



Indoor PCB Box for Air Source Heat Pump

The PCB Box provides a central indoor connection point for the InstaGen R290 heat pump system. Installed near the electrical supply and cylinder, it simplifies wiring, reduces installation complexity, and creates a cleaner, more organised system layout.

Simplified indoor wiring

- Positioned indoors, generally near the hot water cylinder, making it easier to connect controls, pumps, and valves while improving cable management and installation accessibility

Single cable connection

- Provides a direct link to the outdoor unit using a supplied pre-wired 2-core cable, reducing wiring complexity and simplifying system integration

Reduced installation time

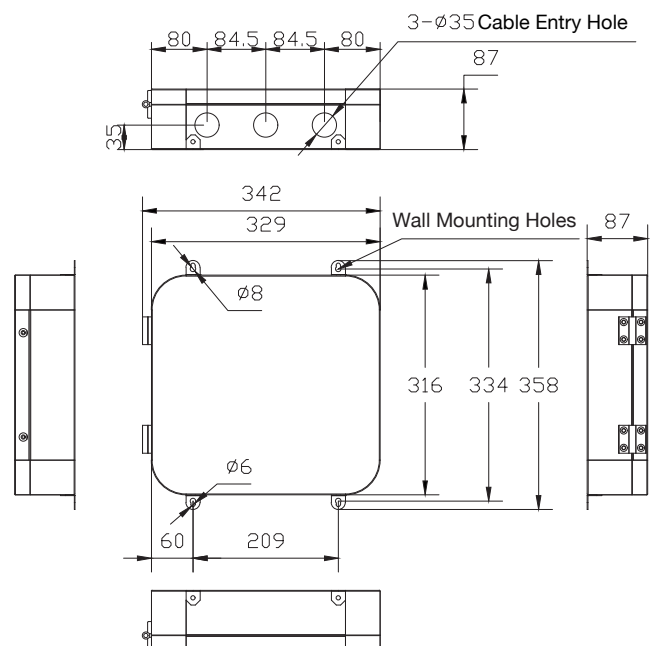
- Acts as a central connection hub, reducing wiring, materials, and labour requirements while helping minimise disruption during installation

Expert support at every stage

- Benefit from InstaGroup's expert support, including heat loss calculations, system sizing and selections, installation guidance, technical assistance, and sales and delivery coordination throughout your project

Contact us:

support@instagen.co.uk



Component	Description/specification
Model	IG1-PCB-A1
PCB Box	Provides a direct link to the ODU via single 2 core cable (supplied & pre-wired), allowing direct connection to all internal components, reducing wiring, materials, disruption
Communication	2-core RS485 communication cable for connecting to heat pump, length 10m x1. Supplied and pre-wired into PCB Box
Power supply type	Dedicated power supply – no shared circuits 9.27A
Supply voltage tolerance	Rated 220v, voltage \pm 10% maximum / 1Ph / 50Hz
Recommended fuse	16A
Minimum cable size	2.5mm ²
Secondary pump control	Allows connection & control for secondary side pump to Terminal Block T1, via a reply to Terminals 7 (Live) & 8 (Neutral)
PCB connection direct to ODU	Connection via Terminal block T2, Terminals 1 & 2, (A RS485 & B RS485). Pre-Wired in PCB Box
Low Voltage Connection for 3rd party thermostats	Direct volt free link for 3rd party room thermostats. Connects via Terminal Block T2, Terminals 3 (Switch) & 4 (Common)
DHW cylinder thermistor	Direct connection from PCB Box to DHWC Dry Pocket via T2 cylinder sensor, (10m) Connection port CN3 on the main PCB board and is Pre-Wired
Immersion heater control	Allows connection & control of Immersion heater Via Relay to Terminal block T1, Terminals 1 (live) & 3 (Neutral)
Back-up heater control	Allows connection & control for Back up heater Via Relay to Terminal block T1, Terminals 2 (Live) & 3 (Neutral)
3-way valve control	Allows for control of the three way valve, to regulate the movement of water between Domestic Hot Water & Space heating, Terminal Block T1, Terminals 4,5 & 6 (4, Hot Water - 5, Heating - 6, Neutral)
Explosion-proof relay	Relay within PCB/control assembly rated for use with R290 (flammable refrigerant)
Ceramic fuse housing	Explosion-proof ceramic fuse housing. Part of the PCB safety assembly
Net weight (kg)	4.5
Unit dimensions (W x H x D [mm])	342 x 358 x 87

