



# NX232A

## Features

- Microprocessor based numerical relay
- Current measurement based on fundamental frequency
- Two stages settings for earth fault
- Local display of measured and set values
- Definite time for low-set and high-set
- Non-volatile fault value recording
- Programmable relay outputs
- Complies with IEC 60255 standard
- ANSI Code : 50N, 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 |

### ACCURACY

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

### INDICATORS

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

### AUXILIARY SUPPLY

|                       |                  |
|-----------------------|------------------|
| Model NX232A-240A (6) | : 198 ~ 265 V AC |
| Model NX232A-110A (6) | : 94 ~ 127 V AC  |
| Supply frequency      | : 50 or 60 Hz    |
| VA rating             | : 3 VA typical   |

### OUTPUT CONTACTS

|                          |                                       |
|--------------------------|---------------------------------------|
| Rated voltage            | : 250V AC / DC                        |
| Contact rating           | : 5 A                                 |
| Expected electrical life | : 100,000 operations at rated current |
| Expected mechanical life | : $5 \times 10^6$ operations          |

### ENVIRONMENTAL CONDITIONS

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

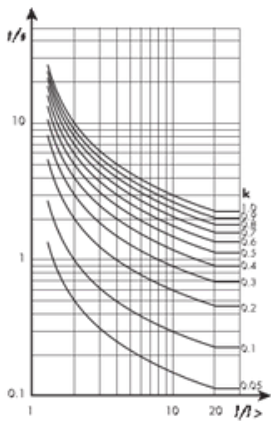
### SETTING RANGES

|                                     |                                                               |
|-------------------------------------|---------------------------------------------------------------|
| Low-set ( $I >$ )                   | : 0.1 A to 5.0 A, step 0.05 A / 2% to 100%, step 1%           |
| Low-set time multiplier ( $k t >$ ) | : 0.05 to 1.0, step 0.01                                      |
| Low-set definite time ( $t >$ )     | : 0.05 to 99 sec, step 0.01 (0.05 to 1.0) / 0.1 (1.0 to 99)   |
| High-set ( $I >>$ )                 | : 0.1 A to 50 A or disable, step 0.1 A / 2% to 1000%, step 2% |
| High-set delay time ( $t >>$ )      | : 0.05 sec to 2.5 sec, step 0.01                              |

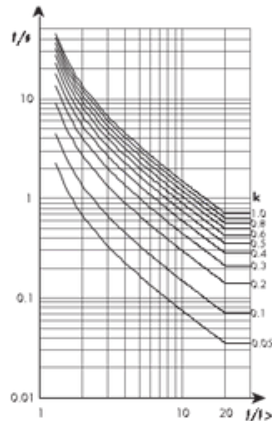
### MECHANICAL

|                      |                          |
|----------------------|--------------------------|
| Mounting             | : Panel mounting         |
| Dimension (mm)       | : 96(w) x 96(h) x 110(d) |
| Enclosure protection | : IP54 at the panel      |
| Approximate weight   | : 0.7 kg                 |

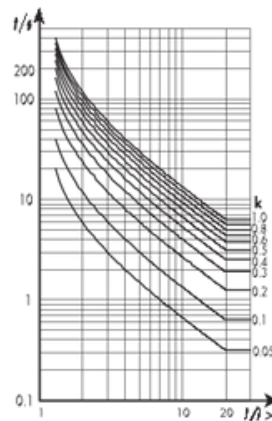
## Normal Inverse



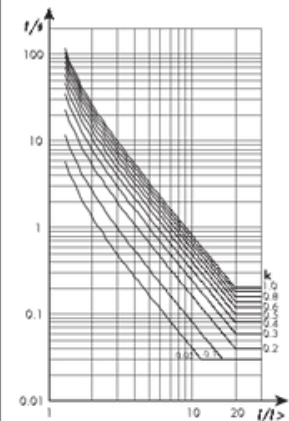
## Very Inverse



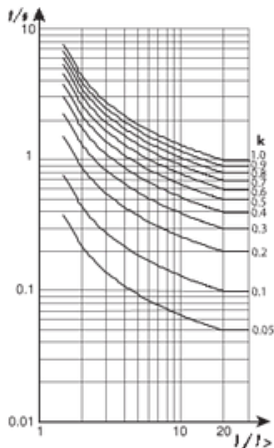
## Long Time Inverse



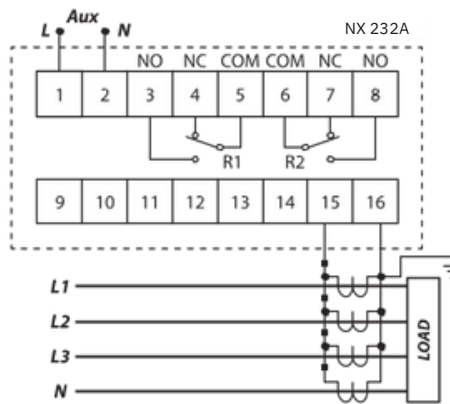
## Extremely Inverse



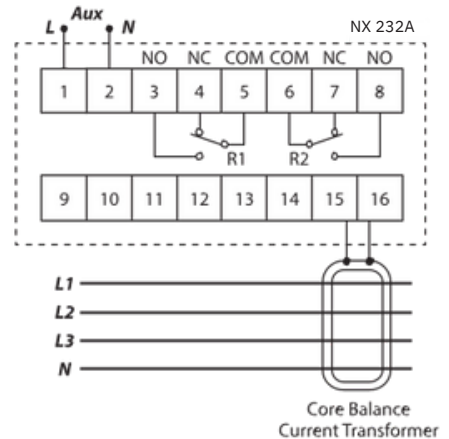
## Normal Inverse 1.3/10



## Typical Application Diagram 1



## Typical Application Diagram 2



## Ordering Information

| MODEL          | DESCRIPTION                                        |
|----------------|----------------------------------------------------|
| NX232A - 240A  | For 50 Hz system, auxiliary voltage 198 ~ 265 V AC |
| NX232A - 110A  | For 50 Hz system, auxiliary voltage 94 ~ 127 V AC  |
| NX232A - 240A6 | For 60 Hz system, auxiliary voltage 198 ~ 265 V AC |
| NX232A - 110A6 | For 60 Hz system, auxiliary voltage 94 ~ 127 V AC  |

## Case Dimensions

