

# Monitoring relay - EMD-SL-3V-400 - 2866051

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Monitoring relay for monitoring 3-phase voltages of 280...520 V AC, window, without neutral conductor connection, supply voltage can be selected using power module, 1 PDT

## 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.

## Product Features

- Adjustable response delay
- Variable supply voltage range
- Adjustable via potentiometer on the front
- Adjustable asymmetry



## Key commercial data

package_quantity	1
GTIN	4017918952655

## Technical data

### Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (operation)	-25 °C ... 40 °C (corresponds to UL 508)
Ambient temperature (storage/transport)	-25 °C ... 70 °C

### Input data

Nominal input voltage $U_N$	(3 ~ 400 V)
Maximum temperature coefficient	< 0.1 %/K

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## Technical data

### Input data

<b>Function</b>	Window, without neutral conductor connection
<b>Min. setting range</b>	-30 % ... 20 % (From $U_N$ )
<b>Max. setting range</b>	-20 % ... 30 % (From $U_N$ )
<b>Min setting range of the voltage threshold value</b>	280 V AC ... 480 V AC
<b>Max. setting range of the voltage threshold value</b>	320 V AC ... 520 V AC
<b>Setting range for response delay</b>	0.2 s ... 10 s
<b>Basic accuracy</b>	$\pm 5\%$ (of scale end value)
<b>Setting accuracy</b>	$\leq 5\%$ (of scale end value)
<b>Repeat accuracy</b>	$\leq 2\%$
<b>Voltage influence</b>	$\leq 0.5\%$
<b>Recovery time</b>	500 ms

### Contact side

<b>Contact type</b>	1 floating PDT
<b>Maximum switching voltage</b>	250 V AC (in acc. with IEC 60664-1)
<b>Interrupting rating (ohmic load) max.</b>	750 VA (3 A/250 V AC, module aligned, $\leq 5$ mm spacing)
<b>Interrupting rating (ohmic load) max.</b>	1250 VA (5 A/250 V AC, module not aligned, $\geq 5$ mm spacing)
<b>Output fuse</b>	5 A (fast-blow)

### Power supply

<b>Supply voltage range</b>	24 V AC ... 230 V AC (see Power modules)
<b>Supply voltage range</b>	24 V DC (see Power modules)

### General

<b>Mechanical service life</b>	Approx. $2 \times 10^7$ cycles
<b>Operating mode</b>	100% operating factor
<b>Mounting position</b>	Any
<b>Assembly instructions</b>	on standard DIN rail NS 35 in accordance with EN 60715
<b>Electromagnetic compatibility</b>	Conformance with EMC Directive 2004/108/EC
<b>Surge voltage category</b>	III, basic insulation (as per EN 50178)
<b>Housing insulation material</b>	Polyamide PA, self-extinguishing
<b>Color</b>	green
<b>Rated insulation voltage</b>	300 V (According to EN 50178)
<b>Conformance</b>	CE-compliant
<b>UL, USA / Canada</b>	UL/C-UL listed UL 508

### Connection data

<b>Conductor cross section stranded min.</b>	0.25 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section solid min.</b>	0.5 mm <sup>2</sup>
<b>Conductor cross section solid max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	20
<b>Conductor cross section AWG/kcmil max</b>	14

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## Technical data

### Connection data

Stripping length	8 mm
Connection method	Screw connection

## classifications

### eCl@ss

eCl@ss 4.0	27371105
eCl@ss 4.1	27371105
eCl@ss 5.0	27371801
eCl@ss 5.1	27371801
eCl@ss 6.0	27371801
eCl@ss 7.0	27371801
eCl@ss 8.0	27371801

### ETIM

ETIM 2.0	EC001438
ETIM 3.0	EC001438
ETIM 4.0	EC001438
ETIM 5.0	EC001438

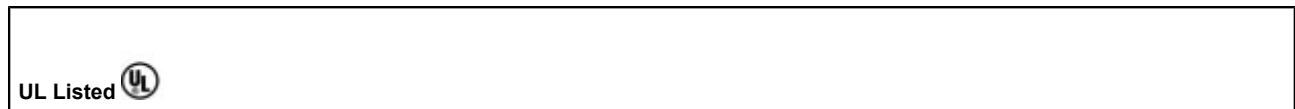
### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121535

## approvals

UL Listed / cUL Listed / cULus Listed /

### Approval details



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approvals



## Drawings

Block diagram

