

NP 3000S (IDMT)



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
- Non-volatile fault values recording
- Complies with IEC 60255 standard
- With RS485 communication

Technical Data

RATINGS

Rated current (I _n)	: 5 A
Frequency	: 50 Hz
Burden	: < 0.3 VA at I _n

AUXILIARY SUPPLY

Model NP3000	: 198 - 265 Vac / 90 - 250 Vdc
Frequency	: 50 Hz
VA rating	: 3 VA typical

ACCURACY

Protection thresholds	: ± 5%
Time delay	: ± 5% with a minimum of 50 ms

SETTING RANGES

i) Overcurrent elements

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 >)	: 0.01 sec to 20sec
High-set (I >>)	: 0.5 A to 100.0A, 10% to 2000% or disable
High-set delay time (t >>)	: 0.01 sec to 20 sec,
Setting range	: (0.00 to 10.0, step 0.05; 10.0 to 100 step 0.5)

SETTING RANGES

ii) Earth-fault elements

Low-set (I _o >)	: 0.10A to 5.0A 2%~100%
Low-set time multiplier (kto>)	: 0.01 to 1.0
Low-set definite time (to>)	: 0.01 sec to 20 sec
High-set (I _o >>)	: 0.10 A to 50 A, 2% to 1000% or disable
High-set delay time (to>>)	: 0.01 sec to 20 sec
Setting range	: (0.00 to 10.0, step 0.05; 10.0 to 100 step 0.5)

OUTPUT CONTACTS

Trip Contacts (R1 & R2)	
Rated voltage	: 240VAC / DC
Contact rating	: 5 A
Expected electrical life	: 100,000 operations at rated current
Expected mechanical life	: 5×10^6 operations

INDICATORS

Auxiliary supply	: Green indicator
Pick-up	: Red indicator
Trip	: 4-segment display and red indicators

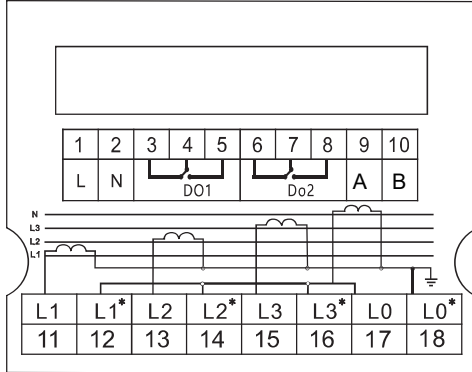
ENVIRONMENTAL CONDITIONS

Temperature	: -5°C to +55°C
Humidity	: 56 days at 93% RH and 40°C non-condensing

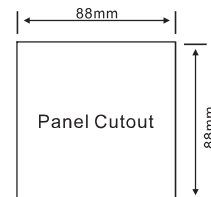
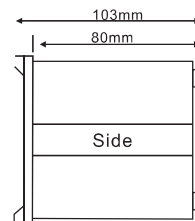
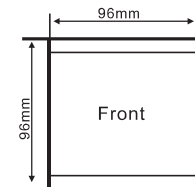
MECHANICAL

Mounting	: Panel mounting
Front panel	: Standard DIN 96mm x 96mm
Approximate weight	: 0.7kg

Combined Overcurrent & Earth Fault Relay



CASE DIMENSION



Ordering Information

MODEL	DESCRIPTION
NP3000	For 50Hz Auxiliary voltage 198-265 Vac / 90 -250 Vdc