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EMR6-N1000-A-1 - Level monitoring relays, 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC, 0.1 - 1000 kΩ



184757 EMR6-N1000-A-1

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184757 EMR6-N1000-A-1

Level monitoring relays, 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC, 0.1 - 1000 kΩ

Alternate Catalog No.

EMR6-N1000-A-1

EL-Nummer (Norway)

4101953

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: 0.1 - 1000 kΩ, Supply voltage: 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC, 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, RVRS, EAC, RCM

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Delivery program

Product range

EMR Measuring and monitoring relays

Basic function

Level monitoring relays

Monitoring of

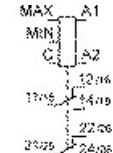
Fill level of conductive liquids

Mixture ratio of conductive liquids

adjustable sensitivity range

0.1 - 1000 kΩ

Contact sequence



Supply voltage

24 - 240 V AC, 50/60 Hz

24 - 240 V DC

Width

22.5 mm

Technical data

General

Standards

IEC/EN 60255-6, EN 61557, UL, CSA, GL, DNV, FMRS, EAC, RCM
 Lifespan, mechanical [Operations]
 10 x 10⁶
 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) mm²
 Terminal capacities Flexible with ferrule
 2 x 0.5-1.5 (2 x 18-16 AWG) mm²
 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_{imp}]
 4000 V AC
 Overvoltage category/pollution degree
 III/3
 Power supply
 Supply voltage
 24 - 240 V AC, 50/60 Hz
 24 - 240 V DC
 Voltage tolerance
 0.85 - 1.1 x U_c
 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_b]
 300 V AC

Rated operational current [I_e] AC-12 at 230 V [I_e]
5 A
Rated operational current [I_e] AC-15 with 230 V [I_e]
3 A
Rated operational current [I_e] DC-12 at 24 V [I_e]
2 A
Minimum switching capacity
10 mA / 12 V
Lifespan, electrical (AC-12/230 V/4 A) [Operations] Lifespan, electrical [Operations]
 0.1×10^6
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

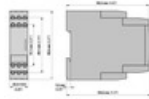
Relays (EG000019) / (Fill) level monitoring relay (EC001447)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment
(low-voltage switch technology) / Level monitoring relay (ecl@ss10.0.1-27-37-18-13 [AKF107014])
Type of electric connection
Screw connection
Rated control supply voltage U_s at AC 50Hz
24 - 240 V
Rated control supply voltage U_s at AC 60Hz
24 - 240 V
Rated control supply voltage U_s at DC
24 - 240 V
Voltage type for actuating
AC/DC
With detachable clamps
No
Number of inputs for electrodes
3
Min. adjustable operate delay time
0.1 s
Max. permitted operate delay time
30 s
Min. adjustable off-delay time
0.1 s
Max. permitted off-delay time
30 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
2
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_r_t_v_i](#)
File
(Web)

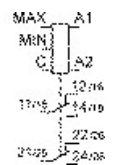
edz files

- [DA-CE-ETN.EMR6-N1000-A-1](#)
File
(Web)

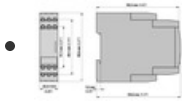
Step files

- [DA-CS-emr6_r_t_v_i](#)
File
(Web)

Wiring diagram

- 
[2432SW-1](#)
Line drawing

Product photo



2430DIM-2

Photo



2432PIC-3

Photo

Instruction Leaflet

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

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