

AQ-S255 Bay control IED



AQ-S255 bay control IED may be applied for demanding control applications. The AQ-S255 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. Up to 11 optional I/O or communication cards can be inserted depending on application requirements. Large freely programmable HMI display provides quick visualization of the object, alarm and event status. The AQ-S255 communicates using various protocols including IEC 61850 substation communication standard.

Highlights

- Bay control unit with extensive IO
- Synchrocheck for up to three circuit breakers
- Up to class 0.2S power and energy measurement accuracy

Technical Data

CONTROL

Controllable objects: 10

Synchrocheck (25)

Autorecloser (79)

8 setting groups

MEASURING AND MONITORING

Phase and residual currents (IL1, IL2, IL3, I01, I02)

Voltage measurements (UL1-UL3, U12-U31, U0, SS)

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Current and voltage THD and harmonics (up to 31st)

Frequency (f)

Power (P, Q, S, pf)

Power (P, Q, S, pf)

Power (P, Q, S, pf) and Energy (E+, E, Eq+, Eq)

Disturbance recorder (3.2 kHz)

Current transformer supervision (CTS)

Fuse failure (VTS)

Trip circuit supervision (TCS)

Event recording

Non-volatile disturbance records: 100

Non-volatile event records: 15000

I/O

Current inputs: 5

Voltage inputs: 4

Digital inputs: 3 (standard)

Output relays: 5+1 (standard)

Options (11 slots)

Digital inputs optional: +8/16/24/32/40/48/56/64/ 72/80/88

Digital outputs optional: +5/10/15/20/25

2 x mA input + 68 x RTD input

Communication media (specified below)

COMMUNICATION

RJ 45 Ethernet 100Mb (front standard)

RJ 45 Ethernet 100Mb and RS 485 (rear standard)

Double LC Ethernet 100Mb (option)

RS232 + serial fibre PP/PG/GP/GG (option)

Communication protocols

IEC 61850

IEC 608705103/101/104

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Modbus RTU, Modbus TCP/IP

DNP 3.0, DNP 3.0 over TCP/IP

SPA

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Application Drawing

