DATASHEET - EMR6-I15-A-1

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

Powering Business Worldwide

Part no.	**EMR6-I15-A-1**
	184754
EL Number (Norway)	**4101950**

General specifications

Product name	Eaton Moeller® series EMR6 Overcurrent and undercurrent monitor
Part no.	EMR6-I15-A-1
EAN	4015081787906
Product Length/Depth	103.7 millimetre
Product height	85.6 millimetre
Product width	22.5 millimetre
Product weight	0.179 kilogram
Certifications	CSA-C22.2 No. 14 UL 508 GL RMRS CCC EAC
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	0.3 A
Current measurement - max	15 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 - min	24 V
Voltage measurement - max	240 V

General information

Degree of protection	Enclosure: IP50 Terminals: IP20
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 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
Type	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	0.06 %/°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
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	60 Hz
Supply voltage	24 - 240 V AC, 50/60 Hz 24 - 240 V DC
Voltage tolerance	1.1 x Uc 0.85 x Uc
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
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 (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

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 electric connection		Screw connection
With detachable clamps		No
External power supply required		No
Voltage type (supply voltage)		AC/DC
Supply voltage AC 50 Hz	V	24 - 240
Supply voltage AC 60 Hz	V	24 - 240
Supply voltage DC	V	24 - 240
Voltage measuring range	V	24 - 240
Type of current		AC/DC
Current measuring range	A	0.3 - 15
Response value amperage 1	A	0.3 - 1.5
Response value amperage 2	A	3 - 15
Single-phase under current possible		Yes
Three-phase under current possible		No
Single-phase overcurrent possible		Yes
Three-phase overcurrent possible		No
Single-phase hysteresis possible		No
Three-phase hysteresis possible		No
Contains function DC-voltage under current		Yes
Contains function DC-voltage overcurrent		Yes
Function DC-current hysteresis		No
Min. adjustable delay-on energization time	s	0.1
Max. permitted delay-on energization time	s	30
Min. adjustable off-delay time	s	0
Max. permitted off-delay time	s	0
External current transformer		No
Number of contacts as normally closed contact		0
Number of contacts as normally open contact		0
Number of contacts as change-over contact		2
Voltage type (operating voltage)		AC/DC
Operating voltage AC 50 Hz	V	24 - 240
Operating voltage AC 60 Hz	V	24 - 240
Operating voltage DC	V	24 - 240
Rated switch current	A	4
Width	mm	22.5
Height	mm	85.6
Depth	mm	103.7