

Specifications



Eaton 184784

Eaton Moeller® series EMR6 Voltage monitoring relay, 3 - 30, 5 - 60, 30 - 300, 60 - 600 V, 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC

General specifications

PRODUCT NAME	Eaton Moeller® series EMR6 Voltage monitoring relay
CATALOG NUMBER	184784
MODEL CODE	EMR6-VM600-A-1
EAN	4015081788200
PRODUCT LENGTH/DEPTH	103.7 mm
PRODUCT HEIGHT	85.6 mm
PRODUCT WIDTH	22.5 mm
PRODUCT WEIGHT	0.154 kg
CERTIFICATIONS	UL508 EAC RMRS CCC RCM CSA-C22.2 No. 14 GL



Powering Business Worldwide

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

Features & functions

ELECTRIC CONNECTION TYPE	Screw connection
FUNCTIONS	Single-phase under voltage possible DC-under voltage Single-phase over voltage possible DC-over voltage
MONITORING FUNCTION	Undervoltage Overvoltage
VOLTAGE MEASUREMENT - MAX	600 V
VOLTAGE MEASUREMENT - MIN	3 V

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

General information

DEGREE OF PROTECTION	Enclosure: IP50 Terminals: IP20
LED INDICATOR	Status indication of energized output relay: Yellow LED Status indication of Supply voltage: Yellow LED Status indication of errors: Red LED Other states depending on fault (see IL): Measured value Status indication of Supply voltage: Green, solid 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	Voltage monitor
VOLTAGE TYPE	AC/DC

Measuring circuits

HYSTERESIS	3 - 30 %
THRESHOLD VALUE	3 V AC, Min. undervoltage response value 3 V AC, Min. overvoltage response value 600 V AC, Max. undervoltage response value 600 V AC, Max. overvoltage response value

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	0.85 x U _c 1.1 x U _c

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

Terminal capacities

CONNECTION TYPE	Snap fixing, top-hat rail IEC/EN 60715
SCREWDRIVER SIZE	5.5 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 mm ²
TERMINAL CAPACITY (SOLID AWG)	18 - 14
TERMINAL CAPACITY (SOLID)	1 x 0.5-2.5 mm ²
TIGHTENING TORQUE	Min. 0.5 Nm, Screw terminals 0.8 Nm, Screw terminals

Timing cycle

DELAY TIME

Adjustable from 0.1 - 30 s,
Response delay time

TIMING CYCLE

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

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-eu251532en.pdf](#)

[eaton-window-current-monitoring-relay-declaration-of-conformity-uk251042en.pdf](#)

DRAWINGS

[eaton-monitoring-relay-dimensions-002.eps](#)

INSTALLATION INSTRUCTIONS

[IL121013ZU](#)

[DA-CS-emr6 r t v i](#)

MCAD MODEL

[eaton-cam-switches-mcad-drawings-emr6-r-t-v-i.dwg](#)

WIRING DIAGRAMS

[eaton-measuring-monitoring-relays-emr6-wiring-diagram.bmp](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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