

HPC PLUS

Precise
Integrated
Heat Pump
Controller



HPC PLUS is a LOGIC ONE® module that provides efficient control of compressor stages, fans, reversing valves, dampers, and auxiliary heat outputs.

Maximize the efficiency of your heat pumps

The HPC Plus stores programmed setpoints in secure, nonvolatile PROM memory. A Low Voltage Detect circuit continuously measures operating voltage while a Temperature Sensor Monitor checks performance of all temperature inputs. A Watch Dog self-running diagnostic program ensures trouble-free operation of all HPC Plus functions.

Bottom Line: With Novar You Know It's Innovative

NOVAR[®]
CONTROLS

With Novar, you know.

LOGIC ONE



Specifications

HPC PLUS

The HPC Plus is configured to efficiently and effectively control water-source and air-source heat pumps of various configurations. It incorporates a special general fault input for programmable alarming, shut down, and auto re-start capabilities.

IOM/2

Hawkí

ETC

ETM

HPC+

UVC

VAV

Physical Characteristics

Height:	5.5 inches.
Width:	8 inches.
Depth:	1.875 inches.
Weight:	1.75 lbs.
Mounting:	Four base-mounting holes allow fastening to compartment panel of heat pump with metal screws.

Operating Environment

Temperature:	-40° to 158° F (-40° to 70° C).
Humidity:	0 to 95% relative, noncondensing.

Electrical

Voltage:	24VAC (Class 2).
Consumption:	8VA.
Analog Inputs:	Dedicated.
Digital Inputs:	Contact closure only.
Analog Output:	0 to 10VDC, 1mA.
Digital Outputs:	24VAC, 1 ampere (pilot duty).
Status Indication:	Schedule-status indicator LED and relay-status LEDs.

Special Circuits/Diagnostics

Low Voltage Detect:	Senses proper operating voltage.
Temperature Sensor Monitor:	Verifies operation of temperature sensors.
Watch Dog:	Monitors and ensures HPC Plus timing and operation.
Fail Safe:	Programmed setpoints held in non-volatile PROM.

Specifications subject to change without prior notification.

Surge Suppression:	All inputs/outputs protected against lightning-induced surge or voltage transients.
Low Limit Protection:	Outputs programmable to respond to low temperatures.

Network Communications

Method:	RS-485, isolated.
Cable (network):	2-wire, shielded cable. Belden 8761 or equivalent.

Options

Zone Temperature Sensors:	RTS-UVC – Remote Temperature Sensor. WTS-UVC – Standard wall-mount, nonadjustable. FTS-3 – Futura wall-mount, nonadjustable. FTS-3A – Futura wall-mount, with integral setpoint adjustment dial.
Sensor Cable:	100-ft. maximum.

ASHRAE Compliance

Cycle II ventilation control.

Input/Output Points

Inputs:	Total - 7. Zone temperature. Supply air temperature. Zone setpoint adjustment. Timed override. Fan status. Compressor stage 1 status. General fault.
Outputs:	Total - 6. Auxiliary heat (digital). Compressor stage 1 (digital). Compressor stage 2 (digital). Fan (digital). Reversing valve (digital). Damper (analog).