

High Voltage Relay

RL 42-L

The RL 42-L (L = low current) High Voltage Relay was developed on the basis of the tried-and-tested RL 42 type. During development, particular emphasis was placed on the lowest possible power consumption. The Coil Current of the low current version is only approx. 30% compared to conventional High Voltage Relays.

Further advantages resulting from this are lower power loss and less heat with large relay matrices. The coil control works

with constant current - independent of the control voltage. The new RL 42-L High Voltage Relay requires just 1.7 watts.

Electromechanical relays for system and control cabinet construction have proven themselves thousands of times over. To protect the user from unintentional, dangerous contact with live conductors, SPS electronic has developed the DK 21 contact protection. This can be plugged onto existing relays and removed just as easily if required.

		RL 42-L
Contacts		double pole double throw
Field Coil	Coil Voltage	24 VDC
	Holding Current	0.09 A (20 °C / 68 °F)
	Inrush Current (first 100 ms)	0.34 A
Coil Resistance		115 Ω (20 °C / 68 °F)
Status Indication		LED
Connections	Switching Circuits	flat plug (6.3 mm l 0.25 in)
	Field Coil	flat plug (4.8 mm l 0.19 in)
Switching Capacity		max. 5000 VA (ohmic load)
Test Voltage	Contact / Field Coil	12000 VDC
	Contact Set 11 / Contact Set 21	8000 VDC
Switching Voltage max.		6000 VAC
Switching Current		max. 10 AAC
Continuous Current		max. 30 AAC / DC
Transition Resistance		< 30 MΩ
Switching Frequency		max. 3 / s
Mechanical Switching Cycles		> 4 x 10 ⁶
B10d Value	I ≤ 10% I max	> 2 x 10 ⁶
Vibration Resistance	10 - 55 Hz/g	5
Shock Strength	g - 11ms	5
Carrier Material		PBT GF30
Protection System		IP 20
Fastening		Top rail (via Mounting Clip)
Accessories		Mounting Clip MC 22, Contact Protection DK 21
Temperature	Storage / Operating Temperature	-25 °C - 40 °C / 5 °C - 55 °C
		-13 °F - 104 °F / 41 °F - 131 °F
Dimensions and Weight (approx.)	Height	55 mm l 2.2 in
	Width	78 mm l 2.2 in
	Depth	48 mm l 1.9 in
	Weight	300 g / 0.66 lbs