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Powering Business Worldwide

EMR6-N100-N-1 - Level monitoring relays, 110 - 130 V AC, 50/60 Hz, 220 - 240 V AC, 50/60 Hz, 5 - 100 kΩ



184758 EMR6-N100-N-1

[Overview](#) [Specifications](#) [Resources](#)



## 184758 EMR6-N100-N-1

Level monitoring relays, 110 - 130 V AC, 50/60 Hz, 220 - 240 V AC, 50/60 Hz, 5 - 100 kΩ

Alternate Catalog No.

EMR6-N100-N-1

EL-Nummer (Norway)

4101954

Level monitoring relays, Product range: EMR Measuring and monitoring relays, Monitoring of: Fill level of conductive liquids, Mixture ratio of conductive liquids, adjustable sensitivity range: 5 - 100 kΩ, Supply voltage: 110 - 130 V AC, 50/60 Hz, 220 - 240 V AC, 50/60 Hz, Mounting position: As required, Fixing: Snap fixing, top-hat rail IEC/EN 60715, Width: 22.5 mm, Standards: IEC/EN 60255-6, EN 61557, UL, CSA, GL, DNV, RMRS, EAC, RCM

- [Delivery program](#)
- [Technical data](#)
- [Design verification as per IEC/EN 61439](#)
- [Technical data ETIM 7.0](#)
- [Approvals](#)
- [Dimensions](#)

### Delivery program

Product range

EMR Measuring and monitoring relays

Basic function

Level monitoring relays

Monitoring of

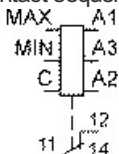
Fill level of conductive liquids

Mixture ratio of conductive liquids

adjustable sensitivity range

5 - 100 kΩ

Contact sequence



Supply voltage

110 - 130 V AC, 50/60 Hz

220 - 240 V AC, 50/60 Hz

Width

22.5 mm

### Technical data

General  
 Standards  
 IEC/EN 60255-6, EN 61557, UL, CSA, GL, DNV, RMRS, EAC, RCM  
 Lifespan, mechanical [Operations]  
 10 x 10<sup>6</sup>  
 Climatic proofing  
 Damp heat, cyclical to IEC 60068-2-30: 24 h cycle, 55° C, 93% relative humidity, 96 h  
 Ambient temperature Operation Operating ambient temperature min.  
 -25 °C  
 Ambient temperature Operation Operating ambient temperature max.  
 +60 °C  
 Ambient temperature Storage  
 - 40 - 85 °C  
 Mounting position  
 As required  
 Shock resistance  
 Class 2  
 Degree of protection Terminals  
 IP20  
 Degree of protection Enclosures  
 IP50  
 Terminal capacities Solid  
 1 x 0.5-2.5 (1 x 18-14 AWG) mm<sup>2</sup>  
 Terminal capacities Flexible with ferrule  
 2 x 0.5-1.5 (2 x 18-16 AWG) mm<sup>2</sup>  
 Standard screw driver  
 5.5 x 0.8 mm  
 Tightening torque  
 0.5 - 0.8 Nm  
 Fixing  
 Snap fixing, top-hat rail IEC/EN 60715  
 Contacts  
 Rated impulse withstand voltage [U<sub>imp</sub>]  
 4000 V AC  
 Overvoltage category/pollution degree  
 III/3  
 Power supply  
 Supply voltage  
 110 - 130 V AC, 50/60 Hz  
 220 - 240 V AC, 50/60 Hz  
 Voltage tolerance  
 0.85 - 1.1 x U<sub>c</sub>  
 Power consumption  
 2.6 VA  
 Rated frequency [f]  
 50 - 60 Hz  
 Duty factor  
 100 % DF  
 Measuring circuits  
 Sensor inputs B1  
 Earth reference sensor  
 Sensor inputs B2  
 Maximum level  
 Sensor inputs B3  
 Minimum level  
 Sensor voltage  
 6 V AC  
 Status indication  
 Supply voltage  
 LED, green  
 Output relay energized  
 LED, yellow  
 Status indicator (LED)  
 Green, solid: Supply voltage  
 Green, flashing: Release delay active  
 Yellow, solid : MIN and MAX occupied  
 Yellow, flashing: Min occupied  
 Yellow, solid (R): Output relay excited  
 Relay output contacts

Rated operational voltage [U<sub>e</sub>]  
300 V AC  
Rated operational current [I<sub>e</sub>]AC-12 at 230 V [I<sub>e</sub>]  
5 A  
Rated operational current [I<sub>e</sub>]AC-15 with 230 V [I<sub>e</sub>]  
3 A  
Minimum switching capacity  
10 mA / 12 V  
Lifespan, electrical (AC-12/230 V/4 A) [Operations] Lifespan, electrical [Operations]  
0.1 x 10<sup>6</sup>  
Short-circuit rating max. fuse [Fast/gL]  
5 A  
Electromagnetic compatibility (EMC)  
Electromagnetic compatibility  
IEC/EN 60947-6-2  
ESD [Air/contact discharge]  
IEC/EN 61000-4-2 level 3 kV  
HF-immunity to radiation  
IEC/EN 61000-4-3 level 3  
Burst  
IEC/EN 61000-4-4 level 3  
Surge  
IEC/EN 61000-4-5 Level 4  
HF-immunity to line-conducted interference  
IEC/EN 61000-4-6 level 3

## Design verification as per IEC/EN 61439

Operating ambient temperature min.  
-25 °C  
Operating ambient temperature max.  
+60 °C

## Technical data ETIM 7.0

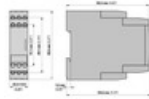
Relays (EG000019) / (Fill) level monitoring relay (EC001447)  
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Level monitoring relay (ecl@ss10.0.1-27-37-18-13 [AKF107014])  
Type of electric connection  
Screw connection  
Rated control supply voltage U<sub>s</sub> at AC 50HZ  
110 - 240 V  
Rated control supply voltage U<sub>s</sub> at AC 60HZ  
110 - 240 V  
Rated control supply voltage U<sub>s</sub> at DC  
0 - 0 V  
Voltage type for actuating  
AC  
With detachable clamps  
No  
Number of inputs for electrodes  
3  
Min. adjustable operate delay time  
0 s  
Max. permitted operate delay time  
0 s  
Min. adjustable off-delay time  
0 s  
Max. permitted off-delay time  
0 s  
Response value sensitivity adjustable  
Yes  
Number of contacts as normally closed contact  
0  
Number of contacts as normally open contact  
0  
Number of contacts as change-over contact  
1  
Physical measurement principle  
Conductive

Cascadable  
Width  
22.5 mm  
Height  
85.6 mm  
Depth  
104.6 mm

## Approvals

Product Standards  
IEC 255-6; UL 508; CSA-22.2 No. 14-05; CE marking  
UL File No.  
E29184  
UL Category Control No.  
NKCR, NKCR7  
CSA File No.  
UL report valid  
CSA Class No.  
3211-03  
North America Certification  
UL listed, certified by UL for use in Canada

## Dimensions



## CAD data

- [Product-specific CAD data](#)  
(Web)
- [3D Preview](#)  
(Web)

## DWG files

- [DA-CD-emr6\\_n\\_n\\_1](#)  
File  
(Web)

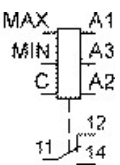
## edz files

- [DA-CE-ETN.EMR6-N100-N-1](#)  
File  
(Web)

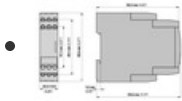
## Step files

- [DA-CS-emr6\\_n\\_n\\_1](#)  
File  
(Web)

## Wiring diagram

-   
2432SW-2  
Line drawing

## Product photo



2430DIM-3

Photo



2432PIC-4

Photo

## Instruction Leaflet

- [Liquid level monitoring relays \(IL121005ZU\)](#)  
Asset  
(PDF, multilingual)

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