Specifications



Eaton 184754

Eaton Moeller® series EMR6 Overcurrent and undercurrent monitor, Current measuring range: 0.3 - 1.5 A, 1 - 5 A, 3 - 15 A, Supply voltage: 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC

General specifications	
PRODUCT NAME	Eaton Moeller® series EMR6 Overcurrent and undercurrent monitor
CATALOG NUMBER	184754
MODEL CODE	EMR6-I15-A-1
EAN	4015081787906
PRODUCT LENGTH/DEPTH	103.7 mm
PRODUCT HEIGHT	85.6 mm
PRODUCT WIDTH	22.5 mm
PRODUCT WEIGHT	0.179 kg
CERTIFICATIONS	CCC GL RMRS EAC CSA-C22.2 No. 14 UL 508
CATALOG NOTES	Extension of the measurement range possible with current transformers

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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

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

Features & functions

CURRENT MEASUREMENT - MAX	15 A
CURRENT MEASUREMENT - MIN	0.3 A
ELECTRIC CONNECTION TYPE	Screw connection
FUNCTIONS	Monitoring of single-phase DC and AC networks DC-voltage under current DC-voltage over current Single-phase under current possible Single-phase over current possible
MONITORING FUNCTION	Overcurrent Undercurrent
VOLTAGE MEASUREMENT - MAX	240 V
VOLTAGE MEASUREMENT - MIN	24 V

General information

DEGREE OF PROTECTION	Enclosure: IP50 Terminals: IP20
LED INDICATOR	Status indication of energized output relay: Yellow LED Status indication of Supply voltage: Green, solid light Status indication of measured value: Red LED Status indication of Supply voltage: Green LED Status indication of active release delay: Green, flashing light Status indication of Output relay excited: Yellow, solid light Status indication of Undercurrent: Red, flashing light
LIFESPAN, MECHANICAL	30,000,000 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	Current monitoring relay
VOLTAGE TYPE	AC/DC

Measuring circuits

HYSTERESIS	3 - 30 %
INPUT CURRENT	Input B3-C: 3 - 15 A Input B1-C: 0.3 - 1.5 A Input B2-C: 1 - 5 A
MEASURING CYCLE	80 ms
TEMPERATURE ERROR	0.06 %/°C, Measuring circuits

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	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
SUPPLY VOLTAGE	24 - 240 V AC, 50/60 Hz 24 - 240 V DC
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)	2
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	0
RATED OPERATIONAL CURRENT (IE)	4 A at DC-12, 24 V 4 A at AC-12, 230 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	3 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	2 A
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	250 V
SHORT-CIRCUIT PROTECTION RATING	Max. 10 A Fast/gL, Fuse, Relay output contacts

Terminal capacities

CONNECTION TYPE	Snap fixing, top-hat rail IEC/EN 60715
SCREWDRIVER SIZE	4 x 0.8 mm, Terminal screw
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE AWG)	2 x 18-16
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x 0.5-1.5 mm²
TERMINAL CAPACITY (SOLID AWG)	18 - 14
TERMINAL CAPACITY (SOLID)	1 x 0.5-2.5 mm²
TIGHTENING TORQUE	0.8 Nm, Screw terminals Min. 0.6 Nm, Screw terminals

Timing cycle

DELAY TIME	On delay: None = 0 or adjustable from 0.1 to 30 s
TIMING CYCLE	0.06 %/°C, Time error within temperature range Adjustable from 0.1 – 30 s, Reset delay/Off-delay time 0.5 % Error within supply voltage (Measuring circuits) 0.5 %, Time error within supply voltage

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-window-current-monitoring-relay-declaration-of-conformity-uk251042en.pdf eaton-window-current-monitoring-relay-declaration-of-conformity-eu251532en.pdf
INSTALLATION INSTRUCTIONS	IL121004ZU
MCAD MODEL	eaton-cam-switches-mcad-drawings-emr6-r-t-v-i.dwg DA-CS-emr6_r_t_v_i

WIRING DIAGRAMS	eaton-monitoring-wiring-diagram.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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