

AQ 2000 Arc quenching device - Medium Voltage



AQ 2000 arc quenching system extinguishes arcing faults within 6ms of arc initiation. The AQ 100 by Arcteq is a reliable and fast acting dedicated arc protection system providing excellent protection against arcing thermal effects by tripping the sourcing circuit breaker(s) almost instantly. When protecting against arcing fault pressure effects circuit breakers are sometimes not fast enough as the pressure wave builds up within the first 10ms of the fault.

The AQ 2000 Arc Quenching System is developed to limit the total arcing time to less than 6ms and to minimize or even eliminate the arcing fault pressure damaging effects. In most applications this will result in a calorie/cm² energy release of less than 1.

The AQ 2000 is utilized in conjunction with the AQ 100 arc protection system. In case of an arc fault the AQ 100 detects the fault, triggers the AQ 2000 arc quenching system and simultaneously trips the fault feeding circuit breaker(s). The AQ 2000 creates a three-phase to ground low-impedance parallel path for fault current to flow thus extinguishing the arc fault. The total arcing time is less than 6ms.

Technical Data

AQ 2000Q – QUENCHING DEVICE

Rated voltage: up to 17.5kV Short-circuit withstand: 40kA for 1 second BIL: 38/95kV Peak current: 100kA Electric life: 2 operations at 40kA, 100ms each Mechanical life: 12 operations Total system operation time 6ms*

AQ 2000T – CAPACITIVE TRIGGER DEVICE

Power supply: 24Vdc Rated voltage: 400Vdc Trigger current pulse: 4000A

Application Drawing

