DATASHEET - EMR6-I1-A-1



Overcurrent and undercurrent monitor, Current measuring range: 3 - 30 mA, 10 - 100 mA, 0.1 - 1 A, Supply voltage: 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC

Part no. EMR6-I1-A-1

184790

EL Number 4101986

(Norway)

(Norway)	
General specifications	
Product name	Eaton Moeller® series EMR6 Overcurrent and undercurrent monitor
Part no.	EMR6-I1-A-1
EAN	4015081788262
Product Length/Depth	103.7 millimetre
Product height	85.6 millimetre
Product width	22.5 millimetre
Product weight	0.152 kilogram
Certifications	GL CCC CSA-C22.2 No. 14 EAC RMRS UL 508
Product Tradename	EMR6
Product Type	Overcurrent and undercurrent monitor
Product Sub Type	None
Catalog Notes	Extension of the measurement range possible with current transformers
Features & Functions	
Current measurement - min	0.01 A
Current measurement - max	1 A
Electric connection type	Screw connection
Functions	DC-voltage over current Monitoring of single-phase DC and AC networks Single-phase under current possible Single-phase over current possible DC-voltage under current
Monitoring function	Undercurrent Overcurrent
Voltage measurement - min	24 V
Voltage measurement - max	240 V
General information	
Degree of protection	Terminals: IP20 Enclosure: IP50
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
LED indicator	Status indication of Supply voltage: Green LED Status indication of Undercurrent: Red, flashing light Status indication of measured value: Red LED Status indication of Output relay excited: Yellow, solid light Status indication of Supply voltage: Green, solid light Status indication of energized output relay: Yellow LED Status indication of active release delay: Green, flashing light
Туре	Current monitoring relay
Voltage type	AC/DC
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	60 °C

Ambient storage temperature - min	40 °C
Ambient storage temperature - max	85 °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
Terminal capacities	
Connection type	Snap fixing, top-hat rail IEC/EN 60715
Terminal capacity (flexible with ferrule)	2 x 0.5-1.5 mm ²
Terminal capacity (flexible with ferrule AWG)	2 x 18-16
Terminal capacity (solid)	1 x 0.5-2.5 mm ²
Terminal capacity (solid AWG)	18 - 14
Screwdriver size	4 x 0.8 mm, Terminal screw
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	0.5 %, Time error within supply voltage 0.5 % Error within supply voltage (Measuring circuits) Adjustable from 0.1 – 30 s, Reset delay/Off-delay time 0.06 %/°C, Time error within temperature range
Power supply	
Duty factor	100 %, Power supply
Power consumption	2.6 VA
Rated control supply voltage (Us) at AC, 50 Hz - min	24 V
Rated control supply voltage (Us) at AC, 50 Hz - max	240 V
Rated control supply voltage (Us) at AC, 60 Hz - min	24 V
Rated control supply voltage (Us) at AC, 60 Hz - max	240 V
Rated control supply voltage (Us) at DC - min	24 V
Rated control supply voltage (Us) at DC - max	240 V
Rated frequency - min	50 Hz
Rated frequency - max Supply voltage	60 Hz 24 - 240 V DC 24 - 240 V AC, 50/60 Hz
Voltage tolerance	0.85 x Uc 1.1 x Uc
Measuring circuits	
Hysteresis	3 - 30 %
Input current	Input B3-C: 0.1 - 1 A Input B1-C: 0.003 - 0.03 A Input B2-C: 0.01 - 0.1 A
Measuring cycle	80 ms
Temperature error	0.06 %/°C, Measuring circuits
Relay output contacts	
Number of contacts (change-over contacts)	2
Number of contacts (normally closed contacts)	0
Number of contacts (normally open contacts)	0
Lifespan, electrical	100,000 Operation (at 230 V, AC-12, 4 A)
Rated operational current (le)	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

Technical data ETIM 9.0

Relays (EG000019) / Current monitoring relay (EC001440)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Current monitoring equipment (ecl@ss13-27-37-18-02 [AKF096019])

Type of lesteric connection Serven connection With destachable classings No External power supply vestigued No Voltage ppot (supply voltage) Vol 2 Supply voltage AC 50 Hz Vol 2 Voltage measuring range Vol 2 Voltage measuring range ACOC Current measuring range ACOC Response value amperage 1 ACOC Response value amperage 2 ACOC Response under current possible Yo Three-phase our under current possible Yo Single-phase under current possible Yo Single-phase under current possible Yo Three-phase vorterent possible Yo Single-phase inysteristic possible Yo Three-phase vorterent possible Yo No No Single-phase inysteristic possible Yo No No Curried in function DC-voltage everturent Yo	(ECI@5513-27-37-10-02 [AKI 030013])		
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Width mm 22.5 Height 85.6	Operating voltage DC	V	24 - 240
Height mm 85.6	Rated switch current	Α	4
	Width	mm	22.5
Depth	Height	mm	85.6
	Depth	mm	103.7