

Specifications



Eaton 184758

Eaton Moeller® series EMR6 Level monitoring relays, 110 - 130 V AC, 50/60 Hz, 220 - 240 V AC, 50/60 Hz, 5 - 100 kΩ

General specifications

PRODUCT NAME	Eaton Moeller® series EMR6 Liquid level monitoring relay
CATALOG NUMBER	184758
MODEL CODE	EMR6-N100-N-1
EAN	4015081787944
PRODUCT LENGTH/DEPTH	103.7 mm
PRODUCT HEIGHT	85.6 mm
PRODUCT WIDTH	22.5 mm
PRODUCT WEIGHT	0.153 kg
CERTIFICATIONS	CSA RMRS EN 61557 RCM IEC/EN 60255-6 UL GL DNV EAC



Powering Business Worldwide

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT STORAGE TEMPERATURE - MAX	85 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30

Features & functions

ELECTRIC CONNECTION TYPE	Screw connection
FUNCTIONS	Response value sensitivity adjustable
MONITORING FUNCTION	Mixture ratio of conductive liquids Fill level of conductive liquids

Electro magnetic compatibility

AIR DISCHARGE	Air/contact discharge, according to IEC/EN 61000-4-2, level 3
BURST IMPULSE	According to IEC/EN 61000-4-4, level 3
ELECTROMAGNETIC COMPATIBILITY	According to IEC/EN 60947-6-2
IMMUNITY TO LINE-CONDUCTED INTERFERENCE	Level 3 (according to IEC/EN 61000-4-6)
IMMUNITY TO RADIATION	Level 3 (according to IEC/EN 61000-4-3)
SURGE RATING	According to IEC/EN 61000-4-5 Level 4

General information

DEGREE OF PROTECTION	Terminals: IP20 Enclosure: IP50
LED INDICATOR	Status indication of Min occupied: Yellow, flashing light Status indication of Supply voltage: Green, solid light Status indication of energized output relay: Yellow LED Status indication of Supply voltage: Green LED Status indication of Min and Max occupied: Yellow, solid light Status indication of active release delay: Green, flashing light Status indication of Output relay excited: Yellow, solid light (R)
LIFESPAN, MECHANICAL	10,000,000 Operations
MOUNTING POSITION	As required
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	EMR Measuring and monitoring relays
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V AC
SHOCK RESISTANCE	Class 2
TYPE	Level monitoring relay

Measuring circuits	
CONNECTION	Minimum level, MIN, Sensor inputs, Measuring circuits
	Maximum level, MAX, Sensor inputs, Measuring circuits
	Earth reference sensor, C, Sensor inputs, Measuring circuits
SENSOR VOLTAGE	6 VAC

VOLTAGE TYPE	AC
Power supply	
DUTY FACTOR	100 %, Power supply
POWER CONSUMPTION	2.6 VA
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
SUPPLY VOLTAGE	110 - 130 V AC, 50/60 Hz 220 - 240 V AC, 50/60 Hz
VOLTAGE TOLERANCE	1.1 x Uc 0.85 x Uc

Relay output contacts

LIFESPAN, ELECTRICAL 100,000 Operation (at 230 V, AC-12, 4 A)

NUMBER OF CONTACTS (CHANGE-OVER CONTACTS) 1

NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS) 0

NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS) 0

RATED OPERATIONAL CURRENT (IE) 5 A at AC-12, 230 V
3 A at AC-15, 230 V

RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX 300 V

SHORT-CIRCUIT PROTECTION RATING Max. 10 A Fast/gL, Fuse, Relay output contacts

Timing cycle

ADJUSTMENT RANGE 5 - 100 kΩ, Sensitivity

Terminal capacities

CONNECTION TYPE Snap fixing, top-hat rail IEC/EN 60715

SCREWDRIVER SIZE 5.5 x 0.8 mm, Terminal screw

TERMINAL CAPACITY 1 x (0.5-2.5) mm², (1 x (18-14) AWG), solid
2 x (0.5-1.5) mm², (2 x (18-16) AWG), flexible with ferrule

TIGHTENING TORQUE Min. 0.5 Nm, Screw terminals
0.8 Nm, Screw terminals

Resources

APPLICATION NOTES [easyE4 and EMR6 - the perfect match for safe motor control](#)

BROCHURES [EMR6 - EMT6 - ETR4 brochure](#)

CATALOGUES [eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf](#)

DECLARATIONS OF CONFORMITY [eaton-liquid-level-monitoring-relay-declaration-of-conformity-uk251044en.pdf](#)
[eaton-liquid-level-monitoring-relay-declaration-of-conformity-eu251552en.pdf](#)

DRAWINGS [eaton-current-monitors-emr6-liquid-level-monitoring-relay-dimensions.tif](#)

ECAD MODEL [ETN.184758.edz](#)

INSTALLATION INSTRUCTIONS [IL121005ZU](#)

MCAD MODEL [eaton-level-monitoring-relays-mcad-drawings-emr6-n-n-1.dwg](#)
[DA-CS-emr6_n_n_1](#)

WIRING DIAGRAMS

[eaton-level-monitors-emr6-liquid-level-monitoring-relay-wiring-diagram-002.bmp](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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