



DATALOGGERS

DataHog relays for Control Applications

In control applications, the DataHog2 datalogger can be fitted with up to 4 relay outputs. These relays are individually programmable to give a switch closure output above or below user set thresholds of sensor measurements. E.g. to open / close windows at defined sunshine or temperature levels or at the onset of rain, to operate an alarm at high wind speed levels, to switch on irrigation at defined soil moisture conditions etc.

Each relay output switch can only be associated with one sensor (e.g. it cannot switch on the average measurement of several sensors), however any one sensor may be assigned to several relays if a threshold 'window' (upper and lower limit) is desired.

The DataHog logger relay output switches are changeover relays, single pole with all three contacts, off, common and on (contacts 1, 2 and 3) available to the user. These are gold plated for low level relay switching, and so are for light duty, low inrush switching only. They are not suitable for direct mains connection, inductive loads or loads over 0.5 amps. Voltages up to 24 VDC or 24 VAC @ 50 Hz can be applied. Slave relays must be used if these ratings are to be exceeded.

DataHog relays have a very low resistance and are suitable for dry switching circuits. They are uncommitted, i.e. volt free switches.

Relay output sockets have 3 pins, so that they cannot be confused with other logger sockets (sensor inputs are 5 pin sockets, the RS232 connector is an 8 pin socket). ACC/8B is the part number for the matching relay output 3 pin plug.

In operation, the DataHog2 logger will compare the relay's assigned channel measurement with the configured threshold level at each Sample Interval (not the Storage or Log Interval), and then switch the relay as required. If the DataHog2 is in Main Menu mode (i.e. not logging) then the relays will remain in their last set position until logging is resumed and the next Sample Interval occurs.

WIRING DETAILS

RELAY SOCKET (SWITCH)

Pin 1	Normally off }joined when the threshold is above the sensor measurement
Pin 2	Common }joined when the threshold is below the sensor measurement
Pin 3	Normally on

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