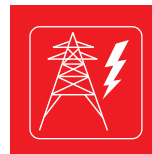


**Power
Utility**

Substation Protection & Control





Trip - Auxiliary - Supervision Relays

High performance, reliable electro-mechanical trip, auxiliary and supervision relays for power utility protection and control applications.



Test Blocks

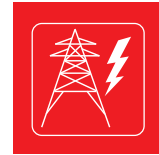
Quick and safe testing access point for protection metering and control panels. Safely isolate, test and verify protection, metering and control schemes.



Arc Fault Protection

Fast acting protection against arcing faults in metal clad air insulated switchgear. Suitable for medium and low voltage applications





Platform summary page

D platform

Compact heavy duty relays for demanding applications, switching of AC&DC voltages, resistive and/or inductive loads.



Delta platform

Compact trip, auxiliary and supervision relays for demanding power utility applications, switching of AC&DC voltages, resistive and/or inductive loads.



Trip Circuit Manager

Multifunction trip relay incorporating supervision functions. Robust contact rating relays for demanding power utility applications.



Alpha platform

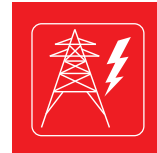
New technology electro-mechanical trip, auxiliary and supervision relays for power utility protection and control applications



6R Matrix platform

Traditional electro-mechanical trip, auxiliary, and supervision relays for power utility protection and control applications.





D platform

Compact heavy duty relays for demanding applications, switching of AC&DC voltages, resistive and/or inductive loads.

D-R4

High speed trip relays

- < 7 ms contact pull-in
- 4 C/O contacts
- High DC breaking capacity



D

High performance auxiliary relays

- 4 C/O contacts
- High DC breaking capacity



BD

High performance auxiliary latching relays (lockout)

- 3 C/O + 1 N/C contacts
- High DC breaking capacity



KDN

High performance auxiliary latching relays (lockout)

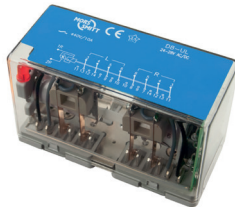
- 8 C/O contacts
- High DC breaking capacity



D8-R

High speed trip relays

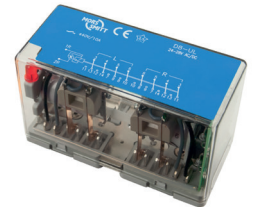
- < 7 ms contact pull in
- 7 C/O contacts
- High DC breaking capacity



D8

High performance auxiliary relays

- 8 C/O contacts
- High DC breaking capacity



Sockets

- Sockets for D platform plug-in relays
- Flexible terminal and mounting options



Trip - Auxiliary - Supervision



Power Utility

Delta platform

Compact trip, auxiliary and supervision relays for demanding power utility applications, switching of AC&DC voltages, resistive and/or inductive loads.

TRD4

High speed trip relays

- < 10 ms operate time
- High burden
- 4 contacts (magnetic blow-out standard)
- Self-reset and latching contact versions (lockout)
- Hand reset mechanical flag
- Surface or 35 mm rail mount



ARD4

High performance auxiliary relays

- < 25 ms operate time
- 4 contacts (magnetic blow-out standard)
- Self-reset and latching contact versions (lockout)
- Hand reset mechanical flag
- Surface or 35 mm rail mount



XRD

Supervision relays

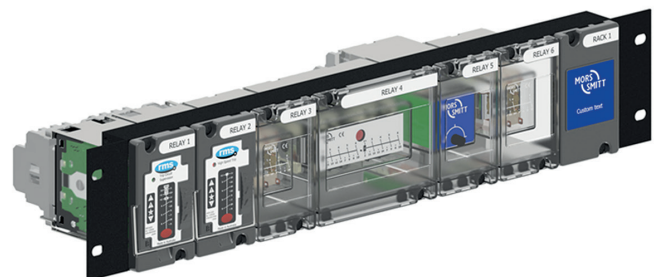
- Trip supply supervision
- Trip circuit supervision
- Mechanical hand reset flag versions
- Self-reset LED indication versions
- Surface or 35 mm rail mount

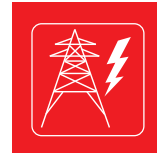


Delta Flex

Modular relay mounting system

- Suits Delta platform
- Suits D relay platform





Trip Circuit Manager (TCM)

Multifunction trip relay incorporating supervision functions. Robust contact rating relays for demanding power utility applications.

TCM

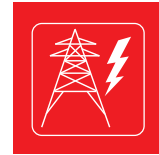
High speed trip relays

- < 10 ms operate time
- 4, 8, 12 or 16 contacts (magnetic blowouts standard)
- Self-reset and latching contact versions (lockout)
- High burden or low burden versions
- Hand reset LED trip indicator
- Integrated trip relay supervision
- Integrated trip supply supervision
- Optional trip circuit supervision

Three high speed trip functions:

- TCM-1 SR contacts + HR flag button + ER flag input
- TCM-2 ER contacts and Flag + HR contacts and flag button (lockout)
- TCM-3 ER contacts + HR contacts and flag button (lockout)





Alpha platform

New technology electro-mechanical trip, auxiliary and supervision relays for power utility protection and control applications.

TR High speed trip relays

- < 8 ms operate time
- User selectable high or low burden
- 5 or 12 heavy duty contact versions
- Self-reset and latching contact versions (lockout)
- Various mechanical flag options
- Panel or rack mounting



AR High performance auxiliary relays

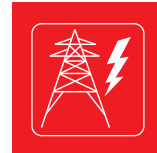
- < 30 ms operate time
- 5 or 12 heavy duty contact versions
- Two element version with 5 contacts per element
- Self-reset and latching contact versions (lockout)
- Various mechanical flag options
- Panel or rack mounting



XR Supervision relays

- Trip supply supervision
- Trip circuit supervision
- Trip Relay supervision
- 5 heavy duty contacts
- Various mechanical flag options
- Panel or rack mounting





6R Matrix platform

Traditional electro-mechanical trip, auxiliary, and supervision relays for power utility protection and control applications.

6RJ

High speed trip relays

- < 10 ms operate time
- High or low burden models
- 5, 10 or 20 heavy duty contact versions
- Self-reset and latching contact versions (lockout)
- Hand reset mechanical flag
- Traditional construction
- Panel or rack mounting



6RA

High performance auxiliary relays

- < 30 ms operate time
- 6 heavy duty contacts
- Two element version with 6 contacts per element
- Self-reset and latching contact versions (lockout)
- Hand reset mechanical flag
- Traditional construction
- Panel or rack mounting



6RX

Supervision relays

- Trip supply supervision
- Trip circuit supervision
- Trip Relay supervision
- 2 C/O heavy duty contacts
- Hand reset mechanical flag
- Traditional construction
- Panel or rack mounting





Quick and safe testing access point for protection, metering and control panels.
Safely isolate, test and verify protection, metering and control schemes.

4M200

14 Circuit test block system

- Compatible with industry standard 14 circuit test blocks
- Compatible with industry standard test plugs
- Finger safe test plug
- Supplied with finger safe shorting leads
- Panel or rack mounting



4M300

14 Circuit test block system

- Economical 14 test circuit test block
- Finger safe test plug
- Supplied with finger safe shorting leads
- Panel or rack mounting



4M400

14 Circuit test block system

- Automatic CT shorting inside the test block
- Staged isolation
- Finger safe test plug
- One test plug suits all 4M400 variants
- Panel or rack mounting



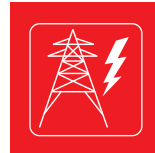
4M402

28 Circuit test block system

- Automatic CT shorting inside the test block
- Staged isolation
- Finger safe test plug
- One test plug suits all 4M402 variants
- Panel or rack mounting



Arc Fault Protection



Power
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Fast acting protection against arcing faults in metal clad air insulated switchgear.
Suitable for medium and low voltage applications.

1S20 2 and 3 point sensor arc fault monitor

- One, two or three arc sensors
- Used with 1S30 optical point arc sensors
- 2 trip contacts
- Integrated arc sensor supervision



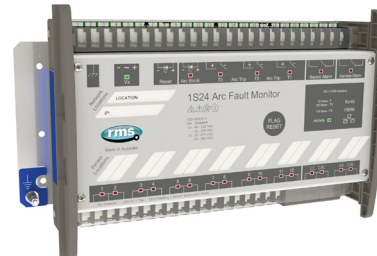
1S23 1 and 2 point sensor arc fault monitor

- 1 or 2 arc sensor input versions
- Used with 1S30 optical point arc sensors
- 1 output makes any relay arc fault protection ready
- Integrated arc sensor supervision



1S24 16 point sensor arc fault monitor 12 point & 2 linear sensor arc fault monitor

- 16 arc sensor inputs
- Used with 1S30 optical point arc sensors
- Optional 2 x 1S40 optical linear arc sensor inputs
- 3 High Speed Trip outputs
- Integrated arc sensor supervision

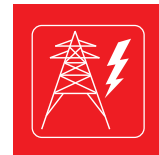


1S25 8 point sensor arc fault monitor

- Up to 8 arc sensors
- Used with 1S30 optical point arc sensors
- 9 trip contacts
- Integrated arc sensor supervision



Arc Fault Protection



Power
Utility

Fast acting protection against arcing faults in metal clad air insulated switchgear.
Suitable for medium and low voltage applications.

1S26

8 point sensor arc fault monitor with current check

- Up to 8 arc sensors
- Integrated high speed current check
- Used with 1S30 optical point arc sensors
- 9 trip contacts
- Integrated arc sensor supervision



1S27

4 point sensor arc fault monitor 4 point & 1 linear sensor arc fault monitor

- Up to 4 point arc sensors and 1 linear sensor
- Used with 1S30 optical point arc sensors
- Optional 1S40 optical linear arc sensor input
- 4 trip contacts
- Integrated arc sensor supervision



1S30

Point sensor

- Single or dual detectors
- Through hole or surface mount
- 6 meter and 20 meter cable lengths
- Supervised by the connected arc fault monitor



1S40

Linear sensor

- Linear Arc Sensor to provide coverage of large volumes
- Up to 35 meter detector fibre length
- Up to 40 meter black link fibre length
- Supervised by the connected arc fault monitor





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