



SpectraCool Remote Access Control (RAC) - Spec

SPECTRACOOL REMOTE ACCESS CONTROL (RAC)



Specification

- Supports most standard wire and wireless routers
- Works with most Hoffman Air conditioners
- input voltage range: 9.5V to 95V
- Operating voltage: 24V
- Operating temperature: -40 c to 65 c
- Storage temperature: -40 c to 85 c
- Supports up to 2 temperature sensors
 - Sensor temperature range: -50 c to 105 c
 - Sensor accuracy: ± 0.2 c
 - Sensor input: Analog or ntc
- Supports up to 10 alarms
 - Door open alarm
 - High temperature alarm
 - low temperature alarm
 - Air inlet temperature sensor failure alarm
 - Air outlet temperature sensor failure alarm
 - High pressure warning
 - low pressure alarm
 - Frost alarm
 - lost communication alarm (lc)
 - lost communication alarm (lc1)
- interfaces
 - USB port to interface with Pc for system configurations
 - ethernet port to interface with local network for remote access
 - rS485 Bus
 - input voltage
- Supports multiple communication protocols
 - SnMP, Modbus tcp, ethernet/iP, and Profinet protocol

Alarm Condition Display

Parameter	Description	Cause	Result	Alarm Relay
TP	High temperature Alarm	Door open and/or smoke detected	Unit turns off for duration of alarm	Relay contacts close
LA	Low temperature Alarm	MAIF high pressure switch opens	No effect on function	N/A
E1	Air inlet temperature Sensor Alarm	Sensor Failure	Unit turns off for duration of alarm	Relay contacts close
E2	Air Outlet temperature Sensor Alarm	Sensor Failure	Unit turns off for duration of alarm	Relay contacts close
Ht	High temperature Alarm	Cabinet over temperature	No effect on function	Relay contacts close
Lt	Low temperature Alarm	Cabinet under temperature	No effect on function	Relay contacts close
A1	Frost Alarm	Evaporator coil frozen	Compressor and evaporator fan off for duration of alarm	Relay contacts close

Application

Hoffman's Spectracool Remote Access Control (RAC) system is an integrated, parametric controller designed to work seamlessly with our enclosure air conditioner (A/C) units for the purpose of remotely monitoring and managing anywhere from a single A/C unit to an entire network of Spectracool air conditioners from virtually anywhere in the world with a secure internet connection.

Electrical Engineering Maintenance, IT System Managers and others can ensure that their systems are always running at optimal levels using the Spectracool Remote Access Control System to help increase productivity and improve overall system reliability. Whether you have a single A/C unit 1,000 miles away in a remote location, or have hundreds of units in a local factory, the Spectracool Remote Access Control System can reduce the number of people needed to monitor and control your enclosure cooling systems to a single individual.

Models with °C Controller Operating Parameters

Parameter	Description	Default Value (°C)	Range (°C)
r01	Cooling set-point	35	20 to 55
r02	Cooling differential	5	-
P08	Door Open and/or smoke detected	28	-

Models with °C Controller Alarm Parameters

Parameter	Description	Default Value (°C)	Range (°C)
P16	High temperature Alarm	55	-
P19	Low temperature Alarm	14	-

Models with °F Controller Operating Parameters

Parameter	Description	Default Value (°F)	Range (°F)
r01	Cooling set-point	80	72 to 120
r02	Cooling differential	7	-
P08	Door open and/or smoke detected	28	4 or 28
A04	Heating set-point*	50*	32 to 60
A05	Heating differential*	7*	-

Cooling turns on at r01 + r02, and off at r01

Heating turns on at A04, and off at A04 + A05

*Functional only on units with heater option

Models with °F Controller Alarm Parameters

Parameter	Description	Default Value (°F)	Range (°F)
P16	High temperature Alarm	125	-
P19	Low temperature Alarm	40	-



+44 (0)121 544 6808

| info@cnet-is.co.uk

**C-NET Industrial Solutions
Limited**

Suite 12, Sandwell Business Centre
Oldbury Road
Smethwick
B66 1NN
United Kingdom