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MCSN11-V - Pressure switch, 3p, 15bar, relief valve



033949 MCSN11-V

Overview Specifications Resources



# 033949 MCSN11-V

Pressure switch, 3p, 15bar, relief valve Alternate Catalog No. EL-Nummer (Norway)

MCSN11-V 4356116

IEC EN 60947-5-1, IP65\_x, pressure monitoring of liquid and gaseous media, e. g. compressed air, for switching of loads, make and break pressure: separately adjustable, with release valve for 6 mm Ermeto coupling

- Delivery program
- Technical data

Design verification as per IEC/EN 61439

- Technical data ETIM 7.0
- Approvals
- Dimensions

### Delivery program

Note on use

This product complies with Low-Voltage Directive 2014/35/EC and BVC Directive 2014/30/EC and meets the requirements in EN 60947-5-1. This product does not meet the rail industry's standard requirements. Accordingly, the user must review it separately for the specific application at hand.

Pressure switches with main contacts

Degree of Protection

IP65

Number of poles

3 pole

Out-in pressure and cut-out pressure:

separate stepless adjustment.

All the intersection points within the diagram area can be set.



Mn. Switching differential 1.4 bar

Example:

Out-out pressure 8.5 bar

Out-in pressure 4.5 bar

With relief valve

For 6 mm Ermeto coupling Max. operating pressure

15 bar

Notes

Features

- With terminal cover as standard
- 1 insulated protective conductor terminal  $_{\square}$
- 1 insulated N terminal
- 2 cable entry knockouts for M20, without cable gland
- IP65 in conjunction with V-M20 cable gland
- Pressure pipe flange R1/2"
- $\bullet~$  please enquire: Pressure pipe flange R  $^{1\!/\!4"}$
- Neoprene membrane

 $R \frac{1}{2}$  " corresponds to G  $\frac{1}{2}$  as per ISO 228-1

For use as a motor load switch as per IEC/EN 60947-4-1 for:

#### Three-phase current



### Single-phase current



#### Direct current DC-3



#### For use as control switch:

Out-in and cut-out pressures are factory-preset as specified with type suffix  $\square$  203948

Fitted on right side with Ermeto self-sealing coupling for pipe diameter 6 mm, on request also available fitted on left side. Order code: MCSN...-VG

### Technical data

General

Standards

IEC/EN 60947-4-1

Test pressure

32 bar

Rupturing pressure

90 bar

Operating frequency [Operations/h]

□ 1500

Climatic proofing

Damp heat, constant, to IEC 60068-2-78

Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature

-25 - 70

Degree of Protection

IP65

Mounting position

As required

Mechanical shock resistance to IEC 60068-2-27 [Half-sinusoidal shock 20 ms]

Vibration resistance acc. to IEC/EN 60068-2-6 [Amplitude 1 mm]

36 Hz

lifespan [Operations ] 0.5 x 10<sup>6</sup>

Terminal capacitiesSolid

1 x (0.75 - 2.5)

2 x (0.75 - 1.5) mm<sup>2</sup>

Terminal capacities Flexible with ferrules to DIN 46228

1 x (0.5 - 1.5) 2 x (0.5 - 1.5) mm<sup>2</sup>

Terminations

Flat terminal with clamping washer

Terminal screw

M4

Tightening torque of terminal screw

1.2 Nm

Contacts/switching capacity

Rated impulse withstand voltage [U<sub>imp</sub>]

4000 V AC

Rated insulation voltage [U]

Overvoltage category/pollution degree

111/3

Max. short-circuit protective deviceFuseless PKZM0-20 Type

Max. short-circuit protective deviceFuse [gG/gL]

20 A

Type of coordination

Rated short-circuit current [la (= Current r)]

1 kA

AC-3Rated operational current230 V

15 A AC-3Rated operational current400 V

AC-3Rated power P230 V

4 kW

AC-3Rated power P400 V

5.5 kW

DC - 3Rated operational current24 V

16 A

DC - 3Rated operational current110 V

12.5 A

DC - 3Rated operational current250 V

2 A

Rated frequency [f]

50 Hz

### Design verification as per IEC/EN 61439

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+70 °C

### Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Pressure switch (EC000243)

Bectric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Pressure monitoring equipment (ecl@ss10.0.1-27-37-18-14 [AKF108014])

Suitable as guard

Yes

Suitable as 2-point controller

Yes

Suitable as limiter

No

Max. operation pressure

15000 hPa

Engaging pressure

0 - 9.4 bar

Initial setting

0 - 0 hPa

Switch off pressure

0 - 11 bar

End setting

0 - 0 hPa

Pressure-switching differential

0 bar

Max. test pressure

32 bar

Bursting pressure

90 bar

Medium temperature

25 - 80 °C

Connection

Inner thread gas cylindrical (BSPP)

Thread size

1/2 inch

Rated voltage Ue at AC 50 Hz 0 - 400 V

Rated voltage Ue at AC 60 Hz

0 - 400 V

Rated voltage Ue at DC 0 - 250 V

Initial value measuring range pressure

End value measuring range pressure

0 Pa

Rated operation power at AC-3, 400 V 5.5 kW

Switching capacity at AC-3, 240 V

15 kA Rated operation current le at AC-1, 400  $\rm V$ 

Rated operation current le at AC-3, 400 V

Number of auxiliary contacts as normally open contact

Number of auxiliary contacts as normally closed contact

Number of auxiliary contacts as change-over contact

Type of electric connection

Screw connection

Number of normally closed contacts as main contact

Number of main contacts as normally open contact

Adjustable current range

0 - 0A

With hand operation

With manual on/off switch

No

**Bectronic** version

No

With display

No

Explosion-proof

No

Degree of protection (IP)

IP65

Degree of protection (NEVA)

Other

Height

111 mm

Width

93 mm Diameter

0 mm

Depth

96 mm

### Approvals

Product Standards CSA-CC22.2 No. 14 CSA File No. 12528 CSA Class No. 3211-06

North America Certification

CSA certified

### **Dimensions**

With relief valve

# Characteristic curve



Characteristic curve
Coordinate visualization
Pressure diagram

# Dimensions single product

• <sub>□</sub> 132X002

Dimensions single product Line drawing Pressure switch

132X003

Dimensions single product Line drawing Compression fitting

132X009

Dimensions single product Line drawing Pressure switches

# 3D drawing

1321002

3D drawing Line drawing Pressure switch

# Product photo



Photo Pressure switch

# **Instruction Leaflet**

• Pressure switch (IL05212001Z) Instruction Leaflet (PDF, International)

# **Declaration of Conformity**

• DA-DC-00002786 Declaration of Conformity (PDF)

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