POWERGUARD DPM20-2

INSTALLATION INSTRUCTIONS

1) Isolate power to the distribution panel by opening the main incoming breaker associated with the relevant existing power meter and verify that the power is indeed switched off.

2) Retract the incoming feeder line to the distribution panel from the main breaker/isolator and reconnect after feeding the wire through the large hole in the enclosed current transformer.

3) Position the DPM20-2 controller so that the control wires to the two relay outputs can be routed conveniently.

4) If required, the Din-rail mounting clip can be removed by splitting the unit and sliding the assembly out. No tools are required for this operation as gentle hand pressure is sufficient.

5) Cut the white wire loop from the current transformer to a convenient length and connect to the 'CT 100:1' terminal. It is important that no current flows through the transformer before these wires are terminated as high voltages can be generated across the un-terminated output wires.

6) Referring to the enclosed 'DPM20-2 INSTALLATION' diagram, up to two 20 Amp loads not exceeding 4,4KW resistive or 1 HP inductive and can now be connected according to the diagram allowing CH2 to control the lowest priority (first to shed) load and CH1 to serve the highest priority load. Use wire with 2,5mM cross sectional area minimum for the controlled loads. Care should be taken when connecting neutral wires to pair them with the relevant earth leakage or non-earth leakage buss when connecting to the relevant controlled loads. Both relay contacts are completely isolated.

7) A maximum total current of up to 99 Amps can now be programmed on the two rotary switches marked 'SET MAX. CURRENT'. This setting would typically be the value of the main incoming isolator or circuit breaker.

8) 230 Vac can now be connected to the terminals marked '230 VAC INPUT', observing the line and neutral designation. This supply must be protected by an independent 5 Amp circuit breaker and taken from the non-earth leakage supply buss. A flashing blue LED light indicates power as well as main processor activity.

9) After four to six minutes, provided that there is sufficient power available (approximately 15 Amps), CH1 will switch on and if current reserve allows, CH2 will follow in approximately 1.5 seconds. Closed contacts are indicated by their respective green LED's.

10) As soon as the total current drawn by the distribution board exceeds the value programmed in step no 7, CH2 relay contact will open for a minimum of 15 minutes and then only restore power to its load as supply becomes available again. Should demand continue to increase during this period, CH1 will also shed, again only to restore after 15 minutes if power is available.

DPM20-2 INSTALLATION