DATASHEET - EMR6-VF600-A-1



Voltage monitor, 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC

Part no.	**EMR6-VF600-A-1**
Catalog No.	**184785**
Eaton Catalog No.	**EMR6-VF600-A-1**

Powering Business Worldwide

Technical data

General

Standards			UL508, CAN/CSA C22.2 No.14, GL, EAC, CCC, RMRS, RCM
Lifespan, mechanical	Operations	x 10^6	30
Climatic proofing			Damp heat, cyclical to IEC 60068-2-30: 24 h cycle, 55° C, 93% relative humidity, 96 h
Ambient temperature			
Operation		°C	
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	+ 60
Storage		°C	- 40 - 85
Mounting position			As required
Shock resistance			Class 2
Degree of protection			
Terminals			IP20
Enclosures			IP50
Terminal capacities		mm^2	
Solid		mm^2	1 x 0.5-2.5 (1 x 18-14 AWG)
Flexible with ferrule		mm^2	2 x 0.5-1.5 (2 x 18-16 AWG)
Standard screwdriver		mm	5.5 x 0.8
Tightening torque		Nm	0.5 - 0.8
Fixing			Snap fixing, top-hat rail IEC/EN 60715

Contacts

Rated impulse withstand voltage	U_{imp}	V AC	4000
Overvoltage category/pollution degree			III/3

Power supply

Supply voltage			24 - 240 V AC, 50/60 Hz 24 - 240 V DC
Voltage tolerance		x U_c	0.85 - 1.1
Power consumption		VA	2.6
Rated frequency	f	Hz	50 - 60
Duty factor		% DF	100

Timing cycle

Response delay time		s	Adjustable from 0.1 - 30
Reset delay/Off-delay time		s	Adjustable from 0.1 – 30

Measuring circuits

Response range for undervoltage	U_{min}	V AC	
Min. undervoltage response value		V AC	3
Max. undervoltage response value		V AC	600
Response range for overvoltage	U_{max}	V AC	
Min. overvoltage response value		V AC	3
Max. overvoltage response value		V AC	600
Hysteresis		%	
Hysteresis, max.		%	5

Status indication

Supply voltage			LED yellow
Output relay energized			LED yellow

Error			LED, red
Status indicator (LED)			Green, solid: Supply voltage Other states depending on fault (see IL): Measured value

Relay output contacts

Lifespan, electrical (AC-12/230 V/4 A)	Operations	x 10^6	
Lifespan, electrical	Operations	x 10^6	0.1

Electromagnetic compatibility (EMC)

Electromagnetic compatibility			IEC/EN 60947-6-2
ESD	Air/contact discharge	kV	IEC/EN 61000-4-2 level 3
HF-immunity to radiation			IEC/EN 61000-4-3 level 3
Burst			IEC/EN 61000-4-4 level 3
Surge			IEC/EN 61000-4-5 Level 4
HF-immunity to line-conducted interference			IEC/EN 61000-4-6 level 3

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60

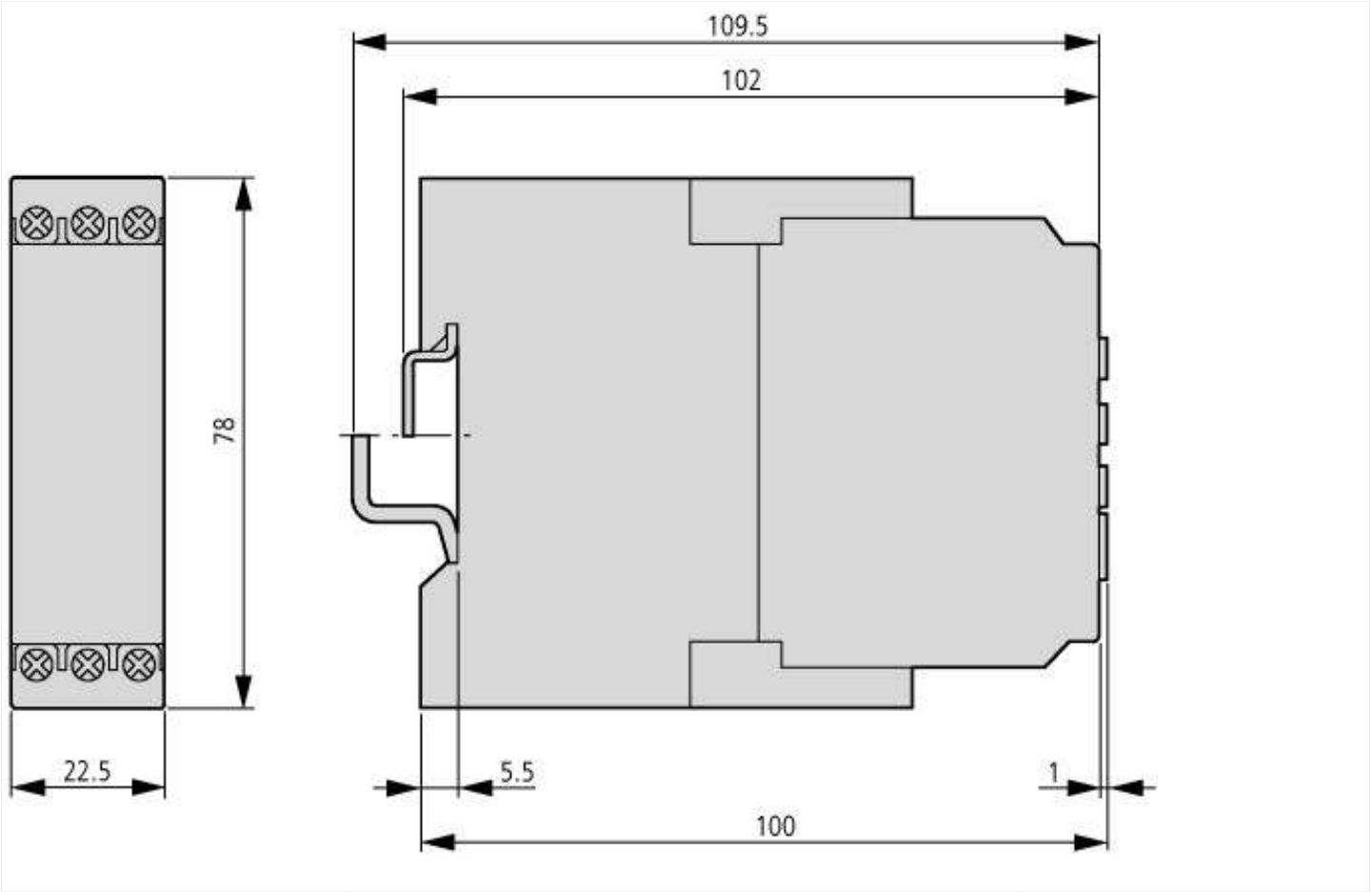
Technical data ETIM 7.0

Relays (EG000019) / Voltage monitoring relay (EC001438)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Voltage monitoring equipment (ecl@ss10.0.1-27-37-18-01 [AKF095014])

Type of electric connection			Screw connection
With detachable clamps			No
Single-phase under voltage possible			Yes
Three-phase under voltage possible			No
Single-phase over voltage possible			Yes
Three-phase over voltage possible			No
Single-phase hysteresis possible			Yes
Three-phase hysteresis possible			No
Contains function DC-under voltage			Yes
Contains function DC-over voltage			Yes
Contains function DC-voltage hysteresis			Yes
Voltage measurement range 1		V	3 - 600
Voltage measurement range 2		V	0 - 0
Type of voltage measurement range			AC/DC
Rated control supply voltage Us at AC 50HZ		V	24 - 240
Rated control supply voltage Us at AC 60HZ		V	24 - 240
Rated control supply voltage Us at DC		V	24 - 240
Voltage type for actuating			AC/DC
Response value voltage		V	3 - 600
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
Number of contacts as normally closed contact			0
Number of contacts as normally open contact			0
Number of contacts as change-over contact			2
Width		mm	23
Height		mm	85
Depth		mm	110

Dimensions



© 09/2018 by Eaton Industries GmbH