



Earth Leakage Lockout - Frozen Contactor

Overview:

M-Tronix is your source for highly innovative electronic control, protection, and monitoring systems for mining and general industry. M-Tronix is your exclusive distributor of the Bramco product range.

Leaders in Innovative Protection Systems, M-TRONIX ellfc3 is compliant to the latest statutory and industry standards, including AS2081:2011. The ellfc3 provides next generation Earth Leakage Lockout and Frozen Contactor Protection. In addition, it also monitors Phase Rotation, Phase Loss and Undervoltage.

Application:

ELL - Earth Leakage Lockout: monitors earth leakage on conductors in an outgoing load circuit before load contactor is closed and to prevent closing the contactor if the earth-leakage resistance is below pre-selected level. (1MΩ)

FC - Frozen Contactor: monitors voltage on the outgoing load circuit when the load contactor is open, identifying leaky vacuum contactor or welded contactor, then initiate isolation of the incoming supply via circuit breaker back tripping.

UV, Phase Loss, Phase Rotation - Incorrect phase rotation, phase loss or undervoltage will cause the UV relay to close with no latch.

Features:

FC:

- Non-Failsafe operation – relay closes on fault
- Adjustable Timer inhibit for motor loads
- More than 25VAC/60VDC on any phase will cause trip
- Common AR interlock contact input
- Separate contacts (2)

UV, Phase Loss, Phase Rotation:

- Phase rotation - CW/CCW down to 30% phase V
- UV Trip <70% of present phase V on any phase
- UV trip - 1 sec, non-failsafe, no latch
- LED indicators for each of these
- Separate contact (1)

Isolation Barrier:

- Isolation Barrier and AR contact inputs are common to the ellfc3 relay.
- Barrier monitored for integrity – causes trip if not connected or if no phase voltage present during normal operation.

Ordering Information:

MT01220 - ellfc3 Relay - 110-240VAC

MT01222 - ellfc3 Relay - 24-48VAC/DC

MT01180 - BAR3 415 - 1100VAC Isolation Barrier

Specifications:

Supply:	MODEL	MIN	TYP	MAX	UNIT
	A01220	100	110	240	V AC 50/60Hz
	A01222	20	24	50	V AC/DC

Power: 2VA +/-20%

Operating Temp: 0 – 60° C

System Voltage: 415V or 1100V

ELL range:

- 1 MΩ
- 2 x C.O. 5A 250VAC contacts
 - 5A 250VAC (General)
 - 5A 30VDC (Resistive)
 - (100VA Max)

FC – Leakage

voltage:

- 25VAC or 60VDC or more
- 2 x C.O. 5A 250VAC contacts
 - 5A 250VAC (General)
 - 5A 30VDC (Resistive)
 - (100VA Max)

UV, PL, PR:

- Trip time - 1 sec
- 1 x C.O. 5A 250VAC contacts
 - 5A 250VAC (General)
 - 5A 30VDC (Resistive)
 - (100VA Max)

FC Timer:

- Inhibit range 1 – 20 seconds

Enclosure

Dimensions: 75mmW x 100mmH x 109.5mmD

Material:

- High impact resistant polycarbonate construction
- IP20 Rating

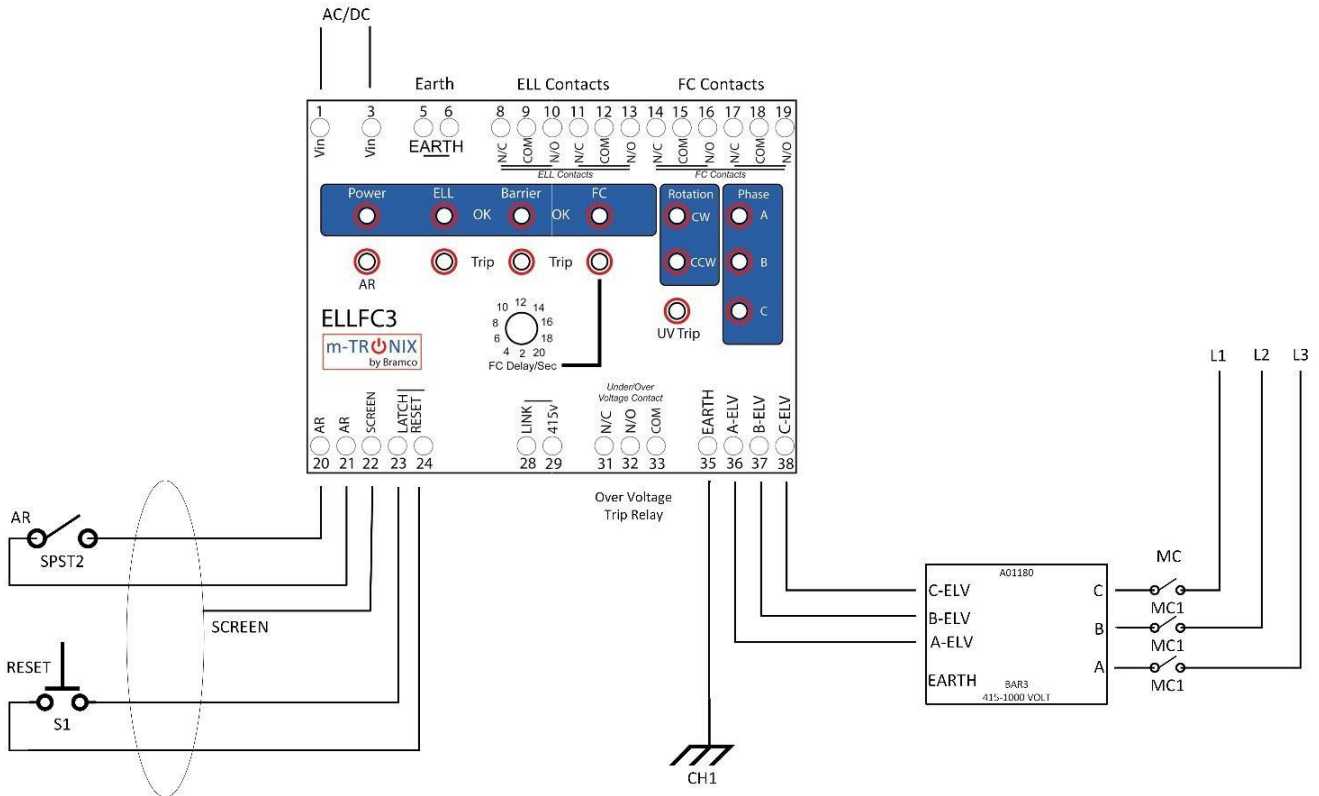
Mounting: DIN rail

Terminals: Cage screw terminals

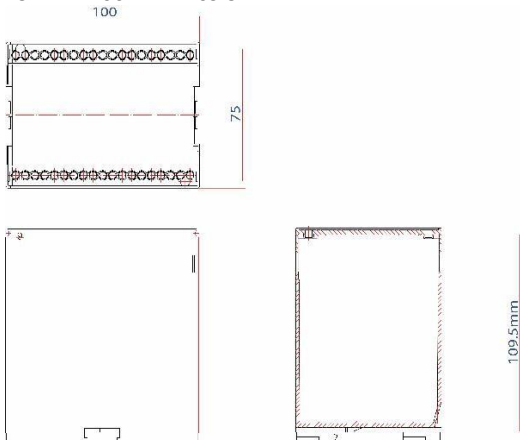
Weight: 333gms



ELLFC3 Wiring Diagram



Enclosure Dimensions
75mm x 100mm x 109.5mm



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Compliance:
AS/NZS 2081:2011
The ellfc3 comes with
a 2 year warranty.