Specifications



Eaton 184789

Eaton Moeller® series EMR6 Phase sequence relays, 200 - 500 V AC, 50/60 Hz

General specifications

PRODUCT NAME	Eaton Moeller® series EMR6 Phase sequence relay
CATALOG NUMBER	184789
MODEL CODE	EMR6-F500-G-1
EAN	4015081788255
PRODUCT LENGTH/DEPTH	103.7 mm
PRODUCT HEIGHT	85.6 mm
PRODUCT WIDTH	22.5 mm
PRODUCT WEIGHT	0.16 kg
CERTIFICATIONS	IEC/EN 60255-6

Powering Business Worldwide

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT STORAGE TEMPERATURE - MAX	85 °C
AMBIENT OPERATING TEMPERATURE - MIN	-20 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °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

Features & functions

ELECTRIC CONNECTION TYPE	Screw connection
FEATURES	Fixed response delay
FUNCTIONS	Phase failure detection Monitoring of three-phase networks
MONITORING FUNCTION	Phase failure Phase sequence monitoring Phase sequence
VOLTAGE MEASUREMENT - MAX	500 V
VOLTAGE MEASUREMENT - MIN	200 V

General information

DEGREE OF PROTECTION	Enclosure: IP50 Terminals: IP20
LED INDICATOR	Status indication of energized output relay: Yellow LED Status indication of Phase failure: Red, solid light Status indication of Phase sequence fault: Red, flashing 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	Phase sequence relay
VOLTAGE TYPE	AC

Measuring circuits

MEASURING CYCLE	500 ms
MONITORING VOLTAGE	200 - 500 V AC, 50/60 Hz (per phase) 200 - 500 V AC
TEMPERATURE ERROR	0.06 %/°C, Measuring circuits

Power supply

DUTY FACTOR	100 %, Power supply
POWER CONSUMPTION	11 VA
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	500 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	200 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	500 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	200 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
SUPPLY VOLTAGE	200 - 500 V AC, 50/60 Hz
VOLTAGE TOLERANCE	0.85 x Uc 1.1 x Uc

Relay output contacts

LIFESPAN, ELECTRICAL	300,000 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
RATED OPERATIONAL CURRENT (IE)	2 A at DC-13, 24 V 4 A at AC-12, 230 V 4 A at DC-12, 24 V 3 A at AC-15, 230 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	250 V
SHORT-CIRCUIT PROTECTION RATING	Max. 10 A Fast/gL, Fuse, Relay output contacts

Terminal capacities

CONNECTION TYPE	Snap fixing, top-hat rail IEC/EN 60715
SCREWDRIVER SIZE	5.5 x 0.8 mm, Terminal screw
TERMINAL CAPACITY	2 x 2.5 mm², solid 2 x 2.5 mm², (2 x 14 AWG), flexible with ferrule
TIGHTENING TORQUE	Min. 0.5 Nm, Screw terminals 0.8 Nm, Screw terminals

Timing cycle

TIMING CYCLE	0.5 % Error within supply voltage (Measuring circuits)

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-asymmetry-monitoring-relay-declaration-of-conformity-eu251531en.pdf eaton-phase-monitoring-relay-declaration-of-conformity-uk251043en.pdf
ECAD MODEL	ETN.184789.edz
INSTALLATION INSTRUCTIONS	eaton-single-function-3phase-relay-emr6-il121006zu.pdf
MCAD MODEL	DA-CS-emr6_a_w_f
WIRING DIAGRAMS	eaton-monitoring-device-phase-sequence-relay-wiring-diagram.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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