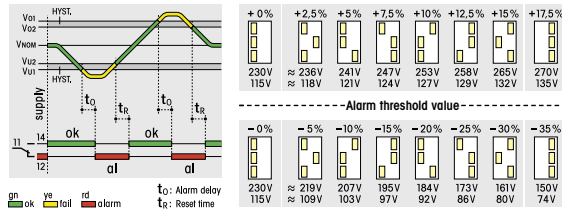


Type: MV53 /... V

Voltage monitoring relay with over- and under voltage thresholds. Adjustable alarm delay. Alarm LED. Threshold setting by DIP switch. 1 change over alarm contact 6 A 250 V. Very suitable for protecting of contactor coils against under voltage (under voltage → low Z of coil → over current → defective).

Monitoring function

Threshold settings in % of nominal voltage. Do not set 0 % for both thresholds.



Measuring circuit data

Nominal voltage V_{nom} , type	AC 115 V / AC 230 V
Over voltage setting range (2.5 % steps)	0 ... 17.5 % from V_{nom}
Under voltage setting range (5 % steps)	0 ... - 35 % from V_{nom}
Frequency range	45 ... 65 Hz
Accuracy	± 3 %

Time data

Fault detection time	100 ms
Alarm delay adjustment range	25 ms ... 2.5 s
Voltage failure buffering	≥ 10 ms

Contacts

Type / Material	1 CO, micro disconnection / AgNi
Rated operational current	6 A
Max. inrush current (10 ms)	15 A
Max. switching voltage	250 V
Max. AC load AC-1 (Fig.1)	1500 VA
Max. DC load DC-1, 24 V / 220 V (Fig.2)	120 W / 65 W
Recommended min. contact load	100 mA / 5 V

Power supply

	AC 115 V	AC 230 V
Nominal voltage	115 V	230 V
Operating voltage range	65 ... 135 V	130 ... 270 V
Power consumption	2.2 W	2.2 W
Frequency range	45 ... 65 Hz	45 ... 65 Hz
Surge immunity EN 6100-4-5	2 kV	2 kV

Insulation

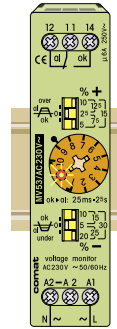
Test voltage open contact	1 kVrms 1 minute
Test voltage between contact and power supply	2 kVrms 1 minute

General specifications

Ambient temperature storage /operation	-40 ... +85 °C / -25 ...+60 °C
Mechanical life of contacts	20 x 10 ⁶ operations
Conductor cross section	Stranded wire 2.5 mm ² , 2 x 1.5 mm ²
Ingress protection degree	Housing: IP 40, terminals: IP 20
Max. Screw torque	0.4 Nm
Housing material	Lexan
Weight	80 g

Standard types

AC 115 50 / 60 Hz	MV53/AC115V
AC 230 50 / 60 Hz	MV53/AC230V



Connection diagram

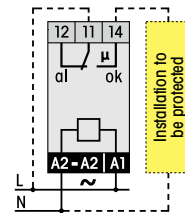


Fig.1 Contact endurance

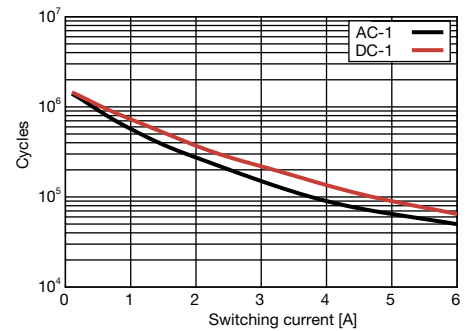
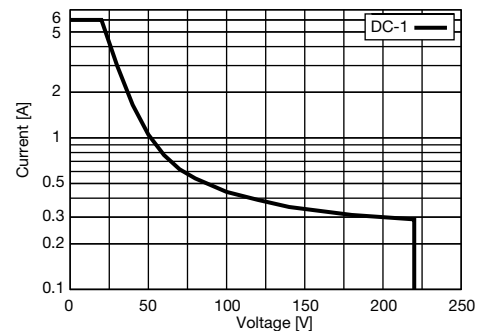
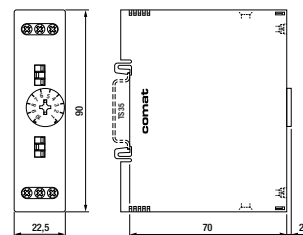


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

