

# DATASHEET - EMR6-I15-B-1



**Overcurrent monitor, Current measuring range: 0.3 - 1.5 A, 1 - 5 A, 3 - 15 A,  
Supply voltage: 220 - 240 V AC, 50/60 Hz**

**Part no. EMR6-I15-B-1**

**184755**

**EL Number  
(Norway)**

**4101951**

<b>General specifications</b>	
Product name	Eaton Moeller® series EMR6 Overcurrent monitor
Part no.	EMR6-I15-B-1
EAN	4015081787913
Product Length/Depth	103.7 millimetre
Product height	85.6 millimetre
Product width	22.5 millimetre
Product weight	0.179 kilogram
Certifications	CCC RMRS GL UL 508 CSA-C22.2 No. 14 EAC
Product Tradename	EMR6
Product Type	Overcurrent monitor
Product Sub Type	None
Catalog Notes	Extension of the measurement range possible with current transformers
<b>Features &amp; Functions</b>	
Current measurement - min	0.3 A
Current measurement - max	15 A
Electric connection type	Screw connection
Functions	DC-voltage over current Single-phase under current possible Monitoring of single-phase DC and AC networks DC-voltage under current Single-phase over current possible
Monitoring function	Undercurrent Overcurrent
Voltage measurement - min	220 V
Voltage measurement - max	240 V
<b>General information</b>	
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 measured value: Red LED Status indication of Supply voltage: Green LED Status indication of active release delay: Green, flashing light Status indication of Supply voltage: Green, solid light Status indication of energized output relay: Yellow LED Status indication of Output relay excited: Yellow, solid light Status indication of Undercurrent: Red, flashing light
Type	Current monitoring relay
Voltage type	AC/DC
<b>Climatic environmental conditions</b>	
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
<b>Electro magnetic compatibility</b>		
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
<b>Terminal capacities</b>		
Connection type		Snap fixing, top-hat rail IEC/EN 60715
Terminal capacity (flexible with ferrule)		2 x 0.5-1.5 mm <sup>2</sup>
Terminal capacity (flexible with ferrule AWG)		2 x 18-16
Terminal capacity (solid)		1 x 0.5-2.5 mm <sup>2</sup>
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
<b>Timing cycle</b>		
Delay time		On delay: None = 0 or adjustable from 0.1 to 30 s
Timing cycle		Adjustable from 0.1 – 30 s, Reset delay/Off-delay time 0.5 % Time error within supply voltage 0.5 % Error within supply voltage (Measuring circuits) 0.06 %/°C, Time error within temperature range
<b>Power supply</b>		
Duty factor		100 %, Power supply
Power consumption		2.6 VA
Rated control supply voltage (Us) at AC, 50 Hz - min		220 V
Rated control supply voltage (Us) at AC, 50 Hz - max		240 V
Rated control supply voltage (Us) at AC, 60 Hz - min		220 V
Rated control supply voltage (Us) at AC, 60 Hz - max		240 V
Rated control supply voltage (Us) at DC - min		220 V
Rated control supply voltage (Us) at DC - max		240 V
Rated frequency - min		50 Hz
Rated frequency - max		60 Hz
Supply voltage		220 - 240 V AC, 50/60 Hz
Voltage tolerance		1.1 x Uc 0.85 x Uc
<b>Measuring circuits</b>		
Hysteresis		3 - 30 %
Input current		Input B2-C: 1 - 5 A Input B3-C: 3 - 15 A Input B1-C: 0.3 - 1.5 A
Measuring cycle		80 ms
Temperature error		0.06 %/°C, Measuring circuits
<b>Relay output contacts</b>		
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 (ec1@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
Supply voltage AC 50 Hz		V	220 - 240
Supply voltage AC 60 Hz		V	220 - 240
Supply voltage DC		V	
Voltage measuring range		V	220 - 240
Type of current			AC
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
Operating voltage AC 50 Hz		V	220 - 240
Operating voltage AC 60 Hz		V	220 - 240
Operating voltage DC		V	
Rated switch current		A	4
Width		mm	22.5
Height		mm	85.6
Depth		mm	103.7