# REMOTE ON/OFF CONTROL AND REMOTE RUN STATUS REPORTING FOR HITACHI WALL MOUNTED SPLIT SYSTEMS

Remote on / off control and remote run status reporting (and by virtue of these two fault status indication) are possible on Hitachi wall mounted split systems via the HA plug which plugs into the indoor PCB.
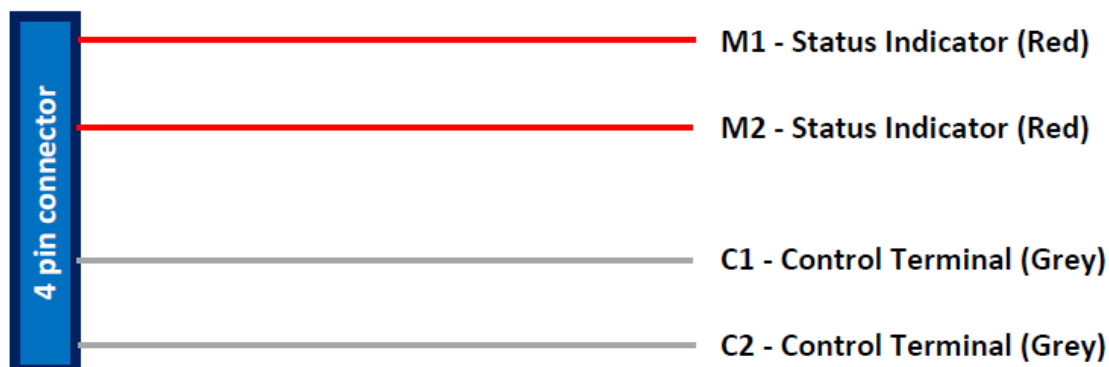
There are two different types of HA plug as follows:

## RAS25YHA2/3 & RAS35YHA3/4 (temperzone #: 171002242)
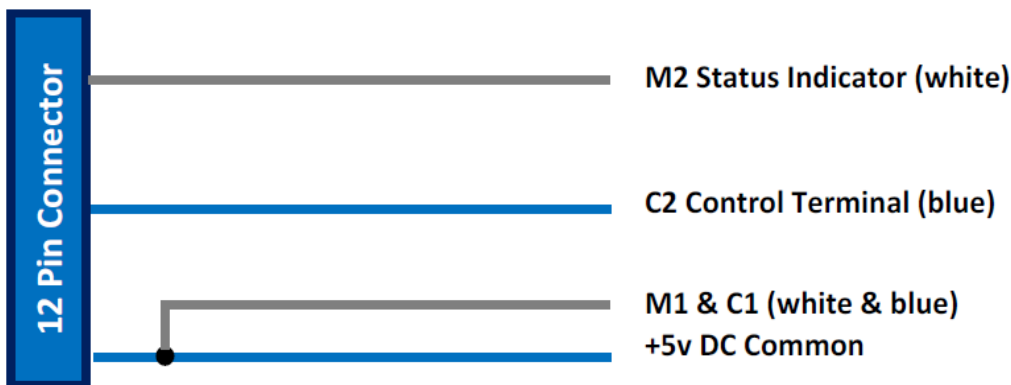


*Attaches to socket "CN6" on the indoor PCB*

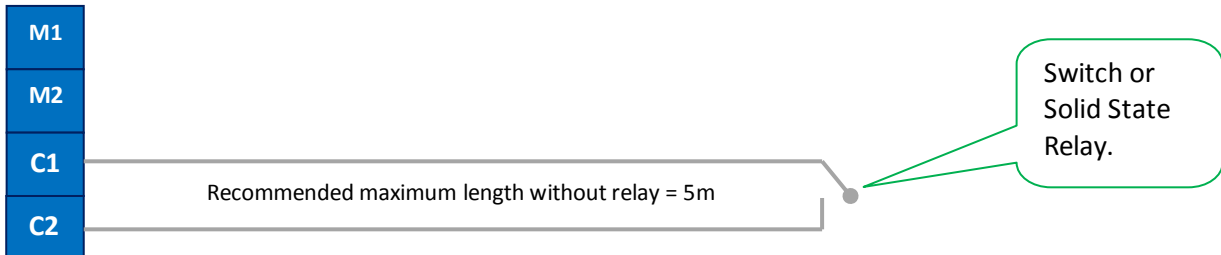## RAS50YHA2/3, RAS60YHA2/3, RAS70YHA2/3 & RAS80YHA2/3 (temperzone #: 171002118)



*For RAS50 - attaches to socket "CN9" on the indoor PCB*
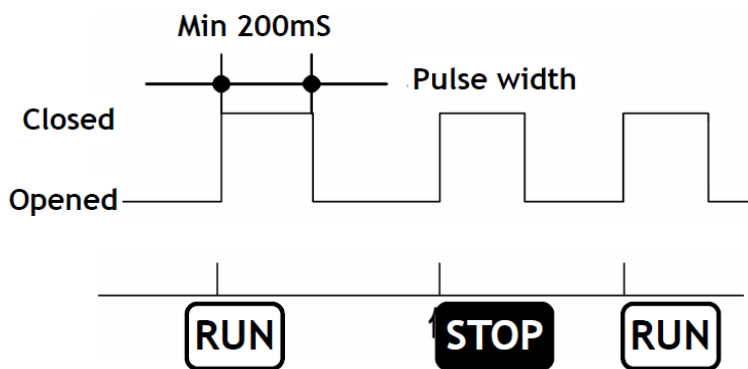*For RAS60, 70 & 80 - attaches to socket "CN7B" on the indoor PCB*

## USING CONTROL TERMINALS (C1 & C2)

The control circuit is a pulse input circuit (5v on 12 pin connector, 0v on 4 pin connector) that starts and stops the heat pump, much like applying and releasing a park brake in a car. When stopped the main power supply is maintained to the system, so last running settings, and any timers set will be remembered. It also allows the compressor's crankcase heater to be maintained if the outdoor ambient temperature demands it – so the unit can immediately re-start when given a signal via the control wire (removing mains power will require a warm up period before the system can re-start).

### Wiring of Control Circuit

| M1 |
|----|
| M2 |
| C1 |
| C2 |

Recommended maximum length without relay = 5m

Switch or Solid State Relay.

### Functionality of Control Circuit

Min 200mS

Pulse width

Closed

Opened

RUN   STOP   RUN

If a line input in to the system is required (on = run / off = stop) a relay will need to be placed between the switch and the HA plug. An Omron relay such as model H3DS-ML (set to "C" mode = signal on / signal off delay) will convert a line input from a simple switch to a pulse input as required by the heat pump.

## USING STATUS TERMINALS (M1 & M2)

The status circuit provides an output to confirm that the heat pump is running. When the unit is in standby mode this circuit has 0Vdc, but when the unit is running approx 5Vdc is applied. This is done by switching the M2 (neutral) leg at the unit. The status circuit can also be used to confirm a fault situation exists - as if the C1/C2 control circuit is activated to tell the unit to run and the M1/M2 status circuit does not confirm the system is running a fault situation must exist.

### Wiring of Status Circuit

| M1 |
|----|
| M2 |
| C1 |
| C2 |

Recommended maximum length without relay = 5m

V

Lamp , LED or Solid State Relay

| Standby Mode | 0Vdc |
|---|---|
| Running Mode | 5Vdc (approx) |