

PROTECTION RELAY

Salient Features

- Plug-in design for simple mounting and easy checking.
- Minimum maintenance.
- Quick response time.
- Compact and lightweight design.
- Rugged construction with proven performance under varying condition.
- Adjustable tripping current/voltage value as per requirement.
- High insulation level.
- High repeatability at the set value.
- High mechanical and electrical endurance.

Types

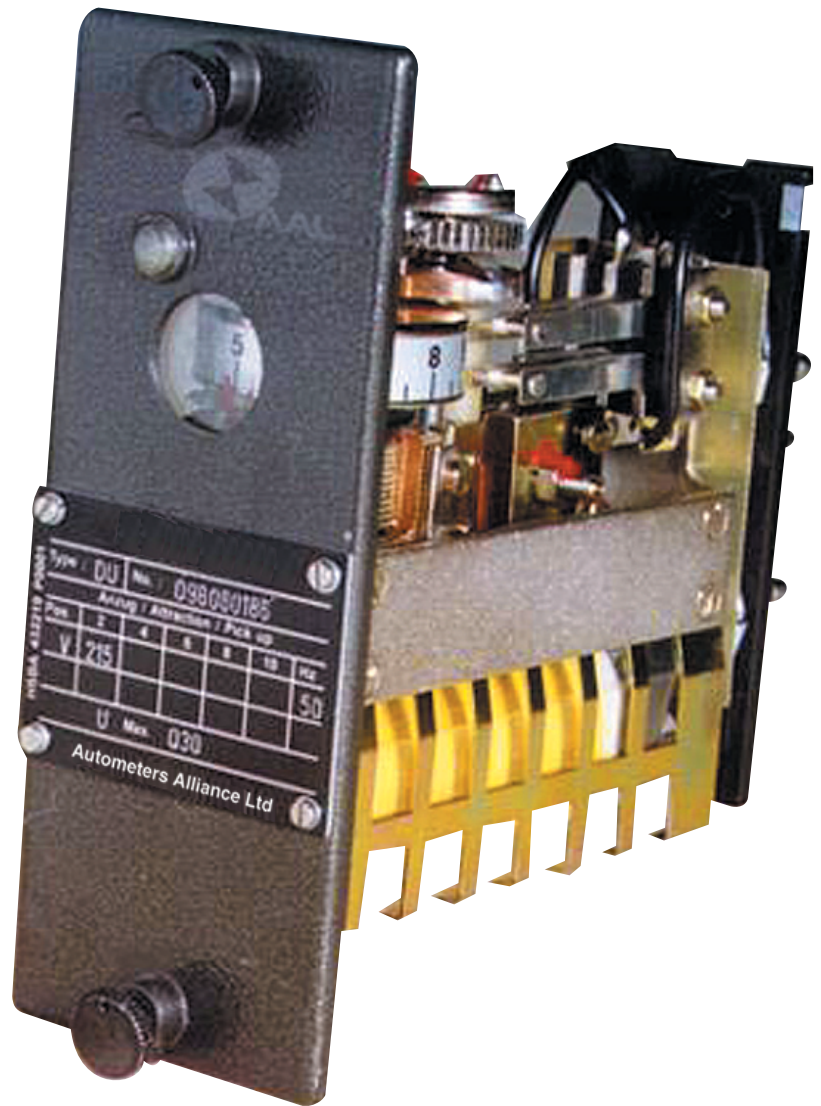
Current Operated (DI) Relays: QLM, QRSI, QE, QF, QLA and MCR relays.

Voltage Operated (DU) Relays: QOP, QOA and Q30 relays, QSIT.

Applications

The relays are designed for protecting electric locomotive equipments & circuits:

- Main transformer against overloading.
- Excitation windings of traction motors and rheostatic braking resistance against over current.
- Auxiliary equipments against overloading.
- Silicon Rectifier against overloading.
- Main power circuit and auxiliary circuit against earth fault.
- Locomotive's electrical equipment against drop of OHE voltage below minimum value.



Autometers Alliance Ltd offers top of the line Protection Relays suitable for electric traction vehicles. Designed to withstand extremes of mechanical and thermal stresses, the product has a proven track record for reliability.

PROTECTION RELAY

A. Current Operated (DI) Relays

Technical Specifications

Designation		QLM	QRSI	QE	QF	QLA	MCR
Set value customised		3.75-9.9A AC, 50Hz	3.75-9.9A AC, 50Hz	3.75-9.9A AC, 50Hz	3.75-9.9A DC	3.75-9.9A AC, 50Hz	2.1-7.5A AC, 50Hz
No. of contacts customised		2 NC/2NO/ 1NC+ 1NO	2 NC/2NO/ 1NC+ 1NO	2 NC/2NO/ 1NC+ 1NO	2 NC/2NO/ 1NC+ 1NO	2 NC/2NO/ 1NC+ 1NO	2 NC/2NO/ 1NC+ 1NO
Coil resistance at 20°C		30m Ω \pm 8%	30m Ω \pm 8%	30m Ω \pm 8%	30m Ω \pm 8%	30m Ω \pm 8%	89.5m Ω \pm 8%
Pick-up time		<70msec	<70msec	<70msec	<70msec	<70msec	<70msec
Dropout time			<60msec	<60msec	<60msec	<60msec	
Contact rating	Making current at 110v (DC)	2A	2A	2A	2A	2A	2A
	Breaking Current at 220v (AC)	2A	2A	2A	2A	2A	2A
Di-electric 50Hz, AC	Contact to earth	2.0kV	2.0kV	2.0kV	2.0kV	2.0kV	2.0kV
	Coil to contact and earth	2.0kV	2.0kV	2.0kV	2.0kV	2.0kV	2.0kV
	Adjacent Contact	1.5kV	1.5kV	1.5kV	1.5kV	1.5kV	1.5kV
Weight (approx.)		1.2kg	1.2kg	1.2kg	1.2kg	1.2kg	1.2kg

B. Voltage Operated (DU) Relays

Designation		QOP	QOA	Q30	QSIT
Set value		70-125 V DC	70-125 V DC	290-500 V AC, 50Hz	70-125 VDC
No. of contacts customised		2 NC/2 NO/ 1 NC+1 NO	2 NC/2 NO/ 1 NC+1 NO	2 NC/2 NO/ 1 NC+1 NO	2 No + 2NC
Coil resistance at 20°C		1800 Ω \pm 8%	1800 Ω \pm 8%	1180 Ω \pm 8%	1800 Ω \pm 8%
Pick-up time		<70msec	<70msec	<70msec	<70msec
Dropout time		<60msec	<60msec	<60msec	<60msec
Contact rating	Making current at 110v (DC)	2A	2A	2A	2A
	Breaking current at 220v (AC)	2A	2A	2A	2A
Di-electric 50Hz, AC	Contact to earth	2.0 kV	2.0 kV	2.0 kV	2.0kV
	Coil to contact and earth	4.8 kV	4.8 kV	3.0 kV	3.0kV
	Adjacent contact	1.5 kV	1.5 kV	1.5 kV	1.5kV
Weight (approx.)		1.2 kg	1.2 kg	1.2 kg	1.3kg



Autometers Alliance Ltd

C-63, Sector-57, Noida - 201 307, India

Tel.: +91 (0) 120-6770100

E-mail: info@autometers.com

Website: www.autometers.com