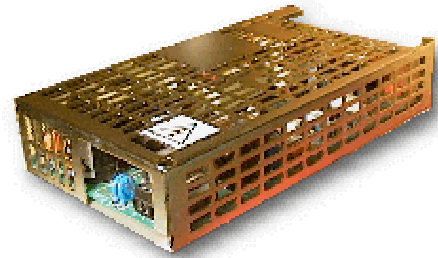


FP150 SERIES – 150 Watt Switched Mode Power Supply



Features:

- High reliability
- Low profile - High density format
- Thermal protection as standard
- Up to five outputs available
- Hot swap capability
- Conforms to International safety regulations
- Power trading between outputs
- Output voltages up to 500Vdc



Low Profile: 212.5 x 116 x 43mm

Description:

The FP150 series offers a highly compact single or multiple output power supply (up to 5 outputs), with the addition of active PFC. Features include universal mains input for international use, low profile (<1U) and choice of either Molex or screw terminal connections making it an ideal product for a wide range of applications. This range can be configured to customer's specific requirements. Constant current version optional with external control to suit.

Specification:

Input

Input voltage : 90 – 264Vac
Input frequency : 47 – 63Hz
Inrush current : < 30A (230Vac)
Earth Leakage : 1.5mA typical at peak input volts
Power Factor : 0.98 typical @ 230Vac
Input current : 2.1A @ 90Vac
Hold up time : 28ms from 240V @ full load
Input fuse : F5AHRC 5 x 20mm

Output

Output voltage : As required within 5 – 500Vdc range
Output current : 30A maximum available
Voltage adjustment: +/- 5% (V1)+/- 2% (V3)
Initial setting: 0.5%
Load /cross regulation: <1% single o/p;(2.5% V1,3,4) (8% V5)
Line regulation : <0.5%, 90-264Vac/ 180-264Vac
Ripple and noise: 0.2%RMS, 1% peak DC - 30MHz
Transient deviation : 5% for 50% load variation
Transient time : 2mS
Over voltage protection : 115 - 125% of V1
Over current protection : All outputs
Output power : 150 Watts convection cooled
De-rating: 2.5% /°C above 50°C
Temperature coefficient: 0.02%/°C (V1) 0.05% (V2-V5)
Shock and vibration: Meets MIL STD810F

Options

Mains powerfail
Output OK
Remote sense
ORing diodes for N+1
Isolated outputs available
5mm screw or Molex connection
External voltage / current control via potentiometer
Front panel as required for rack mount
250W peak power for high surge applications
Current share for parallel use

Output ratings

Up to five outputs available
Output voltages up to 500Vdc
Max 30A current

General

Efficiency: 80% typical
MTBF: >100,000 hrs to MIL217E @ 25°C
Dielectric strength:
4.25Kvdc input to Output
2.25Kvdc input to Earth
500Vdc output to Earth
Connections: 0.375" Beau screw terminals,
5mm screw or Molex 0.156" as required.
(custom loom optional)

Environmental

Operating Temperature:
-20c to +60°C De-rate at 2.5% /°C above 50°C
Storage Temperature:
-25°C to + 85°C
Operating humidity:
0 to 95% RH non-condensing

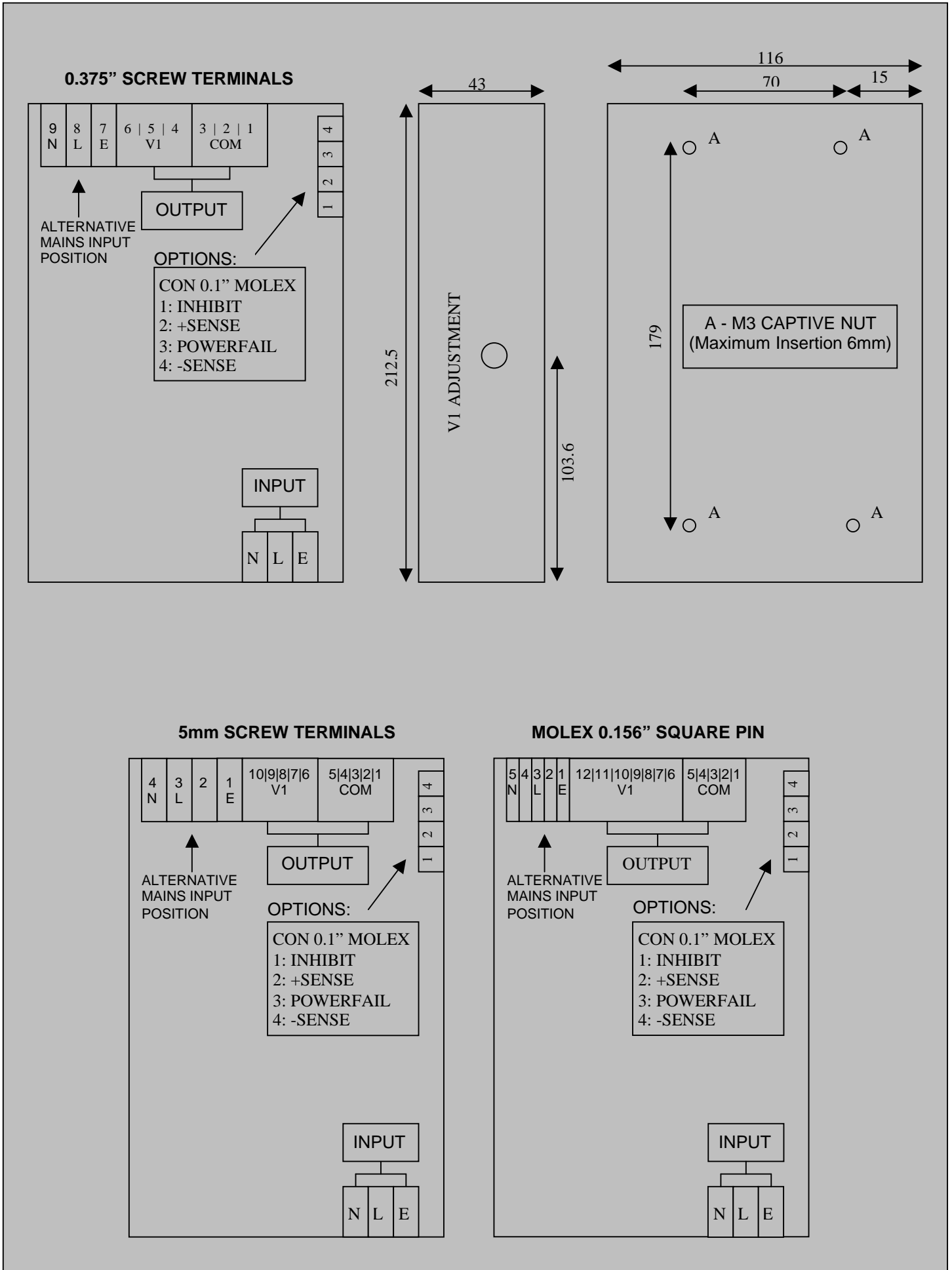
Safety & EMC

Isolation, input to earth : 2.5kVdc, >2.5mm
Isolation, input to output : 4.25KVdc, >6.4mm
Isolation, output to earth : 500Vdc
(unless commoned)
Units designed to meet: EN60950, UL60950,
CSA 22.2 No. 950 & 234
Emissions designed to meet: EN55022-B
(conducted) EN55022-A (radiated)

Immunity designed to meet:

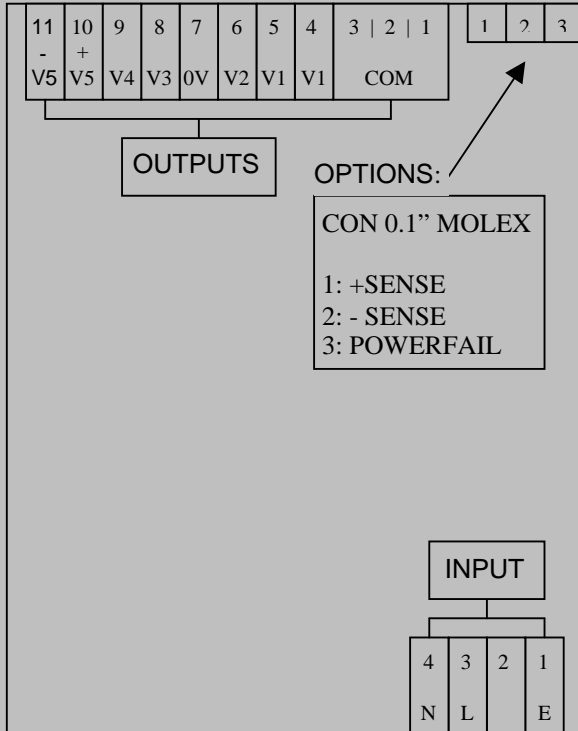
EN61000-4-2 (ESD)
EN61000-4-3 (RAD)
EN61000-4-4 (FAST TRANS)
EN61000-4-5 (SURGE)
EN61000-4-6 (CONDUCTED)
EN61000-4-8 (MAGNETIC)
EN61000-4-11 (VOLTAGE DIPS & FLUCTUATIONS)
EN61000-3-2 (MAINS HARMONICS)
EN61000-3-3 (VOLTAGE FLUCTUATIONS)

FP150 Series Single Output Mechanical Details and Connections



FP150 Series Multiple Output Mechanical Details and Connections

5mm SCREW TERMINALS



MOLEX 0.156" SQUARE PIN

