



V-Series Control System

The UPC and V-Series Load Controls

protect equipment driven by Variable Speed Motor Drives



V-Series Control



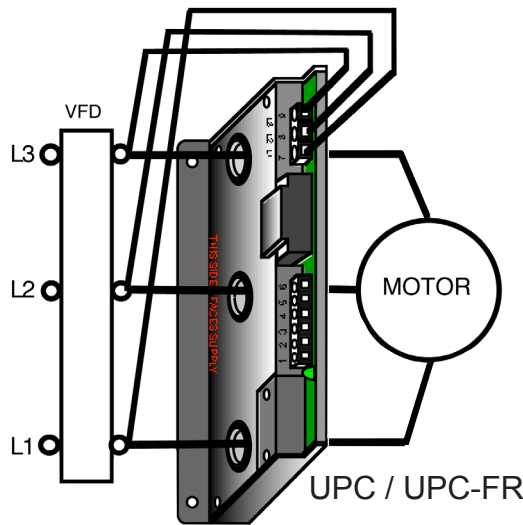
UPC/UPC-FR Power Cell

V-Series Load Controls and UPC Power Cells are used together to protect equipment in Variable Speed motor drive applications. The UPC monitors motor power and sends a 0-10V signal to the V-Series Load Control. Each Load Control has adjustable set points and relay outputs. The set point configuration differs depending on the application and is called out by a specific model number.

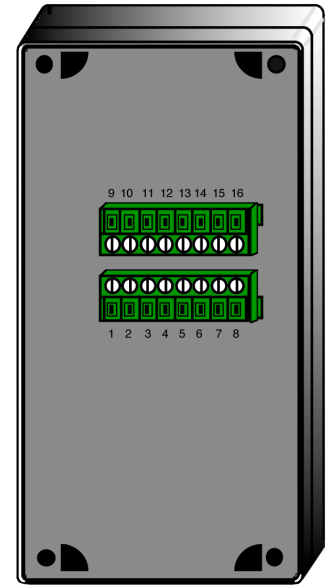
The UPC measures True Power (Watts) on the output side of AC or DC motor drives and is field scaleable from small motors to 150 HP. Response time is field adjustable from 500 ms to 12 Sec. The UPC-FR has a fast Response time field adjustable from 50 ms to 1.2 Sec.

The V-Series Load Controls read the measured load on a digital display in either HP, KW or % Load. The meter also reads the set point and delay settings during setup. A HIGH trip set point will trip an output form C relay on an increase in load and a LOW trip set point will trip an output form C relay on a loss of load. Reset can be done manually, remotely with a switch or automatically using jumpers on the resets. A 4-20ma analog output is also provided.

- PFR-1550V - Has one adjustable set point that can be programed for either HIGH trip or LOW trip.
- PFR-1750V - Has two adjustable set points that are configured for HIGH trip.
- ROC-50V - Has two adjustable set points. One is configured for HIGH trip (Max. Limit) and the other is a RATE OF CHANGE set point that reacts to fast acting loads like jam conditions on conveyors, indexing equipment etc. Use with UPC-FR for Fast Response.
- PMP-25V - Has two adjustable set points configured for HIGH trip and LOW trip.



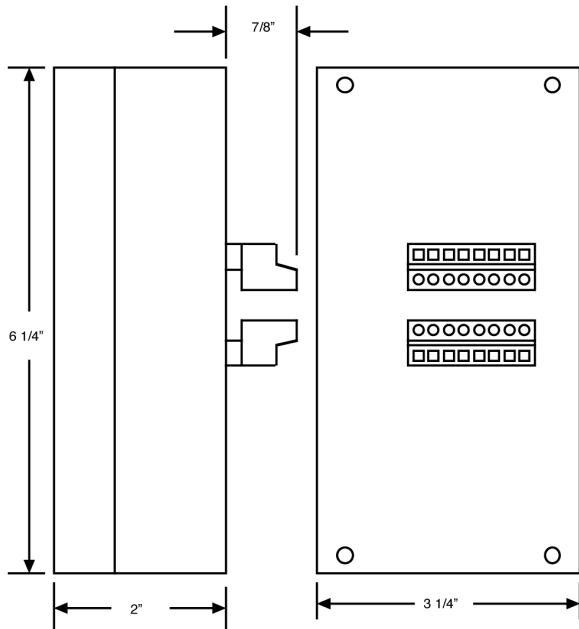
1. 4-20MA Analog Output
2. Analog Ground
3. 10V Analog Output
4. Chassis Ground
5. 120VAC
6. 120VAC
7. L1
8. L2
9. L3



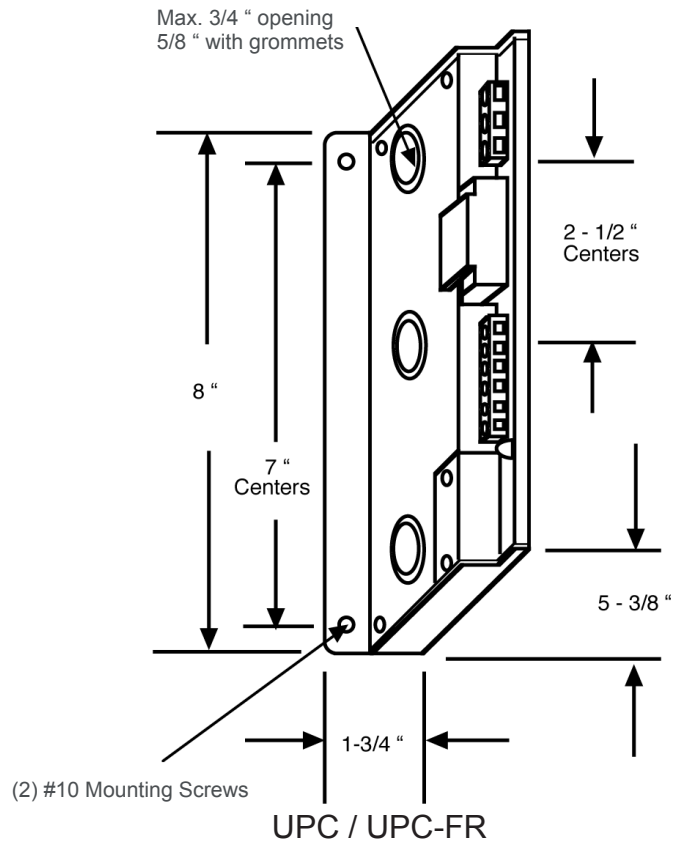
V-Series Back View

- | | |
|----------------------------|------------------|
| 1. Chassis / Static Ground | 10. Relay 1 N.C. |
| 2. 4-20MA Positive | 11. Relay 1 Com. |
| 3. 4-20MA Negative | 12. Relay 2 N.O. |
| 4. Reset | 13. Relay 2 N.C. |
| 5. Reset | 14. Relay 2 Com. |
| 6. Reset Common | 15. 120 VAC |
| 7. 10V Input Positive | 16. 120 VAC |
| 8. 10V Input Negative | |
| 9. Relay 1 N.O. | |

Notes:
 *The 0-10V signal (terminals 2 and 3) from the UPC power cell wires to the V-Series Load Control (terminals 8 and 7). A shielded signal wire should be used and the shield connected to GROUND at one end.
 *Relay outputs on the V-Series Load Control are shown with POWER ON and NOT TRIPPED. The trip condition is the shelf state.



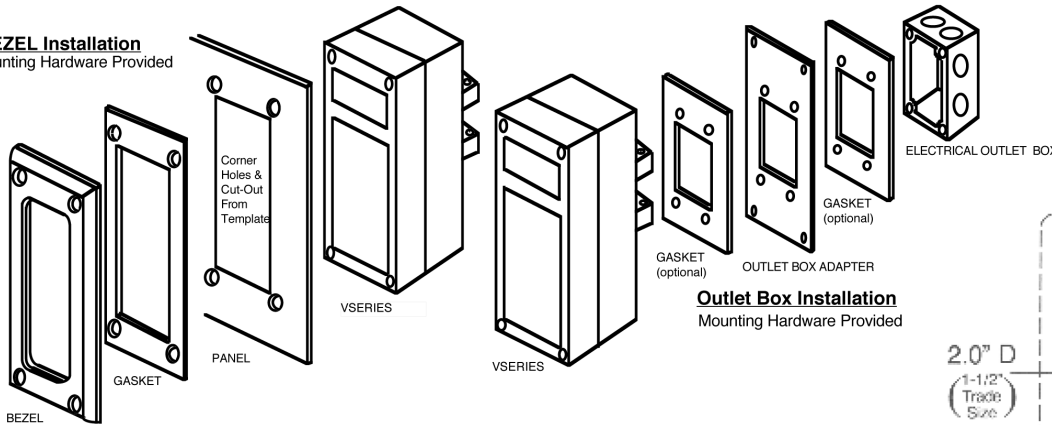
V-Series Control



(2) #10 Mounting Screws

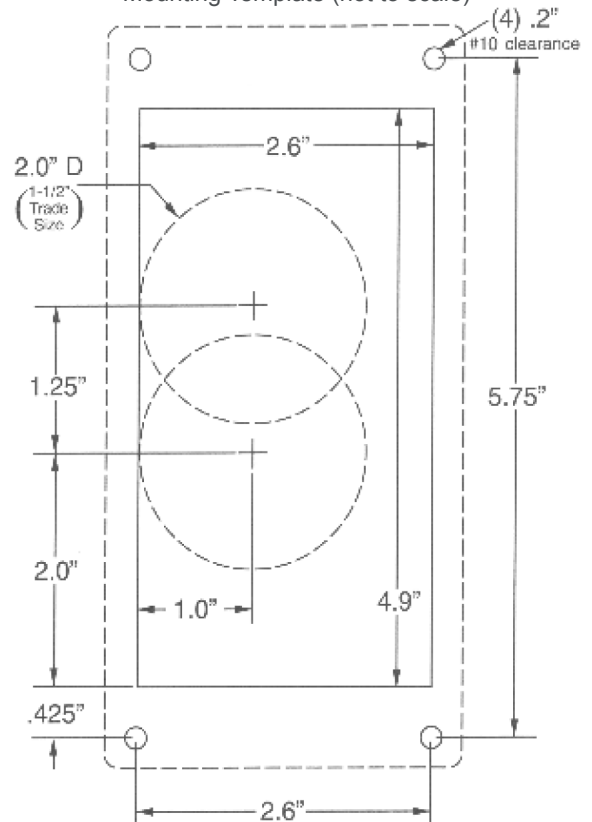
UPC / UPC-FR

BEZEL Installation
Mounting Hardware Provided



Outlet Box Installation
Mounting Hardware Provided

Mounting Template (not to scale)



The Mounting Template ships with the V-series control and is used to mark hole punches for mounting on the outside of a panel door or raceway. To mount behind panel door or raceway use template to make a rectangular cut out and the BEZEL is used. Ask for the BEZEL kit when ordering (no charge). Gaskets are provided for both mounting options to maintain NEMA 4 integrity.

The OUTLET BOX ADAPTER is used for a surface or backplane mount. This adapter will adapt to an OUTLET BOX so the V-Series connectors are spaced off the backplane of the panel. Ask for OUTLET BOX ADAPTER when ordering (no charge). Gaskets are provided.