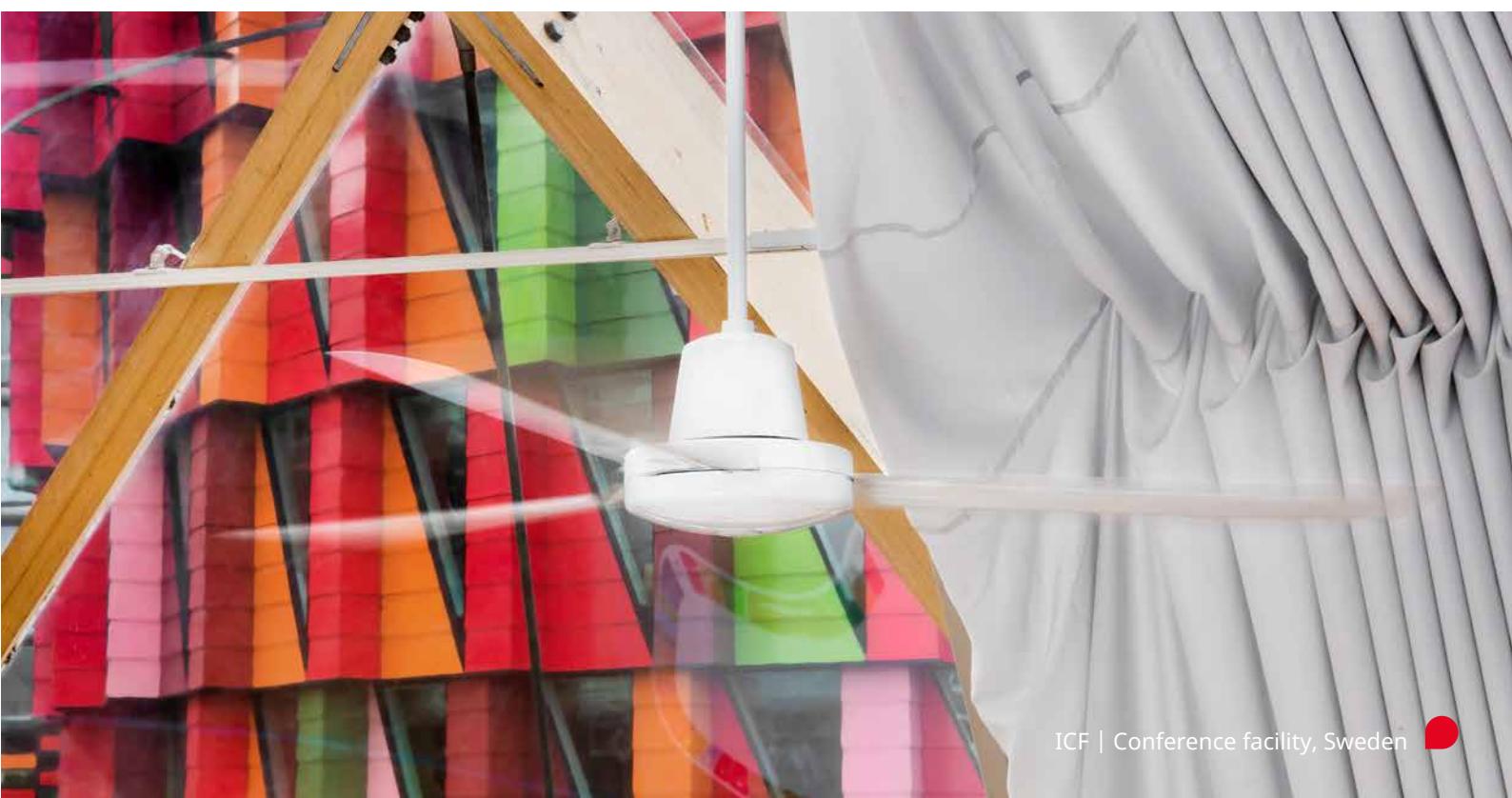
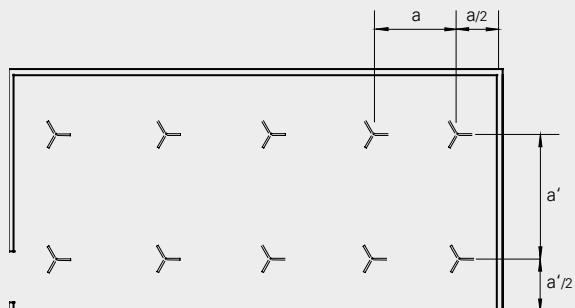
10692	CAR15	Automatic fan speed control, max. breaking current: 6,3 A
11814	CFR1R	5-step control, max. breaking current: 0,4 A
11812	PE1	Variable fan speed control, external mounting (IP54) or recessed mounting (IP44), max. breaking current: 1 A
11813	PE2,5	Variable fan speed control, external mounting (IP54) or recessed mounting (IP44), max. breaking current: 2,5 A
5000	RE1,5	5-step control, max. breaking current: 3 A
5001	RE3	5-step control, max. breaking current: 5 A
5002	RE5	5-step control for 12 fans

Accessories

11806	CFAP200	Short downrod, total height 395 mm
11808	CFAP750	Long downrod, total height 945 mm
11809	CFB900	Fan blades, fan diameter 914 mm
11810	CFB1200	Fan blades, fan diameter 1218 mm

Recommended distance between fans

Ceiling height [m]	4	6	8	10	12
Distance a [m]	5	7	8	9	10



Fan convector PF Smart ⚡

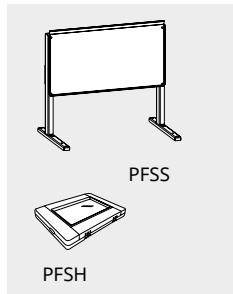


PFS
RF included!



Art.nr	Type	Output [W]	Airflow [m³/h]	Sound level* [dB(A)]	Voltage [V]	LxHxD [mm]	Weight [kg]
Fan convector PFSE with 1.2 m cord and plug. (IP24)							
87660	PFSE4	400	40/60	26,5/37	230V~	450x325x105	4,1
87661	PFSE10	1000	60/100	28/38,5	230V~	660x325x105	5,8
87662	PFSE17	1750	100/150	29/40,5	230V~	940x325x105	8,1
Fan convector PFSD for fixed installation. (IP24)							
87663	PFSD4	400	40/60	26,5/37	400V2~	450x325x105	4,1
87664	PFSD10	1000	60/100	28/38,5	400V2~	660x325x105	5,8
87665	PFSD17	1750	100/150	29/40,5	400V2~	940x325x105	8,1

*) Conditions: Distance to the unit 2 metres. Directional factor: 2. Equivalent absorption area: 12,75 m². At lowest/highest airflow.



Accessories

Art.nr	Type	Description
87670	PFSS4	Floor stand for PFSE4
87671	PFSS10	Floor stand for PFSE10
87672	PFSS17	Floor stand for PFSE17
87674	PFSH	Hub that connects wirelessly to a network. Can control up to 50 zones.

Thermowarm TWT ⚡



TWT100

TWTC

Art.nr	Type	Output [W]	Voltage [V]	LxHxD [mm]	Weight [kg]
Thermowarm TWT100. White front, with switch. (IP44)*					
6982	TWT10521	500	230V~	465x205x123	2,0
6987	TWT11021	1000	230V~	765x205x123	3,0
Thermowarm TWTC. Front in stainless steel, with cable and plug. (IP54)*					
11396	TWTC30521	500	230V~	465x205x123	2,0
11398	TWTC31021	1000	230V~	765x205x123	3,0

*) For offshore and other installations not covered by the Ecodesign Regulation (EU) 2015/1188

Thermowarm TWS ⚡



TWS100

TWS200

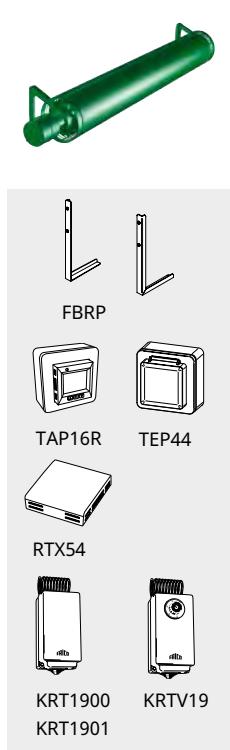
TWSC

Art.nr	Type	Output [W]	Voltage [V]	LxHxD [mm]	Weight [kg]
Thermowarm TWS100. White front. Smart, integrated control with digital display. (IP44)					
153395	TWSE103	300	230V~	333x208x123	1,7
153396	TWSE105	500	230V~	453x208x123	2,2
153397	TWSE110	1000	230V~	753x208x123	3,2
153398	TWSD110	1000	400V~	753x208x123	3,2
Thermowarm TWS200. Grey velour covered front. Smart, integrated control with digital display. Max. surface temperature: 60°C (IP44)					
153399	TWSE205	500	230V~	453x208x123	1,7
153400	TWSE210	1000	230V~	753x208x123	3,2
153401	TWSD210	1000	400V~	753x208x123	3,2
Thermowarm TWSC. Stainless steel. Smart, integrated control with digital display. (IP54)					
153402	TWSC303	300	230V~	333x208x123	1,7
153403	TWSC305	500	230V~	453x208x123	2,2
153404	TWSC310	1000	230V~	753x208x123	3,2

Accessories

Art.nr	Type	Description
212066	TWSL12	Protective display cover for TWS100/200
212067	TWSL3	Protective display cover for TWS300

Ribbed pipe radiator ↳



Art.nr	Type	Output [W]	Voltage [V]	LxHxD [mm]	Weight [kg]
Ribbed pipe radiator 125 (IP44)					
6980	125-12B	200	230V~	370x180x185	2,4
6981	125-22B	375	230V~	530x180x185	3,3
6983	125-32B	575	230V~	730x180x185	4,5
6985	125-42B	775	230V~	880x180x185	5,5
323310	125-52B	1150	230V~	1185x180x185	7,5
Ribbed pipe radiator 127, for use in combustible areas (sand filled) (IP44)					
6990	127-22B	500	230V~	980x180x185	10,9
6991	127-42B	800	230V~	1925x180x185	33,3
Art.nr	Type	Description			
Accessories					
79403	FBRP	Floor brackets (2x), dark green			
Controls					
92790	TAP16R	Electronic thermostat, 16A, IP21			
205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.			
93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54			
Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188					
5999	KRT1900	Capillary tube thermostat, IP55			
10211	KRT1901	Capillary tube thermostat for room heating/cooling, IP55			
10214	KRTV19	Capillary tube thermostat with knob, IP44			

Frost guard FML ↳



Art.nr	Type	Output [W]	Voltage [V]	LxHxD [mm]	Weight [kg]
Frost guard FML. White front. (IP31)					
10191	FML200	200	230V~	298x90x68	0,7
10194	FML300	300	230V~	398x90x68	0,9
Frost guard FMS. White front. (IP31)					
10197	FMS200	200	230V~	90x298x68	0,7
Frost guard FMLR. Stainless steel design. (IP31)					
10643	FMLR200	200	230V~	298x90x68	0,7

Bench heater SH ↳



Art.nr	Type	Output [W]	Voltage [V]	LxH*xW [mm]	Weight [kg]
10201	SH17521	175	230V~	700x110x200	1,4
10202	SH17531	175	400V~	700x110x200	1,4
10203	SH25021	250	230V~	1000x110x200	1,9
10204	SH25031	250	400V~	1000x110x200	1,9
10206	SH37521	375	230V~	1500x110x200	2,9
10207	SH37531	375	400V~	1500x110x200	2,9

*) Height with brackets.

Ceiling convector TKW



TKW



TKW + TKWFG



TKW + TKWDG

Art.nr	Type	Heat output* ¹ [kW]	Cooling output* ² (total) [kW]	Cooling output* ² (sensible) [kW]	Airflow [m ³ /h]	LxWxH [mm]
Ceiling convector TKW, 2-pipe system, with water heating/cooling (IPX0)						
414580	TKW202EC	2,71	2,38	1,98	660	569x629x298
414581	TKW302EC	3,65	3,99	3,04	735	569x629x298
414582	TKW402EC	5,23	4,69	3,61	900	569x629x298
414583	TKW502EC	7,32	6,90	4,72	980	825x885x298
414584	TKW602EC	9,10	7,22	5,44	1160	825x885x298
414585	TKW702EC	11,8	9,58	7,15	1600	825x885x298
Ceiling convector TKW, 4-pipe system, with water heating/cooling (IPX0)						
414592	TKW204EC	0,97	2,00	1,86	660	569x629x298
414593	TKW304EC	3,16	3,37	2,64	735	569x629x298
414594	TKW404EC	3,36	4,01	3,29	900	569x629x298
414595	TKW604EC	5,82	6,64	5,12	1160	825x885x298
414596	TKW704EC	8,11	7,93	6,28	1600	825x885x298

*¹) Applicable at water temperature 50/40 °C, air temperature, in +20 °C.

*²) Applicable at water temperature +7/12 °C, air temperature in +27 °C, relative humidity 47%.

Art.nr	Type	Description	TKW20-40	TKW50-70
Accessories				
372698	TKWFG6	Front grille 600x600	•	
372706	TKWFG9	Front grille 900x900		•
247276	TKWDG6A	Design front grille 360° 600x600	•	
247278	TKWDG9A	Design front grille 360° 900x900		•
247277	TKWDG6B	Design front grille 180° 600x600	•	
247279	TKWDG9B	Design front grille 180° 900x900		•
157024	TKWDT6	Drip tray	•	
157025	TKWDT9	Drip tray		•
Controls				
76649	FCR230	Room regulator 0-10, IP20		
11929	ECG1	External room temperature sensor, IP30		
7284	TG-A1/PT1000	Clamp-on sensor PT1000, IP65		
157457	VPTK1504	Valve kit DN15 Kvs 0,4		
157458	VPTK1506	Valve kit DN15 Kvs 0,6		
157459	VPTK2025	Valve kit DN20 Kvs 2,5		
157460	VPTK2040	Valve kit DN20 Kvs 4,0		

FC Control System

One system, numerous possibilities

Frico air curtains come with an integrated PC-board and are supplemented with the intelligent control system FC of your choice, working together to create many smart and energy saving features. There are four different packages to choose from, depending on your requirements, and extra components can be added to expand and customize the system. Please contact us to assemble a package suited to your specific needs.



FC Direct

Entry level

- Door contact
- Calendar function
- Filter timer

FC Smart

FC Direct +

- Control via app (Bluetooth)
- Wireless sensors possible
- Enhanced water control possible
- Adjustable calendar function
- Away and Boost function
- Adjustable filter timer
- Vestibule function
- Zone possibility

FC Pro

FC Direct + FC Smart +

- Automatic air flow control
- Automatic heat blocking

FC Building - BMS

FC Direct +

- 0-10V or Modbus
- Automatic air flow control*
- Automatic heat blocking*
- Enhanced water control possible
- Heat and fan settings
- Alarm indication
- Read values

* Requires outdoor temp signal

Controls

FCDA - FC Direct



Art.nr Type Description

74684	FCDA	FC Direct, first level control system
74685	FCSA	FC Smart, second level control system
74686	FCPA	FC Pro, third level control system
74687	FCBA	FC Building, BMS system

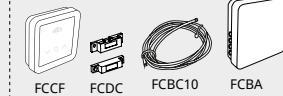
FCSA - FC Smart



FCPA - FC Pro



FCBA - FC Building



FCLAP



Accessories FC Control

Art.nr Type Description

74684	FCDA	Extra FC Direct for creating zones
74699	FCLAP	Local access point for extra wireless sensors or app control (Bluetooth), incl. 10 m communication cable, FC, IP44
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, FC, IP20
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44
74703	FCTXRF	Wireless indoor/outdoor temperature sensor, FC, IP44
17495	FCDC	Door contact
74718	FCBC05	Extra communication cable, FC, 5 m
74719	FCBC10	Extra communication cable, FC, 10 m
74720	FCBC25	Extra communication cable, FC, 25 m
74721	FCSC10	Extra sensor cable, FC, 10 m
74722	FCSC25	Extra sensor cable, FC, 25 m
74702	FCWTA	Return water temperature sensor, FC

FCBC/FCSC



FCWT

Thermostats

		Art.nr	Type	Voltage [V]	Max input [A]	Setting range [°C]	Protection class	HxWxD [mm]
TAP16R	TP8	Programmable thermostats						
		92790	TAP16R	230V~	16	5-37	IP21	87x87x52
T10S	TK10S	11661	TP8	230V~	8	5-35	IP30	87x125x34
T, TK, TD, basic offer thermostats								
		24727	T10S	230V~	10	5-30	IP30	80x80x31
TKS16 TKS16400	TD10	24728	TK10S	230V~	10	5-30	IP30	80x80x31
		11651	TKS16	230V~	16	5-30	IP30	80x80x39
KRT1900	KRTV19	11652	TKS16400	400V2~	16	5-30	IP30	80x80x39
		11653	TD10	230V~	10	5-37	IP30	80x80x31
RTI2, electronic 2-step thermostats								
		10231	RTI2	230V~	16/10, 230/400V~	5-35	IP44	155x87x43
KRT1901		10741	RTI2V	230V~	16/10, 230/400V~	5-35	IP44	155x87x43
KRT, capillary tube thermostats								
		5999	KRT1900	-	16/10, 230/400V~	0-40	IP55	165x57x60
KRT2800		10211	KRT1901	-	16/10, 230/400V~	-35+10	IP55	165x57x60
		10214	KRTV19	-	16/10, 230/400V~	0-40	IP44	165x57x60
KRT2800		5989	KRT2800	-	16/10, 230/400V~	0-40	IP55	165x57x60
TBK, bimetal thermostats								
		11663	TBK10	230V~	10	5-30	IP30	85x82x39
		11664	TBKS10	230V~	10	5-30	IP30	80x80x43

		Accessories		
RTS01	RTX54	Art.nr	Type	Description
		10250	RTS01	External room temperature sensor, NTC10KΩ
		205540	TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
		93044	RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
		205550	SKG30	Black bulb sensor, NTC10KΩ, IP30

Regulators and control systems

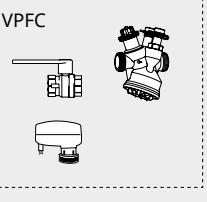
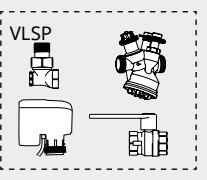
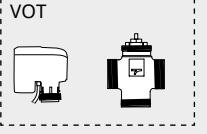
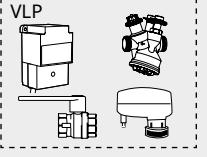
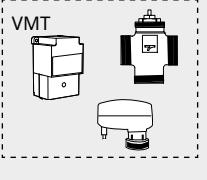
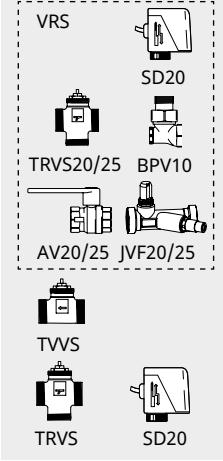
		Art.nr	Type	Voltage [V]	Max input [A]	Protection class	HxWxD [mm]	Resistance [kOhm]
CIRT, stepless output control with timer								
CIRT	PDK65	10739	CIRT	230/400V(2~)	16	IP44	155x87x43	
PDK65, presence detector with power supply								
		211780	PDK65	230V~	10	IP42	88x88x39	
PDK65S, additional presence detector to PDK65								
PDK65S	PAMP10	211781	PDK65S	230V~	10	IP42	102x70x50	
PAMP10, external potentiometer								
		87675	PAMP10	230V~	4	IP54/44	82x82x65	10
PE, variable fan speed control								
PE	RE	11812	PE1	230V~	1,0	IP44/54*	82x82x65	
		11813	PE2,5	230V~	2,5	IP44/54*	82x82x65	
RE, 5-step control								
		5000	RE1,5	230V~	1,5	IP54	200x105x106	
CFR1R	S123	5001	RE3	230V~	3	IP54	200x105x106	
		5002	RE5	230V~	5	IP54	200x105x106	
		5003	RE7	230V~	7	IP54	247x147x145	
CFR1R, 5-step control								
CFR1R	S123	11814	CFR1R	230V~	0,4	IPX0	120x120x60	
S123, manual switch for 1-2-3 steps								
RB3	RB123	11733	S123	230/400V~	20	IP44	72x64x46	
RB3, relaybox 400V3N~								
RB3	RB123	93012	RB3	400V3~	16	IP44	155x87x43	
RB123, relaybox with 3 step output control								
CBT		205688	RB123	400V3~	16	IP44	155x87x43	
CBT, electronic timer								
CBT		10740	CBT	230V~	16	IP44	155x87x43	

*) External mounting (IP54) or recessed mounting (IP44).

Regulators and control systems

	ERP, electric heating control																
	Art.nr	Type	Voltage [V]	Max input [A]	Protection class	HxWxD [mm]											
	10243	ERP	230/400V~	16	IP20	153x93x40											
Accessories																	
<table border="1"> <thead> <tr> <th>Art.nr</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>10260</td><td>ERPRG</td><td>Room sensor ERP</td></tr> <tr> <td>10244</td><td>ERPGG</td><td>Floor/duct sensor ERP</td></tr> <tr> <td>10245</td><td>ERPS</td><td>Electric heating control (slave unit), IP20</td></tr> </tbody> </table>						Art.nr	Type	Description	10260	ERPRG	Room sensor ERP	10244	ERPGG	Floor/duct sensor ERP	10245	ERPS	Electric heating control (slave unit), IP20
Art.nr	Type	Description															
10260	ERPRG	Room sensor ERP															
10244	ERPGG	Floor/duct sensor ERP															
10245	ERPS	Electric heating control (slave unit), IP20															

Water control

	Valve systems for FC Control					
	Art.nr	Type	Description			
	238293	VPFC15LF	Pressure independent and modulating valve system, low flow, DN15			
	238294	VPFC15NF	Pressure independent and modulating valve system, DN15			
	238295	VPFC20	Pressure independent and modulating valve system, DN20			
	238296	VPFC25	Pressure independent and modulating valve system, DN25			
	238297	VPFC32	Pressure independent and modulating valve system, DN32			
	Valve systems for SIRe Basic and Competent					
	Art.nr	Type	Connection			
	VLSP, pressure independent valve system on/off					
	79379	VLSP15LF	Low flow	DN15		
	79380	VLSP15NF		DN15		
	79381	VLSP20		DN20		
	79382	VLSP25		DN25		
	79417	VLSP32		DN32		
	VOT, three way control valve and actuator on/off					
	19031	VOT15		DN15		
	19032	VOT20		DN20		
	19033	VOT25		DN25		
	Valve systems for SIRe Advanced					
	Art.nr	Type	Connection			
	VLP, pressure independent and modulating valve system					
	79375	VLP15LF	Low flow	DN15		
	79376	VLP15NF		DN15		
	79377	VLP20		DN20		
	79378	VLP25		DN25		
	79416	VLP32		DN32		
	VMT, three way control valve and modulating actuator					
	19034	VMT15		DN15		
	19035	VMT20		DN20		
	19036	VMT25		DN25		
Other valve systems						
	Art.nr	Type	Description	Connection		
	24733	VRS20	Valve kit DN20	DN20		
	24734	VRS25	Valve kit DN25	DN25		
	24729	TVVS20	2-way control valve DN20	DN20		
	24730	TVVS25	2-way control valve DN25	DN25		
	19019	TRVS20	3-way control valve DN20	DN20		
	19020	TRVS25	3-way control valve DN25	DN25		
	10073	SD20	Actuator on/off	-		
						

Technical data

Enclosure classes for electrical materials

IP, first figure Protection against solid objects

0	No protection
1	Protection against solid objects ≥ 50 mm
2	Protection against solid objects ≥ 12,5 mm
3	Protection against solid objects ≥ 2,5 mm
4	Protection against solid objects ≥ 1,0 mm
5	Protection against dust
6	Dust-tight

IP, second figure

Protection against water

0	No protection
1	Protection against vertically dripping water
2	Protection against dripping water max 15°
3	Protection against sprinkled water
4	Protection against spraying with water
5	Protection against water jets
6	Protection against heavy seas
7	Protection against short immersion in water
8	Protection against the effects of long-term immersion in water

How is sound measured?

Sound level is measured in decibel (dB). The dB is a logarithmic unit used to describe a ratio. If the sound level is increased by 10 dB, the result is twice as loud (mathematically it is 6 dB, but the way we hear it, it is 10 dB).

It is also useful to know that two equally strong sound sources give an added sound level of 3 dB. Assume you have two entrances with two air curtains in each entrance, all four units with a sound level of 50 dB. The total sound level will then be 56 dB. The first opening will have a total sound level of 53 dB plus an extra 3 dB from the other opening.

Points of reference - dB

0	The softest sound a person can hear
10	Normal breathing
30	Recommended max. level for bedrooms
40	Quiet office, library
50	Large office
60	Normal conversation
80	Ringing telephone
85	Noisy restaurant
110	Shouting in ear
120	The threshold of pain

Sound pressure: Our sound measurements are carried out according to the international standards BS 848, AMCA 210-85 and DIN 24 163. The distance to the product is 5 m, directivity factor 2 and the equivalent absorption area is 200 m², unless otherwise stated.

Sound power: Measurements according to ISO 27327-2: 2014, Installation type E.

Heat insulation, U-value

U = thermal transmittance value [W/m² °C]

U-values indicate the heat insulating capacity of a building section.

Material	U-value [W/m ² °C]
Walls	
New building	
Wooden fascia with 15 cm insulation and plaster	0,27
Wooden fascia with 20 cm insulation and plaster	0,25
Wooden fascia with 25 cm insulation and plaster	0,22
Brick fascia with 15 cm insulation and plaster	0,27
Brick fascia with 20 cm insulation and plaster	0,24
Light concrete with 15 cm insulation	0,25
Light concrete with 20 cm insulation	0,2
Sheet metal fascia with 5 cm insulation	0,8
Sheet metal fascia with 10 cm insulation	0,4
Sheet metal fascia with 15 cm insulation	0,3
New construction for low energy house	0,18
Warehouse	0,3
One layer PVC (900 g)	5,0
Insulated hall (Thermohall)	0,6
Older building	
Single brick 12 cm	1,8
1 1/2 brick 18 cm	1,1
Light concrete block 20 cm	0,8
Light concrete block 30 cm	0,6
Concrete 15 cm	2,8
Concrete with 5 cm insulation	0,8
Concrete with 10 cm insulation	0,4
Frame wall with 5 cm insulation	0,8
Frame wall with 10 cm insulation	0,4
Frame wall with 15 cm insulation	0,3
New construction	0,3
Roof	
New building	
Sheet metal pitched roof, with 20 cm insulation	0,24
Brick pitched roof, with 20 cm insulation	0,23
Older building	
Concrete beam frame 15 cm	2,8
Concrete beam frame with 5 cm insulation	0,8
Concrete beam frame with 10 cm insulation	0,4
Light concrete 20 cm	0,8
Light concrete 30 cm	0,6
Sheet metal roof, uninsulated	4,0
Sheet metal roof with 5 cm insulation	0,8
Sheet metal roof with 10 cm insulation	0,6
Sheet metal roof with 25 cm insulation	0,2
Windows	
New building	
1+1 pane window (1 outer pane and 1 insulated pane)	2,5
2 pane window (2 insulated panes)	2,7
2+1 pane window (1 outer pane and 2 insulated panes)	1,0
3 pane window (3 insulated panes)	1,2
Energy class A	0,9
Energy class B	1,0
Energy class C	1,1
Energy class D	1,2
Energy class E	1,3
Energy class F	1,4
Energy class G	1,5
Older building	
1 pane window	5,0
2 pane window	3,0
3 pane window	2,0
3 pane window insulation pane	1,8

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Frico's head office is located outside Gothenburg in Sweden and we are a part of the Systemair Group. Today Frico is represented in 70 countries worldwide either by subsidiaries or distributors. Updated information is always available on our website <https://planetaklimata.com.ua/>.

We manufacture at production units in Skinnskatteberg, Sweden and at other ISO-certified production units in Europe. Our warehouses are strategically placed in several places in Europe.



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