



A complete range for heat regulation to answer all your needs

> Ventilators and natural ventilation



Ventilators

- New metal and plastic louvres
- New roof fan with or without motor

Natural ventilation

- New metal and plastic ventilation louvres

> Air/air exchangers, air conditioners



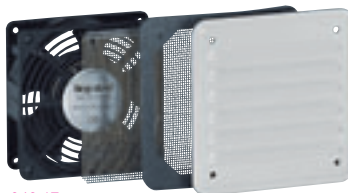
- New range of vertical and horizontal air conditioners
- New air/air exchangers

> Heating



- Resistance heating : to prevent condensation forming inside the enclosure
- Hygrostat and humidity thermostat : to adjust the humidity level in enclosures

Check the compatibility between your enclosures size and heat regulation devices see p. 290



348 17



348 52



Technical characteristics (p. 291)

Pack	Cat.Nos	Ventilators with metal louvre
		<p>IP 32 - IK 10 Ventilator is mounted on the outside of the enclosure or cabinet A second outlet can be installed to increase the flow rate and optimise discharge rates from the enclosure 230 V - 50/60 Hz</p> <p>30/160 m³/h: 30 m³ installed with filter 160 m³ for free blow-out Supplied with a pair of metal louvres, a pair of anti-insect grilles and an internal finger-guard grille</p>
1	348 17	RAL 7035
1	365 71	Beige RAL 7032
		<p>Ventilators with plastic louvre</p> <p>IP 54 - IK 08 230 V - 50/60 Hz RAL 7035 Equipped with finger-guard grilles Reduced external dimensions (7 to 10 mm) Possibility of mounting with spacer Cat.Nos 348 88/89/90 to increase cabling capacity in enclosure Ventilator is mounted on the outside of the enclosure or cabinet Screw fixing on a panel width 1 to 4 mm A second outlet louvre can be installed to increase the flow rate and optimise discharge rates from the enclosure</p> <p>40/160 m³/h 40 m³ installed with filter 160 m³ with second louvre Cat.No 348 34 160 m³ for free blow out Supplied with a pair of louvres 150 x 150 mm equipped Electrostatic filter washable EU 3, G3</p> <p>100/160 m³/h 100 m³ installed with filter 160 m³ with second louvre Cat.No 348 35 160 m³ for free blow out Supplied with a pair of louvres 250 x 250 mm Media filter washable EU 3, G3</p> <p>170/240 m³/h 170 m³ installed with filter 240 m³ with second louvre Cat.No 348 35 240 m³ for free blow out Supplied with a pair of louvres 250 x 250 mm Media filter washable EU 3, G3</p>
1	348 50	
1	348 51	
1	348 52	

NEW

heat regulation for cabinets and enclosures ventilators (continued)



348 54



348 89



Spacer 348 89 mounted on ventilator 348 52



365 74



365 79



348 04



348 05



348 35



Technical characteristics (p. 291)

Ventilators with plastic louvre (continued)

Pack	Cat.Nos	
1	348 53	360/800 m³/h 360 m ³ installed with filter 800 m ³ with second louvre Cat.No 348 36 800 m ³ for free blow-out Supplied with a pair of louvres 325 x 325 mm Media filter washable EU 3, G3
1	348 54	520/1000 m³/h 500 m ³ installed with filter 1000 m ³ with second louvre Cat.No 348 36 1000 m ³ for free blow-out Supplied with a pair of louvres 325 x 325 mm Media filter washable EU 3, G3

Spacers for ventilators

IP 54 maintained. RAL 7035
Enable increase cabling capacity in enclosure by semi-flush mounting of ventilator

1	348 88	150 x 150 mm
1	348 89	250 x 250 mm
1	348 90	325 x 325 mm

Air circulation kit 160 m³/h

1	365 74	Uniformizes temperature in enclosure Prevent hot spots Plate or rail mounting in bottom part of enclosure or under most sensitive equipment The air flow must be directed upward
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Roof ventilators

Plastic - RAL 7035
Provide very high extraction rate
Screw mounting on top of enclosures
Dimensions: 400 x 350 x 100 mm
Delivered without input air louvre
IP 23 - IK 08

With motor

Flow rate (m³/h):

	Free blowing	With 1 louvre Cat.No 348 35	With 2 louvres Cat.No 348 35	With 1 louvre Cat.No 348 36	With 2 louvres Cat.No 348 36
1	348 07	600	350	400	450
1	348 08	1000	400	500	600

Natural ventilation

Ventilation glands for cabinets

IP 44 - IK 08 for outdoor use
Grey polyamide 6.6

2	365 78	Drilling Ø15 mm
2	365 79	Drilling Ø30.5 mm

Metal louvres

IP 32 - IK 10
Set of 2 metal louvres + 2 anti-insect grilles

1	348 04	RAL 7035 - 138 x 138 mm
1	365 70	Beige RAL 7032 - 138 x 138 mm
1	348 05	RAL 7035 - 248 x 248 mm
1	348 16	Beige RAL 7032 - 248 x 248 mm

Plastic louvres

RAL 7035
Supplied singly

1	348 34	IP 44 - 150 x 150 mm With filter EU 3, G3
1	348 35	IP 54 - 250 x 250 mm With filter EU 3, G3
1	348 36	IP 54 - 325 x 325 mm With filter EU 3, G3



353 72



353 46



353 50



353 58

Technical characteristics (p. 291)

50/60 Hz
RAL 7035

For the permanent circulation of air inside the enclosure and cooling of the enclosure via an exchanger with aluminium plates or activation of a thermostat (preset to 35 °C) on the air-conditioner

Reduced maintenance without filter

These products do not affect the IP rating of the enclosure on which they are installed (IP 54)

Pack	Cat.Nos	Air/air exchanger
		To be installed vertically on a panel or enclosure door Total isolation of internal and external circuits Washable exchange battery Ambient operating temperature: - 5 °C to + 40 °C Dissipation rates:
1	353 71	14 W/°C
1	353 72	36 W/°C
1	353 73	50 W/°C
1	353 74	80 W/°C

		Air conditioners	
		Possible setting: 20 °C to 46 °C Weatherproof cooling circuit and total isolation of internal and external air circuits Ambient operating temperature: 20 °C to 50 °C	
		To be installed vertically For installation on a panel or enclosure door	
		Cooling capacity acc. to EN 814	
		Voltage/Phase	L35L35 L35L50
1	353 46	230 V/1	380 W 240 W
1	353 47	230 V/1	640 W 470 W
1	353 48	230 V/1	820 W 680 W
1	353 49	230 V/1	1 250 W 910 W
1	353 50	230 V/1	1 600 W 1 230 W
1	353 51	230 V/1	2 000 W 1 510 W
1	353 53	230 V/1	3 850 W 2 870 W
1	353 54	400 V/2	1 600 W 1 230 W
1	353 55	400 V/3	2 000 W 1 510 W
1	353 56	400 V/3	3 850 W 2 870 W

		Air conditioners (continued)		
		To be installed horizontally on roof To be installed on extendable enclosures only		
		Cooling capacity acc. to EN 814:		
		Voltage/Phase	L35L35	L35L50
1	353 58	230 V/1	1 150 W	900 W
1	353 59	230 V/1	1 550 W	1 200 W
1	353 60	230 V/1	2 050 W	1 560 W
1	353 62	230 V/1	3 850 W	2 870 W
1	353 63	400 V/2	1 550 W	1 200 W
1	353 64	400 V/3	2 050 W	1 560 W
1	353 65	400 V/3	3 850 W	2 870 W

heat regulation for cabinets and enclosures

heating



348 02



348 06



348 47



353 18



353 19



348 49



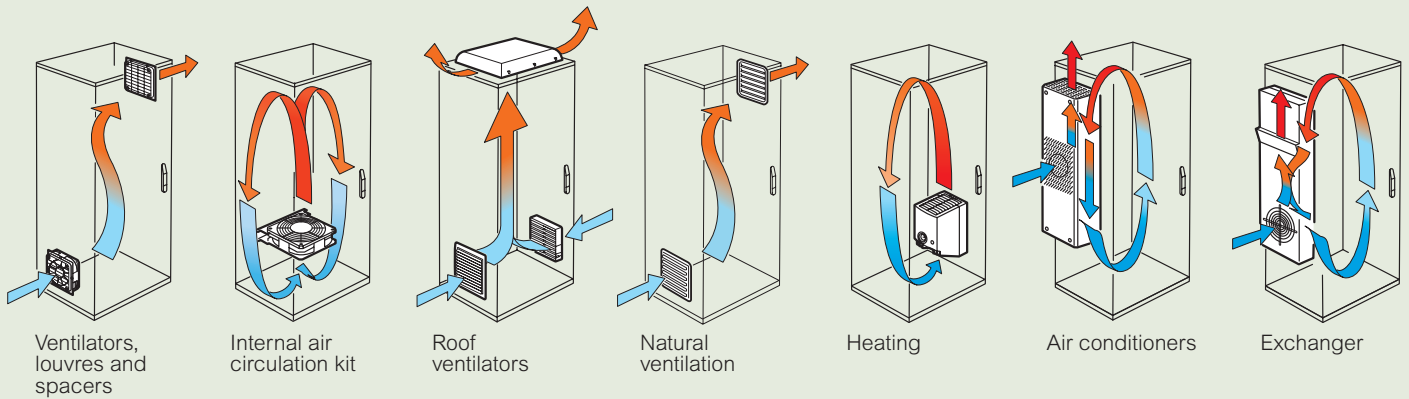
Technical characteristics (p. 291)

Pack	Cat.Nos	Heating								
		Resistance heaters 110 V/240 V\sim Class II \square IP 20 Prevent condensation forming inside the enclosure Heat dissipator in black aluminium oxide Supplied complete with cables 450 mm length Lighting functions: "PTC" auto-regulated Ensures security with limited temperature: t maxi: 70 °C Mounting on rail \perp connection on terminals								
		<table border="1"> <thead> <tr> <th>Power</th> <th>Start-up current</th> </tr> </thead> <tbody> <tr> <td>20 W</td> <td>0.8 A</td> </tr> <tr> <td>60 W</td> <td>1.5 A</td> </tr> <tr> <td>120 W</td> <td>3.2 A</td> </tr> </tbody> </table>	Power	Start-up current	20 W	0.8 A	60 W	1.5 A	120 W	3.2 A
Power	Start-up current									
20 W	0.8 A									
60 W	1.5 A									
120 W	3.2 A									
1	348 00									
1	348 01									
1	348 02									
1	348 06	Pulsated air 230 V\sim 350 W 7.5 A Fan flow rate: 35 m ³ /hr Built-in temperature limiter Supplied with thermostat: 0 to 60 °C Operating LED Material: Polycarbonate UL 94 VO								
1	348 47	Room thermostat Precision 0.5 °C (neutral connected) Switching and control range: 2 °C 12 at 250 V AC NO contact: 10 A; NC contact: 5 A Mounted on DIN rail. Can be set to between 5 and 60 °C with NC and NO contact								
1	353 18	Hygrostat For adjusting the relative humidity inside a cabinet or an enclosure to avoid the formation of condensation by starting up a heater or a fan 230 V \sim - 50/60 Hz Contact 5 A - 250 V \sim , 6 A - 24 V, 3 A - 12 V Colour RAL 7021 Rail mounting \perp Adjustable from 35 % to 100 % relative humidity								

Pack	Cat.Nos	Heating (continued)
1	353 19	Humidithermostat For independent adjustment of the temperature and humidity level inside a cabinet or an enclosure, to avoid the formation of condensation by starting up a heater or a fan 230 V \sim - 50/60 Hz Output relay 8 A - 250 V \sim , 5 A - 35 V Colour: RAL 7021 For fixing on rail \perp Adjustable from 0 °C to 60 °C and from 50 % to 90 % relative humidity
1	348 49	Door switch 6 A - 250 V 1 NC contact - 1 NO contact For example, to cut off the air conditioning and the lighting supply as soon as the enclosure or cabinet door is opened
1	363 13	Supplied complete with fixing lug for Altis For Atlantic cabinets

heat regulation for cabinets and enclosures

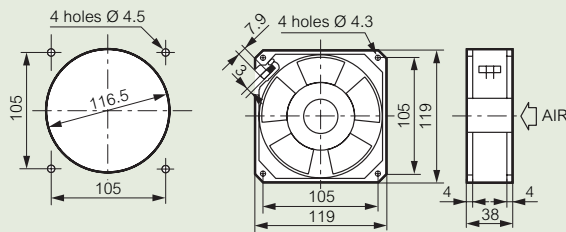
Principle of operation



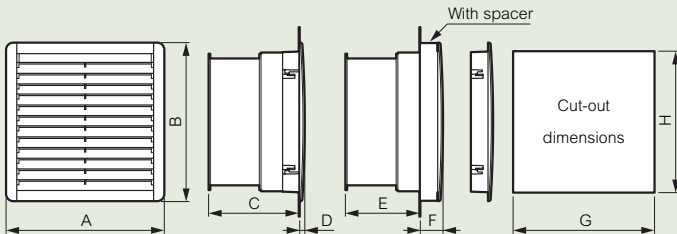
Ventilators, louvres and spacers

Dimensions and cut-out

Cat.Nos 365 71 and 348 17



Cat.Nos 348 50/51/52/53/54/34/35/36



Cat.Nos	A	B	C	D	E	F	G	H
348 50	150	150	70	7	43	34	125	125
348 51	250	250	105	8	78	35	223	223
348 52	250	250	123	8	96	35	223	223
348 53	325	325	152	10	125	37	291	291
348 54	325	325	115	10	88	37	291	291
348 34	150	150	-	7	-	34	125	125
348 35	250	250	-	8	-	35	223	223
348 36	325	325	-	10	-	37	291	291

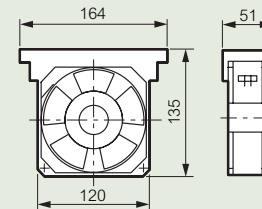
Technical characteristics

Cat.Nos	365 71/348 17	348 50	348 51	348 52	348 53	348 54
Voltage (V)/ phase	220-240/1	230/1	230/1	220-240/1	220-240/1	230/1
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
No load flow ventilator only (m ³ /h)	160	160	160	240	800	1000
On load flow						
- with an output louvre (supplied)	30	40	100	170	360	520
Static pressure (mm of water)	100	66	51	111	160	186
Power down (W)	22	20	20	29	67	114
Current drawn (A)	0.14	0.125	0.125	0.426	0.3	0.5
Operating temperature	-10°C/+50°C					
IP/IK	32/10	54/08	54/08	54/08	54/08	54/08
Sound level (dB)	49	43	43	50	61	71
Weight (kg)	0.72	0.8	1.4	1.7	3.6	3.7

Internal air circulation kit

Dimensions

Cat.No 365 74



Technical characteristics

Cat.No	Circulation kit 50/60 Hz							
	Rated speed (rpm)	Max. flow rate (m ³ /hr)	Static pressure (mm of water)	Power drawn (W)	Current drawn (mA)	Operating temperature (°C)	Noise (dBA)	Weight (kg)
365 74	2750	160	10	18	135	-10 / +55	44	0.55

Roof ventilators

Technical characteristics

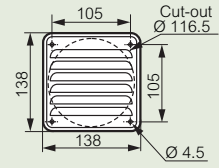
Cat.Nos	Max. flow rate (m ³ /hr)	Power drawn (W)	Current drawn (mA)	Operating temperature (°C)	Noise (dBA)	Weight (kg)
348 07	600	70	0.32	50	64	4.1
348 08	1000	180	0.5	50	72	4.3

heat regulation for cabinets and enclosures (continued)

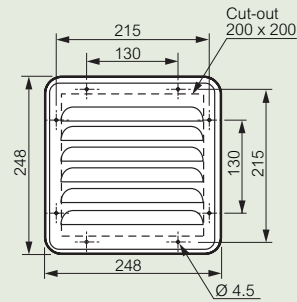
Natural ventilation

Dimensions and cut-out

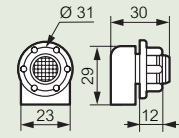
Cat.Nos 365 70 and 348 04



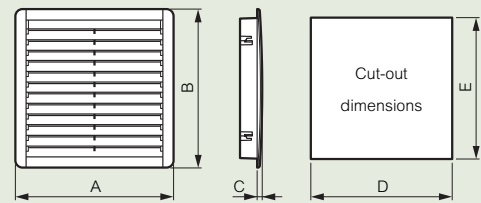
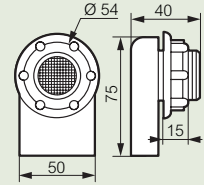
Cat.Nos 348 16 and 348 05



Cat.No 365 78



Cat.No 365 79

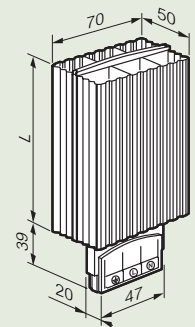


Cat.Nos	A	B	C	D	E
348 34	150	150	7	125	125
348 35	250	250	8	223	223
348 36	325	325	10	291	291

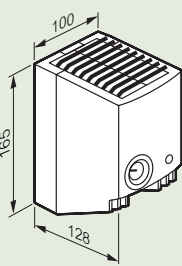
Heating

Dimensions

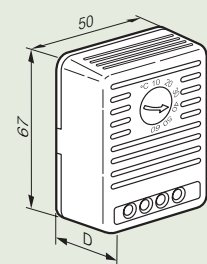
Cat.Nos 348 00/01/02



Cat.No 348 06



Cat.Nos 348 47 and 353 18/19



Cat.Nos	Power	L (mm)
348 00	20 W	80
348 01	60 W	140
348 02	120 W	220

Cat.Nos	D (mm)
348 47	34
353 18	38
353 19	43

Vertical installation at the bottom of the enclosure
Air circulation:
- ensure clearance > 50 mm all round the device
- do not cover

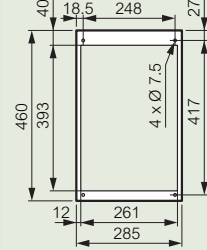
Technical characteristics

Cat.Nos	Voltage	Adjustment range	Output relay	Weight	Boxe	Colour
353 18	230 V~ 50/60 Hz	35 to 100 % rF	5 A - 250 V~ 30 V to 24 V=	100 gr.	ABS acc. UL94VO	RAL 7021
353 19	230 V~ 50/60 Hz	0 to 60 °C 50 to 90 % rF	5 A - 250 V~	100 gr.	ABS UL94VO	RAL 7021

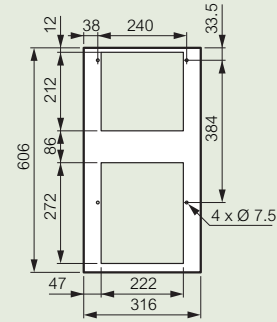
Air conditioners

Dimensions and cut-out

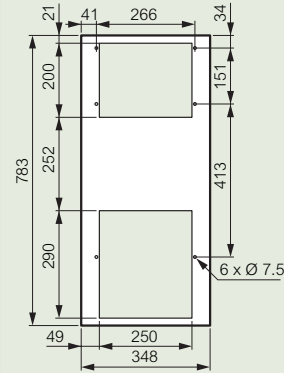
Cat.No 353 46



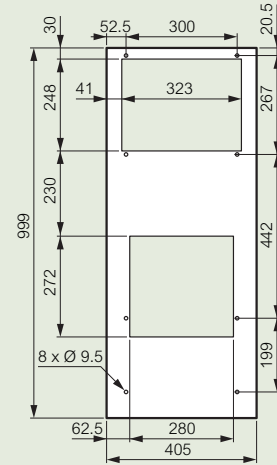
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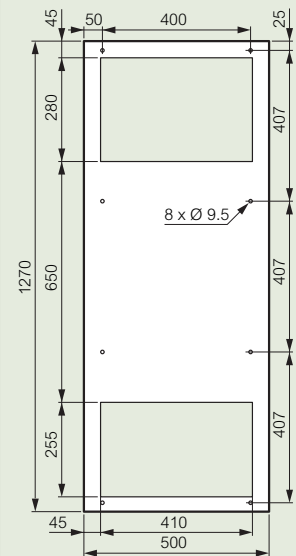
Cat.No 353 48



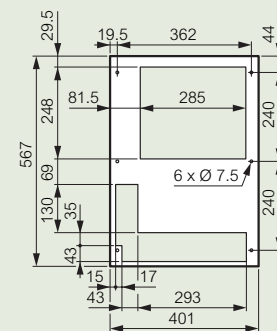
Cat.Nos 353 49/50/51/54/55



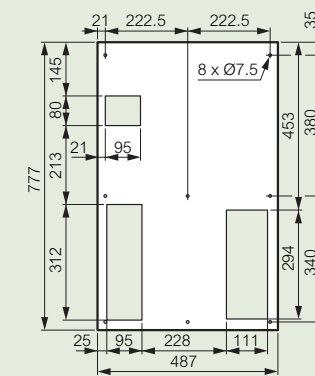
Cat.Nos 353 53/56



Cat.Nos 353 58/59/60/63/64



Cat.Nos 353 62/65



Air conditioners technical characteristics

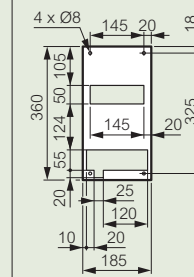
Vertical air - conditioners										
Cat.Nos	353 46	353 47	353 48	353 49	353 50	353 51	353 53	353 54	353 55	353 56
Cooling capacity (W): L35 L35 EN 814	380	640	820	1 250	1 600	2 000	3 850	1 600	2 000	3 850
L35 L50 EN 814	240	470	680	910	1 230	1 510	2 870	1 230	1 510	2 870
Voltage (V/phase)	230/1	230/1	230/1	230/1	230/1	230/1	230/1	400/2	400/3	400/3
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power drawn (W)	330	470	490	760	940	1 290	1 990	960	1 150	2 050
Current drawn (A) operation	1.6	2.1	2.6	3.8	5.3	6.5	9.5	2.9	2.5	3.6
Current drawn (A) start-up	6	8.1	10.8	11	18	24	35.2	11	10	18
Flow rate of int. air circuit (m³/hr)	280	330	330	570	570	860	1 450	570	860	1 450
Flow rate of ext. air circuit (m³/hr)	280	570	570	860	1 050	1 050	1 450	1 050	1 050	1 450
Cooler load R 134a (kg)	0.11	0.2	0.14	0.38	0.45	0.42	1.05	0.45	0.59	1.05
Internal circuit IP	54	54	54	54	54	54	54	54	54	54
External circuit IP	20	20	20	20	20	20	20	20	20	20
Sound level (dB)	60	65	65	65	65	65	70	65	65	70
Dimensions: H x W x D (mm)	460 x 285 x 176	605 x 315 x 209	783 x 348 x 213	999 x 406 x 237	999 x 406 x 237	999 x 406 x 237	1 270 x 500 x 335	999 x 406 x 237	999 x 406 x 237	1 270 x 500 x 325
Weight (kg)	17	21	27	38	40	52	82	42	54	85

Roof air - conditioners							
Cat.Nos	353 58	353 59	353 60	353 62	353 63	353 64	353 65
Cooling capacity (W): L35 L35/EN 814	1 150	1 550	2 050	3 850	1 550	2 050	3 850
L35 L50/EN 814	900	1 200	1 560	2 870	1 200	1 560	2 870
Voltage (V/phase)	230/1	230/1	230/1	230/1	400/2	400/3	400/3
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power drawn (W)	660	930	1 300	1 950	940	1 190	1 890
Current drawn (A) during operation	3.2	4.5	6	9	2.8	1.9	3.4
Current drawn (A) during start-up	11	18	24	38.2	9.6	10	17
Flow rate of int. air circuit (m³/hr)	570	860	1 050	1 450	860	1 050	1 450
Flow rate of ext. air circuit (m³/hr)	1 010	1 820	1 820	3 410	1 820	1 820	3 410
Cooler load R 134a (kg)	0.63	0.8	1.05	1.18	0.8	0.55	1.6
Internal circuit IP	54	54	54	54	54	54	54
External circuit IP	20	20	20	20	20	20	20
Sound level (dB)	65	65	65	75	65	65	75
Dimensions: H x W x D (mm)	415 x 567 x 401	415 x 567 x 401	415 x 567 x 401	487 x 777 x 492	415 x 567 x 401	415 x 567 x 401	487 x 777 x 492
Weight (kg)	40	44	50	83	46	52	86

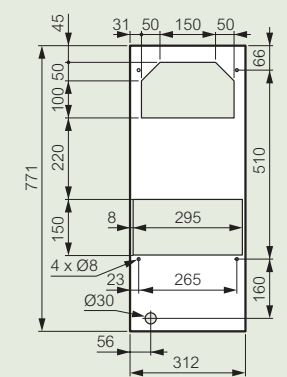
Exchangers

Dimensions

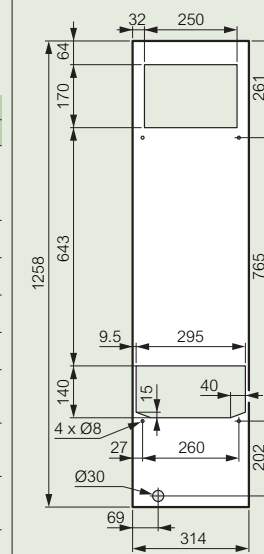
Cat.No 353 71



Cat.No 353 72/73



Cat.No 353 74



Technical characteristics

Cat.Nos	Exchangers air/air			
	353 71	353 72	353 73	353 74
Specific power (W/°C)	14	36	50	80
Voltage (V)	230	230	230	230
Frequency (Hz)	50/60	50/60	50/60	50/60
Power drawn (W)	72	140	140	240
Current drawn (A)	0.5	0.64	0.64	1.06
Flow rate of int. air circuit (m³/hr)	280	570	600	1 050
Flow rate of ext. air circuit (m³/hr)	280	570	600	1 050
Internal circuit IP	54	54	54	54
External circuit IP	20	20	20	20
Sound level (dB)	59	67	67	75
Dimensions: H x W x D (mm)	363 x 188 x 165	771 x 316 x 93	771 x 316 x 93	1 260 x 317 x 108
Weight (kg)	7	10	10	17