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# Monitoring relay - EMD-SL-PH-690 - 2905597

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Monitoring relay for monitoring phase sequence, phase failure, and asymmetry for 208 V AC ... 690 V AC from 3-phase voltages, 2 PDTs, with screw connection

## Product Description

Increasingly higher demands are being placed on safety and system availability – across all sectors. Processes are becoming more and more complex, not only in mechanical engineering and the chemical industry, but also in plant and automation technology. Demands on power engineering are also increasing constantly. Error-free and therefore cost-effective operation can only be achieved through continuous monitoring of important network and system parameters. Electronic monitoring relays in the EMD series are available for a wide range of monitoring tasks to avoid the consequences of errors or to keep them within limits. The operating states are indicated using colored LEDs, errors that may occur can be sent to a control system via a floating contact or can shut down a part of the system. Some device versions are equipped with startup and response delays in order to briefly tolerate measured values outside the set monitoring range.



## Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 967198

## Technical data

### Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (C300)
	-25 °C ... 55 °C (B300)
Ambient temperature (storage/transport)	-25 °C ... 70 °C

### Input data

Nominal input voltage $U_N$	690 V (3~ 208 V ... 690 V)
Input voltage range	177 V ... 794 V (3~)
Function	Undervoltage, phase sequence, phase failure

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## Technical data

### Input data

Min setting range of the voltage threshold value	177 V AC
Max. setting range of the voltage threshold value	794 V AC
Setting range for response delay	0.1 s ... 10 s
Basic accuracy	≤ 3 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)
Repeat accuracy	≤ 2 %
Asymmetry	25 %
Recovery time	> 500 ms

### Contact side

Contact type	2 floating PDT contacts
Maximum switching voltage	400 V AC
Interrupting rating (ohmic load) max.	1250 VA (5 A/250 V AC at +55 °C)
	150 VA (5 A/30 V DC at +55°C)
	75 VA (2.5 A/30 V DC at +70°C)
Output fuse	5 A (fast-blow)

### Power supply

Supply voltage	±15 % (= measuring voltage)
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### General

Mechanical service life	20 x 10 <sup>6</sup> cycles
Operating mode	100% operating factor
Mounting position	any
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Overvoltage category	III (IEC 60664-1)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

### Connection data

Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping length	8 mm
Connection method	Screw connection

### Standards and Regulations

# Monitoring relay - EMD-SL-PH-690 - 2905597

## Technical data

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61326-1
Noise immunity	EN 61326-1
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

## Classifications

### eCl@ss

eCl@ss 5.1	27371801
eCl@ss 6.0	27371801
eCl@ss 8.0	27371802

### ETIM

ETIM 5.0	EC001440
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## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

#### Approvals submitted

### Approval details

UL Listed
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cUL Listed
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EAC
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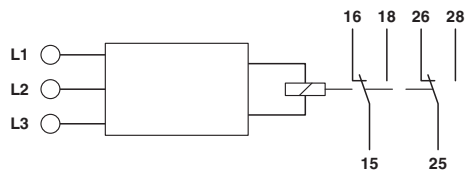
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## Approvals

cULus Listed 

## Drawings

Block diagram



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