

DIN-rail mount type

# Earth Leakage Relay

# TM-18c



features

## \*18r Auto-reset



True RMS Measurement with SPARC<sup>1</sup> and DCOI<sup>2</sup> Algorithm

Fundamental Signal Detection<sup>3</sup>

Real Time Display of I $\Delta$ n (A)

Fault / lo-set & hi-set Trip LED Indication

Fault Start Event Recording

Trip Event Memory  
(non-volatile 7 previous records)

Fault Start Event Memory  
(non-volatile 4 previous records)

Programmable Relay Output contact for K2

Last Trip Elapsed Time (up to 99days)

Auto Z.C.T. Connection Check (open / short)

\*Self-reclosing / Auto-reset

\*Trip Lock-out Setting

\*Reset Interval Setting

Software Lock to Prevent Unauthorized Setting

Complies with :

IEC-61000-4-2/4-4/4-5/255-5:1 Standards

### technical data

Aux Power	: 65~275 Vac ; 90 ~ 300 Vdc
Fundamental Frequency	: 50 or 60 Hz (software selectable)
Current Input (I $\Delta$ n)	: ZCT (multiple sizes from ID of 30~200mm)
Measurement Range	: 0.01 ~ 30.0 A
Output Relay Rating	: SPDT 5A, 250V AC/DC
Display	: 7-Segment LED (3 + 1 digit)
Indication (LEDs)	: Fault, lo / hi set trip
Operating Temp.	: 0°C ~ +55°C
Humidity	: 56 days at 93%RH, 40°C non-condensing
IP Rating / Weight	: IP52 (front panel) / 200g

### \*auto-reset setting

Trip lock-out setting :	1 ~ 10
Auto reset timer :	3.0 ~ 200 sec.
Reset Interval :	OFF or 5,10,15,30,45 mins, 1~8 hrs, 10,12, 24 hrs

### fundamental frequency

50 or 60Hz Selectable

### parameter setting

I $\Delta$ n > : lo-set	0.03~30.0 A 0.03 ~ 1.00 A (step of 0.01 A) 1.00 ~ 3.00 A (step of 0.05 A) 3.00 ~ 10.0 A (step of 0.1 A) 10.0 ~ 30.0 A (step of 0.5 A)
t > : lo-set trip delay time	0.03 ~ 20.0 sec 0.03 ~ 0.10 sec (step of 0.01sec) 0.10 ~ 1.00 sec (step of 0.02sec) 1.0 ~ 20.0 sec (step of 0.1sec)
I $\Delta$ n >> : hi-set	OFF or 0.1~30.0 A 0.1~10.0 A (step of 0.1 A) 10.0 ~ 30.0 A (step of 0.5 A)
t >> : hi-set trip delay time	fixed @ 30ms

### K1 output contact

Latching (Lc) trip

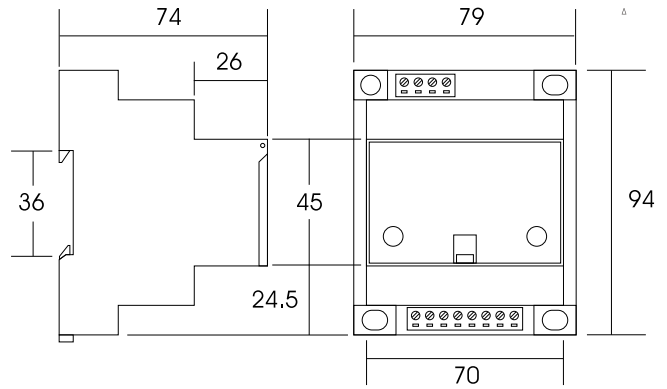
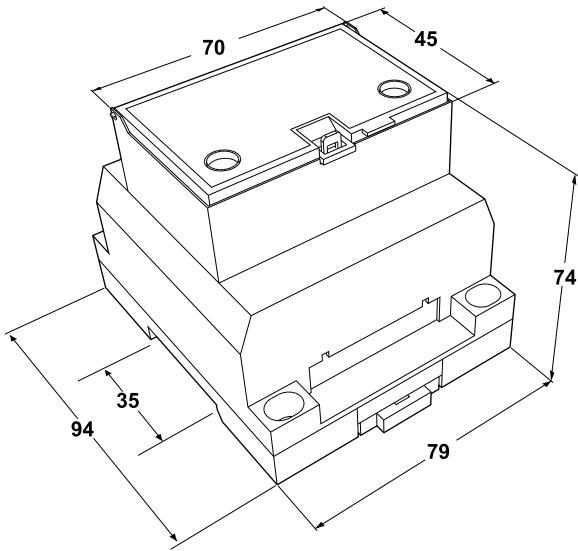
### K2 output contact

Programmable (18c)  
\*Trip Lock-out (18r)  
Latching (Lc) or Non-latching (nLc)

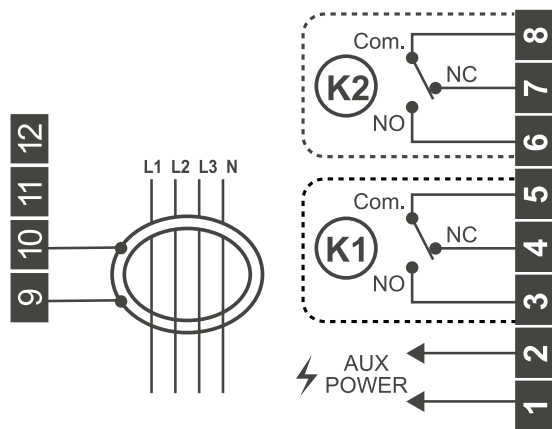
(\* Available for models TM-18r (Auto-reset) only

Note: Specification subject to change without prior notification (please visit [www.delab.com.my](http://www.delab.com.my) for latest specification)

## casing dimension



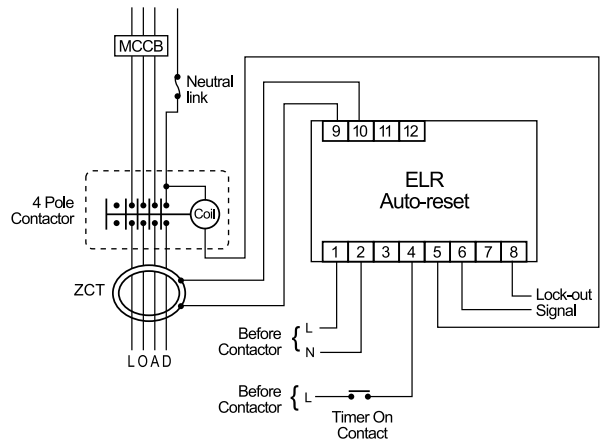
## wiring diagram



**(K1)** Contact Trip (Lc)

**(K2)** 18c : Programmable Contact (Lc / nLc)  
18r : Lock-out Contact (Lc / nLc)

## auto-reset wiring diagram



## ordering information

Model	Description
TM-18c	65 ~ 275 Vac (50~60Hz) 90 ~ 300 Vdc
TM-18r	Auto-reset type : 65 ~ 275 Vac (50~60Hz) 90 ~ 300 Vdc

Note: All measurement in mm.