

A SYSTEM SOLUTION FOR CONTROL OF EXCESSIVE FAULT CURRENTS

For Systems Rated 2.8kV-38kV and continuous currents upto 5000A



Current Limiting Protector







· System Upgrade -

without replacing under-rated equipment such as circuit breakers, reclosers, switches or bus.

· Reactor Bypass -

to eliminate costly operating losses and eliminate voltage regulation problems.

· Transformer Protection -

to minimize damage by reducing fault energy.

· Cogeneration-

to limit contribution to the system while protecting your cogenerator investment.

· Lower Breaker Ratings -

to reduce the cost of full rated equipment in new installations while improving protection.

· Close Bus Ties -

without exceeding equipment ratings.

Thermal | Nuclear | Oil & Gas | Captive Power | Hydro | Wind | T&D

Metals | Petrochemical | Mining | Chemical | Cement | Paper

For any queries, please write to fcl@aartechsolonics.com or contact us at our Registered Office



AARTECH SOLONICS LIMITED

Registered Office:
"Ashirwad" E-2/57,
Arera Colony, Bhopal, M.P.
INDIA 462016
Tel: +91-755-2463593/4276335
Mob: +91-9993091168

Unit#1 - Mandideep: 35-A/36 Sector-B Industrial Area, Mandideep Dist. Raisen, M.P. INDIA 462046 Tel: +91-7480-233020 Unit#2 - Parwanoo : Khasra No. 311, Near Him Cold Storage Sector-1A, Parwanoo Dist. Solan, H.P. INDIA 173220

Email: info@aartechsolonics.com URL: http://www.aartechsolonics.com

CLIP OPERATION

A large section copper conductor carries the continuous current. Upon occurrence of a short circuit current, a sensing unit actuates a linear cutting device. This segments the copper conductor into a number of fractional lengths, and bends them upward, thereby forming multiple gaps. Arcs form at these gaps. The resultant arc voltage across these gaps causes transfer of the short circuit current to a small, parallel current limiting fuse. This fuse then melts and clears the circuit, as would a conventional current limiting fuse. Current extinction occurs in the first half loop, and limitation prior to the first peak. Reliable interruption is assured without venting of ionized gases.

Note the multiple breaks in the main current path to provide faster commutation of fault current to the current limiting fuse element, while providing improved dielectric withstand.

SERVICE LIFE

Interrupters are designed for a 20 year in-service life. There is no need to replace or rebuild repeatedly without ever operating.

FEATURES

High Continuous Current - upto 5000A Electronically Triggered - Permits breakers to work up to their ratings.

Redundant Sensing - Provides backup sensing Very High Interrupt Ratings - Upto 120kA rms symmetrical.

Wide Environmental Range - Indoor/Outdoor Applications

Low Fault Energy Let-through - Reduce Damage

ELECTRICAL RATINGS

Voltage, kV......2.8 - 38kV* Continuous current, A, rms, sym......Up to 5000** Interrupting rating,

A, rms, sym.....Up to 120kA**
Peak let-thru current,

C 401 A

@ 40kA rms, sym.

@14kA trip level21kA

Available trip levels

kA instantaneousUp to 42kA

- * Consult factory for 600V and 72.5kV.
- ** Consult factory for higher ratings.





