NPM910

The optimal management of electrical power systems is based in particular on the reliability, availability and communication skills of protection, measurement and automation devices.

The NPM910 offers a modular motor protection and control solution for small and medium size motors. Optional cards (I/O, communication...) are available for more comprehensive monitoring and control applications. Up to 16 RTD signals can be connected for thermal alarming and tripping.

The NPM910 communicates using various protocols including IEC 61850 substation communication standard.

- Soft-start protection starting from 6Hz
- Star-delta started motor supervision
- 2-speed motor protection

ANSI CODES

50/51	50N /51N(S)	50H/51H /68H	46R/46L /46	87N
49M	48/14	66	37	51m
50BF /52BF				
74TC				

Our energy at your service

ice
Protection & Control

CHARACTERISTICS

Protection functions
- Three-phase overcurrent, 4 stages INST, DT or IDMT [50/51]
- Earth-fault (sensitive), 4 stages INST, DT or IDMT [50N/51N (S)]
- Harmonic overcurrent / inrush blocking, 4 stages INST, DT or IDMT [50H/51H/68H]
- Current unbalance, 4 stages INST, DT or IDMT [46/46R/46L]
- Cable end differential [87N]
- Motor thermal overload [49M]
- Motor start-up / locked rotor supervision with speed switch [48/14]
- Restart inhibit / frequent starts [66]
- Undercurrent/loss of load [37]
- Mechanical jam [51m]
- Breaker failure protection [50BF/52BF]
- Arc protection (option) [50ARC]

Measuring and monitoring
- Phase and residual currents (IL1, IL2, IL3, I01, I02)
- Current THD and harmonics (up to 31st)
- Circuit breaker wear (CBW)
- Disturbance recorder (3.2 kHz)
- Current transformer supervision (CTS)
- Trip circuit supervision [74TC]

Control
- Controllable objects: 5
- 8 setting groups

Hardware
- Current inputs: 5
- Digital inputs: 3 (standard)
- Output relays: 5+1 (standard)

Options (4 slots)
- Digital inputs optional: +8 per card
- Digital outputs optional: +5 per card (2 cards max.)
- Arc protection (12 sensors +2xHSO +BI)
- 2 x mA input + 6-8 x RTD input (2 cards max.)
- Communication media (specified below)

Event recording
- Non-volatile disturbance records: 100
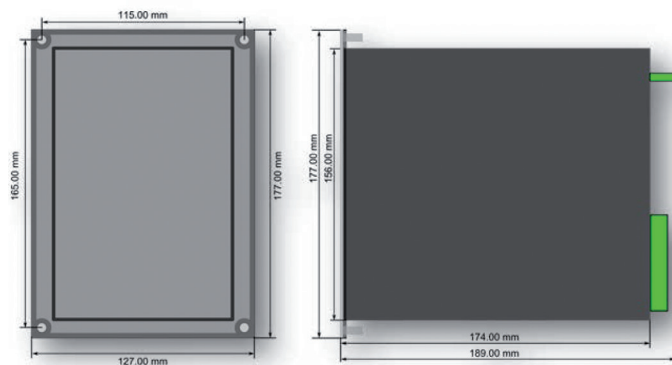- Non-volatile event records: 10000

Communication media
- RJ 45 Ethernet 100Mb (front standard)
- Double LC Ethernet 100Mb (option)
- RS232 + serial fibre PP/PG/GP/GG (option)

Communication protocols standard
- IEC 61850
- IEC 60870-5-103/101/104
- Modbus RTU, Modbus TCP/IP
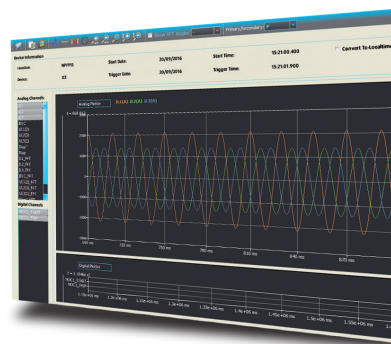- DNP 3.0, DNP 3.0 over TCP/IP
- SPA

Case
- H, W, D without terminal 177x127x174 mm
- H, W, D with terminal 177x127x189 mm (casing height 4U, width ¼ rack, depth 210 mm)
- H, W of front plate 177x127 mm
- H, W of cut out 160x106 mm

SMART9 - integrated software
Our user friendly SMART9 (Setting, Measurement, Analysis, Recording, Time-saving) configuration software helps the user get the best from NP900 series relays.