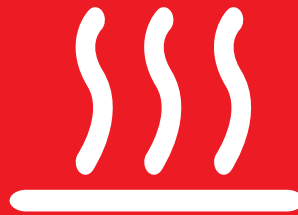




**NORSTAT INC.**



Air Conditioning

# THERMAL MANAGEMENT SOLUTIONS FOR ELECTRICAL ENCLOSURES



## Air Conditioning

### Models and power

The range of air conditioners ALFA ELECTRIC includes several productions depending on voltages and different type of thermostat mounted. The code varies about voltage and control instrumentation.

### Low maintenance

ALFA ELECTRIC air conditioners require little maintenance on all models through the adoption of heat exchanger with a pitch between the fins is not less than 4 mm. The fins are treated to reduce the adhesion of dirt.

### Rotary Compressor

ALFA ELECTRIC air conditioners are distinguished by the adoption on most models of rotary compressors. This type of compressors, unlike the more common alternative compressors allowed to contain the clutter in favour of a greater distance between inlet hot air from the context and delivery of fresh air into the framework. The greater distance allows the reduction of the phenomenon of by-pass, using a greater amount of fresh air produced.

### Outdoor version

These units have a special cover designed to protect internal components, a condenser fan controller in according to the condensation pressure and pressure controller for the safety of compressor. On request is available a heater band to protect compressor in low ambient temperature.

### Digital thermostat

digital thermostat allows to implement various control operations:

1. setting ignition temperature compressor
2. setting temperature compressor shutdown
3. Set delay on / off the compressor in terms of temperature
4. Setting the standard period of the compressor to avoid the phenomenon of intermittent on/off. This phenomenon is very detrimental to the proper operation of the air conditioner.
5. Setting the maximum value allowed for the overcoming of the maximum temperature in the cabinet, after which the thermostat emits an alarm
6. Setting the delay time of the alarm switch

### Less weight and less vibrations

The rotary compressor also reduces the weight of the unit with obvious benefits in the transport, handling and installation of the machine. The lower vibrations due to a lower inertia of the moving parts make this component quiet and durable.

### Greater efficiency

The rotary compressor has considerable advantages over the alternative compressor: among them being a bigger isentropic efficiency mainly due to different internal cooling which favors compression. The absence of valves in suction and dead volumes, typical of alternative systems, reduces the loss of gas pressure.

## CODE COMPOSITION

# AVC 035 . 00 1 \_

### INSTALLATION

- Standard as in data sheet (external)
- B Internal built in
- S semi-recess

### CONTROL SYSTEM

- 0 mechanic thermostat
- 1 digital thermostat

### POWER SUPPLY

- 00 230VAC/1ph/50-60Hz
- 01 115VAC/1ph/50-60Hz
- 02 400VAC/2ph/50-60Hz
- 41 400VAC/3ph/50Hz
- 42 400VAC/3ph/60Hz
- 43 400VAC/3ph/50Hz - 460VAC/3ph/60Hz

### COOLING CAPACITY

Power

### SERIES

- AVC Wall mount indoor installation
- ARC Roof mount
- AVE Wall mount outdoor installation
- ARK Rack 19" mount

## AIR CONDITIONER SELECTION WITH WATT-A-CALCULATOR



Watt-a-Calculator is a selection software that makes the best model to the specific customer application. Watt-a-Calculator is available on Alfaelectric web site. Please visit it and follow the easy instructions to find the solutions for you.

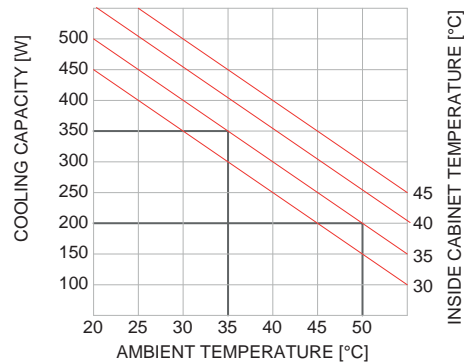
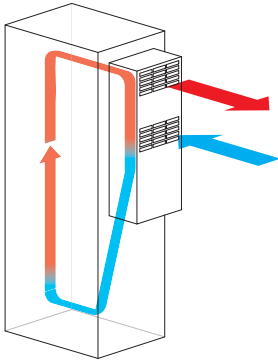
[www.alfaelectric.com/wattcalc](http://www.alfaelectric.com/wattcalc)

Specifications, values and drawings are subject to change without notice.



## AVC 035

### WALL MOUNT AIR CONDITIONER



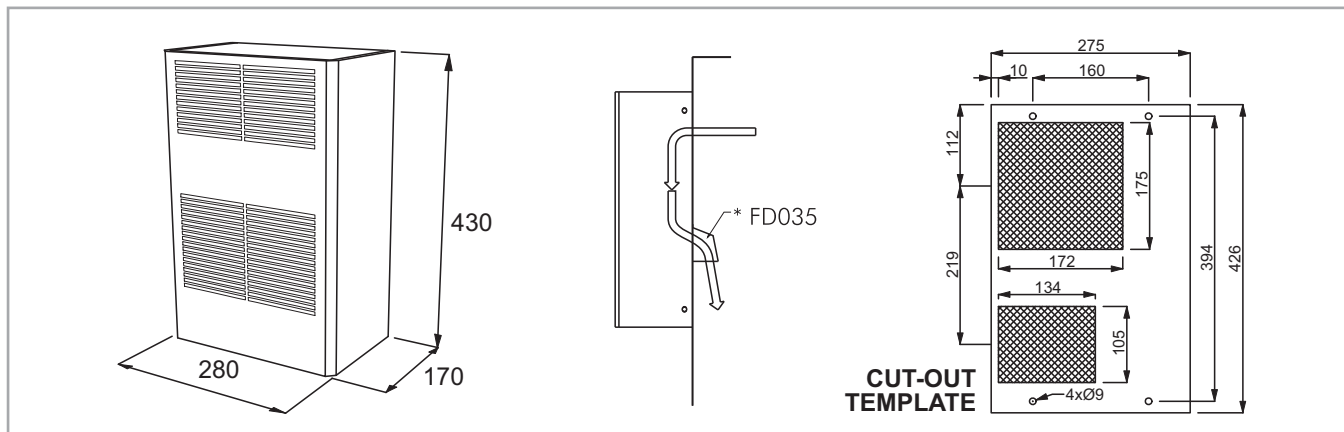
Features	Unit	AVC035.000	AVC035.001	AVC035.010	AVC035.011	AVC035.020	AVC035.021
Power supply	V/Hz	230V/1ph/50-60		115V/1ph/50-60		400V/2ph/50-60	
Dimensions HxWxD	mm	430x280x170					
Cooling capacity A35A35	W	350/370					
Cooling capacity A35A50	W	200/220					
Max current	A	1.5/1.6		3/3.2		0.9/1	
Delayed fuse	A	4		6		4	
Absorbed electric power A35A35	W	290/320					
Absorbed electric power A35A50	W	320/350					
Refrigerant	-	R134a					
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)					
Operating temperature (enclosure)	°C (°F)	+20/+45 (+69/+113)					
Noise level	dB(A)	60					
Electrical connection	-	Three-pole connector					
Protection degree EN60529/1 (enclosure)	-	IP54					
Protection degree EN60529/1 (ambient)	-	IP34					
Weight (with packaging)	kg	15(16)		17(18)		17(18)	
Package Dimension H x W x D	mm	470 x 340 x 280					
Colour	-	RAL 7035					
Conformity/Certifications	-	CE					

#### Versions

Outdoor	AVE035.000	AVE035.010	AVE035.020
---------	------------	------------	------------

#### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL
Flow diverter*	FD035

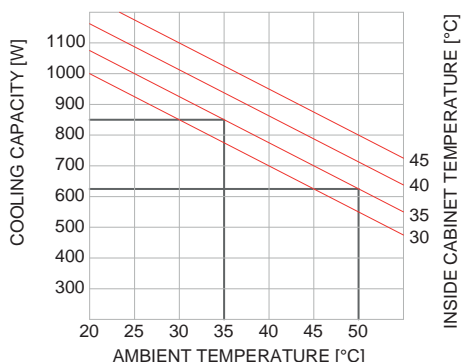
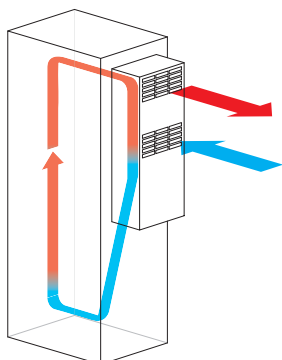


Specifications, values and drawings are subject to change without notice.



## AVC 085

### WALL MOUNT AIR CONDITIONER



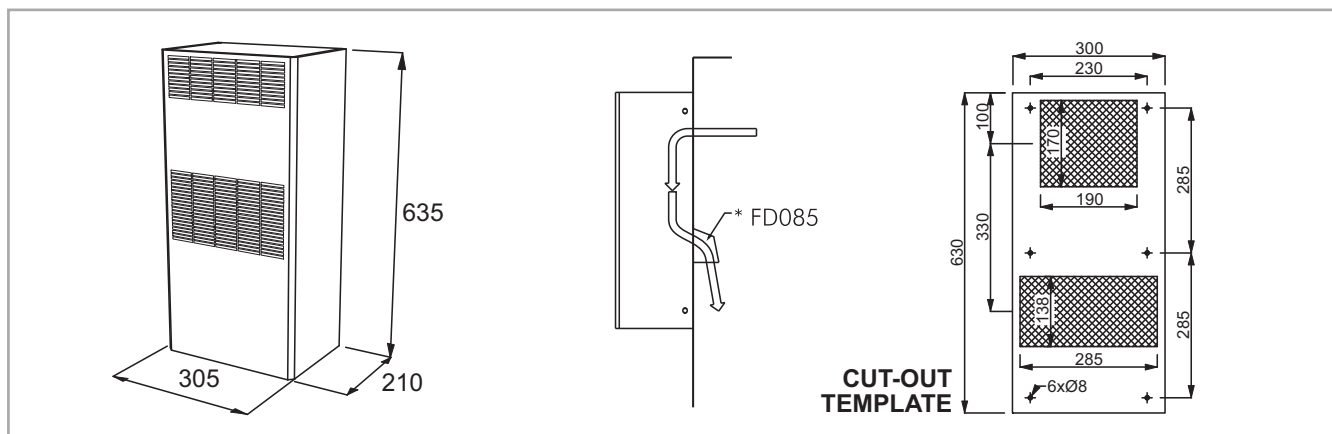
Features	Unit	AVC085.000	AVC085.001	AVC085.010	AVC085.011	AVC085.020	AVC085.021
Power supply	V/Hz	230V/1ph/50-60		115V/1ph/50-60		400V/2ph/50-60	
Dimensions HxWxD	mm	635x305x210					
Cooling capacity A35A35	W	850/900					
Cooling capacity A35A50	W	625/650					
Max current	A	2.65/2.75		5.3/5.4		1.65/1.75	
Delayed fuse	A	6		10		4	
Absorbed electric power A35A35	W	490/530					
Absorbed electric power A35A50	W	600/640					
Refrigerant	-	R134a					
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)					
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)					
Noise level	dB(A)	62					
Electrical connection	-	Three-pole connector					
Protection degree EN60529/1 (enclosure)	-	IP54					
Protection degree EN60529/1 (ambient)	-	IP34					
Weight (with packaging)	kg	23(24)		30(31)		30(31)	
Package Dimension H x W x D	mm	690 x 345 x 250					
Colour	-	RAL 7035					
Conformity/Certifications	-	CE					

### Versions

Outdoor	AVE085.000	AVE085.010	AVE085.020
---------	------------	------------	------------

### Accessories

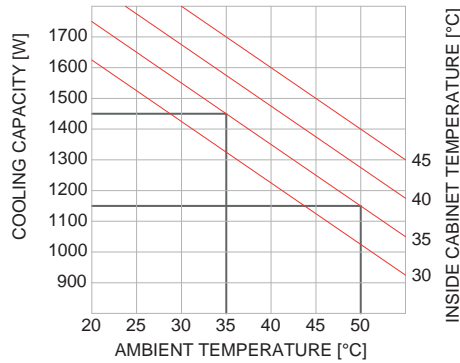
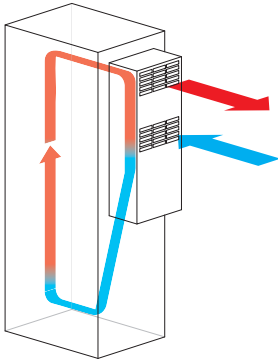
Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL
Flow diverter*	FD085



Specifications, values and drawings are subject to change without notice.



## AVC 145 WALL MOUNT AIR CONDITIONER



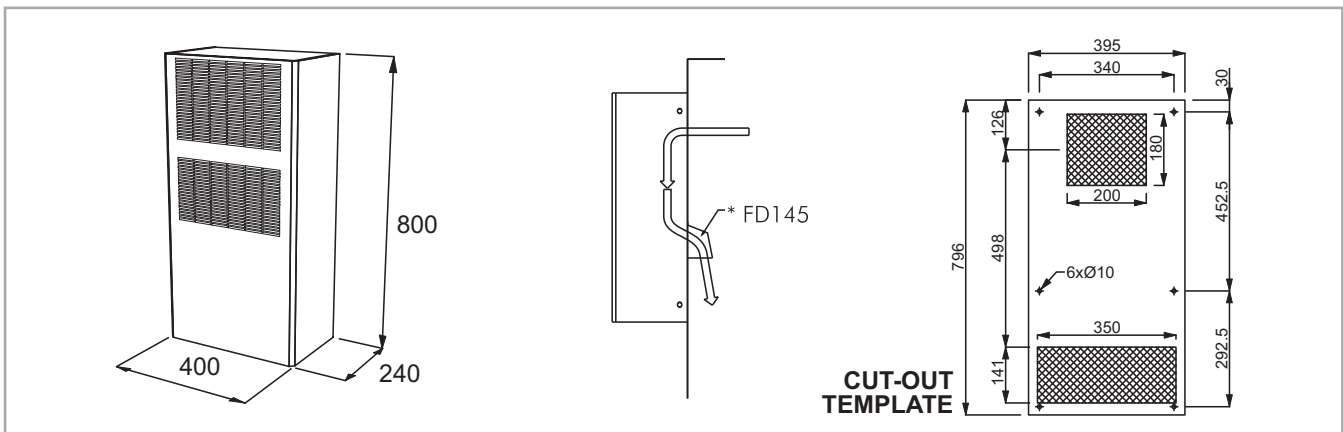
Features	Unit	AVC145.000	AVC145.001	AVC145.010	AVC145.011	AVC145.020	AVC145.021
Power supply	V/Hz	230V/1ph/50-60		115V/1ph/50-60		400V/2ph/50-60	
Dimensions HxWxD	mm	800x400x240					
Cooling capacity A35A35	W	1450/1500					
Cooling capacity A35A50	W	1150/1200					
Max current	A	3.7/4.2		7.4/8.4		1.35/2.1	
Delayed fuse	A	6		10		4	
Absorbed electric power A35A35	W	600/630					
Absorbed electric power A35A50	W	710/760					
Refrigerant	-	R134a					
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)					
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)					
Noise level	dB(A)	65					
Electrical connection	-	Three-pole connector					
Protection degree EN60529/1 (enclosure)	-	IP54					
Protection degree EN60529/1 (ambient)	-	IP34					
Weight (with packaging)	kg	37(38)		49(50)		49(50)	
Package Dimension H x W x D	mm	875 x 455 x 280					
Colour	-	RAL 7035					
Conformity/Certifications	-	CE					

### Versions

Outdoor	AVE145.000	AVE145.010	AVE145.020
---------	------------	------------	------------

### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL
Flow diverter*	FD145

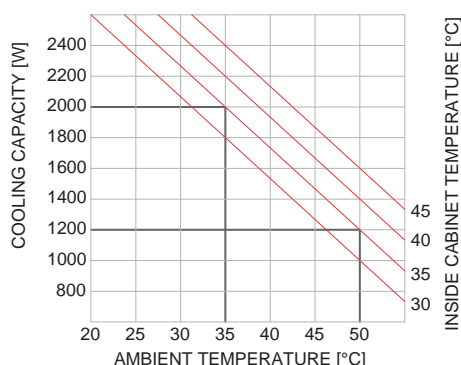
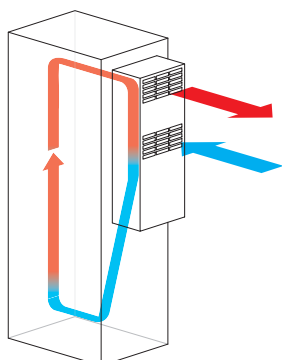


Specifications, values and drawings are subject to change without notice.



## AVC 200

### WALL MOUNT AIR CONDITIONER



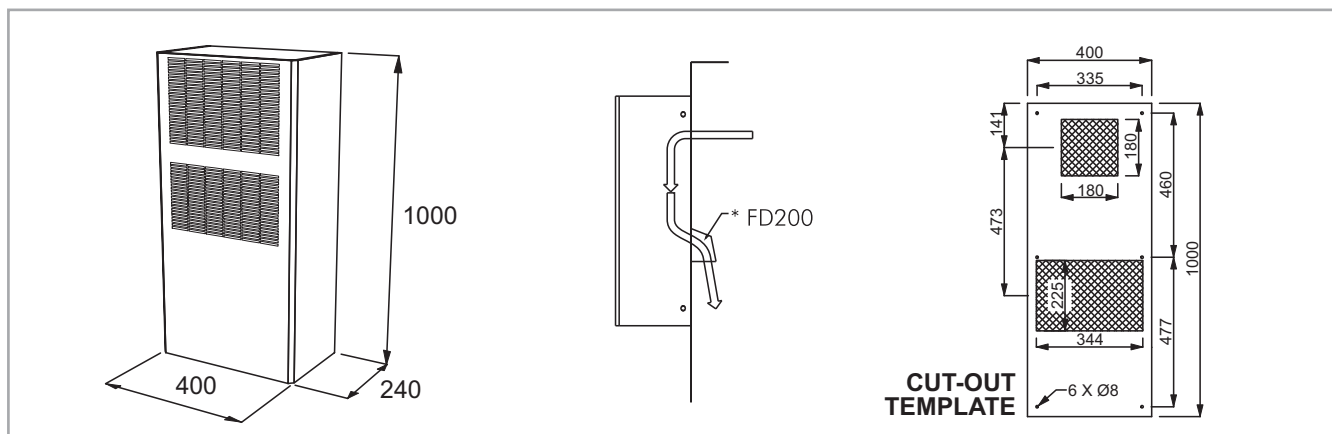
Features	Unit	AVC200.000	AVC200.001	AVC200.010	AVC200.011	AVC200.020	AVC200.021
Power supply	V/Hz	230V/1ph/50-60		115V/1ph/50-60		400V/2ph/50-60	
Dimensions HxWxD	mm	1000x400x240					
Cooling capacity A35A35	W	2000/2100					
Cooling capacity A35A50	W	1200/1250					
Max current	A	6.6/6.9		13/13.8		3.3/3.5	
Delayed fuse	A	10		16		6	
Absorbed electric power A35A35	W	1060/1100					
Absorbed electric power A35A50	W	1240/1300					
Refrigerant	-	R134a					
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)					
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)					
Noise level	dB(A)	70					
Electrical connection	-	Three-pole connector					
Protection degree EN60529/1 (enclosure)	-	IP54					
Protection degree EN60529/1 (ambient)	-	IP34					
Weight (with packaging)	kg	49(50)		57(58)		57(58)	
Package Dimension H x W x D	mm	1070 x 460 x 265					
Colour	-	RAL 7035					
Conformity/Certifications	-	CE					

#### Versions

Outdoor	AVE200.000	AVE200.010	AVE200.020
---------	------------	------------	------------

#### Accessories

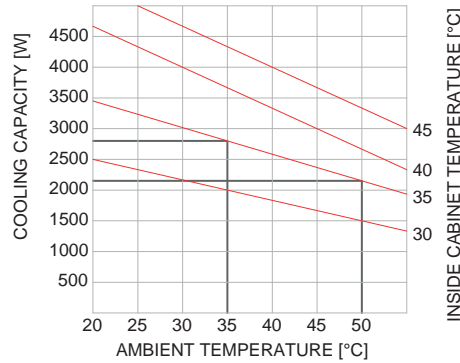
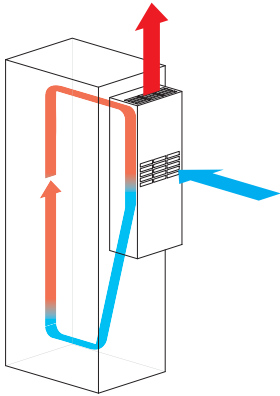
Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL
Flow diverter*	FD200



Specifications, values and drawings are subject to change without notice.



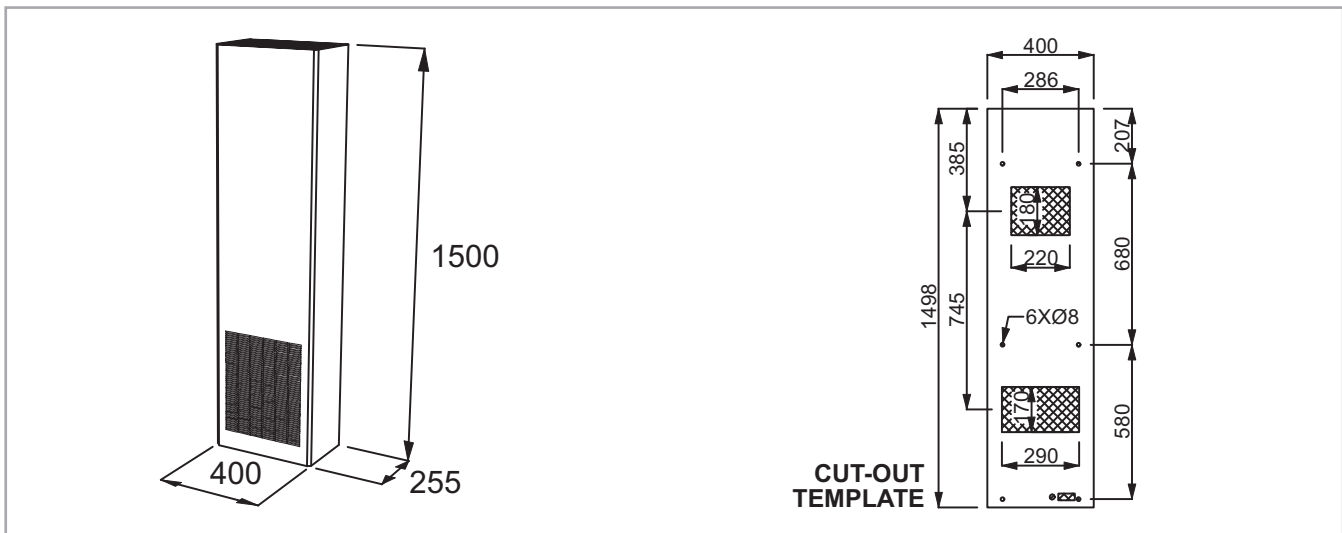
## AVC 300 WALL MOUNT AIR CONDITIONER



Features	Unit	AVC300.431
Power supply	V/Hz	400V/3ph/50-460V/3ph/60
Dimensions HxWxD	mm	1500x400x255
Cooling capacity A35A35	W	2800/2950
Cooling capacity A35A50	W	2150/2330
Max current	A	2.2
Inrush current	A	11/11.8
Absorbed electric power A35A35	W	1550/1790
Absorbed electric power A35A50	W	1780/2050
Refrigerant	-	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)
Noise level	dB(A)	70
Electrical connection	-	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54
Protection degree EN60529/1 (ambient)	-	IP34
Weight (with packaging)	kg	65(67)
Package Dimension H x W x D	mm	1610 x 435 x 290
Colour	-	RAL 7035
Conformity/Certifications	-	CE

### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL

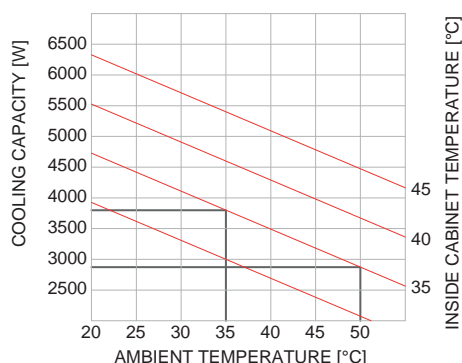
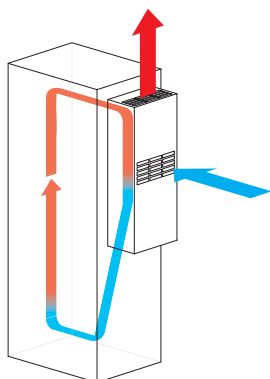


Specifications, values and drawings are subject to change without notice.



## AVC 400

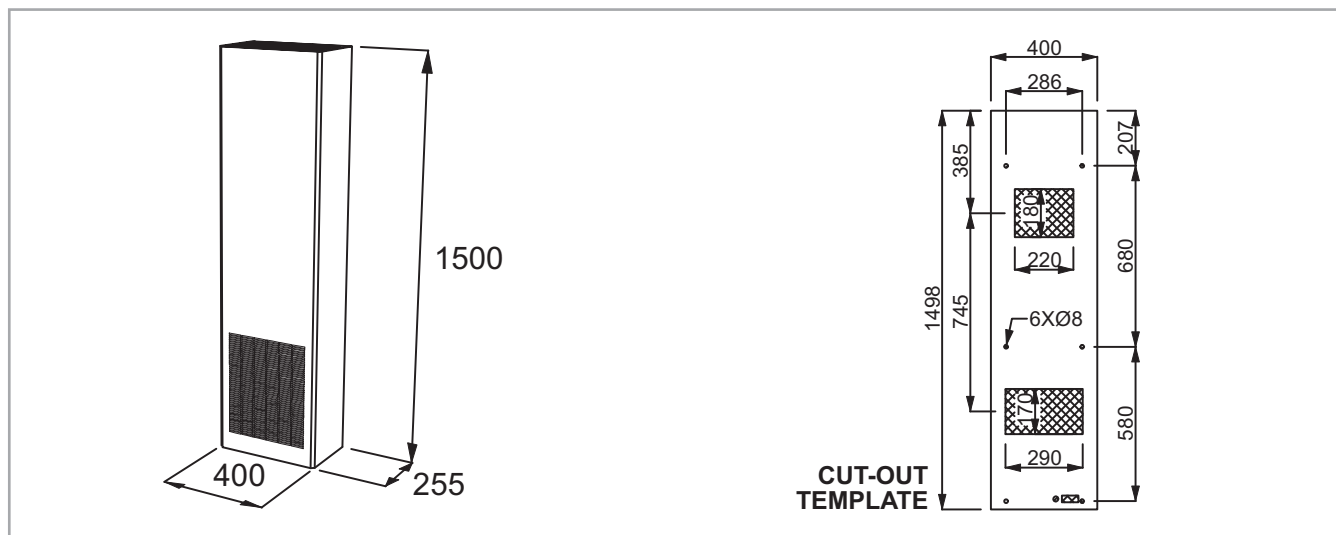
### WALL MOUNT AIR CONDITIONER



Features	Unit	AVC400.431
Power supply	V/Hz	400V/3ph/50-460V/3ph/60
Dimensions HxWxD	mm	1500x400x255
Cooling capacity A35A35	W	3800/3980
Cooling capacity A35A50	W	2880/3160
Max current	A	2.7
Inrush current	A	14.5/15.1
Absorbed electric power A35A35	W	2080/2440
Absorbed electric power A35A50	W	2410/2800
Refrigerant	-	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)
Noise level	dB(A)	70
Electrical connection	-	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54
Protection degree EN60529/1 (ambient)	-	IP34
Weight (with packaging)	kg	65(67)
Package Dimension H x W x D	mm	1610 x 435 x 290
Colour	-	RAL 7035
Conformity/Certifications	-	CE

#### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL



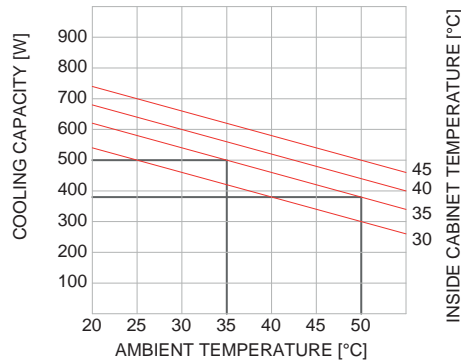
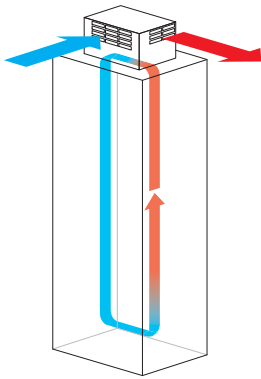
Specifications, values and drawings are subject to change without notice.





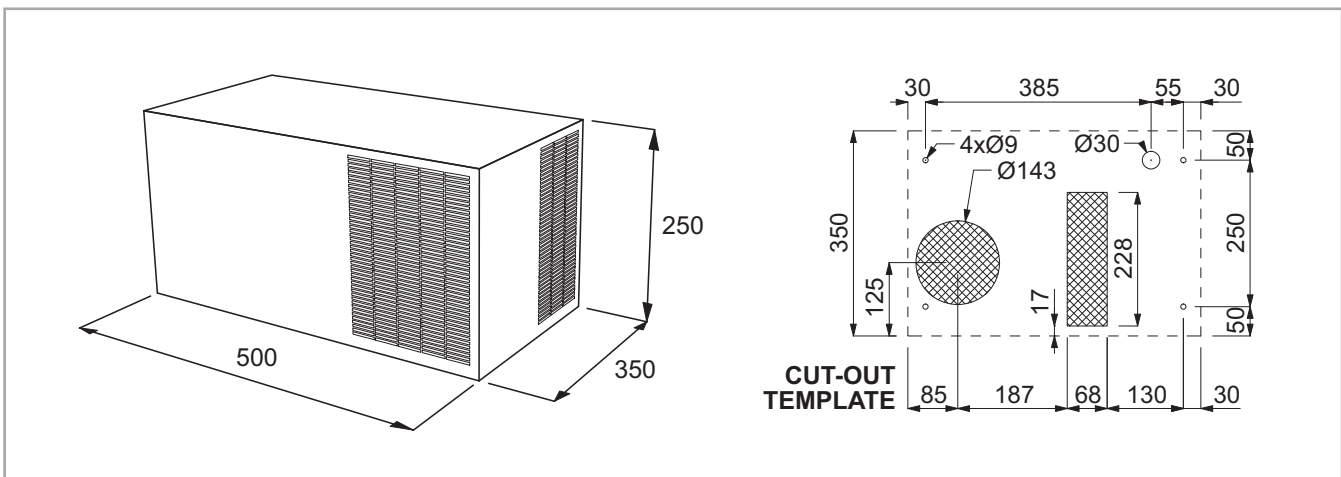
## ARC 050

### ROOF MOUNT AIR CONDITIONER



Features	Unit	ARC050.000
Power supply	V/Hz	230V/1ph/50-60
Dimensions HxWxD	mm	250x350x500
Cooling capacity A35A35	W	500/520
Cooling capacity A35A50	W	360/380
Max current	A	2/2.2
Inrush current	A	6.9/7
Absorbed electric power A35A35	W	360/420
Absorbed electric power A35A50	W	440/520
Refrigerant	-	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)
Noise level	dB(A)	67
Electrical connection	-	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54
Protection degree EN60529/1 (ambient)	-	IP34
Weight (with packaging)	kg	22(23)
Package Dimension H x W x D	mm	495 x 640 x 345
Colour	-	RAL 7035
Conformity/Certifications	-	CE

Accessories	
Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL

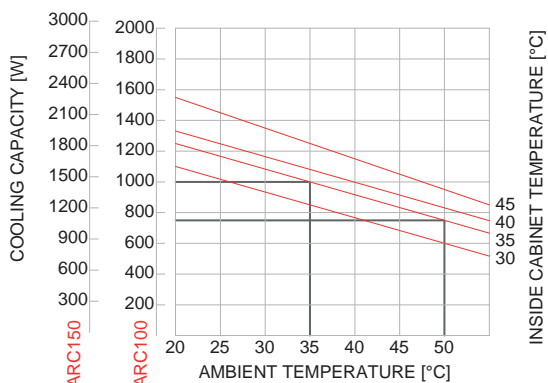
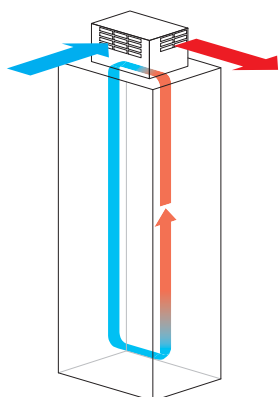


Specifications, values and drawings are subject to change without notice.



## ARC 100/150

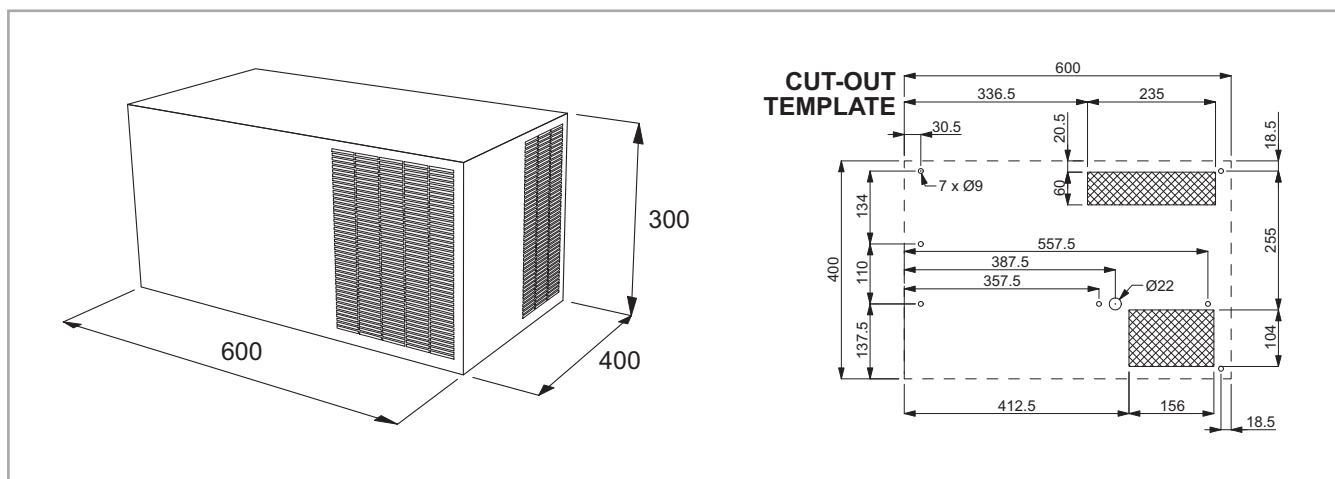
### ROOF MOUNT AIR CONDITIONER



Features	Unit	ARC100.000	ARC150.000
Power supply	V/Hz	230V/1ph/50-60	230V/1ph/50-60
Dimensions HxWxD	mm	300x400x600	300x400x600
Cooling capacity A35A35	W	1000/1060	1460/1520
Cooling capacity A35A50	W	760/790	1090/1130
Max current	A	2.8/3.4	4/4.8
Inrush current	A	11.5/12.6	16.3/13.5
Absorbed electric power A35A35	W	580/670	790/930
Absorbed electric power A35A50	W	720/830	970/1150
Refrigerant	-	R134a	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)	+20/+45 (+68/+113)
Noise level	dB(A)	70	70
Electrical connection	-	Three-pole connector	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54	IP54
Protection degree EN60529/1 (ambient)	-	IP34	IP34
Weight (with packaging)	kg	37(39)	37(39)
Package Dimension H x W x D	mm	520 x 755 x 510	520 x 755 x 510
Colour	-	RAL 7035	RAL 7035
Conformity/Certifications	-	CE	CE

#### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL

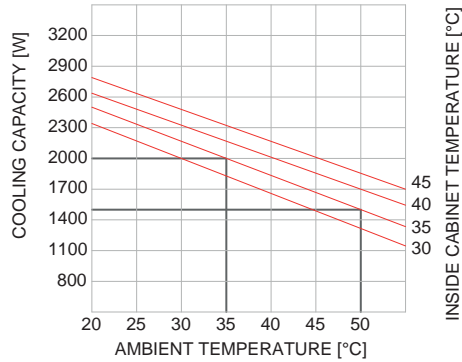
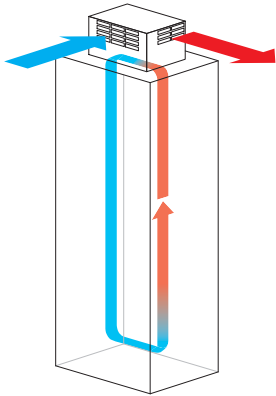


Specifications, values and drawings are subject to change without notice.



## ARC 200

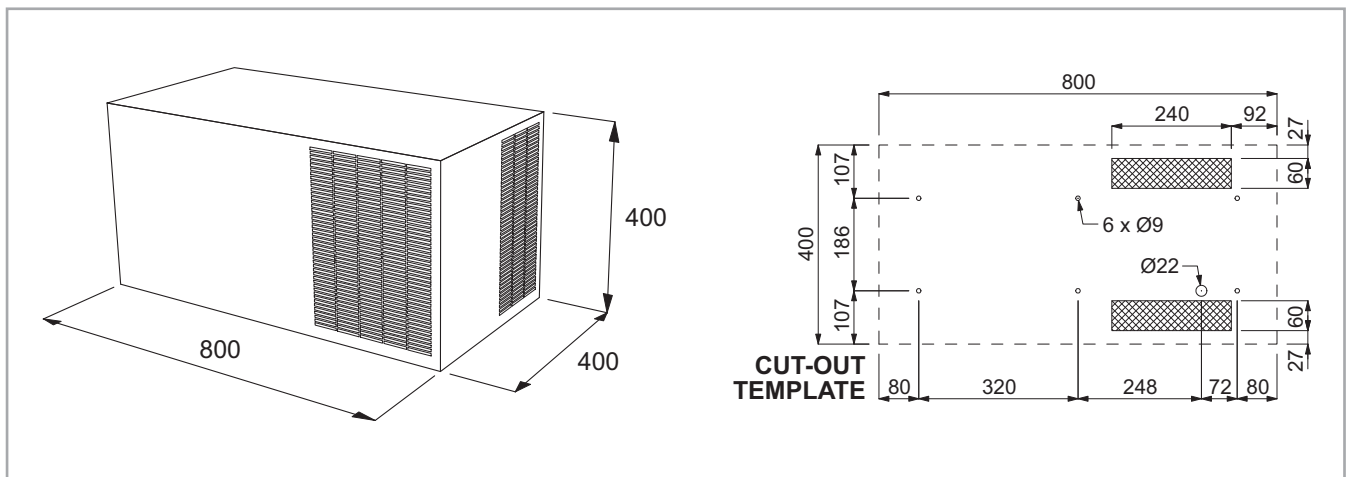
### ROOF MOUNT AIR CONDITIONER



Features	Unit	ARC200.000
Power supply	V/Hz	230V/1ph/50-60
Dimensions HxWxD	mm	400x400x800
Cooling capacity A35A35	W	2000/2110
Cooling capacity A35A50	W	1500/1570
Max current	A	5.1/6.2
Inrush current	A	23.6/24.1
Absorbed electric power A35A35	W	1040/1250
Absorbed electric power A35A50	W	1290/1540
Refrigerant	-	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)
Noise level	dB(A)	65
Electrical connection	-	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54
Protection degree EN60529/1 (ambient)	-	IP34
Weight (with packaging)	kg	54(57)
Package Dimension H x W x D	mm	480 x 865 x 440
Colour	-	RAL 7035
Conformity/Certifications	-	CE

#### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL

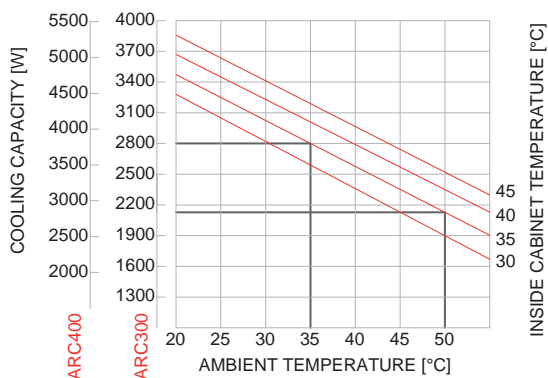
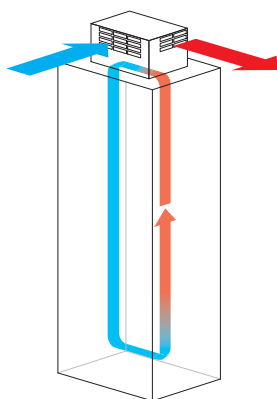


Specifications, values and drawings are subject to change without notice.



# Air Conditioning 2800-3800 W

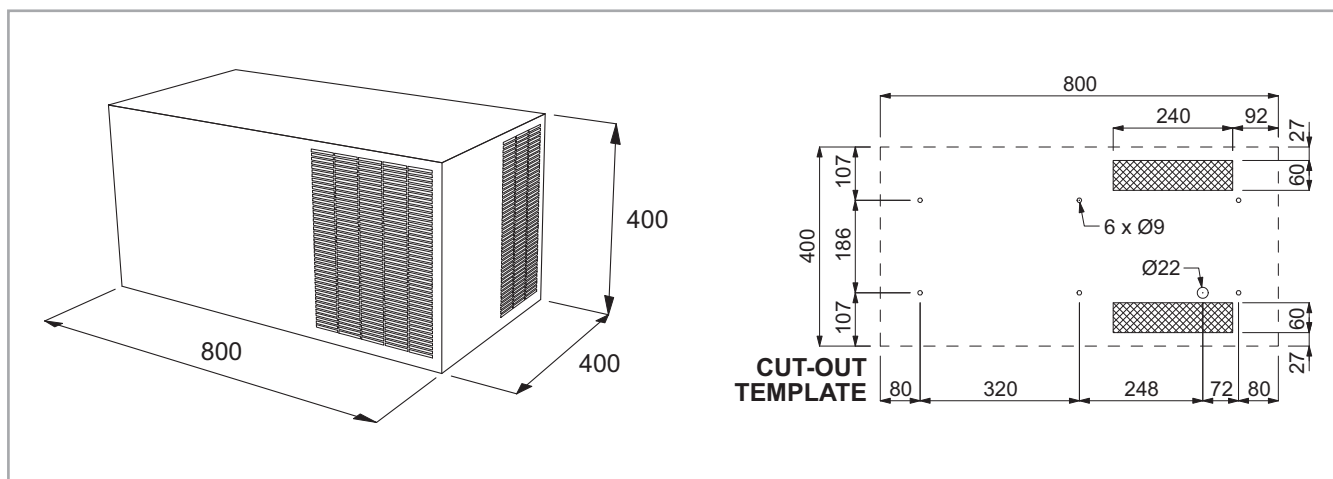
## ARC 300/400 ROOF MOUNT AIR CONDITIONER



Features	Unit	ARC300.410	ARC400.410
Power supply	V/Hz	400V/3ph/50	400V/3ph/50
Dimensions HxWxD	mm	400x400x800	400x400x800
Cooling capacity A35A35	W	2800	3800
Cooling capacity A35A50	W	2110	2840
Max current	A	2.2	2.7
Inrush current	A	11	14.5
Absorbed electric power A35A35	W	1120	1400
Absorbed electric power A35A50	W	1380	1720
Refrigerant	-	R134a	R134a
Operating temperature (ambient)	°C (°F)	+20/+55 (+68/+131)	+20/+55 (+68/+131)
Operating temperature (enclosure)	°C (°F)	+20/+45 (+68/+113)	+20/+45 (+68/+113)
Noise level	dB(A)	65	65
Electrical connection	-	Three-pole connector	Three-pole connector
Protection degree EN60529/1 (enclosure)	-	IP54	IP54
Protection degree EN60529/1 (ambient)	-	IP34	IP34
Weight (with packaging)	kg	60(62)	63(65)
Package Dimension H x W x D	mm	480 x 865 x 440	480 x 865 x 440
Colour	-	RAL 7035	RAL 7035
Conformity/Certifications	-	CE	CE

### Accessories

Door limit switch	FINCOR
Door limit switch with mechanical lock	FINRIP
Flashing safety device	FSL



Specifications, values and drawings are subject to change without notice.