

< **HLR SOLID STATE RELAYS**
360050


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GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller series HLR solid state relay
CATALOG NUMBER	360050
MODEL CODE	HLR25/1H(DC)230V
EAN	4015081998173
PRODUCT LENGTH/DEPTH	28.8 mm
PRODUCT HEIGHT	58.2 mm
PRODUCT WIDTH	44.8 mm
PRODUCT WEIGHT	.06 kg
COMPLIANCES	CE Marked RoHS Compliant
CERTIFICATIONS	CE UL 508 EAC CCC

MODEL CODE	HLR25/1H(DC)230V
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FEATURES & FUNCTIONS

FUNCTIONS	Switching at zero-crossing
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ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT	Screw connection
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ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
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GENERAL

DEGREE OF PROTECTION	IP20
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FREQUENCY RATING	45 Hz - 65 Hz
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MOUNTING POSITION	Mount device in specified orientation and do not heatsink
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NUMBER OF PHASES	1
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NUMBER OF PILOT LIGHTS	1
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OVERVOLTAGE CATEGORY	III
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POLLUTION DEGREE	2
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RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6 kV (1.2/50 µs)
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SERIES	HLR
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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	DC

CLIMATIC ENVIRONMENTAL CONDITIONS

ALTITUDE	0 - 1000 m (Above 1000 m derate linearly by 1 % 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	-40 °C
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 61000-4-2) Control: 1 kV, 5 kHz PC 1 (according to IEC/EN 61000-4-2)
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 (according to IEC/EN 61000-4-3) 10 V/m, 2.0 - 2.7 GHz, PC 1 (according to IEC/EN 61000-4-3)

IMMUNITY TO LINE-CONDUCTED INTERFERENCE	10 V/m, 0.15 - 80 MHz, PC 1 (according to IEC 61000-4-6)
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RADIO INTERFERENCE CLASS	Class A
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TERMINAL CAPACITIES

TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	Main: 1 x 1-4 mm ² , 2 x 1-4 mm ² Control: 1 x 0.5-2.5 mm ² , 2 x 0.5-2.5 mm ²
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TERMINAL CAPACITY (SOLID)	Main: 1 x 2.5-6 mm ² , 2 x 2.5-6 mm ² Control: 1 x 0.5-2.5 mm ² , 2 x 0.5-2.5 mm ²
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TERMINAL CAPACITY (SOLID/STRANDED AWG)	Main: 1 x 14-10, 2 x 14-10 Control: 1 x 18-12, 2 x 18-12
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TERMINAL CAPACITY (STRANDED)	Main: 1 x 2.5-6 mm ² , 2 x 2.5-6 mm ² Control: 1 x 0.5-2.5 mm ² , 2 x 0.5-2.5 mm ²
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TIGHTENING TORQUE	Main: 2.4 Nm (21.2 lb-in) Control: 0.5 Nm (4.4 lb-in)
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SCREWDRIVER SIZE	Main: Pozidriv 2 Control: Pozidriv 1
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ELECTRICAL RATING

OPERATING VOLTAGE - MAX.	265 V
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OPERATING VOLTAGE - MIN.	24 V
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RATED OPERATIONAL CURRENT (IE) AT AC-1	0 A
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RATED OPERATIONAL CURRENT (IE) AT AC-3	0 A
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RATED OPERATIONAL CURRENT (IE) AT AC-51	25 A
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RATED OPERATIONAL CURRENT (IE) AT AC-53A	5 A
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RATED OPERATIONAL CURRENT (IE) AT AC-53B	0 A
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RATED OPERATIONAL VOLTAGE (UE) AT AC - MIN	24 V
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RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	265 V
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SHORT-CIRCUIT RATING

RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 600 Y/347 V	65 kA
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RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 230 V	10 kA
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RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 V	10 kA
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CONTROL CIRCUIT

DELAY TIME	1/2 period
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DROP-OUT TIME	< 1/2 period
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DROP-OUT VOLTAGE	1.2 V DC
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INPUT CURRENT	< 12 mA
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PICK-UP VOLTAGE	2.5 V DC
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RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
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RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
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RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
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RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
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RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	3 V
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RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	32 V
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MOTOR RATING

HORSEPOWER	1.5 HP (230 V), 3 HP (480 V), 5 HP (600 V)
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DESIGN VERIFICATION

EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID	28 W
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HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID	28 W
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RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	25 A
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STATIC HEAT DISSIPATION, NON-CURRENT-	0 W
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DEPENDENT PVS

10.2.2 CORROSION RESISTANCE

Meets the product standard's requirements.

10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES

Meets the product standard's requirements.

10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT

Meets the product standard's requirements.

10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS

Meets the product standard's requirements.

10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION

Please enquire

10.2.5 LIFTING

Does not apply, since the entire switchgear need evaluated.

10.2.6 MECHANICAL IMPACT

Does not apply, since the entire switchgear need evaluated.

10.2.7 INSCRIPTIONS

Meets the product standard's requirements.

10.3 DEGREE OF PROTECTION OF ASSEMBLIES

Does not apply, since the entire switchgear need evaluated.

10.4 CLEARANCES AND CREEPAGE DISTANCES

Meets the product standard's requirements.

10.5 PROTECTION AGAINST ELECTRIC SHOCK

Does not apply, since the entire switchgear need evaluated.

10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS

Does not apply, since the entire switchgear need evaluated.

10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS

Is the panel builder's responsibility.

10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS

Is the panel builder's responsibility.

10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
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 calculation. Eaton will provide heat dissipation devices.
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications of the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications of the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided that the specifications in the instruction leaflet (IL) is observed.

Resources >

How to buy from Eaton



Questions before you buy

Contact us via web form by clicking the link above, or call us: +44 (0) 1753 608 700 option 2, then option 1

