

# Eaton 184764

Eaton Moeller® series EMR6 Phase monitoring relays, Multi-functional, 300 - 500 V AC, 50/60 Hz

PRODUCT NAME	Eaton Moeller® series EMR6 Phase monitoring relay
CATALOG NUMBER	184764
PRODUCT LENGTH/DEPTH	103.7 mm
PRODUCT HEIGHT	85.6 mm
PRODUCT WIDTH	22.5 mm
PRODUCT WEIGHT	0.16 kg
CERTIFICATIONS	GL UL IEC CSA CCC

<b>TYPE</b>	Phase monitoring relay
<b>FEATURES</b>	Imbalance threshold values adjustable 2 - 25 % of mean value of phase voltages
<b>AIR DISCHARGE</b>	Air/contact discharge, according to IEC/EN 61000-4-2, level 3
<b>ELECTRIC CONNECTION TYPE</b>	Screw connection
<b>POLLUTION DEGREE</b>	3
<b>POWER CONSUMPTION</b>	3 VA
<b>BURST IMPULSE</b>	According to IEC/EN 61000-4-4, level 3
<b>CLIMATIC PROOFING</b>	Damp heat, cyclic, to IEC 60068-2-30
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	4000 V AC
<b>ADJUSTABLE DELAY-ON ENERGIZATION TIME - MIN</b>	0.1 s
<b>ADJUSTABLE OFF-DELAY TIME - MIN</b>	0.1 s
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	85 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	40 °C
<b>MEASURING CYCLE</b>	50 ms
<b>NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)</b>	2
<b>NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)</b>	0
<b>PERMITTED DELAY-ON ENERGIZATION TIME - MAX</b>	30 s
<b>PERMITTED OFF-DELAY TIME - MAX</b>	30 s

	<a href="#">eaton-multi-function-3phase-relay-emr6-il121007zu.pdf</a>
	<a href="#">eaton-phase-monitors-monitoring-wiring-diagram.eps</a>
	<a href="#">eaton-phase-monitors-emr6-phase-monitoring-relay-wiring-diagram.bmp</a>
	<a href="#">EMR6 - EMT6 - ETR4 brochure</a>
	<a href="#">eaton-current-monitors-emr6-phase-monitoring-relay-dimensions-002.tif</a>
	<a href="#">easyE4 and EMR6 - the perfect match for safe motor control</a>

<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX</b>	500 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN</b>	300 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX</b>	500 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN</b>	300 V
<b>RATED OPERATIONAL CURRENT (IE)</b>	4 A at AC-12, 230 V 3 A at AC-15, 230 V 2 A at DC-13, 24 V 4 A at DC-12, 24 V
<b>LIFESPAN, ELECTRICAL</b>	100,000 Operation (at 230 V, AC-12, 4 A)
<b>SCREWDRIVER SIZE</b>	5.5 x 0.8 mm, Terminal screw
<b>VOLTAGE TYPE</b>	AC
<b>CONNECTION TYPE</b>	Snap fixing, top-hat rail IEC/EN 60715
<b>MOUNTING POSITION</b>	As required
<b>SHOCK RESISTANCE</b>	Class 2
<b>OVERVOLTAGE CATEGORY</b>	III
<b>SHORT-CIRCUIT PROTECTION RATING</b>	Max. 10 A Fast/gL, Fuse, Relay output contacts
<b>DUTY FACTOR</b>	100 %, Power supply
<b>DEGREE OF PROTECTION</b>	Enclosure: IP50 Terminals: IP20
<b>SUPPLY VOLTAGE</b>	300 - 500 V AC, 50/60 Hz
<b>DELAY TIME</b>	0.2 s, Response delay time On-delay/off-delay: none = 0 or adjustable between 0.1 - 30 s
<b>SURGE RATING</b>	According to IEC/EN 61000-4-5 Level 4
<b>ELECTROMAGNETIC COMPATIBILITY</b>	According to IEC/EN 60947-6-2
<b>TEMPERATURE ERROR</b>	0.06 %/°C, Measuring circuits
<b>MONITORING VOLTAGE</b>	300 - 500 V AC, 50/60 Hz (per phase)
<b>FUNCTIONS</b>	Under voltage detection Phase failure detection Over voltage detection

	Multi-functional
<b>HYSTERESIS</b>	0 - 5 %
<b>IMMUNITY TO LINE-CONDUCTED INTERFERENCE</b>	Level 3 (according to IEC/EN 61000-4-6)
<b>TIGHTENING TORQUE</b>	0.8 Nm, Screw terminals Min. 0.6 Nm, Screw terminals
<b>IMMUNITY TO RADIATION</b>	Level 3 (according to IEC/EN 61000-4-3)
<b>SUITABLE FOR</b>	Three-phase networks
<b>VOLTAGE TOLERANCE</b>	0.85 x Uc 1.1 x Uc
<b>TIMING CYCLE</b>	0.06 %/°C, Time error within temperature range 0.5 % Error within supply voltage (Measuring circuits) 0.5 %, Time error within supply voltage Adjustable from 0.1 – 30 s, Reset delay/Off-delay time
<b>LED INDICATOR</b>	<p>Status indication of Phase sequence fault: Red, flashing light (F1 and F2 alternating)</p> <p>Status indication of energized output relay: Green flashing (R)</p> <p>Status indication of Phase sequence error: Red LEDs (F1 and F2 flashing)</p> <p>Status indication of Overvoltage: F1 red, solid light</p> <p>Status indication of Relay energized: Yellow, solid light</p> <p>Status indication of Phase failure: F1 red, solid light and F2 red, flashing light</p> <p>Status indication of Supply voltage: Green, solid light</p> <p>Status indication of Delay time running: Yellow, flashing light</p> <p>Status indication of Phase failure: Red LEDs (F1 on, F2 flashes)</p> <p>Status indication of Imbalance: Red, solid light (F1 and F2)</p> <p>Status indication of Supply</p>

	voltage: Green LED (R on) Status indication of Undervoltage: F2 red, solid light Status indication of Overvoltage: Red LED (F1 on) Status indication of Undervoltage: Red LED (F2 on)
<b>LIFESPAN, MECHANICAL</b>	30,000,000 Operations
<b>MONITORING FUNCTION</b>	Phase imbalance monitoring Phase failure Undervoltage Phase sequence monitoring Phase sequence (can be deactivated) Overvoltage Imbalance
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>	0 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>	0 V
<b>RATED FREQUENCY - MAX</b>	60 Hz
<b>RATED FREQUENCY - MIN</b>	50 Hz
<b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>	250 V
<b>VOLTAGE MEASUREMENT - MAX</b>	500 V
<b>VOLTAGE MEASUREMENT - MIN</b>	300 V
<b>PRODUCT CATEGORY</b>	EMR Measuring and monitoring relays
<b>TERMINAL CAPACITY</b>	1 x (0.5-2.5) mm <sup>2</sup> , (1 x (18- 14) AWG), solid 2 x (0.5-1.5) mm <sup>2</sup> , (2 x (18- 16) AWG), flexible with ferrule
<b>VOLTAGE TYPE OF SUPPLY VOLTAGE</b>	AC
<b>VOLTAGE TYPE OF OPERATING VOLTAGE</b>	AC
<b>RATED SWITCH CURRENT</b>	4 A
<b>SUPPLY VOLTAGE AT AC,</b>	300 V

<b>50 HZ - MIN</b>	
<b>SUPPLY VOLTAGE AT AC, 50 HZ - MAX</b>	500 V
<b>SUPPLY VOLTAGE AT AC, 60 HZ - MIN</b>	300 V
<b>SUPPLY VOLTAGE AT AC, 60 HZ - MAX</b>	500 V
<b>OPERATING VOLTAGE AT AC, 50 HZ - MIN</b>	300 V
<b>OPERATING VOLTAGE AT AC, 50 HZ - MAX</b>	500 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MIN</b>	300 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MAX</b>	500 V

<b>PROJECT NAME:</b>
<b>PROJECT NUMBER:</b>
<b>PREPARED BY:</b>
:



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