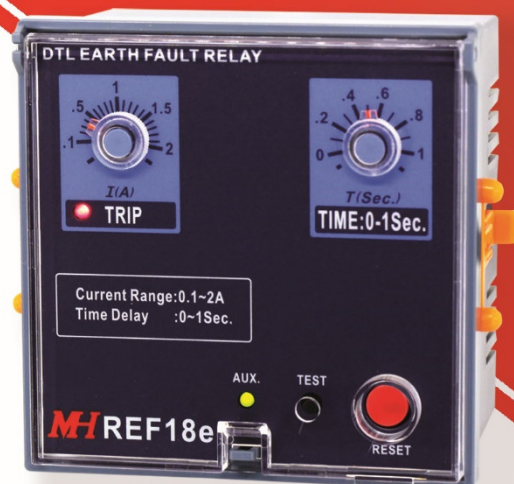


MH *Protection Relays*

e-series

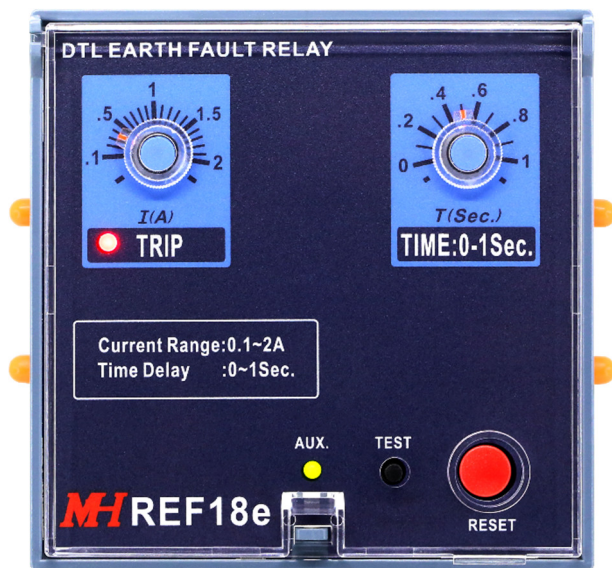
an evolution of protection

REF 18e



REF 18e - V1

DTL Earth Fault Protection Relay



The **REF18e** is a DTL earth fault protection relay which for front panel mounting with a standard 96mm x 96mm dimension.

The REF18e is designed according to protection standard IEC 60255 series.

The earth fault setting can be set from 0.1 A to 2.0 A, while the tripping time from 0 to 1 second.

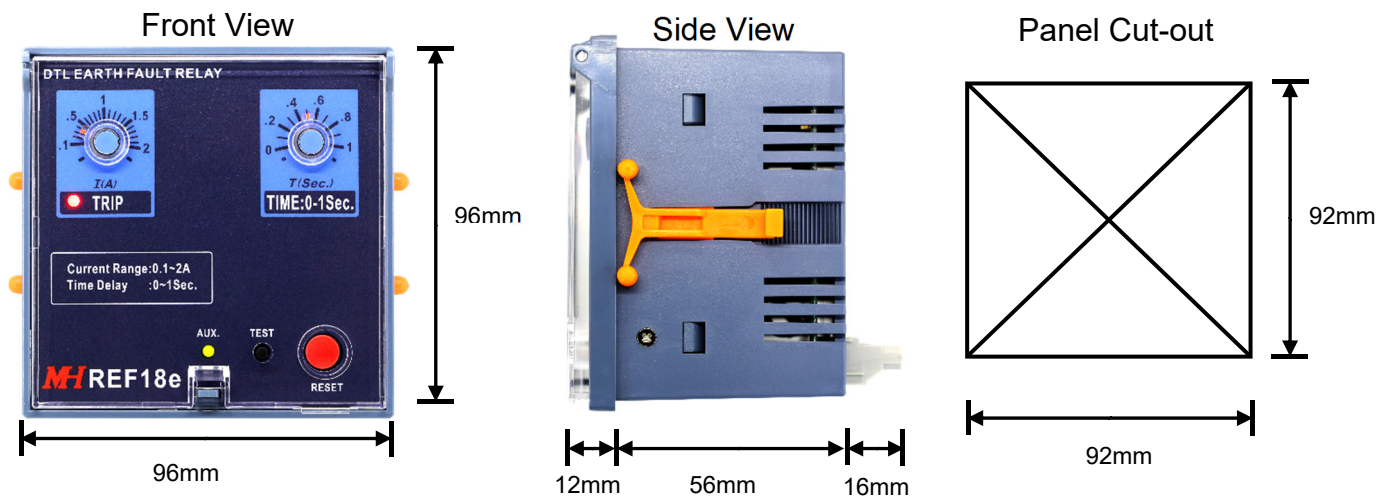
Technical Specification		
Description		Value
Protection and Functionality Description		ANSI 51N – Time delay earth fault ANSI 50N – Instantaneous earth fault
Earth Fault Pickup Current Setting		AC 0.1 – 2.0A
Definite Time Delay (DTL) Setting		0 – 1.0 sec
Supply Voltage		AC 230V $\pm$ 15%, 50/60 Hz (Other voltages available on request)
Power Consumption		2VA
Rated Input Current		5A (1A available upon request)
Overcurrent withstandability		10 * I rated (for 3 sec)
Output contact	Relay Output	1 x CO (Changeover) Contact
	Contact Rating	Rated 250VAC, 5A
LED Status Indicator		Tripping Indicator, AUX Power
Operating Temperature		0-55°C
Relative Humidity		< 95%, non-condensing
Degree of Protection		IP 52
Housing Material		ABS resin complying with UL94V0
Unit Weight		Approximately 300g
Unit Dimension		96mm (width) x 96mm (height) x 84mm (depth)

REF 18e - V1

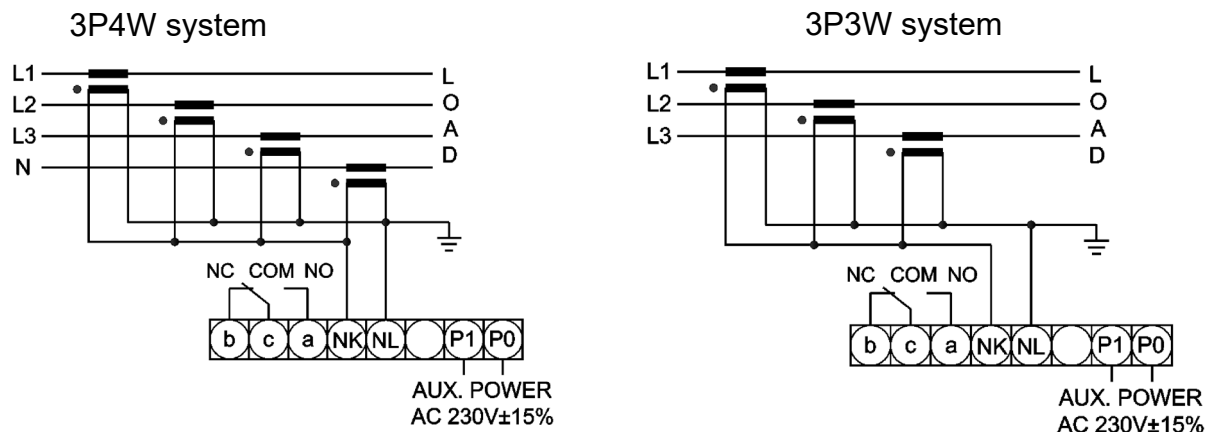
DTL Earth Fault Protection Relay



Dimension and Cut-out



Wiring Diagram



Standard Compliance

Electromagnetic compatibility of electrical equipment	Directive 2014/30/EU
Product Safety Requirement	IEC 60255-27
Noise immunity:	
Electrostatic discharge	IEC 61000-4-2 (IEC 60255-26)
Radiated radiofrequency electromagnetic field	IEC 61000-4-3 (IEC 60255-26)
Fast transients	IEC 61000-4-4 (IEC 60255-26)
Surge	IEC 61000-4-5 (IEC 60255-26)
Conducted disturbance induced by radiofrequency fields	IEC 61000-4-6 (IEC 60255-26)
Power frequency magnetic field	IEC 61000-4-8 (IEC 60255-26)
A.C. voltage dips, and interruptions	IEC 61000-4-11 (IEC 60255-26)
Emissions:	
Radiated emission	CISPR 11/22 (IEC 60255-26)
Conducted emission	CISPR 22 (IEC 60255-26)
Environmental test:	
Vibration	IEC 60255-21-1
Shock and Bump	IEC 60255-21-2
Cyclic Temperature with Humidity	IEC 60068-2-30 (IEC 60255-1)
Safety	CE Marking

REF 18e - V1

DTL Earth Fault Protection Relay



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