

Features

Provides elementary protection functions

Added security against nuisance trip handling

Manual test button for relay operation checking

Integrated surge arrester against transient overvoltages

Tamper-proof design for settings protection

EMC type tested in accordance with IEC 60255-26 / IEC 61000-4 series

Designed with LED display

Curve selection in accordance with ANSI, IAC, IEC, 1.3, DTL

- Normally Inverse (NI)
- Very Inverse (VI)
- Extremely Inverse (EI)
- Short Time Inverse (STI)
- Moderate Inverse (MI)

Trip value recording (4-memory)

High set mode is incorporated for instantaneous protection

REF 052e

IDMTL Earth Fault Relay

REF 052e



Technical Data

Power supply

AC / DC 85 - 265V

(other voltages available on request)

Operating Frequency

50/60Hz

Rated Current

5A (1A available upon request)

Earth Fault Time multiplier setting

0.03 - 2.00 (0.01 step)

Earth Fault High-Set

2.0 - 10.0x setting current (0.1 step)

Earth Fault Current setting

2.0 - 50% (0.1% per step)

Time setting range (DTL)

0.03 - 2.00 sec (0.01 sec step)

Pick-up current

100 - 115% of the setting current

Reset current value

≤ 90% of the operating value

Operating and storage temperature range

Operating -10° to 55° C

Curve Standard

IEC, IAC, ANSI, 1.3/10, DTL

Curve Type

Normal Inverse, Very Inverse

Extremely Inverse, Short Time Inverse (Not for ANSI)

Moderate Inverse (Only for ANSI)

Relative humidity

95% at +40°C

Degree of protection

IP54 (Front)/ IP20 (Rear)

Operation life expectancy

Electrical: > 10,000 operations

Mechanical: > 5 x 10⁶ operations

Output contact

AC250V 5A

Indication

Red LED (relay tripped)

Housing material

ABS resin complying with UL94V0

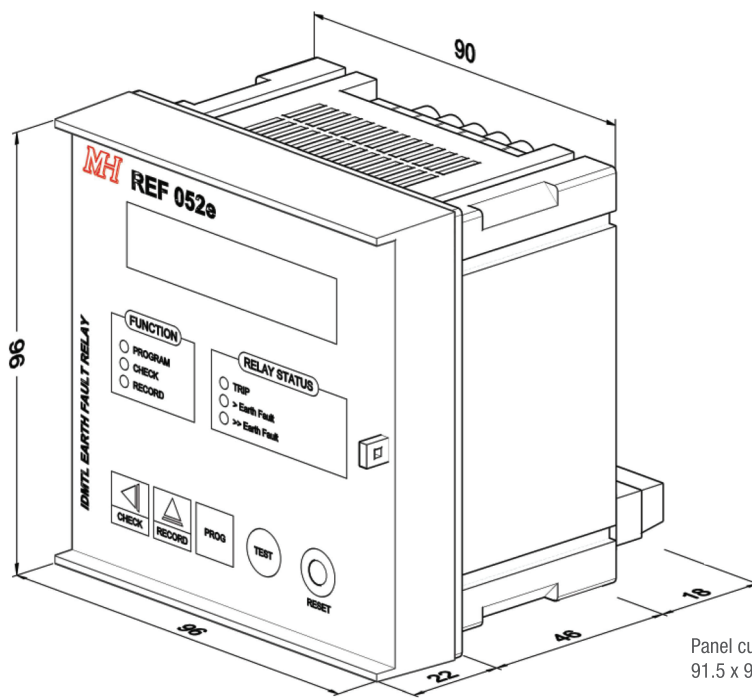
Unit Weight

Approximately 500g

Power consumption

≤ 2VA

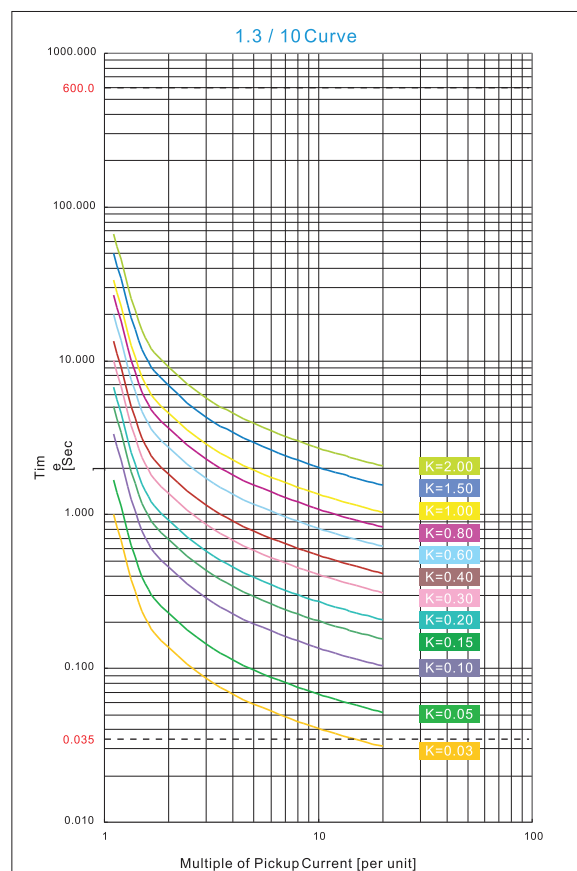
Dimension



Panel cut-out
91.5 x 91.5 mm

Characteristics Curve

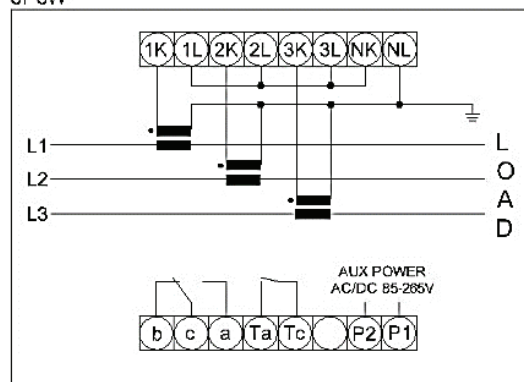
Time current Characteristics in accordance with IEC 60255



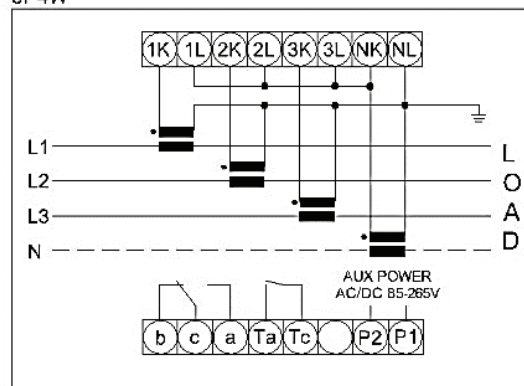
Programable option: 1.3/10 Inverse,
ANSI, IAC, IEC curve see in manual

Connection Diagram

3P3W



3P4W



Compliance with standards

CISPR 11 / EN 55011	Conducted and radiated emissions
IEC/EN 61000 -4-2	Electrostatic discharge immunity test
IEC/EN 61000 -4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC/EN 61000 -4-4	Electrical fast transient / burst immunity test
IEC/EN 61000 -4-5	Surge immunity test
IEC/EN 61000 -4-6	Immunity to conducted disturbances, induced by radio -frequency fields
IEC/EN 61000 -4-8	Power frequency magnetic field immunity test
IEC/EN 61000 -4-11	Voltage dips, short interruptions and voltage variations immunity tests
IEC/EN 61000 -4-18	Damped oscillatory wave immunity
IEC/EN 60255-1	Measuring relay and protection equipment
IEC/EN 60255-27	Measuring relays and protection equipment M - Part 27: Product safety requirement
IEC/EN 60255-151	Measuring relays and protection equipment M - Part 181: Functional requirement for over/under current protection

Ordering Infomation

Model:	Description
REF 052e	IDMTL EF relay, panel type