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
Contacts		double pole double throw
Field Coil	Coil Voltage Holding Current Inrush Current (first 100 ms)	24 VDC 0.09 A (20 °C / 68 °F) 0.34 A
Coil Resistance		115 Ω (20 °C / 68 °F)
Status Indication		LED
Connections	Switching Circuits Field Coil	flat plug (6.3 mm I 0.25 in) flat plug (4.8 mm I 0.19 in)
Switching Capacity		max. 5000 VA (ohmic load)
Test Voltage	Contact / Field Coil Contact Set 11 / Contact Set 21	12000 VDC 8000 VDC
Switching Voltage max.		6000 VAC/DC
Switching Current	AC	max. 10 AAC
	DC	max. 40 mADC @ 1000 V max. 15 mADC @ 3000 V max. 8 mADC @ 6000 V
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 10
Fastening		Top-hat rail (via mounting clip MC22)
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 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