PowerGuard commercial system installation instructions

PowerGuard CPM30-1W

Installation

Remove the lid of the unit and securely fit upright against a panel or wall with Fischer or normal 4mM screws. The 4,5mM mounting holes are accessible through the rectangular apertures on the four corners of the enclosure. Drill or punch 20mM holes at the bottom of the enclosure to accommodate glands as required for wiring.

Set Up Instructions

After powering up the system, SW1 active will inhibit its load when overall demand falls within the backlash range selected on the shed controller. This feature falls away when the backlash transgression restores and only activates again after a power interruption. This feature is essential for customers with a compromised electrical supply.

SW2 active responds to phase conscious shed requests, again essential for customers with a compromised supply. Customers with adequate supply will realise an improved random shed pattern with SW2 off.

SW3, 4 & 5 set the minimum shed period following a shed request. With these switches off,

the period is 1 minute and increases by 2,5 minutes for each additional binary bit added.

Total shed period is as follows: SW3=3,5; SW4=6; SW3+4=8,5; SW5=11; SW3+5=13,5; SW4+5=16 and SW3+4+5=18,5 minutes.

SW6, 7 & 8 control the minimum time between accepting shed requests. These switches together with switches 3,4&5 are essential for air conditioner control to ensure that the occupant’s comfort levels are not compromised. With SW6,7&8 off, there is no lock-out interval. SW6=15; SW7=30; SW6+7=45; SW8=60; SW6+8=75; SW7+8= 90 and SW6+7+8=105 minutes.

SW9 & 10 decide on how many CPM30-1W receivers, on average, should respond to a shed request. For example, if 100 receivers are installed, all set to odds = 50, then approximately 2 units will shed for each shed request. With a total of 10 units, all set to odds = 10, approximately 1 unit will shed for each shed request. Odds are manipulated such that a recently shed unit will revert to maximum odds to allow other units to shed before it responds to the next shed request. With both SW9&10 off, odds= 5; SW9= 10; SW10= 25 and SW9&10= 50. Odds can be decreased within a control grid to favour higher priority loads or can be increased to protect lower priority loads.

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