

Pressure switch, 3p, 15bar

Part no. MCSN11
Catalog No. 029203
Alternate Catalog No. MCSN11
EL-Nummer (Norway) 4356112

Delivery program

Note on use	This product complies with Low-Voltage Directive 2014/35/EC and EMC 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.		
Product range	Pressure switches with main contacts		
Degree of Protection	IP65		
Number of poles	3 pole		
Cut-in pressure and cut-out pressure: separate stepless adjustment. All the intersection points within the diagram area can be set.	Min. switching differential: 1.4 bar	Example: Cut-out pressure 8.5 bar Cut-in pressure 4.5 bar Variable switching differential	
Max. operating pressure	bar	15	

Notes

Features

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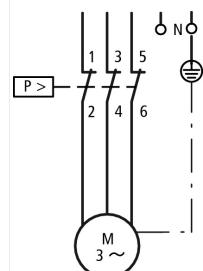
- With terminal cover as standard
- 1 insulated protective conductor terminal 
- 1 insulated N terminal
- 2 cable entry knockouts for M20, without cable gland
- IP65 in conjunction with V-M20 cable gland
- Pressure pipe flange R ½"
- please enquire: Pressure pipe flange R ¼"
- Neoprene membrane

R $\frac{1}{4}$ " corresponds to G $\frac{1}{4}$

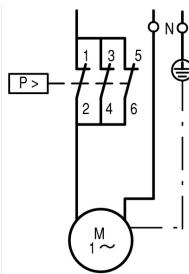
R $\frac{1}{2}$ " corresponds to G $\frac{1}{2}$ as per ISO 228-1

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

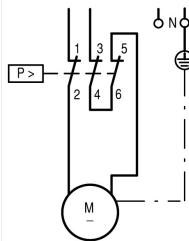
Three-phase current



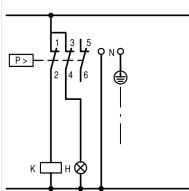
Single-phase current



Direct current DC-3



For use as control switch:



Cut-in and cut-out pressures are factory-preset as specified with type suffix → 203948

Technical data

General

Standards			IEC/EN 60947-4-1
Test pressure	bar	32	
Rupturing pressure	bar	90	
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		Vertical 90° in all directions	
Mechanical shock resistance to IEC 60068-2-27	Half-sinusoidal shock 20 ms	g	> 10
Vibration resistance acc. to IEC/EN 60068-2-6	Amplitude 1 mm	Hz	36
lifespan	Operations	$\times 10^6$	0.5
Terminal capacities		mm^2	
Solid		mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrules to DIN 46228		mm^2	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)
Terminations			Flat terminal with clamping washer
Terminal screw			M4
Tightening torque of terminal screw	Nm		1.2

Contacts/switching capacity

Rated impulse withstand voltage	U_{imp}	V AC	4000
Rated insulation voltage	U_i	V	400
Overvoltage category/pollution degree			III/3
Max. short-circuit protective device			

Fuseless	Type	PKZM0-20	
Fuse	gG/gL	A	20
Type of coordination			1
Rated short-circuit current	I_q (= Current r) kA		1
AC-3			
Rated operational current			
230 V		A	15
400 V		A	11.5
Rated power P			
230 V		kW	4
400 V		kW	5.5
DC - 3			
Rated operational current			
24 V		A	16
110 V		A	12.5
250 V		A	2
Rated frequency	f	Hz	50
Impedance per pole		$m\Omega$	1.68

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Pressure switch (EC000243)			
Electric 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. operating pressure	hPa	15000	
Engaging pressure	bar	0 - 9.4	
Initial setting	hPa	0 - 0	
Switch off pressure	bar	0 - 11	
End setting	hPa	0 - 0	
Pressure-switching differential	bar	0	
Max. test pressure	bar	32	
Bursting pressure	bar	90	
Medium temperature	°C	25 - 80	
Connection		Internal thread cylindrical BSPP-G (ISO 228-1)	
Thread size		1/2 inch	
Rated voltage Ue at AC 50 Hz	V	0 - 400	
Rated voltage Ue at AC 60 Hz	V	0 - 400	
Rated voltage Ue at DC	V	0 - 250	
Initial value measuring range pressure	Pa	0	
End value measuring range pressure	Pa	0	
Rated operation power at AC-3, 400 V	kW	5.5	
Switching capacity at AC-3, 240 V	kA	15	
Rated operation current Ie at AC-1, 400 V	A	0	
Rated operation current Ie at AC-3, 400 V	A	11.5	
Number of auxiliary contacts as normally open contact		0	
Number of auxiliary contacts as normally closed contact		0	
Number of auxiliary contacts as change-over contact		0	
Type of electric connection		Screw connection	

Number of normally closed contacts as main contact		3
Number of normally open contacts as main contact		0
Adjustable current range	A	0 - 0
With hand operation		No
With manual on/off switch		No
Electronic version		No
With display		No
Explosion-proof		No
Degree of protection (IP)		IP65
Degree of protection (NEMA)		Other
Height	mm	111
Width	mm	60
Diameter	mm	0
Depth	mm	96