

FRM-050

Fuse Replacement Module (50 Ampere)

ENERGY & MINING

Description

Corrpro's electronic Fuse Replacement Module (FRM) is a microprocessor controlled device which monitors the AC secondary current of the rectifier inductively (non-contact). Should the current exceed the programmed maximum value by the programmed trip rating, the module will lock into a trip algorithm that will trip the circuit breaker, thereby shutting down the rectifier. If the FRM tripped the circuit breaker, upon power up the FRM will indicate that it tripped the circuit breaker via a violet status indicator (trip memory). Unlike traditional fuses the electronic module produces no wasted energy as heat and has no live components exposed on the front panel of the rectifier. Additionally, the module can be factory programmed with adjustable time delays from 0-2 seconds programmable in 0.25 second increments to handle inrush currents which may occur at rectifier start up. The FRM module can replace almost any AC fuse, and can be retrofitted into just about any manufacturer's rectifier. An optional TTL-RS232 converter is available to allow field programming/adjustments of the module.

Features

- Infinite programmable maximum value.
- Programmable inrush current delay.
- Programmable trip point (125%, 150% or 175%) from maximum value.
- High intensity RGB LED status indicator.
- FRM trip memory (upon power up).
- Real time clock (optional) for logging when the module tripped.
- Field programmable utilizing any terminal program and optional converter module.



Advantages

- No heat generation
- No temperature de-rating
- No need for spare fuses
- Trips faster than a fuse (depending on fault)

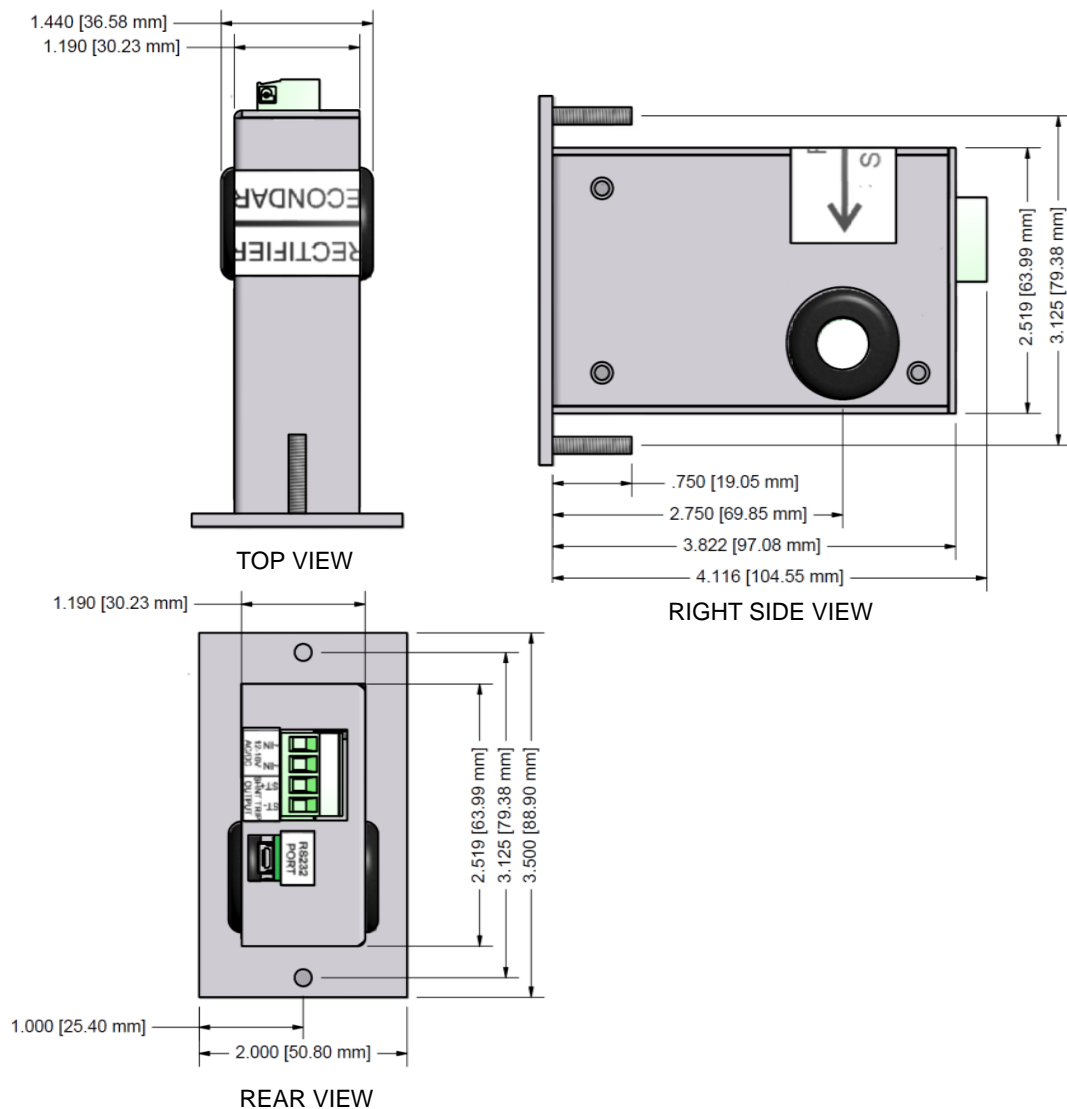
Specifications

- Current input range 5-100 Amperes AC
- Operating ambient: -40° to +45°C (-40° to 113°F)
- Robust housing constructed from marine grade aluminum
- Durable lexan front panel
- Externally powered from a 12 to 24 volt AC step-down transformer or DC supply
- Optional 100-125 Ampere configuration

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Enclosure Dimensions



Front Panel

corrpro

ELECTRONIC FUSE MODULE

STATUS ●

- Inrush Delay
- O.K.
- Warning
- Overload
- Module Tripped

LED COLOR	Status Indication
None	No power
Cyan	Inrush delay time (programmable from 0 to 2 seconds)
Green	Monitored AC current within safe zone
Yellow	Monitored AC current is at 100% of rating
Red	Monitored AC current is at 105% to programmed (125%/150%/175%) of rating
Red/Blue	Monitored AC current is beyond programmed rating and tripping breaker
Violet	FRM caused the breaker to trip
White	Programming mode

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Corrpro Rectifier Division
 10848 - 214 Street, Edmonton, Alberta, Canada, T5S 2A7
 Tel: 780-447-4565 Fax: 780-447-4248
 E-mail: quotes@corrpro.ca
<http://www.corrpro.ca>