

AQ-T256 Transformer protection IED



AQ-T256 is a transformer protection IED with sophisticated and easy to use differential protection function. The AQ-T256 transformer protection IED provides for both low and high side overcurrent, earth-fault, negative sequence and two independent restricted earth-fault instances. Up to 10 optional I/O or communication cards are available for extensive monitoring and control applications. The AQ-T256 communicates using various protocols including IEC 61850 substation communication standard.

Highlights

- Large I/O capability
- Predefined or custom connection group selection
2nd and 5th harmonic blocking
- Automatic verification of connection group and nominal value settings
- Through fault and overloading statistics for preventive maintenance

Technical Data

PROTECTION FUNCTIONS

2 winding transformer differential (87T)

High/low impedance restricted earth fault / cable end differential * (87N1, 87N2)

Transformer thermal overload (49T/49RTD)

Three-phase overcurrent, 2+2 stages INST, DT or IDMT (50/51)

Earth-fault (sensitive), 3 stages INST, DT or IDMT (50/51N)

Harmonic overcurrent / inrush blocking, 4 stages INST, DT or IDMT (50/51H, 68)

Current unbalance / broken conductor, 2+2 stages INST, DT or IDMT (46/46R/46L)

Breaker failure protection (50BF/52BF)

Arc protection (option) (50ARC/50NARC)

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CONTROL

Controllable objects: 10

8 setting groups

MEASURING AND MONITORING

Event recording

Non-volatile disturbance records: 100

Non-volatile event records: 15000

I/O

Current inputs: 10

Digital inputs: 3 (standard)

Output relays: 5+1 (standard)

Options (10 slots)

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

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

Arc protection (12 sensors +2xHSO +BI)

2 x mA input + 6-8 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 60870-5-103/101/104

Modbus RTU, Modbus TCP/IP

DNP 3.0, DNP 3.0 over TCP/IP



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SPA

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Application Drawing

