

# Janus

## Air Conditioner



**Janus** unit heaters can be used to economically cool industrial, commercial and sporting facilities, transforming a traditional heating system using unit heaters into a system that can also be used in the summer months, significantly improving the working conditions.

The condensate collection tray is built into the appliance, while two-speed motors are fitted as standard. Upon request, controls with thermostat can also be supplied.

The Janus unit heaters are made in 4 sizes, each with 3 and 4 row coils, for a total of 8 models, with heat outputs from 16 to 104 kW and cooling capacities from 5 to 28 kW.

## TECHNICAL CHARACTERISTICS

- The **main casing** is **manufactured from galvanized prepainted steel** (1 mm thick) finished in light grey (RAL 9002), and it is assembled from three component parts, assembled with self-tapping screws for quick maintenance on the heat coil. The use of hot dip galvanised and pre-painted steel ensures consistency and excellent protection against corrosion.
- The **standard motor** fitted is a hermetically sealed and is maintenance free. The motor is 2 speeds, 3 phase, single voltage 400V/50Hz, protection IP55, class B, with klixon thermal protection that is triggered in the event of overheating. The rotation speed can be reduced by passing from delta to star connection.
- **Coil** with large heating surfaces with copper pipe and in aluminium fins.
- The **condensate collection tray** is fitted inside the unit. Made from galvanized steel insulated with polyolefin (PO) foam (class M1).

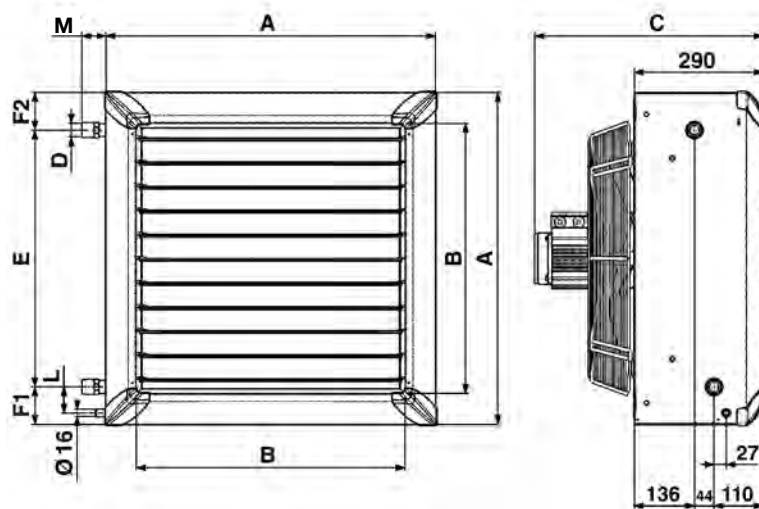
### Janus identification code

Reference: **46F43**

46	F	4	3
Motor 4/6 pole (1350/1000 r.p.m.)	Range Janus	Size 4	Rows 3

Janus





Model	A	B	C	D	E	F1	F2	L	M
<b>46 F 23/24</b>	526	390	500	1"	376	78	71	58	55
<b>46 F 43/44</b>	634	498	500	1"	476	76	83	58	55
<b>68 F 63/64</b>	742	606	525	1"	576	83	83	58	55
<b>68 F 93/94</b>	1010	874	650	1 ¼"	818	90	100	67	63

Model	Weight Kg		Water content liters	
	3R	4R	3R	4R
<b>46 F 23/24</b>	25,0	26,0	1,7	2,2
<b>46 F 43/44</b>	32,5	34,0	2,7	3,4
<b>68 F 63/64</b>	42,5	44,5	4,0	5,1
<b>68 F 93/94</b>	77,0	81,0	7,6	9,8

## Heating emission

Model		46 F 23		46 F 24		46 F 43		46 F 44	
Mounting height	m	2.5 ÷ 4				3 ÷ 4.5			
Speed	r.p.m.	1350	1000	1350	1000	1350	1000	1350	1000
Air flow	m <sup>3</sup> /h	2000	1365	1800	1270	3450	2290	3100	2000
Throw	m	11	7,5	10	6,5	16	12	15	11
Noise level at 5 m (*)	dB(A)	59	51	59	51	64	54	64	54
Water temperature 45/40 °C - Δt 5 °C Entering air temperature +15 °C	kW	8,47	6,65	9,66	7,62	14,44	11,15	16,55	12,27
	Leaving air temp. °C	27,4	29,3	30,7	32,6	27,3	29,2	30,6	32,9
Water temperature 85/75 °C - Δt 10 °C Entering air temperature +15 °C	kW	20,75	16,23	23,58	18,52	35,15	27,08	40,14	29,66
	Leaving air temp. °C	43,4	49,8	53,3	57,7	44,8	49,6	52,9	58,4
Water temperature 90/70 °C - Δt 20 °C Entering air temperature +15 °C	kW	19,86	15,63	22,76	18,00	33,86	26,26	39,04	29,10
	Leaving air temp. °C	44,0	48,5	52,0	56,5	43,7	48,5	51,8	57,6

Model		68 F 63		68 F 64		68 F 93		68 F 94	
Mounting height	m	3 ÷ 5				3.5 ÷ 5.5			
Speed	r.p.m.	950	750	950	750	950	750	950	750
Air flow	m <sup>3</sup> /h	3930	3050	3510	2650	7500	5800	6800	5100
Throw	m	16	12	15	11	26	20	25	19
Noise level at 5 m (*)	dB(A)	60	52	60	52	66	60	66	60
Water temperature 45/40 °C - Δt 5 °C Entering air temperature +15 °C	kW	18,81	15,77	20,67	16,95	37,97	32,04	42,29	34,43
	Leaving air temp. °C	29,0	30,4	32,2	33,7	29,8	31,2	33,2	34,8
Water temperature 85/75 °C - Δt 10 °C Entering air temperature +15 °C	kW	45,46	38,07	49,79	40,75	92,37	77,80	102,66	83,31
	Leaving air temp. °C	48,8	52,1	56,5	60,0	51,0	54,2	59,2	62,8
Water temperature 90/70 °C - Δt 20 °C Entering air temperature +15 °C	kW	44,38	37,26	48,95	40,28	89,39	75,66	100,11	81,73
	Leaving air temp. °C	48,0	51,3	55,8	59,5	49,9	53,2	58,1	61,9

(\*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

## Cooling emission

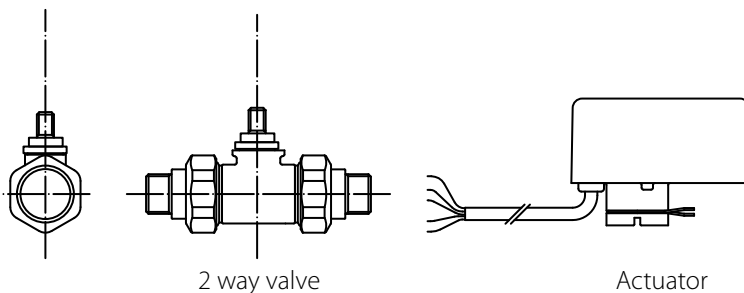
Modello		46 F23	46 F24	46 F43	46 F44
Mounting height	m	2.5 ÷ 4		3 ÷ 4.5	
Speed	r.p.m.	1000	1000	1000	1000
Air flow	m <sup>3</sup> /h	1365	1270	2290	2000
Throw	m	7,5	6,5	12	11
Noise level at 5 m (*)	dB(A)	51	51	54	54
Water temperature 7/12 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	5,00	6,08	8,62	10,28
	kW Sensible	3,57	4,14	6,05	6,78
	Leaving air temp. °C	20,1	18,1	20,0	17,7
Water temperature 11/15 °C - Δt 4 °C Entering air temperature +28 °C - R.H. 55%	kW Total	3,57	4,27	6,21	7,32
	kW Sensible	3,25	3,62	5,43	5,86
	Leaving air temp. °C	20,8	19,4	20,8	19,1
Water temperature 9/14 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	4,02	4,90	6,93	8,34
	kW Sensible	3,31	3,79	5,51	6,11
	Leaving air temp. °C	20,6	19,0	20,7	18,7

Modello		68 F63	68 F64	68 F93	68 F94
Mounting height	m	3 ÷ 5		3.5 ÷ 5.5	
Speed	r.p.m.	750	750	750	750
Air flow	m <sup>3</sup> /h	3050	2650	5800	5100
Throw	m	12	11	20	19
Noise level at 5 m (*)	dB(A)	52	52	60	60
Water temperature 7/12 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	13,08	15,28	23,24	26,89
	kW Sensible	8,79	9,78	16,09	17,75
	Leaving air temp. °C	19,9	16,8	19,6	17,4
Water temperature 11/15 °C - Δt 4 °C Entering air temperature +28 °C - R.H. 55%	kW Total	9,33	10,89	16,56	19,08
	kW Sensible	7,61	8,28	14,28	15,38
	Leaving air temp. °C	20,3	18,5	20,5	18,9
Water temperature 9/14 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	10,62	12,51	18,76	21,74
	kW Sensible	7,91	8,75	14,66	16,07
	Leaving air temp. °C	20,0	18,0	20,3	18,4

(\*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

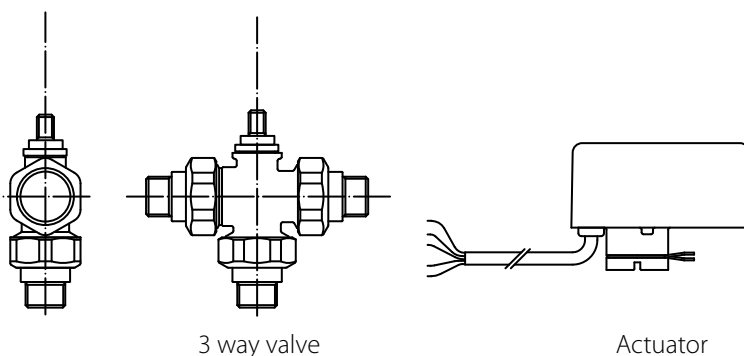
**VA2V 2 way valve**

- Composed by:
- one 2-way valve
  - one ON-OFF 230V actuator



**VA3V 3 way valve**

- Composed by:
- one 3-way valve
  - one ON-OFF 230V actuator



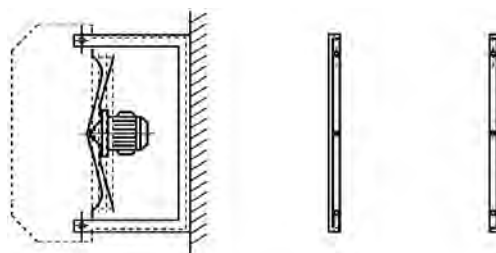
**KIT-VA Extension kit**

To be used with water valves (mandatory).



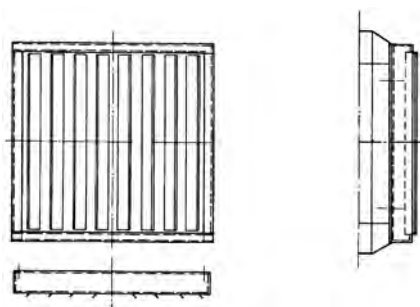
**AMP Wall bracket**

Horizontal discharge



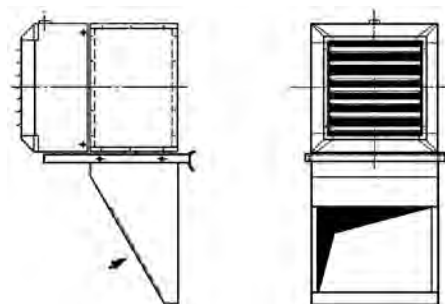
**AD 4 way diffuser**

To be used when discharging downflow to create a 4 way discharge pattern



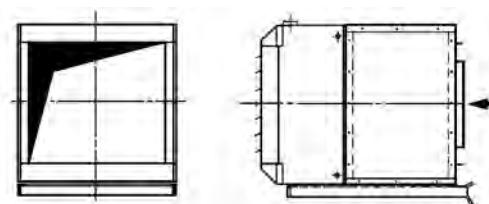
**ARC Simple intake hood fitted underneath**

Wall bracket included  
 Prepainted steel thickness 1 mm



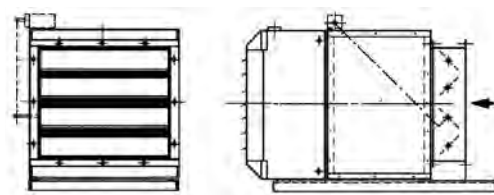
**AE Fresh air box**

Prepainted steel thickness 1 mm



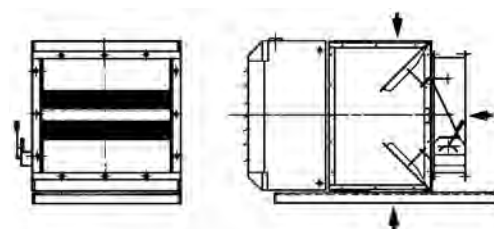
**AES Fresh air box with manually operated damper**  
 (can be motorized by the customer)

Prepainted steel thickness 1 mm.



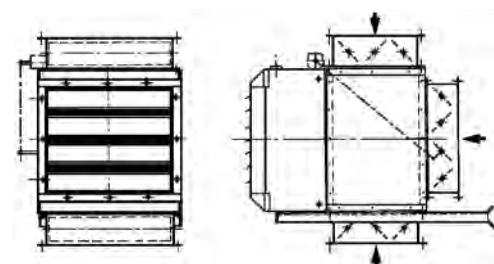
**AM Internal/external air mixing box manually controlled**

Prepainted steel thickness 1 mm.

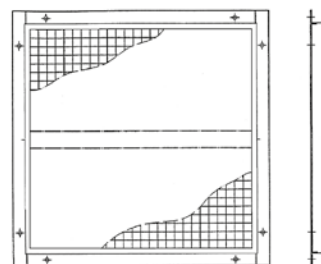


**AMS Internal/external air mixing box, manually controlled**  
 (can be motorized by customer)

Prepainted steel thickness 1 mm

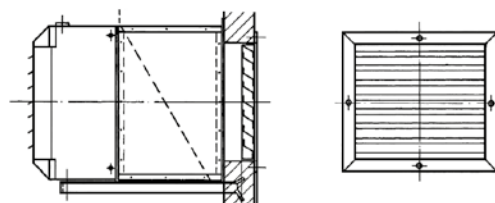


**APP**      **Ball protection grid**



**AG**      **External air intake grille suitable with AE and AES air boxes**

Prepainted steel thickness 1 mm



## Controls

**DSS**      **Delta-Star switch**  
for two speed Delta-Star motors, 4/6 or 6/8 poles



**BS 3-ST**      **Manual three-position switch with thermostat**  
for two speed Delta-Star motors, 4/6 or 6/8 poles, with klixon thermic protection

