

# High Voltage Relay

## RL 42-L

The RL 42-L (L = Low Current) High Voltage Relay is based on the proven RL 42 design and has been specifically developed for minimal power consumption. The coil current of the low-current version is approximately 30% of that required by conventional high-voltage relays.

As a result, the relay offers reduced power loss and lower heat generation, particularly in large relay matrices. The coil is driven by a constant-current control, independent of the control voltage, and requires only 1.7 W of power.

Proven electromechanical relay technology ensures reliable performance for system integration and control cabinet applications.



		High Voltage Relay RL 42-L
<b>Contacts</b>		double pole double throw
<b>Field Coil</b>	Coil Voltage Holding Current Inrush Current (first 100 ms)	24 VDC 0.09 A (20 °C / 68 °F) 0.34 A
<b>Coil Resistance</b>		115 Ω (20 °C / 68 °F)
<b>Status Indication</b>		LED
<b>Connections</b>	Switching Circuits Field Coil	flat plug (6.3 mm I 0.25 in) flat plug (4.8 mm I 0.19 in)
<b>Switching Capacity</b>		max. 5000 VA (ohmic load)
<b>Test Voltage</b>	Contact / Field Coil Contact Set 11 / Contact Set 21	12000 VDC 8000 VDC
<b>Switching Voltage max.</b>		6000 VAC
<b>Switching Current</b>	AC DC	max. 10 AAC max. 40 mADC @ 1000 V max. 15 mADC @ 3000 V max. 8 mADC @ 6000 V
<b>Continuous Current</b>		max. 30 AAC / DC
<b>Transition Resistance</b>		< 30 MΩ
<b>Switching Frequency</b>		max. 3 / s
<b>Mechanical Switching Cycles</b>		> 4 x 10 <sup>6</sup>
<b>B10d Value</b>	I ≤ 10% I max	> 2 x 10 <sup>6</sup>
<b>Vibration Resistance</b>	10 - 55 Hz/g	5
<b>Shock Strength</b>	g - 11ms	5
<b>Carrier Material</b>		PBT GF30
<b>Protection System</b>		IP 10
<b>Fastening</b>		Top-hat rail (via mounting clip MC22)
<b>Accessories</b>		Mounting Clip MC 22, Contact Protection DK 21
<b>Temperature</b>	Storage / Operating Temperature	-25 °C - 40 °C / 5 °C - 55 °C -13 °F - 104 °F / 41 °F - 131 °F
<b>Dimensions and Weight (approx.)</b>	Height Width Depth Weight	55 mm I 2.2 in 79 mm I 3.1 in 48 mm I 1.9 in 300 g / 0.66 lbs