

R 1000



FEATURES

- Built-in self test and soft recovery watchdog
- Three-phase, three-stage setting for phase overcurrent
- Two-stage setting for earth fault
- 5 selectable IDMT and definite times
- Thermal overload protection
- Cold load pickup protection
- Circuit breaker failure protection
- Selectable fundamental or true RMS measurement
- Selectable 50 or 60 Hz frequency
- 2 Programmable LEDs linked to alarm
- Programmable contact outputs
- Non-volatile fault values recording up to 3 records
- Complies with IEC 60255 standard
- ANSI code: 50G, 50P, 50N, 51G, 51P, 51N, CLP, 50BF, 49RMS

SPECIFICATIONS

RATING

Rate Current In	: 5A
Frequency	: 50 or 60Hz
Burden	: <0.3VA at In
Thermal Withstand	: 4 x In Continuous

AUXILIARY SUPPLY

Supply Voltage	: 198 ~ 265VAC
Supply Frequency	: 50 or 60Hz
VA Rating	: 3VA max

ACCURACY

Protection Thresholds:	±3% or ±20mA whichever is greater
Time Delay	: ±3% or ±40ms whichever is greater

SETTING RANGES

(i) Overcurrent Setting

3I>	: 0.5A -12.5A(10% -250%), *(Variable steps 1)
ktI>	: 0.01 -1.00, *(Variable steps 2)
tl>	: 0.03 -100s, *(Variable steps 2)
3I>Delay Type	: DT, NI3/10, NI1.3/10, VI, LI, EI
3I>>	: OFF/0.5 -100A (10% -2000%), *(Variable steps 1)
tl>>	: 0.03 -100s, *(Variable steps 2)
3I>>>	: OFF/0.5 -100A (10% -2000%), *(Variable steps 1)
tl>>>	: 0.03 -100s, *(Variable steps 2)

(ii) Earth-fault Setting

Io>	: 0.1A -10.0A(2% -200%), *(Variable steps 1)
ktIo>	: 0.01 -1.00, *(Variable steps 2)
tIo>	: 0.03 -100s, *(Variable steps 2)
Io>Delay Type	: DT, NI3/10, NI1.3/10, VI, LI, EI
Io>>	: OFF/0.1 -50A (2% -1000%), *(Variable steps 1)
tIo>>	: 0.03 -100s, *(Variable steps 2)

(iii) Thermal Overload Setting

θ>	: OFF/0.5A -10.0A (10% -200%), (step 0.05A)
Tθ	: 1 to 200 minutes, (step 1min)
ktIθ>	: 1.00 -1.50, (step 0.01)
θ Trip	: 50 to 200%, (step 1%)
θ Alarm	: 50 to 200%, (step 1%)

OUTPUT CONTACTS

Rated Voltage	: 250VAC
Continuous Carry	: 5A (Cosφ=1.0)
Expected Electrical Life	: 10 ⁵ operations
Expected Mechanical Life	: 5 x 10 ⁶ operations
No of Output Contact	: 2

ENVIRONMENTAL CONDITIONS

Operating Temperature	: -10°C to 55°C
Humidity	: 5% to 95%, non-condensing

MECHANICAL

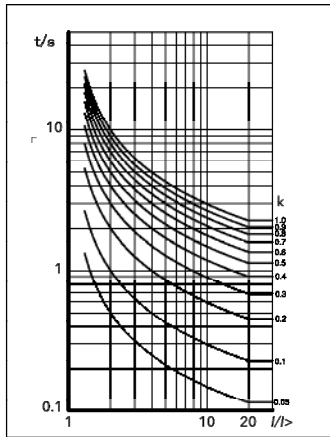
Mounting	: Panel mounting
Dimension (mm)	: 96(w) x 96(h) x 90(d)
Enclosure protection	: IP54 at the panel IP20 at the body
Approximate weight	: 0.80kg

*Variable Steps 1: step 0.05 (<10), step 0.1 (<100)

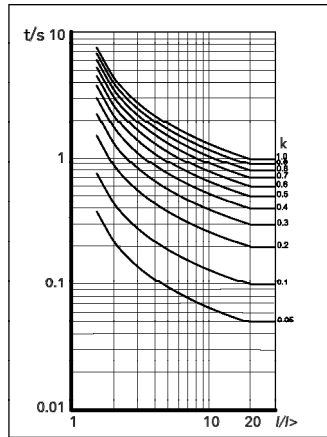
*Variable Steps 2: step 0.01 (<1), step 0.1 (<10), step 0.5 (<100)

IDMT CURVE

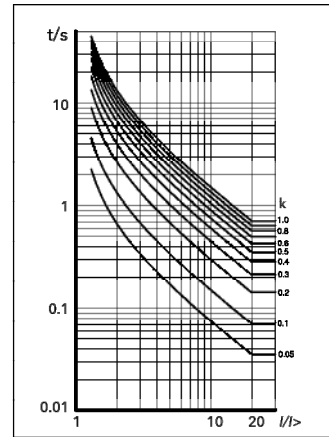
NORMAL INVERSE 3/10



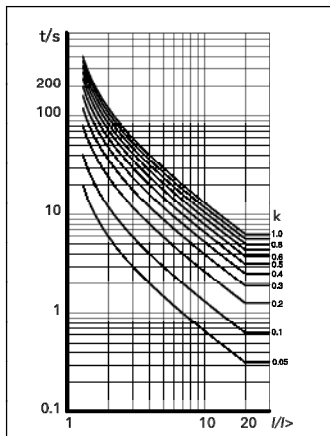
NORMAL INVERSE 1.3/10



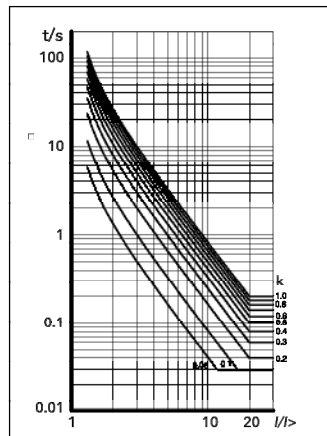
VERY INVERSE



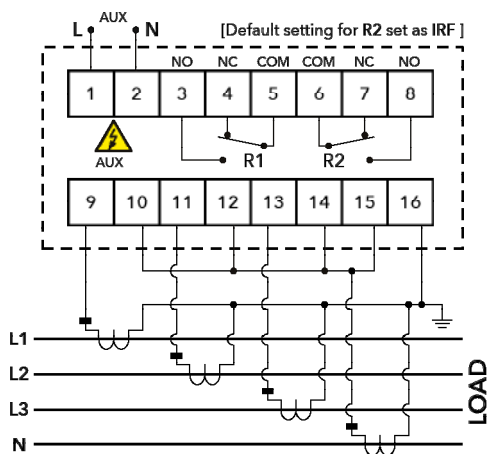
LONG-TIME INVERSE



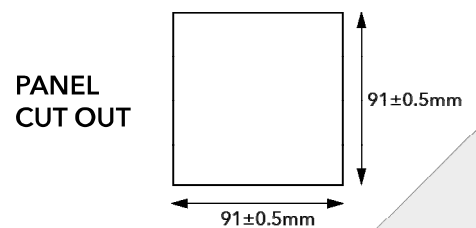
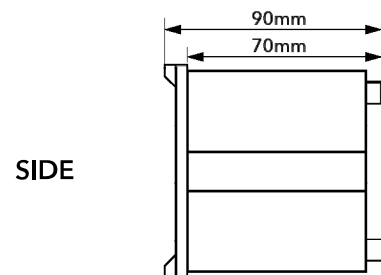
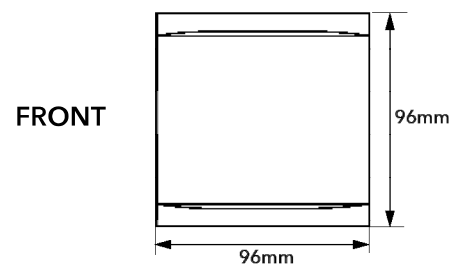
EXTREMELY INVERSE



TYPICAL APPLICATION DIAGRAM



CASE DIMENSION



ORDERING INFORMATION

MODEL	DESCRIPTION
R1000-230A	Auxiliary Voltage 198~265 V AC, frequency 50 or 60Hz