

# Fault Driven Power Supply

## X0106-5A CTs & X0161-1A CTs

NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

The output of the Fault Driven Power Supply is 48Vdc and used to trip circuit breakers and/or power other protective devices. Primary input power to the Fault Driven Power Supply is 110Vac with a secondary power input of 3 circuits from current transformers on the mains input to the equipment being protected.

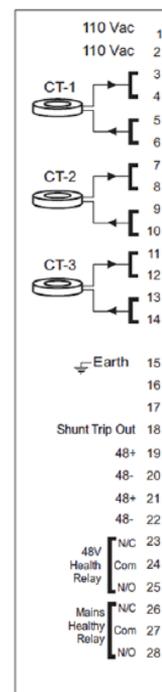
The unit provides a regulated 48V supply capable of supplying a continuous 500mA with a short term pulse capability of 10A. This allows the Fault Driven Supply to be used to power both protection relays and also heavily rated shunt trip circuits on main circuit breakers.

Three additional outputs are provided which may be used for monitoring or included as additional protection in control circuits. These contacts are; 1) Mains Healthy, which closes when there is 110VAC present, 2) 48V Healthy which is operated when there is greater than 45V on the output terminals and, 3) a Shunt Trip voltage output, which may be used as a pseudo no-volt circuit, this output turns on when the bus volts drops from a healthy state (of greater than 45V) to 36V. This directly connects the DC bus to the shunt trip terminal and is intended to directly operate the shunt trip of a breaker. This would only be used if it is intended that the main breaker is to be opened upon loss of input supply.

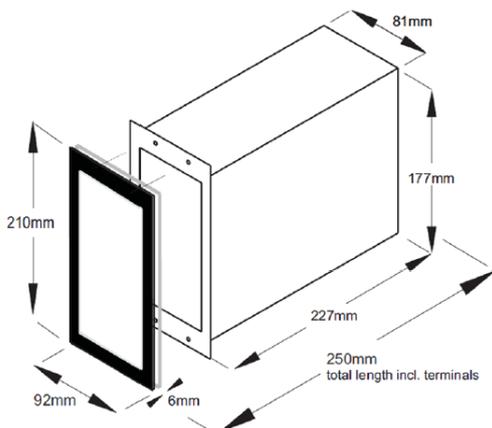
The Fault Driven power supply is also current limited to protect against overloading. Over loading may easily occur if a shunt trip coil is left in circuit on power up, which may be the case in the event of an emergency stop button being operated and not released. If operating in Current Limit, a red LED on the front panel will be on. If the current limit condition continues the unit will switch off to protect the power supply from overheating and causing permanent internal damage. This second condition is indicated on the front panel with an Over Temperature LED.



### Rear Terminal Layout



### Case Dimensions



### Mounting Cut Out

