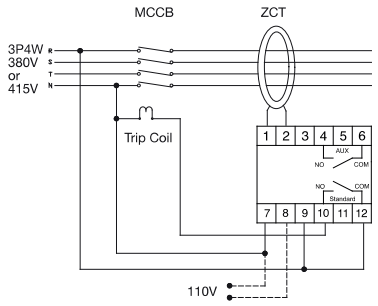
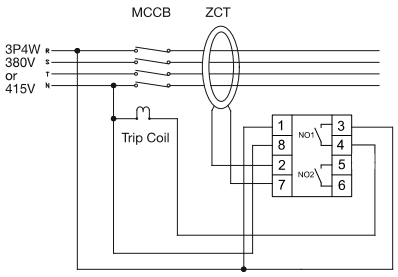
Connection Diagram

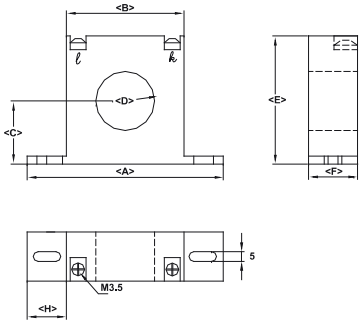


DIN rail mounting design – EL_model

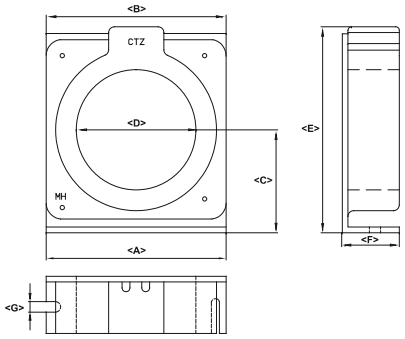


Flush mounting design – EL_P model

Dimensions *(Zero Phase Current Transformers)*



CTZ 35, 50, 70



CTZ 105, 140

Types	Rated current (Single PVC)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
CTZ35	150A	115	75	40	Ø35	77	30	-	20
CTZ50	250A	132	92	50	Ø50	94	30	-	20
CTZ70	400A	156	116	60	Ø70	118	30	-	20
CTZ105	600A	158	158	90	Ø105	180	32	7	-
CTZ140	1000A	202	202	105	Ø140	208	32	7	-

Authorized Dealer:

Product specifications and features are subject to change without prior notice

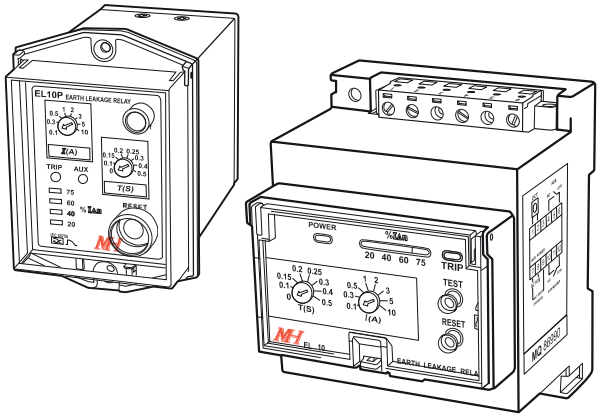
Cat. no. MH-2022/05-ELR

MH Protection Relays

MH Protection Relays

A Protection Class of its Own

MH Earth Leakage Relay • EL Series



MH Protection Relays

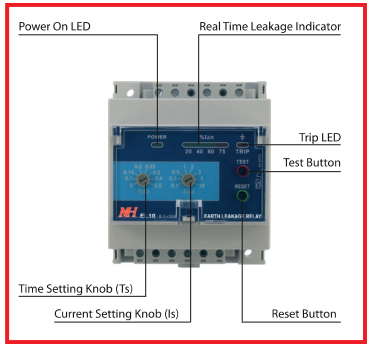
MH represents a legacy of design and development, specializing in power management and power quality solutions and its core expertise, electrical protection relays. The MH Protection Relays has its heritage dated since 1981 where, designed by Mun Hean and manufactured by Kasuga of Japan, developed a range of electronic relays that dominated the market for decades.

Today, with its own R&D wing, Mun Hean Technology Pte Ltd, MH continues this tradition. Anchored on the exclusive MTB fault indication system, we proudly bring to you this state-of-the-art protection relay series that is truly, A Protection Class of its Own.

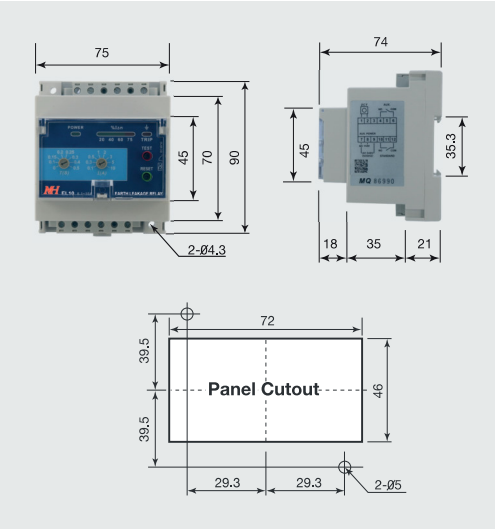
Features

- Manual test button for relay operation checking.
- Real-time monitoring of leakage current.
- Detection of 'No-connection' to ZCT (Zero Phase Current Transformer).
- Tamper-proof design for settings protection.
- Type tested* in acc. with IEC 60255 Series
- Highest accuracy ZCT (> 1,000 ampere-turns transformation).

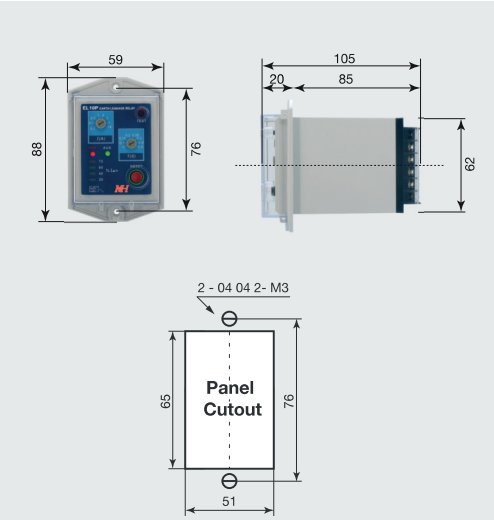
* Type test report issued by independent testing laboratory is available upon request.
* Type AC and type A residual current devices in acc. with IEC 60755.



Models	DIN rail mounting design			Flush mounting design		
	EL 03	EL 10	EL 30	EL 03P	EL 10P	EL 30P
Sensitivity current (A)	0.03/ 0.1/ 0.3/ 0.5/ 1/ 1.5/ 2/ 3	0.1/ 0.3/ 0.5/ 1/ 2/3/ 5/ 10	0.5/ 1/ 3/ 5/ 10/15/ 20/ 30	0.03/ 0.1/ 0.3/ 0.5/ 1/ 1.5/ 2/ 3	0.1/ 0.3/ 0.5/ 1/ 2/3/ 5/ 10	0.5/ 1/ 3/ 5/ 10/15/ 20/ 30
Operating time (sec)	0 / 0.1 / 0.15 / 0.20 / 0.25 / 0.30 / 0.40 / 0.50			0 / 0.1 / 0.15 / 0.20 / 0.25 / 0.30 / 0.40 / 0.50		



DIN rail mounting design – EL_model



Flush mounting design – EL_P model

Technical Data

Characteristics		
Power supply		AC 110/230V ±15% (ELxx) AC 230V ±15% (ELxxP) (Other voltages available upon request)
Operating frequency		50/ 60Hz
Operating temperature		-10 to +60°C
Relative humidity		< 93% RH (non-condensing)
Degree of protection (IEC 60529)		IP31 (front), IP20 (back)
Power Consumption		Approximately 2.5VA
Output	Relay Output	2 x N/O (Normally Open)
	Contact Rating	5A at 250VAC
LED status indication		● (Normal operation) ● (Fault current detected / link fault to ZCT)
Housing material		ABS resin complying with UL94VO
Unit weight		Approximately 300g for all EL relay series
Compliance with standards		
Product Standard		IEC 60755, IEC 60255 Series
Product Safety Requirements		IEC 60255-27
Electromagnetic Compatibility		CISPR11/22 (IEC 60255-26)
		IEC 61000-4-2 (IEC 60255-26)
		IEC 61000-4-3 (IEC 60255-26)
		IEC 61000-4-4 (IEC 60255-26)
		IEC 61000-4-5 (IEC 60255-26)
		IEC 61000-4-6 (IEC 60255-26)
		IEC 61000-4-8 (IEC 60255-26)
		IEC 61000-4-11 (IEC 60255-26)
Vibration, Shock and Bump		IEC 60255-21-1
		IEC 60255-21-2
Dry Heat, Damp Heat, Steady State, Cyclic Temperature with Humidity		IEC 60068-2-2 (IEC 60255-1)
		IEC 60068-2-78 (IEC 60255-1)
		IEC 60068-2-30 (IEC 60255-1)
Safety		CE Marking

Characteristics Curve