



Industrial Air curtain

Axi SC



www.stavoklima.eu

Description

Open doors and gates are necessary for continuous movement of products in industrial settings. This inevitably results in generation of temperature fluctuations or negative pressure, which result in penetration of cold air into a building. AXI gate curtains perfectly serve to its purpose owing to high performance for curtaining of two spaces in the industrial environment. Their installation substantially reduces continuous inflow of cold air and noticeably eliminates undesired leakage of warm air. This saves heating costs, incapacity for work rate drops, and continuous operation is provided.

The curtains are fitted with axial (AC or EC) fans. The benefits of the axial fans are their variable applications. They may be installed both vertically and horizontally. The industrial curtains are most applied in the ware-

houses, dispatch, or service spaces, on the loading ramps, gates for fork-lifting trucks, and other frequently and long-time open spaces.

Heating options are offered from standard hot-water heat exchangers up to non-standard steam ones with high temperatures and pressures, from low-temperature multiline ones up to electric heating. (Attention to high electric power input for the electric heating.)

The air curtain is in standard made from zinc-coated metal sheet, and we defined RAL 7035 basic colour for painted versions. We can deliver any RAL colour upon request. The air curtains may also be delivered with stainless steel cladding if installation is requested to e.g. food processing facility.

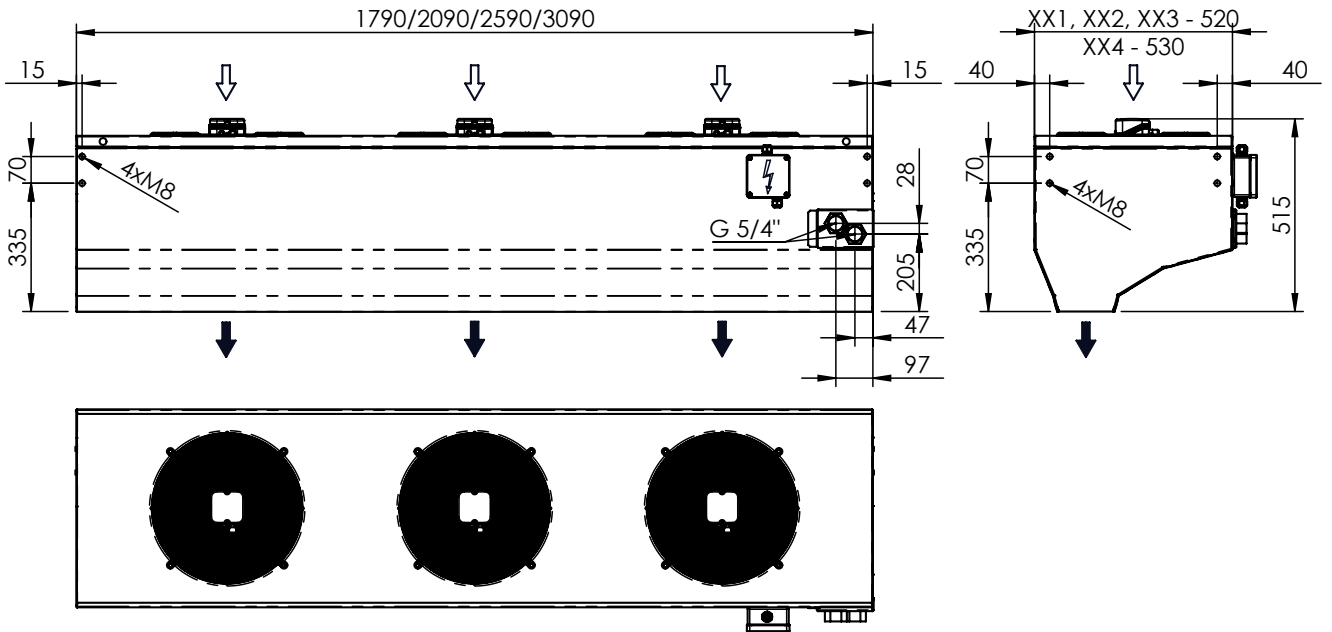


Basic features - Industrial door air curtains are in particular designed for:

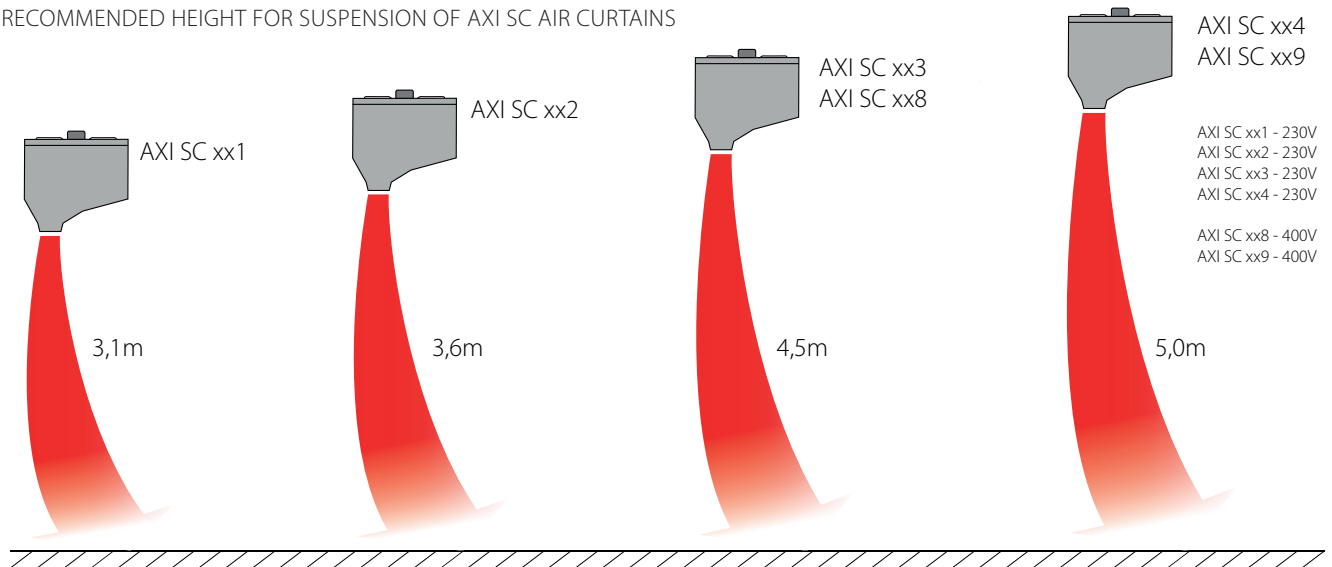
- warehouses and stock spaces
- loading ramps
- gate entries
- workshop and service operations
- production and assembly halls

For curtaining, the following may be used:

- circulating air – at room temperature
- circulating air – heated by electric or hot-water heater
- location: vertically / horizontally
- version: cold air/hot air (hot water, electric, or steam)
- suitable for door heights: 3.1; 3.6; 4.5; 5.0 m
- suitable for door widths: 1.8; 2.1; 2.6; 3.1 m; also with connection component for any door width
- version: zinc-coated cladding or RAL 7047 (grey), all RAL colours upon request, stainless steel cladding available as well.
- AC or EC fans
- wide range of control elements and accessories



RECOMMENDED HEIGHT FOR SUSPENSION OF AXI SC AIR CURTAINS



The information is indicative only. Differences of temperature and pressure, weather conditions, length of the air curtain, frequency in the door opening, and other influences must be taken into account. The length of the air curtain must correspond to width of the door space.

INLET/OUTLET FLANGE BRACKET



Undesired twisting off or tearing away the connection of the heat exchanger (especially during the installation) is prevented thanks to the special protective bracket reinforcing the strained area. This is a standard feature.

INTEGRATED FAN DIFFUSER



All AXI units are equipped with integrated fan diffuser in order to reduce the turbulent air flow inside the unit and thus increase the total air volume. This feature also reduces the noise generated by the fans. Thanks to the integrated fan diffuser the unit is fully compliant with ERP 2015 regulation.

Technical data

Technical data of single phase units with heating (230V)

	TH(V)CP-184-4-AXI SC		TH(V)CP-214-4-AXI SC		TH(V)CP-264-4-AXI SC		TH(V)CP-314-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	11100	10250	12500	11675	16500	14500	20500	17900
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	43,67	58,22	37,07	68,22	49	83,6	61,01	103,9
water pressure drop [kPa]	6,83	11,47	6	17,06	11,67	8,62	19,95	14,38
volume flow rate [m³/h]	1,88	2,5	1,59	2,93	2,1	3,59	2,62	4,46
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	27,39	36,51	22,67	43,17	30,44	52,14	38,28	65,47
water pressure drop [kPa]	3,16	5,29	2,65	8,01	5,31	3,95	9,22	6,7
volume flow rate [m³/h]	1,18	1,57	0,97	1,85	1,31	2,24	1,64	2,81
Voltage / power [V]/[kW]	230V / 1,17	230V / 1,17	230V / 1,17	230V / 1,17	230V / 1,56	230V / 1,56	230V / 1,95	230V / 1,95
Nominal current [A]	6,5	6,5	6,5	6,5	8,6	8,6	10,8	10,8
Acoustic pressure dB[A]**	65	64	66	65	67	66	67	66
Weight [kg]	83	85	89	97	113	119	134	141

	TH(V)CP-183-4-AXI SC		TH(V)CP-213-4-AXI SC		TH(V)CP-263-4-AXI SC		TH(V)CP-313-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	8600	8075	11200	9900	13975	12475	16750	14950
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	38,36	51,18	35,15	62,38	45,18	77,1	55,24	94,25
water pressure drop [kPa]	5,41	9,1	5,45	14,51	10,1	7,46	16,67	12,07
volume flow rate [m³/h]	1,65	2,2	1,51	2,68	1,94	3,31	2,37	4,05
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	24,12	32,21	21,51	39,58	28,11	48,17	34,74	59,54
water pressure drop [kPa]	2,51	4,23	2,41	6,86	4,6	3,42	7,75	5,65
volume flow rate [m³/h]	1,04	1,38	0,92	1,7	1,21	2,07	1,49	2,56
Voltage / power [V]/[kW]	230/0,72	230/0,72	230/0,96	230/0,96	230/1,2	230/1,2	230/1,44	230/1,44
Nominal current [A]	3,8	3,8	5	5	6,3	6,3	7,6	7,6
Acoustic pressure dB[A]**	63	64	64	64	64	64	65	65
Weight [kg]	72	75	83	90	102	105	120	127

	TH(V)CP-182-4-AXI SC		TH(V)CP-212-4-AXI SC		TH(V)CP-262-4-AXI SC		TH(V)CP-312-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	7050	6650	9125	8225	11700	10325	13725	12400
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	34,61	45,97	31,77	56,32	41,38	69,49	50,04	85,01
water pressure drop [kPa]	4,49	7,5	4,54	12,08	8,61	6,19	13,96	10,03
volume flow rate [m³/h]	1,49	1,98	1,37	2,42	1,78	2,99	2,15	3,65
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	21,82	29	19,5	35,82	25,79	43,56	32,52	53,84
water pressure drop [kPa]	2,1	3,5	2,02	5,73	3,93	2,86	6,5	4,71
volume flow rate [m³/h]	0,94	1,25	0,84	1,54	1,11	1,87	1,35	2,31
Voltage / power [V]/[kW]	230/0,5	230/0,5	230/0,66	230/0,66	230/0,83	230/0,83	230/0,99	230/0,99
Nominal current [A]	2,6	2,6	3,5	3,5	4,4	4,4	5,3	5,3
Acoustic pressure dB[A]**	54	54	54	54	54	54	54	54
Weight [kg]	70	72	80	88	100	106	116	124

	TH(V)CP-181-4-AXI SC		TH(V)CP-211-4-AXI SC		TH(V)CP-261-4-AXI SC		TH(V)CP-311-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	5450	5300	7725	7150	10000	9350	12400	11350
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	30,2	40,44	29,25	52,06	38,27	65,75	47,56	80,91
water pressure drop [kPa]	3,5	5,95	3,92	10,48	7,49	5,6	12,73	9,17
volume flow rate [m³/h]	1,3	1,74	1,26	2,24	1,65	2,82	2,04	3,48
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	19,12	25,62	17,99	33,18	23,88	41,28	29,98	51,32
water pressure drop [kPa]	1,65	2,8	1,75	4,99	3,43	2,59	5,94	4,32
volume flow rate [m³/h]	0,82	1,1	0,77	1,43	1,03	1,77	1,29	2,21
Voltage / power [V]/[kW]	230/0,33	230/0,33	230/0,5	230/0,5	230/0,66	230/0,66	230/0,83	230/0,83
Nominal current [A]	1,8	1,8	2,6	2,6	3,5	3,5	4,4	4,4
Acoustic pressure dB[A]**	54	54	54	54	54	54	55	55
Weight [kg]	66	68	76	84	95	101	112	119

** Acoustic pressure measured from the distance of 5 m from the unit. Protection degree: IP54

Technical data of single phase units with heating (400V)

	TH(V)CP-189-4-AXI SC		TH(V)CP-219-4-AXI SC		TH(V)CP-269-4-AXI SC		TH(V)CP-319-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m ³ /h]	10900	10000	12450	11350	16725	14350	20500	17800
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	43,27	57,45	37	67,19	49,33	83,16	61,1	103,58
water pressure drop [kPa]	6,72	11,19	5,97	16,61	11,81	8,55	19,95	14,3
volume flow rate [m ³ /h]	1,86	2,47	1,59	2,89	2,12	3,58	2,62	4,45
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	27,14	36,05	22,62	42,54	30,62	51,85	38,28	65,28
water pressure drop [kPa]	3,1	5,18	2,64	7,8	5,36	3,91	9,22	6,66
volume flow rate [m ³ /h]	1,17	1,55	0,97	1,83	1,32	2,23	1,64	2,8
Voltage / power [V]/[kW]	400-1,35/1,02	400-1,35/1,02	400-1,35/1,02	400-1,35/1,02	400-1,8/1,36	400-1,8/1,36	400-2,25/1,7	400-2,25/1,7
Nominal current [A]	2,9/2,0	2,9/2,0	2,9/2,0	2,9/2,0	3,9/2,6	3,9/2,6	4,9/3,3	4,9/3,3
Acoustic pressure dB[A]**	66	65	68	67	69	68	69	69
Weight [kg]	80	82	86	94	109	115	129	136

	TH(V)CP-188-4-AXI SC		TH(V)CP-218-4-AXI SC		TH(V)CP-268-4-AXI SC		TH(V)CP-318-4-AXI SC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m ³ /h]	8350	7750	10875	9600	13600	12050	16300	14500
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	37,77	50,02	34,64	61,34	44,58	75,65	54,51	92,67
water pressure drop [kPa]	5,26	8,72	5,31	14,09	9,85	7,2	16,29	11,7
volume flow rate [m ³ /h]	1,62	2,15	1,49	2,64	1,92	3,25	2,34	3,98
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	23,77	31,5	21,22	38,92	27,74	47,3	34,27	58,58
water pressure drop [kPa]	2,45	4,06	2,35	6,64	4,48	3,31	7,56	5,49
volume flow rate [m ³ /h]	1,02	1,35	0,91	1,67	1,19	2,03	1,47	2,52
Voltage / power [V]/[kW]	400-0,78/0,54	400-0,78/0,54	400-1,04/0,72	400-1,04/0,72	400-1,3/0,9	400-1,3/0,9	400-1,56/1,08	400-1,56/1,08
Nominal current [A]	1,8/1,0	1,8/1,0	2,4/1,4	2,4/1,4	3,0/1,7	3,0/1,7	3,6/2,1	3,6/2,1
Acoustic pressure dB[A]**	64	64	64	64	65	65	66	66
Weight [kg]	72	75	83	90	102	105	120	127

Technical data of the units without heating (230V)

	SH(V)CP-184-4-AXI SC	SH(V)CP-214-4-AXI SC	SH(V)CP-264-4-AXI SC	SH(V)CP-314-4-AXI SC
Air volume [m ³ /h]	14400	15250	18000	24725
Voltage/power input/current	230V/1,17kW/6,5A	230V/1,17kW/6,5A	230V/1,56kW/8,6A	230V/1,95kW/10,8A
Acoustic pressure dB[A]**	67	68	69	69
Weight [kg]	70	75	94	113
	SH(V)CP-183-4-AXI SC	SH(V)CP-213-4-AXI SC	SH(V)CP-263-4-AXI SC	SH(V)CP-313-4-AXI SC
Air volume [m ³ /h]	10250	12925	16100	19300
Voltage/power input/current	230V/0,72kW/3,8A	230V/0,96kW/5A	230V/1,2kW/6,3A	230V/1,44kW/7,6A
Acoustic pressure dB[A]**	67	66	66	67
Weight [kg]	58	68	84	98
	SH(V)CP-182-4-AXI SC	SH(V)CP-212-4-AXI SC	SH(V)CP-262-4-AXI SC	SH(V)CP-312-4-AXI SC
Air volume [m ³ /h]	8000	10100	12650	15125
Voltage/power input/current	230V/0,5kW/2,6A	230V/0,66kW/3,5A	230V/0,83kW/4,4A	230V/0,99kW/5,3A
Acoustic pressure dB[A]**	59	55	55	56
Weight [kg]	56	66	81	95
	SH(V)CP-181-4-AXI SC	SH(V)CP-211-4-AXI SC	SH(V)CP-261-4-AXI SC	SH(V)CP-311-4-AXI SC
Air volume [m ³ /h]	5800	8150	10600	13100
Voltage/power input/current	230V/0,33kW/1,8A	230V/0,5kW/2,6A	230V/0,66kW/3,5A	230V/0,83kW/4,4A
Acoustic pressure dB[A]**	55	55	55	56
Weight [kg]	52	62	77	90

Technical data of the units without heating (400V)

	SH(V)CP-189-4-AXI SC	SH(V)CP-219-4-AXI SC	SH(V)CP-269-4-AXI SC	SH(V)CP-319-4-AXI SC
Air volume [m ³ /h]	14250	14500	19750	24500
Voltage/power input/current [V]-[ΔV kW]-[ΔV A]	400V-1,35/1,02kW-2,9/2,0A	400V-1,35/1,02kW-2,9/2,0A	400V-1,8/1,36kW-3,9/2,7A	400V-2,25/1,7kW-4,9/3,3A
Acoustic pressure dB[A]**	68	70	71	71
Weight [kg]	67	72	90	108
	SH(V)CP-188-4-AXI SC	SH(V)CP-218-4-AXI SC	SH(V)CP-268-4-AXI SC	SH(V)CP-318-4-AXI SC
Air volume [m ³ /h]	9900	12550	15000	18600
Voltage/power input/current [V]-[ΔV kW]-[ΔV A]	400V-0,78/0,54kW-1,8/1,0A	400V-1,04/0,72kW-2,4/1,4A	400V-1,3/0,9kW-3,0/1,7A	400V-1,56/1,08kW-3,6/2,1A
Acoustic pressure dB[A]**	66	66	67	68
Weight [kg]	58	68	84	98

** Acoustic pressure measured from the distance of 5 m from the unit. Protection degree: IP54

Technical data of single phase units with heating (230V), EC fans

	TH(V)CP-184-4-AXI SC EC		TH(V)CP-214-4-AXI SC EC		TH(V)CP-264-4-AXI SC EC		TH(V)CP-314-4-AXI SC EC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	12000	10825	14025	12350	17900	16025	22025	19250
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	45,42	59,94	39,2	70,31	50,98	88,19	63,18	108,03
water pressure drop [kPa]	7,33	12,09	6,63	18,01	12,53	9,49	21,24	15,43
volume flow rate [m³/h]	1,95	2,58	1,68	3,02	2,19	3,79	2,72	4,64
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	28,47	37,56	23,93	44,47	31,63	54,91	39,62	68
water pressure drop [kPa]	3,39	5,58	2,91	8,45	5,68	4,33	9,81	7,17
volume flow rate [m³/h]	1,22	1,61	1,03	1,91	1,36	2,36	1,7	2,92
Voltage / power [V]/[kW]	230V/1,04	230V/1,04	230V/1,04	230V/1,04	230V/1,38	230V/1,38	230V/1,73	230V/1,73
Nominal current [A]	6,6	6,6	6,6	6,6	8,8	8,8	11	11
IP rating	54	54	54	54	54	54	54	54
Accoustic pressure dB[A]**	62	62	63	63	63	63	64	64
Weight [kg]	78	80	84	92	106	112	125	132

	TH(V)CP-183-4-AXI SC EC		TH(V)CP-213-4-AXI SC EC		TH(V)CP-263-4-AXI SC EC		TH(V)CP-313-4-AXI SC EC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	11025	10350	14400	12800	18050	16050	21600	19300
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	43,52	58,51	39,7	71,66	51,19	88,27	62,58	108,18
water pressure drop [kPa]	6,79	11,56	6,79	18,63	12,63	9,51	20,87	15,47
volume flow rate [m³/h]	1,87	2,51	1,71	3,08	2,2	3,79	2,69	4,65
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	27,3	36,7	24,2	45,3	31,8	55,0	39,2	68,1
water pressure drop [kPa]	3,14	5,35	2,99	8,74	5,72	4,34	9,64	7,19
volume flow rate [m³/h]	1,17	1,58	1,04	1,95	1,36	2,36	1,69	2,93
Voltage / power [V]/[kW]	230/0,45	230/0,45	230/0,6	230/0,6	230/0,75	230/0,75	230/0,9	230/0,9
Nominal current [A]	3,6	3,6	4,8	4,8	6	6	7,2	7,2
IP rating	54	54	54	54	54	54	54	54
Accoustic pressure dB[A]**	58	58	59	59	59	59	60	60
Weight [kg]	70	72	80	88	100	106	116	124

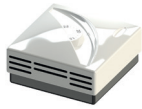
	TH(V)CP-182-4-AXI SC EC		TH(V)CP-212-4-AXI SC EC		TH(V)CP-262-4-AXI SC EC		TH(V)CP-312-4-AXI SC EC	
Heat exchanger type	1	2	1	2	1	2	1	2
Air volume [m³/h]	7675	7375	9975	9125	12400	11500	14925	13775
Heating capacity (water 80/60°C, ti=18°C)								
heating capacity [kW]	36,17	48,5	33,2	59,66	42,59	73,76	52,18	90,1
water pressure drop [kPa]	4,87	8,26	4,91	13,4	9,06	6,89	15,06	11,14
volume flow rate [m³/h]	1,56	2,09	1,43	2,56	1,83	3,17	2,24	3,87
Heating capacity (water 60/40°C, ti=15°C)								
heating capacity [kW]	22,8	30,57	20,36	37,88	26,53	46,15	32,84	56,98
water pressure drop [kPa]	2,27	3,85	2,2	6,33	4,14	3,2	7,01	5,2
volume flow rate [m³/h]	0,98	1,31	0,88	1,63	1,14	1,98	1,41	2,45
Voltage / power [V]/[kW]	230/0,3	230/0,3	230/0,45	230/0,45	230/0,6	230/0,6	230/0,75	230/0,75
Nominal current [A]	2,4	2,4	3,6	3,6	4,8	4,8	6	6
IP rating	44	44	44	44	44	44	44	44
Accoustic pressure dB[A]**	57	56	59	57	59	57	59	58
Weight [kg]	66	68	76	84	95	101	112	119

Technical data of three phase units without heating (230V), EC fans

	SH(V)CP-184-4-AXI SC EC	SH(V)CP-214-4-AXI SC EC	SH(V)CP-264-4-AXI SC EC	SH(V)CP-314-4-AXI SC EC
Air volume [m³/h]	16250	16575	22000	27225
Voltage/power input/current	230V/1,04kW/6,6A	230V/1,04kW/6,6A	230V/1,38kW/8,8A	230V/1,73kW/11A
IP rating	54	54	54	54
Accoustic pressure dB[A]**	62	61	63	64
Weight [kg]	65	70	87	104
	SH(V)CP-183-4-AXI SC EC	SH(V)CP-213-4-AXI SC EC	SH(V)CP-263-4-AXI SC EC	SH(V)CP-313-4-AXI SC EC
Air volume [m³/h]	13200	16600	20500	24750
Voltage/power input/current	230V/0,45kW/3,6A	230V/0,6kW/4,8A	230V/0,75kW/6A	230V/0,9kW/7,2A
IP rating	54	54	54	54
Accoustic pressure dB[A]**	58	54	59	60
Weight [kg]	56	66	81	95
	SH(V)CP-182-4-AXI SC EC	SH(V)CP-212-4-AXI SC EC	SH(V)CP-262-4-AXI SC EC	SH(V)CP-312-4-AXI SC EC
Air volume [m³/h]	8625	11000	13550	16425
Voltage/power input/current	230V/0,3kW/2,4A	230V/0,45kW/3,6A	230V/0,6kW/4,8A	230V/0,75kW/6A
IP rating	44	44	44	44
Accoustic pressure dB[A]**	57	58	58	59
Weight [kg]	52	62	77	90

** Acoustic pressure measured from the distance of 5 m from the unit.

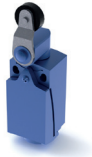
** Acoustic pressure measured from the distance of 5 m from the unit.



TP1 room thermostat (230V/3A/AC15) – temperature range 5-35°C, IP 30



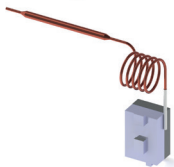
TP4 room thermostat for industrial application - IP54 protection



DKMG magnetic door contact, changeover contact, 24V/50Hz/1A/AC15



DKM mechanical door contact



PTT Inbuilt Heat Exchanger protection by use of a anti-frost capillary sensor. To be used in conjunction with a control valve type ETV or ETVT. Recommended pre-set value to be 10°C. Degree of protection IP42. Operating voltage 230V/50Hz switch contact 3A/AC15 with a range of 5°-35°C.

Valves

As required by the customer, a non-embedded 2-way or 3-way valve with control head can be delivered for the hot water heat exchanger. The valve drive may be either self-acting (thermostatic) or electrothermic.

The thermostatic head is always delivered with a separated sensor being located behind the water heat exchanger – exhausted air temperature control.

The electrothermic valve drive can be supplied to the hot water heat exchanger as non-embedded either as 2-way or 3-way. The valve is characterized by quiet and failure-free operation. Should the thermal drive be under voltage, the built-in sensor heats up. Following some time difference the drive starts continuously closing. Opening time about 4 minutes at cold start. When power is interrupted, smooth opening of thermal drive occurs. The drive is always delivered in “normally open” (NO – 230V/3W) version.

TV XXL” (N)

2-way water flow control valve for regulation of the medium through the unit. Manufactured with a corrosion resistant bronze body fitted with a stainless steel spindle, maximum pressure difference of 0,2 bar, kvs = 8.0 m³/h based upon medium temperature water maximum 120°C at a maximum pressure of 10 bar. The thermostatic head has a separate sensor for a temperature range setting of 27°-57°C and is supplied as part of the valve.)

ETVQ 1” (N)

A pressure-independent adjustment and control valve with electrothermic head. The valve offers linear control feature and is pressure-independent, which means the control feature is not dependent on pressure available, and not influenced by low authority. Minimum/maximum pressure difference 0.23/4 bar for medium temperature max 90°C at max 16 bar pressure. The electrothermic head included in the valve for 230V/3W (NO). Opening time about 4 minutes at cold start, IP54.

ETVQ 5/4” (N)

A pressure-independent adjustment and control valve with electrothermic head. The valve offers linear control feature and is pressure-independent, which means the control feature is not dependent on pressure available, and not influenced by low authority. Minimum/maximum pressure difference 0.23/4 bar for medium temperature max 90°C at max 16 bar pressure. The electrothermic head included in the valve for 230V/3W (NO). Opening time about 4 minutes at cold start, IP54.

Control



Air curtain controllers for 230V:

Ox

The O-controller is a 5-speed voltage regulator for fans with 230V power supply. It is equipped with a separate switch for light indication of power ON. O-series controllers allows for connection of multiple air curtains. The selection of an appropriate controller type must consider the power input of the unit (output power limitation in "A").

Type of controller	O2	O3	O5	O7	O10
Power supply	230V	230V	230V	230V	230V
Output power limitation	2 A	3 A	5 A	7 A	10 A
Protection class	IP 54				
Dimensions (width/height/depth)	86x166x91 mm		123x240x125 mm		146x272x140 mm



ROJ Light

3-speed capacity regulator, electronics for unit control with accessories placed in sheet-metal box with ventilation vents, equipped with electrical protection and capacity elements, preparation for control by door contact 24 V (potential free contact), fan time delay with additional setting 0.5s – 10 H, inbuilt fuse. The ROJ Light-series controllers allows for connection of multiple air curtains. The selection of an appropriate controller type must consider the power input of the unit (output power limitation in "A").

Type of controller	ROJ light 14-10	ROJ light 30-10
Power supply	230V	230V
Output power limitation	14 A	30 A
Protection class	IP 20	
Dimensions (width/height/depth)	180x320x140 mm	220x350x180 mm



LS-AX-03

ROJ

3-speed capacity regulator, electronics for unit control with accessories placed in sheet-metal box with ventilation vents, equipped with electrical protection and capacity elements, output ports for a frost protection thermostat (needs to be specified as an extra accessory), and electric valve control set in accordance with the room thermostat is possible. Inbuilt fuse, fault output frost protection, output for circulation pump control up to 6A / 230V, input for automatic operation contact, The printed circuit board inside the controller allows for linking to an external control type LS-AXT-02 for operation of more than one unit. ROJ-series controllers allows for connection of multiple air curtains. The selection of an appropriate controller type must consider the power input of the unit (output power limitation in "A"). In addition, the series ROJ 14-21 and ROJ 30-21 feature failure/operation function.).

Type of controller	ROJ 14-20	ROJ 14-21	ROJ 30-20	ROJ 30-21
Power supply	230 V			
Output power limitation	14 A		30 A	
Protection class	IP 65			
Dimensions (width/height/depth)	300x400x170 mm			



UNIREG

Unireg distribution board is suitable for AC or EC units control with hot water heater and 230V motor where integration of control electronics may not be provided in the unit. The system permits use of all Ditrionic, Econ and BMS input features. Unireg distribution board performance needs to be controlled depending on power input of the units (performance limitation in „A“).

Type of controller	Unireg				Unireg				Unireg				Unireg		
	DIT 4,5	DIT 6	DIT 9	DIT 14	ECON 4,5	ECON 6	ECON 9	ECON 14	BMS 4,5	BMS 6	BMS 9	BMS 14	DIT EC	ECON EC	BMS EC
Power supply	230V														
Output power limitation	4,5 A	6 A	9 A	14 A	4,5 A	6 A	9 A	14 A	4,5 A	6 A	9 A	14 A	14 A	14 A	14 A
Protection class	IP 20														
Dimensions (width/height/depth)	300x400x170 mm														

Air curtain controllers for 400V:

OTx

0-1-2 speed control for 3-phase (400V) motors fitted to air curtains without the possibility of connecting door contacts, but this basic unit will allow connection to a room thermostat. The selection of an appropriate controller type is given by the power input of the unit.



Type of controller	OT4	OT8	OT10	OT15
Power supply	400V	400V	400V	400V
Output power limitation	4 A	8 A	10 A	15 A
Protection class	IP 65			
Dimensions (width/height/depth)	275x220x140 mm			

RTx

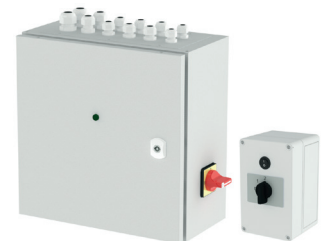
0-1-2 speed control for 3-phase (400V) motors fitted to air curtains with the possibility of connecting door contacts incl. fan time delay and room thermostat. The selection of an appropriate controller type is given by the power input of the unit.



Type of controller	RT4	RT8	RT10	RT15
Power supply	400V	400V	400V	400V
Output power limitation	4 A	8 A	10 A	15 A
Protection class	IP 65			
Dimensions (width/height/depth)	275x220x140			

ROTx

0-1-2 speed control for 3-phase (400V) motors fitted to air curtains without the possibility of connecting door contacts incl. fan time delay and room thermostat. Output ports for a frost protection thermostat (needs to be specified as an extra accessory), and electrothermic valve control set in accordance with the room thermostat is possible. The printed circuit board inside the controller allows for linking to an external control type LS-AXT-02 for operation of more than one unit. In addition, the series ROT4-1, ROT 10-1 and ROT15-1 feature failure/operation function.



LS-AXT-02

Type of controller	ROT4	ROT4-1	ROT10	ROT10-1	ROT15	ROT15-1
Power supply	400 V		400 V		400 V	
Output power limitation	4 A		10 A		15 A	
Protection class	IP 65					
Dimensions (width/height/depth)	400x400x210 mm					

Functions of controllers

Controller type	O3	O5	O7	OT 4	OT 8	OT 10	OT 15	ROJ light 14-10	ROJ light 30-10	RT 4	RT 8	RT 10	RT 15	ROJ 14-20	ROJ 14-21	ROJ 30-20	ROJ 30-21	ROT 4	ROT 4-1	ROT 10	ROT 10-1	ROT 15	ROT 15-1
voltage [V]	230V			400V				230V		400V				230V				400V					
max. current of the unit (units) [A]	3	5	7	4	8	10	15	14	30	4	8	10	15	14	14	30	30	4	4	10	10	15	15
door contact*	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
door contact timer	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
door contact override	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
room thermostat*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
external regulator	-	-	-	-	-	-	-	-	-	-	-	-	-	LS-AX-03				LS-AXT-02					
anti-frost protection*	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
electrothermic valve + pump*	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
automatic mode	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
chained control	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
failure/operation signal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	✓	-	✓	-	✓	-	✓

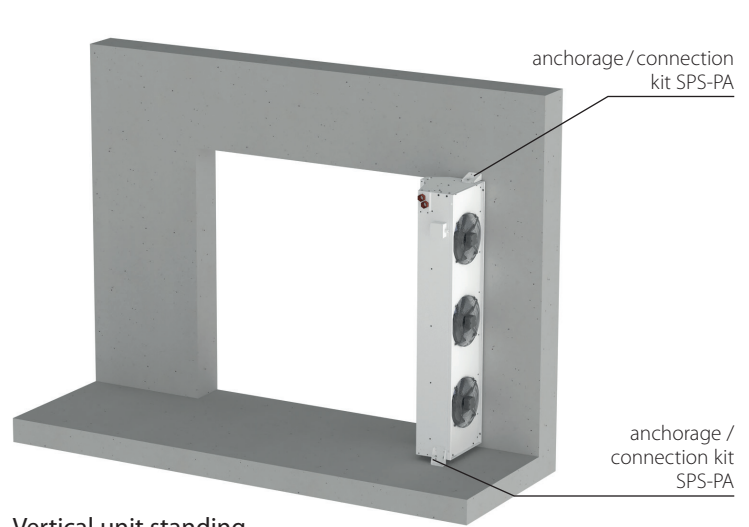
*The switchboard is normally prepared for control by these devices – however, they are not included in the standard delivery.

Installation

HORIZONTAL INSTALLATION



VERTICAL INSTALLATION



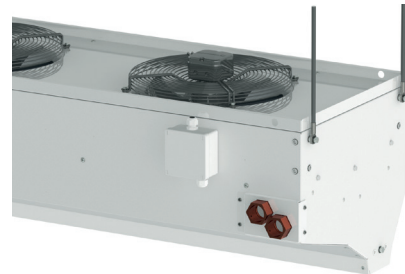
Vertical unit standing on the right hand side of the doorway must be specified as "left" (order key THCL) in the order and vice versa. Water connection must be always on top.

HORIZONTAL INSTALLATION

Mounting options - wall suspension



Mounting options - ceiling suspension



Anchoring /connecting set SPS-PA

The SPS-PA set permits:

- Combining of the AIX air curtains together (horizontally and vertically)
- Anchoring of the AXI air curtains to the floor in case of the vertical installation
- Anchoring of the upper part of AXI air curtains to the side wall in case of the vertical installation

All AXI industrial air curtains can be combined into a single assembly using the SPS-PA connecting set. The SPS-PA connecting set permits three different mounting positions depending on the required tolerance between the connected units or distance from the wall (vertical assembly).

In case of the **horizontal installation**, any number of the air curtains can be combined to cover doors wider than one air curtain – this set of the units may require additional support.

Each air curtain must be hung on all four hanging points.

The vertical stacking of multiple units is limited to two curtains due to limited loading capacity of the equipment.



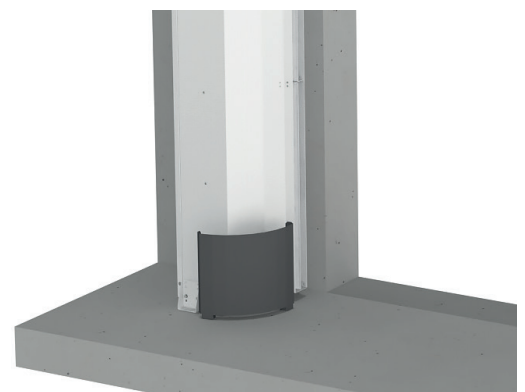
SPS-SI silentblocks (set of 4 pcs)

The vertically installed AXI industrial air curtains may tend to transfer the vibrations generated by the axial fans to the surface they are mounted to. To minimize the effect, we recommend that the SPS-SI set of silent blocks be installed between the floor and the SPS-PA anchoring set.

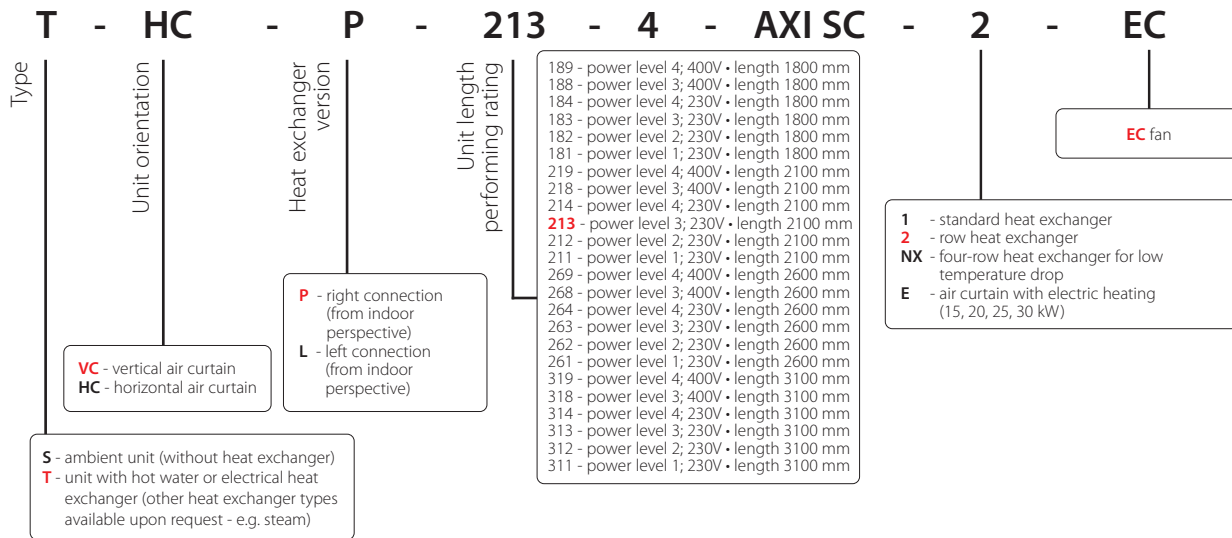


Protective frame ONR

In the case of vertical installation, we recommend fitting the air curtain with a protective impact frame as an option. It is suitable as protection of the curtain against damage by handling trucks or other types of transport. Available in galvanized steel as standard, painted in RAL color or in stainless steel on request.



Order key



Accessories

- ceiling suspension
- wall suspension
- thermostatic valve with remote capillary sensor
- door contact

Custom features:

- anti-frost thermostat
- corrosion-free casing



AN AXI 05/20

Ditributor: