

# NX1000A



## Features

- Microprocessor based numerical relay
- Current measurement based on fundamental frequency
- Three-phase, low-set overcurrent
- Three-phase, high-set overcurrent
- Low-set earth-fault
- High-set earth-fault
- Definite time for low-set and high-set
- Five selectable IDMT characteristic curves
- Local display of measured and set values
- Programmable relay outputs
- Last trip elapsed time
- Non-volatile last 3 fault values recording
- Complies with IEC 60255 standard
- ANSI Code : 50P, 50N, 51P, 51N

## Technical Data

### RATINGS

Rated current ( $I_n$ )	: 5 A
Rated frequency	: 50 or 60 Hz
Burden	: < 0.3 VA at $I_n$
Thermal withstand	: 4 x $I_n$ continuous

### AUXILIARY SUPPLY

Model NX1000A-240A	: 198 ~ 265 V AC
Model NX1000A-240AD	: 85 ~ 265 V AC 110 ~ 340 VDC
Model MK1000A-150D	: 24 ~ 150 V DC
Supply frequency	: 50 or 60 Hz
V A rating	: 3 VA typical

### ACCURACY

Protection thresholds	: $\pm 5\%$
Time delay	: $\pm 5\%$ with a minimum of 50 ms

### OUTPUT CONTACTS

Trip Contacts ( R1 & R2 )	
Rated voltage	: 250V AC / DC
Contact rating	: 5 A
Expected electrical life	: 100,000 operations at rated current
Expected mechanical life	: 5 x 10 <sup>6</sup> operations

### SETTING RANGES

#### I) OVERCURRENT ELEMENT

Low-set ( $I>$ )	: 0.1 A to 10.0 A (2% to 200%)
Low-set time multiplier ( $kt>$ )	: 0.01 to 1.0
Low-set definite time ( $t>$ )	: 0.00 sec to 100 sec
High-set ( $I>>$ )	: 0.5 A to 100 A (10% to 2000%) or disable
High-set delay time ( $t>>$ )	: 0.00 sec to 100 sec

#### II) EARTH-FAULT ELEMENT

Low-set ( $I_{o>$ )	: 0.10 A to 5.0 A, (2% to 100%)
Low-set time multiplier( $kt_{o>}$ )	: 0.01 to 1.0
Low-set definite time ( $t_{o>}$ )	: 0.00 sec to 100 sec
High-set ( $I_{o>>$ )	: 0.10 A to 50 A (2% to 1000%) or disable
High-set delay time ( $t_{o>>}$ )	: 0.00 sec to 100 sec

(0.00 to 1.00, step 0.01; 1.00 to 10.0, step 0.10;  
10.0 to 100, step 0.5)

### INDICATORS

Auxiliary supply	: Green indicator
Pick-up	: Red indicator
Trip	: 7-segment display and Red indicators

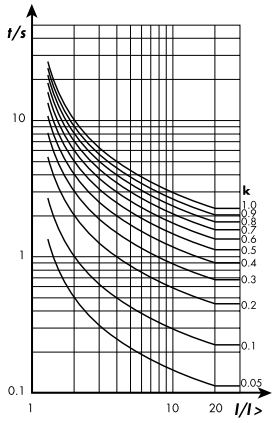
### ENVIRONMENTAL CONDITIONS

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

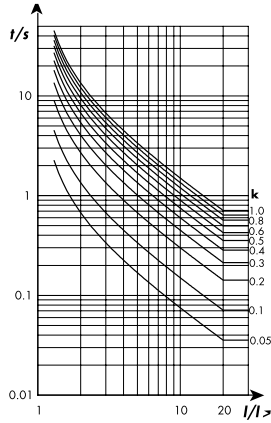
### MECHANICAL

Mounting	: Panel mounting
Dimension (mm)	: 96(w) x 96(h) x 110(d)
Enclosure protection:	IP54 at the panel
Approximate weight	: 0.8 kg

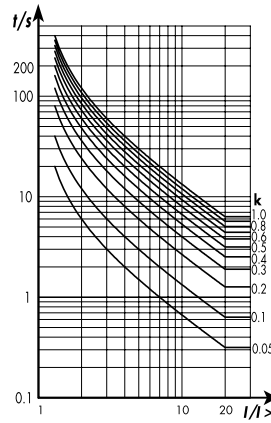
### Normal Inverse



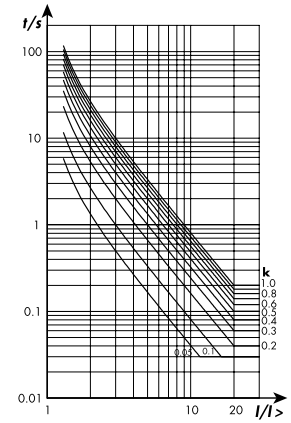
### Very Inverse



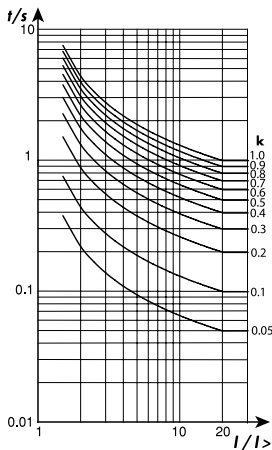
### Long Time Inverse



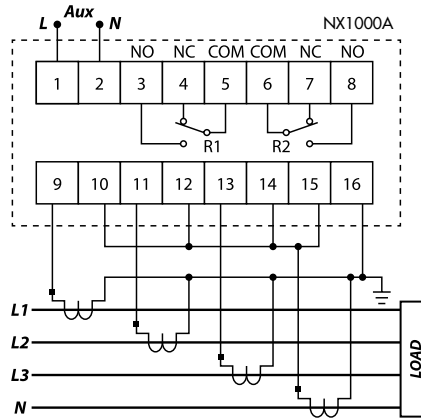
### Extremely Inverse



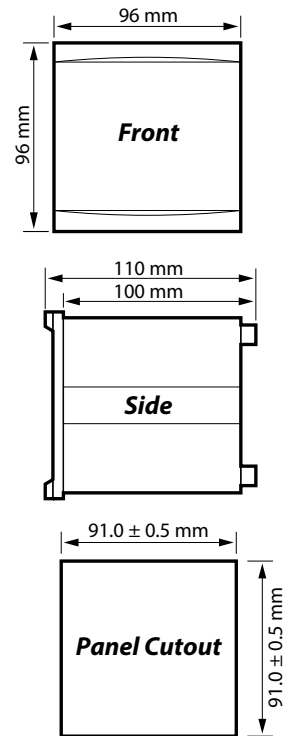
### Normal Inverse 1.3/10



### Typical Application Diagram



### Case Dimensions



### Ordering Information

MODEL	DESCRIPTION
NX1000A-240A	For 50/60 Hz system, auxiliary voltage 198 ~ 265 V AC
NX1000A-240AD	For 50/60 Hz system, auxiliary voltage 85 ~ 265 V AC or 110~340 V DC
NX1000A-150D	For 50/60Hz system, auxiliary voltage 24 ~ 150 V DC