2.0

All-in-one air conditioning unit with state-of-the-art monobloc technology and no outdoor condenser.

**Submittal datasheet** 

Product code: C3MS15IC3UC

Model: ..2.0 15HP -DC Inverter -240V/60Hz-1Ph + ELEC 2kW

# **BEAUTIFUL, SLIM, AND SILENT**

Too often air conditioning means installing bulky and unsightly condensing units outside buildings. The INNOVA **2.0**, however, is an air conditioner without an external unit that is designed to blend seamlessly into existing domestic environments. It delivers excellent energy performance with minimal aesthetic impact.

Every detail of this unit has been fine tuned to create a slim and compact heat pump that delivers on both form and function. In the summer, the **2.0** gives you refreshing cooling and in the winter, cozy heating. Its efficient design also makes it simple to install, requiring little more than two small wall openings.

Unit is supplied with heating element set at factory at 1 kW (can be set at 2 kW during installation).



### **General Features**

- BLDC Inverter compressor
- ECM fans (centrifugal)
- R32 refrigerant
- Auto restart
- Intelligent defrost
- No outdoor unit
- Condensate disbursement systems

- Onboard touch controller
- Field-configured 1800 W electric heat supplement. Staged as 900 W + 900 W
- Electronically controlled air louver
- 3 selectable fan speeds + Auto
- Easy to install Wi-Fi with Android/iOS App
- Industry leading STC rating

- Modes: Cool, Heat, Dehumidify, Auto
- Dry contact (CP)
- Washable filter
- Cabinet finish: RAL 9003 signal white -steel
- Available: underbody cover plate

# R32

# Performance Specifications

### Cooling Performance (35°C: 27°C)

Max. cooling capacity (dual power)		12 000 <sup>(1)</sup>		
Performance - cooling - Max. 27°C	BTU/h	10 200		
Minimum cooling capacity		3100		
Performance - Cooling - Efficiency	SEER2 - EER2	15.75 - 11.23		
Refrigerant		R32		
Refrigerant charge	kg	0,50		
Airflow - Indoor - Evaporator	CEM	160 to 290		
Airflow - Outdoor - Condenser	CFM	200 to 350		

<sup>10</sup> DUAL POWER - DC Inverter technology provides a capacity boost up to 12 000 btu/h

	(2) Electric heater additional power	(3) Total heat capacity w/Elec
900 W	3075 Btu	15 075 Btu
1800 W	6150 Btu	18 140 Btu

#### 1800 W electric heat

 $\label{thm:conjunction} The \ electric \ heat \ works \ in \ conjunction \ with \ the \ heat \ pump \ when \ the \ heat \ pump \ has \ insuficient \ power.$ 

### Heating Performance (7°C: 20°C)

Max. heat output (dual power)		12 000(1)(2)(3)		
Performance - Heating - Max.	BTU/h	10 100		
Minimum heat output		4800		
Performance - Heating - Efficiency	HSPF2	8,55		
Nominal sound pressure	JD(A)	41		
Minimum sound pressure	dB(A)	29		
Max. indoor air flow rate	OFM	241		
Max. external air flow rate	CFM	288		



# Electric Specifications (Power Supply = Hardwired Only)

Volt	range		208 to 253		
Tension p	ower supply	(V / Hz / ph)	230 / 60 / singe phase		
Cooling	Running		3,4		
	Max		4,4		
Heating	Running	Α	10,7		
(heat pump only)	Max		14,9		
	Standby		10,8		
Input power	Off mode	w	1,7		
M	Cooling	W	1800		
Max power input	Heating		3600		
Circuit Breaker	MCA		20		
	MCOP	A	30		
	Recommended size		20		

Note: Electric ratings are calculated based on a 230 V power supply.

### **Optional Programming functions**

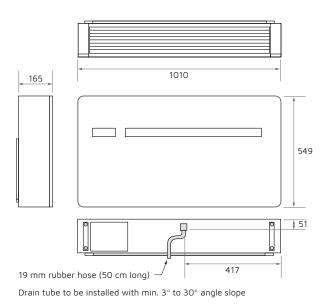
- The heater resistance can easily be deactivated if not needed. The normal behavior in heat mode is that the heater resistance and the heat pump are running in parallel under specific conditions.
- In heat mode, it is possible to run the heat pump in parallel with only the 1 kW (1000 W) or the 2 kW (2000 W) heater resistance.
- 3) In heat mode, if the detected outdoor temperature remains under -10 °C for 15 minutes the heat pump will turn OFF. The heater resistance will turn ON (or it will be kept on if already running). Then, the unit will run only with the indoor fan and the resistance active.

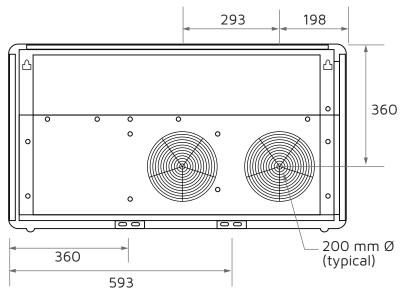
#### All units come with

Heat exchangers, DC Inverter compressor, condensate release system with summer evaporation, EC fan on outdoor side and DC brushless fan, Wi-Fi connectivity, R32 gas – no power cord is provided.

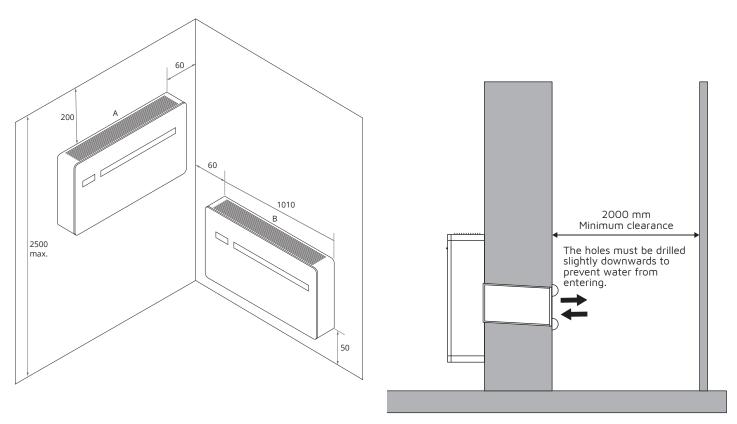


# Dimensions - Physical Data



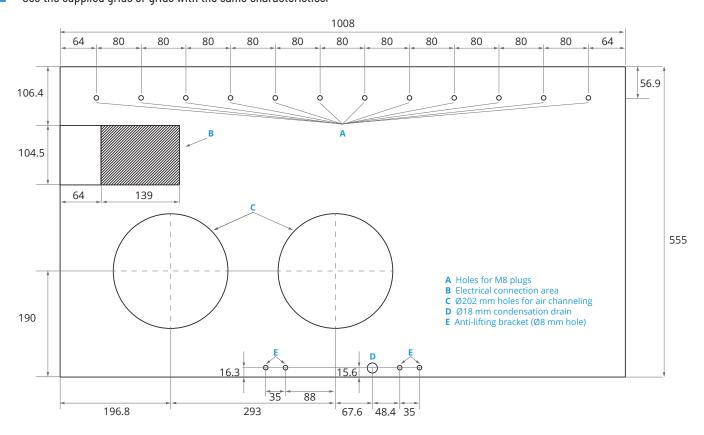


# **Installation Clearance**



# **Mounting Template**

- For the unit to work, two holes with a 202 mm diameter must be placed as indicated on the template.
- The maximum depth of the holes is 1 m and there must be no bends.
- Use the supplied grids or grids with the same characteristics.



### Heating performance (based on variable temperature)

	Maxi	mum Fan S	peed	Minimum Fan Speed				
Indoor Temp. (°C)		20		20				
Outdoor Temp. (°C)	PH	PA	COP	PH	PA	COP		
-20	1,21	0,66	1,83	0,64	0,33	1,95		
-10	1,25	0,66	1,89	0,67	0,33	2,02		
-7	1,52 0,68		2,24	0,81	0,34	2,38		
-2	1,85	0,69	2,68	0,98	0,35	2,85		
2	2,09 0,70		2,99	1,11	0,35	3,18		
7	2,31	0,71	3,25	1,23	0,36	3,46		
12	2,62	0,71	3,68	1,39	0,36	3,91		
15	2,78	0,71	3,90	1,48	0,36	4,15		
20	3,10	0,72	4,31	1,65	0,36	4,58		



### **Cooling performance** (based on variable temperature)

Maximum Fan Speed						Minimum Fan Speed						
Indoor Temp. (°C)	25			27		25			27			
Outdoor Temp. (°C)	PC	PA	COP	PC	PA	COP	PC	PA	COP	PC	PA	COP
40	2,16	0,78	2,77	2,22	0,78	2,85	1,12	0,39	2,87	1,14	0,40	2,85
38	2,22	0,75	2,96	2,28	0,75	3,04	1,17	0,37	3,16	1,19	0,38	3,13
35	2,27	0,72	3,15	2,33	0,72	3,24	1,22	0,35	3,49	1,24	0,36	3,44
27	2,30	0,70	3,29	2,36	0,70	3,37	1,25	0,33	3,79	1,27	0,34	3,74
25	2,33	0,68	3,43	2,39	0,68	3,51	1,28	0,31	4,13	1,30	0,32	4,06
23	2,36	0,66	3,58	2,42	0,66	3,67	1,31	0,29	4,52	1,33	0,30	4,43
20	2,39	0,64	3,73	2,45	0,64	3,83	1,34	0,27	4,96	1,36	0,28	4,86
18	2,42	0,62	3,90	2,48	0,62	4,00	1,37	0,25	5,48	1,39	0,26	5,35

PH = Heating capacity (kW)

#### **Installation notes**

- The unit must be perfectly level on the vertical and horizontal axis.
- The unit must be tight to the wall, with zero leakage between the external ducts and the unit. Use insulating material if wall is not level.

#### Rear

- The rear of the unit must be tight to the wall so there are zero gaps between the wall and the unit,
- Gaps can allow outside air inside and create short cycling and humidity. If there are any gaps, they must be sealed with insulation.

#### **Exterior**

 On the exterior of the building, there should be no obstacles blocking the airflow from the louver. There must be a least 100 cm of free and clear space in front of the louvers.

#### Return air

 The return air is on the top through the integrated return air grille.





PC = Cooling capacity (kW)

PA = Input power (kW)

<sup>\*</sup> Outdoor relative humidity = 85 %