NPBC915

Bay Control IED

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

NPBC915 bay control IED may be applied for various types of control applications. The NPBC915 comes with full current, voltage, power and energy measurement capability and may be equipped with additional I/O depending on application needs. Easy to use and powerful logic programming expands further the application range to more demanding control needs. Optional cards (I/O, communication...) can be inserted depending on application requirements. Large freely programmable HMI display provides quick visualisation of the object, alarm and event status.

The NPBC915 communicates using various protocols including IEC 61850 substation communication standard.

- Smart grid control

RE and Data Centre recommended.

ANSI CODES

50BF /52BF	99				
21FL	60	74TC	25	79	86

CHARACTERISTICS

Protection functions
- Breaker failure protection [50BF/52BF]
- Programmable functions [99]

Measuring and monitoring
- Phase and residual currents (IL1, IL2, IL3, I01, I02)
- Voltage measurements (UL1-UL3, U12-U31, U0, SS)
- Fault locator [21FL]
- Current and voltage harmonics (up to 31st)
- Current THD
- Frequency (f)
- Power (P, Q, S, pf)
- Energy (E+, E-, Eq+, Eq-)
- Disturbance recorder: from 400 Hz to 3.2 kHz (8 to 64 samples per cycle)
- Current transformer supervision (CTS)
- Fuse failure (VTS)
- Trip circuit supervision [74TC]

Control
- Controllable objects: 10
- Synchrocheck [25]
- Autorecloser [79]
- Lock out relay [86]
- 8 setting groups

Hardware
- Current inputs: 5
- Voltage inputs: 4
- Digital inputs: 2 or 3 (standard)
- Output relays: 5+1 (standard)

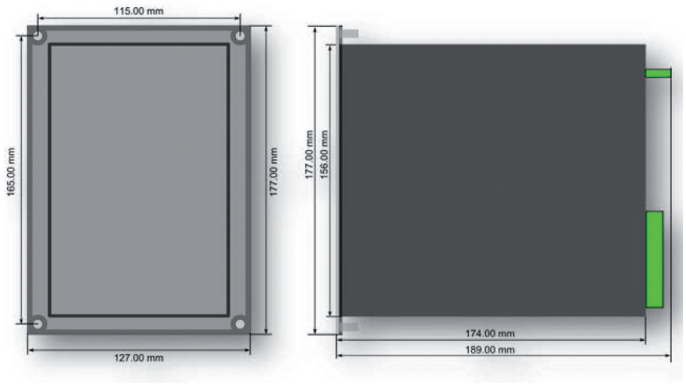
Options (3 slots)
- Digital inputs optional: +8 per card
- Digital outputs optional: +5 per card (2 cards max.)
- RTD inputs: +8 per card
- mA analog measures (1 input + 4 outputs)
- Communication medias (specified below)

Event recording
- Non-volatile disturbance records: 100
- Non-volatile event records: 10,000

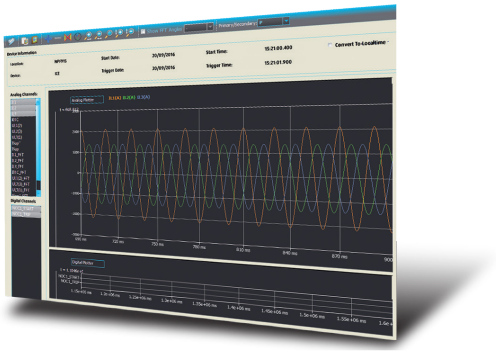
Communication medias
- RJ45 Ethernet 100Mb (rear port) + RS485
- Double LC fibre Ethernet 100Mb HSR/PRP (rear port)
- Double Ethernet RJ45 - 100 Mb HSR/PRP (rear port)
- RS232 + serial fibre PP/PG/GP/GG (option)
- Double RJ45 Ethernet 100Mb (rear port)
- Double ST fibre Ethernet 100Mb (rear port)

Communication protocols standard
- IEC 61850 (including HSR & PRP)
- IEC 60870-5-103/101/104
- Modbus RTU, Modbus TCP/IP
- DNP 3.0, DNP 3.0 over TCP/IP
- SPA

Case (dimensions without protection gasket)
- 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
- Removable protection gasket width 3 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 (connection from RJ45 Ethernet 100Mb front and rear port).



Protection & Control ice
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• ISO 19443 : 2018 • ISO 9001 : 2015 • ISO 14001 : 2015 certified •