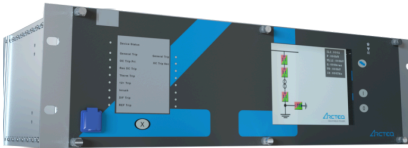


AQ-B398 Busbar Protection Device

Description

AQ-B398 comes in two variants: the C variant (AQ-B398C) is a centralized busbar protection device, while the D variant (AQ-B398D) is a main device for distributed busbar protection applications. In distributed busbar protection applications the device communicates with bay devices using the IEC 61850-9 intercommunication standard. The bay device can be any of the AQ 300 series devices that have the incorporated busbar protection bay device functionality. AQ-B398 provides a total trip time of less than 20 ms for busbar faults.



Highlights:

- Centralized busbar protection:
 - A maximum of 6 bays and 2 busbar sections in a three-phase configuration.
 - A maximum of 24 bays and 8 busbar sections in a single-phase configuration.
- Distributed busbar protection:
 - A maximum of 24 bays.
 - A synchronizing signal with 1-ms time intervals in a distributed configuration.

Technical data

PROTECTION

- Circuit breaker failure protection (CBFP; 50BF/52BF)
- AQuench arc quenching device (MV)
- Distributed busbar protection (sub-unit) (optional)

MEASURING AND MONITORING

- Number of supervised trip contacts: 8
- Current (IL1, IL2, IL3, IO)
- Voltage (U1, U2, U3, U12, U23, U31, U0) and frequency (f)
- Power (P, Q, S, pf) and Energy (E+, E-, Eq+, Eq-)
- Event recorder

HARDWARE (AQ-B398C)

Standard

- CPU module (MM/ST + RJ-45)
- Power supply module (PS + fault relay)
- Current measurement module
- Voltage measurement module
- Trip module (4 outputs)
- 12 digital inputs (3x4)
- 8 digital outputs (1x8)
- Trip module (4 outputs)
- Number of empty slots: 6

Options

- 4-channel RTD module

HARDWARE (AQ-B398D)

Standard

- CPU module (MM/ST + RJ-45)
- Power supply module (PS + fault relay)

No options

COMMUNICATION

Communication inputs

- RJ-45 100 Mbps Ethernet + MM/ST fiber optic Ethernet
- 2 x ST/MM redundant fiber optic Ethernet (optional)
- ST/MM fiber optic Ethernet and RS-485 (optional)
- LC/MM and RJ-45 (optional)
- 2 x LC/MM (optional)
- PRP/HSR (optional)

Communication protocols

- IEC 60870-5-101/104/103
- Modbus/RTU and Modbus/TCP
- DNP3.0
- IEC 61850 (optional)

SOFTWARE

- Advanced "CyberProtect" cyber security feature (optional)

