

IMPORTANT! READ THIS FIRST BEFORE COMMENCING INSTALLATION

MULTI-MAGIC AMBIENT SENSOR INSTALLATION

This sensor measures the external air temperature and relative humidity. It is intended for use with a compatible CW-80 or CW-H cooler.

Input Range

- Temperature: 0-10V = -40 to +70 °C / -40 to +158°F
- Relative Humidity: 0-10V = 0-100%

Recommended Cable Specification

The sensor requires 24VDC power and 2 signal wires.

- Instrumentation Cable with 4x 0.5mm² (AWG 20) conductors;
- Always route communication cables at least 300mm (12") away from high voltage cables and high-power machines.
- Crossover high power cables at right angles.

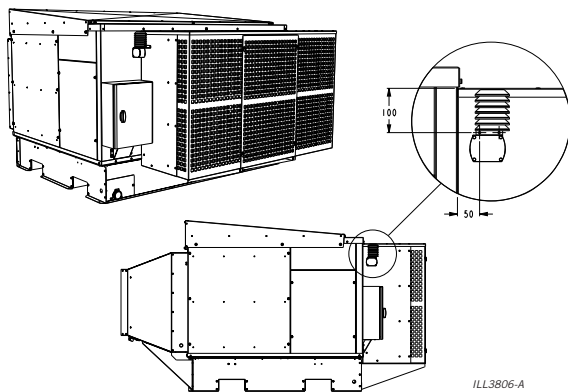
24VDC power can be supplied by the cooler (as shown) or a separate power supply (not included).

Cooler Input Terminals

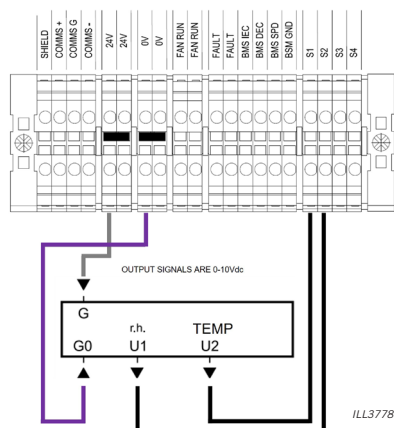
Compatible CW-80 or CW-H coolers have a series of sensor input channels, configured in pairs and labelled S1/S2, S3/S4 (CW-H and CW-80) and S5/S6 (CW-80 only).

Always setup up the first channel (S1, S3 or S5) for temperature, and the second channel (S2, S4 or S6) for relative humidity.

EXAMPLE CW-H FITMENT

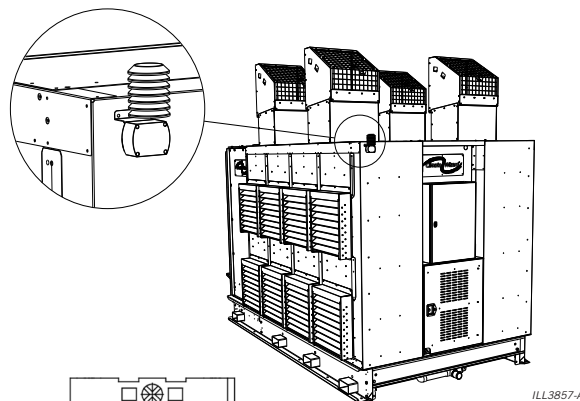


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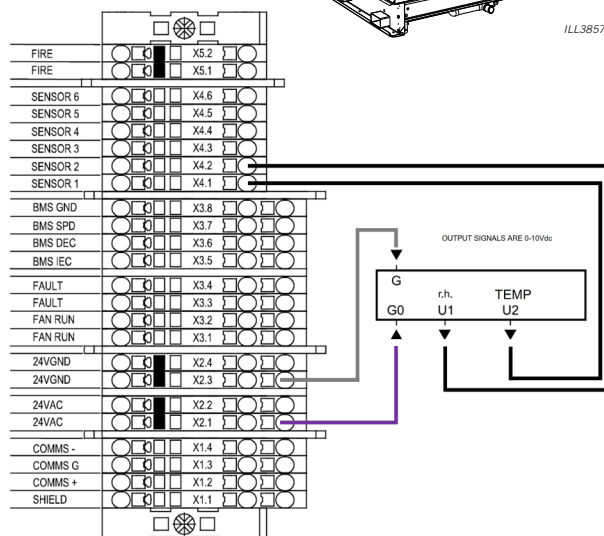


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EXAMPLE CW-80 FITMENT



ILL3857-A



ILL3866

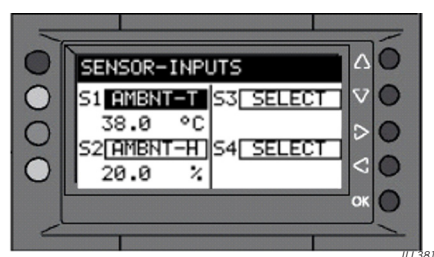
CONNECTING

After installation, use the LEFT/RIGHT buttons to navigate to the SENSORS screen on the cooler PLC screen.

Highlight the first sensor input channel for the connected sensor (S1, S3 or S5). Press OK and use the DOWN button to select AMBNT-T. Press OK to confirm. AMBNT-H will automatically be selected for the second sensor input channel (S2, S4 or S6).

Check the Temperature and R/H values on cooler PLC screen are present and correct.

Units can be changed between °C and °F in the PLC settings.



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MULTI-MAGIC AMBIENT SENSOR INSTALLATION

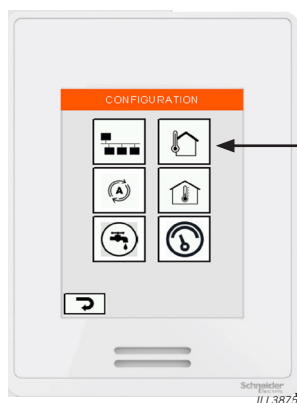
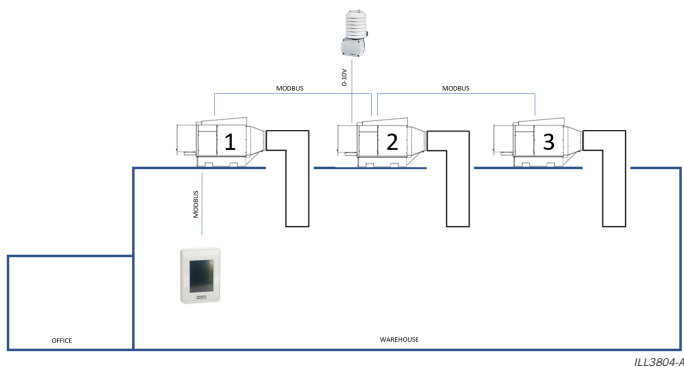
AMBIENT CONDITION MONITORING

Ambient Condition Monitoring is a special operating mode exclusive to the Multi-Magic Wall Controller. It uses advanced logic to predict the cooler supply air temperature based upon measured external ambient temperature and relative humidity conditions.

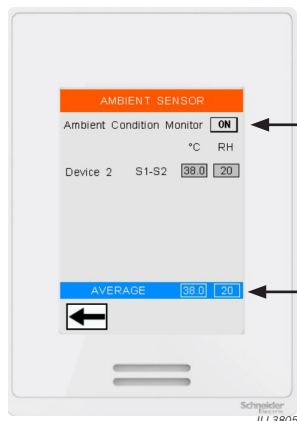
When the Wall Controller detects that the predicted supply air temperature is higher than the current internal room temperature it stops the connected coolers, even if the room temperature is higher than the set point.

Multiple ambient sensor inputs from multiple connected coolers can be measured together to provide an average value for larger spaces.

EXAMPLE SETUP



OPEN AMBIENT SENSOR MENU ON WALL CONTROLLER



SET AMBIENT CONDITION MONITORING TO ON TO USE PREDICTED SUPPLY TEMPERATURE LOGIC

WALL CONTROLLER AVERAGES VALUES OF ALL CONNECTED SENSORS

EXAMPLE FUNCTION

Room Temperature (RT) = 18.0°C

Wall Controller Set Point (SP) = 17.0°C

Cooling is requested as RT > SP

Installed Cooler(s) = CW-H15

Ambient Conditions as measured by Sensor = 38°C and 20% RH

Predicted Supply Temperature (PST) = 19.5°C

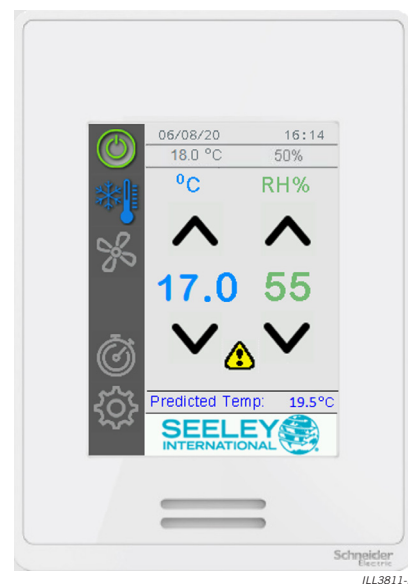
Coolers are disabled as PST > RT

This mode is particularly suitable for applications which require room temperatures less than 20°C

Coolers will automatically resume running when either;

1. Ambient Conditions change, allowing predicted supply temperature to be lower than room temperature.
2. Room Temperature rises above predicted supply temperature.

If the coolers have been stopped due to Ambient Condition Monitoring, a warning triangle and the predicted supply temperature appears on the Wall Controller main page.



NOTE! Ambient Condition Monitoring is not compatible with the Multi-Magic Wall Controller Minimum/Maximum Fan Speed limit function. See Wall Controller manual for more information.

Warranty Service Australia

1300 650 644

For outside Australia contact your local dealer.

seeleyinternational.com

It is the policy of Seeley International to introduce continual product improvement. Accordingly, specifications are subject to change without notice. Please consult with your dealer to confirm the specifications of the model selected.