

GENERATION & NETWORK

Busbar Protection IED



NPV911

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 NPV911 offers a modular voltage protection solution for substations. Voltage and frequency protection with optional cards (I/O, communication...) and powerful logic programming possibility make NPV911 optimal for demanding load shedding or automatic transfer applications.

The NPV911 communicates using various protocols including IEC 61850 substation communication standard.



- 8 frequency stages and 8 setting groups for load shedding
- Synchrocheck for up to three circuit breakers

ANSI CODES

59	27	59N	59P/27P /47	78
81O/81U	81R			
60	74TC	25		

Our energy at your service

CHARACTERISTICS

Protection functions

- Overvoltage, 4 stages INST, DT or IDMT [59]
- Undervoltage, 4 stages INST, DT or IDMT [27]
- Zero sequence overvoltage, 4 stages INST, DT or IDMT [59N]
- Positive sequence under/overvoltage, negative sequence overvoltage, 4 stages INST, DT or IDMT [59P/27P/47]
- Vector jump [78]
- Over/under frequency, 8 stages INST or DT [810/81U]
- Rate of change of frequency, 8 stages INST or DT or IDMT [81R]

Measuring and monitoring

- Voltage measurements (UL1-UL3, U12-U31, U0, SS)
- Voltage harmonics (up to 31st)
- Disturbance recorder (3.2 kHz)
- Fuse failure (VTS)
- Trip circuit supervision [74TC]

Control

- Controllable objects: 5
- Synchrocheck [25]
- 8 setting groups

Hardware

- Voltage inputs: 4
- Digital inputs: 3 (standard)
- Output relays: 5+1 (standard)

Options (5 slots)

- Digital inputs optional: +8 per card
- Digital outputs optional: +5 per card (2 cards max.)
- 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

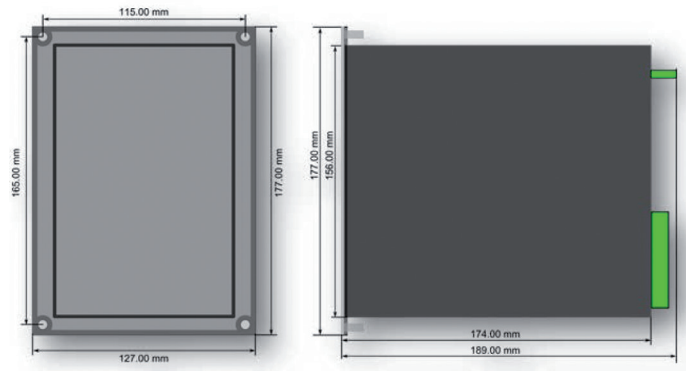
- RJ 45 Ethernet 100Mb (front standard)
- Double LC Ethernet 100Mb (option)
- RS232 + serial fibre PP/PG/GP/GG (option)

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

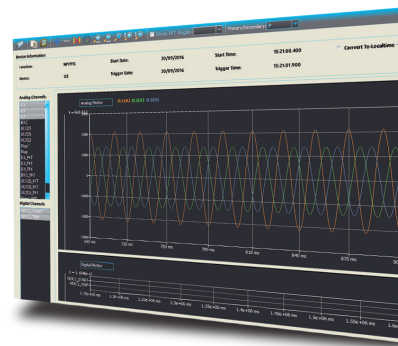
Case

- 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.



The specifications and drawings given are subject to change and are not binding unless confirmed by our specialists.



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