

360038	Eaton Moeller series HLR Solid-state relay, 1-phase, 20 A, 230 - 230 V, DC	
	Eaton Moeller series HLR solid state relay	
General specifications	Product Name	Eaton Moeller series HLR solid state relay
	Catalog Number	360038
	Model Code	HLR15/1(DC)230V
	EAN	4,01508E+12
	Product Length/Depth	103.5 mm
	Product Height	110 mm
	Product Width	17.8 mm
	Product Weight	0.205 kg
	Compliances	CE Marked RoHS Compliant
	Certifications	CE UL 508 EAC
Features & Functions	Features	Modular version
	Functions	Switching at zero-crossing
	Electrical connection type for auxiliary- and control-current circuit	Screw connection
	Electrical connection type of main circuit	
General	Degree of protection	IP20
	Frequency rating	45 Hz - 65 Hz
		Mount device in specified orientation and do not obstruct the heatsink
	Mounting position	
	Number of phases	1
	Number of pilot lights	
	Overvoltage category	III
	Pollution degree	2
	Rated impulse withstand voltage (Uimp)	6 kV (1.2/50 µs)
	Series	HLR
	Shock resistance	15/11 g/ms (according to EN 50155, EN 61373)
	Type	Solid-state relay
		2 g/axis (2-100 Hz, IEC 60068-2-6, EN 50155, EN 61373)
	Vibration resistance	
	Voltage type	DC
		0 - 1000 m (Above 1000 m derate linearly by 1% of FLC per 100 m up to a maximum of 2000 m)
Climatic environmental conditions	Altitude	
	Ambient storage temperature - min	-40 °C
	Ambient storage temperature - max	100 °C
	Climatic proofing	95% relative humidity non-condensing at 40°C
	Operating temperature - min	
	Operating temperature - max	80 °C
Electromagnetic compatibility	Air discharge	8 kV (according to IEC/EN 61000-4-2) Main: 2 kV, 5 kHz PC 1 (according to IEC/EN 61000-4-4) Control: 1 kV, 5 kHz PC 1 (according to IEC/EN 61000-4-4)
	Burst Impulse	
	Contact discharge	4 kV (according to IEC/EN 61000-4-2)
		10 V/m, 80 - 1000 MHz and 1.4 - 2.0 GHz, PC 1
	Electromagnetic fields	3 V/m, 2.0 - 2.7 GHz, PC 1
		10 V/m, 0.15 - 80 MHz, PC 1 (according to IEC/EN 61000-4-6)
	Immunity to line-conducted interference	
	Radio interference class	Class A

Electrical rating	Operating voltage - max.	230 V
	Operating voltage - min.	
	Rated operational current (Ie) at AC-1	12:00 am
	Rated operational current (Ie) at AC-3	
	Rated operational current (Ie) at AC-51	20 A
	Rated operational current (Ie) at AC-53A	5:00 am
	Rated operational current (Ie) at AC-53B	
	Rated operational voltage (Ue) at AC - min	
	Rated operational voltage (Ue) at AC - max	
	Rated conditional short-circuit current, type 1, 600 Y/347 V	100 kA
Short-circuit rating	Rated conditional short-circuit current (Iq), type 2, 230 V	
	Rated conditional short-circuit current (Iq), type 2, 380 V, 400 V, 415 V	
Control circuit	Delay time	1/2 period + 500 microseconds at 24 V DC
	Drop-out time	
	Drop-out voltage	1 V DC
	Input current	10.3 mA at 24 V DC
	Pick-up voltage	3 V DC
	Rated control supply voltage (Us) at AC, 50 Hz - min	0 V
	Rated control supply voltage (Us) at AC, 50 Hz - max	
	Rated control supply voltage (Us) at AC, 60 Hz - min	
	Rated control supply voltage (Us) at AC, 60 Hz - max	
	Rated control supply voltage (Us) at DC - min	3 V
	Rated control supply voltage (Us) at DC - max	32 V
Motor rating	Horsepower	1 HP (230 V), 3 HP (480 V), 3 HP (600 V)
Design verification	Rated operational power at 220/230 V, 50 Hz	0.37 kW
	Rated operational power at 400 V, 50 Hz	0.75 kW
	Equipment heat dissipation, current-dependent	
	Pvid	21 W
	Heat dissipation per pole, current-dependent	
	Pvid	
	Rated operational current for specified heat dissipation (In)	
	Static heat dissipation, non-current-dependent	
	Pvs	0 W
	10.2.2 Corrosion resistance	Meets the product standard's requirements.

10.2.3.1 Verification of thermal stability of enclosures	
10.2.3.2 Verification of resistance of insulating materials to normal heat	
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	
10.2.4 Resistance to ultra-violet (UV) radiation	Please enquire
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	
10.2.7 Inscriptions	
10.3 Degree of protection of assemblies	
10.4 Clearances and creepage distances	
10.5 Protection against electric shock	
10.6 Incorporation of switching devices and components	
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	
10.9.2 Power-frequency electric strength	
10.9.3 Impulse withstand voltage	
10.9.4 Testing of enclosures made of insulating material	
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.11 Short-circuit rating	
10.12 Electromagnetic compatibility	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
10.13 Mechanical function	
IL034109ZU2021_09.pdf	
Wed Feb 23 2022	

Installation instructions
Date