360045	**Eaton Moeller series HLR Solid-state relay, 1-phase, 25 A, 600 - 600 V, AC/DC**	
General specifications	Product Name	Eaton Moeller series HLR solid state relay
	Catalog Number	360045
	Model Code	HLR25/1(AC)600V
	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
	Mounting position	Mount device in specified orientation and do not obstruct the heatsink
	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
	Vibration resistance	2 g/axis (2-100 Hz, IEC 60068-2-6, EN 50155, EN 61373)
	Voltage type	AC/DC
Climatic environmental conditions	Altitude	0 - 1000 m (Above 1000 m derate linearly by 1% of FLC per 100 m up to a maximum of 2000 m)
	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)
	Burst Impulse	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)
	Contact discharge	4 kV (according to IEC/EN 61000-4-2)
	Electromagnetic fields	10 V/m, 80 - 1000 MHz and 1.4 - 2.0 GHz, PC 1 3 V/m, 2.0 - 2.7 GHz, PC 1
	Immunity to line-conducted interference	10 V/m, 0.15 - 80 MHz, PC 1 (according to IEC/EN 61000-4-6)
	Radio interference class	Class A
Terminal capacities	Terminal capacity (flexible with ferrule)	Main: 1 x 1-4 mm², 2 x 1-4 mm² Control: 1 x 0.5-2.5 mm², 2 x 0.5-2.5 mm²
	Terminal capacity (solid)	Main: 1 x 2.5-6 mm², 2 x 2.5-6 mm² Control: 1 x 0.5-2.5 mm², 2 x 0.5-2.5 mm²
	Terminal capacity (solid/stranded AWG)	Main: 1 x 14-10, 2 x 14-10 Control: 1 x 18-12, 2 x 18-12
	Terminal capacity (stranded)	
	Tightening torque	Main: 2 Nm (17.7 lb-in) Control: 0.5 Nm (4.4 lb-in)
	Screwdriver size	Main: Pozidriv 2 Control: Pozidriv 1

Electrical rating	Operating voltage - max.	600 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	25 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	
Short-circuit rating	Rated conditional short-circuit current, type 1, 600 Y/347 V	100 kA
	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	2 periods at 230 V AC
	Drop-out time	1/2 period + 40 microseconds at 230 V AC
	Drop-out voltage	5 V AC
	Input current	5 mA at 230 V AC
	Pick-up voltage	20 V AC
	Rated control supply voltage (Us) at AC, 50 Hz - min	20 V
	Rated control supply voltage (Us) at AC, 50 Hz - max	275 V
	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	24 V
	Rated control supply voltage (Us) at DC - max	190 V
Motor rating	Horsepower	1 HP (230 V), 3 HP (480 V), 3 HP (600 V)
	Rated operational power at 220/230 V, 50 Hz	0.37 kW
	Rated operational power at 400 V, 50 Hz	0.75 kW
Design verification	Equipment heat dissipation, current-dependent Pvid	25 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 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	Does not apply, since the entire switchgear needs to be evaluated.
	10.7 Internal electrical circuits and connections 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	Is the panel builder's responsibility.
	10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
	10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
	10.12 Electromagnetic compatibility	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
	10.13 Mechanical function	
Installation instructions	IL034109ZU2021_09.pdf	
Date	Wed Feb 23 2022	