



Model Number

NJ4-30GM-N-200

Features

- 4 mm flush
- Temperature range 0 ... 200 °C (0 ... 392 °F)

Technical Data
General specifications
Switching function
Output type
Rated operating distance
Installation
Assured operating distance
Reduction factor r _{Al}
Reduction factor r _{Cu}
Reduction factor r ₃₀₄
Output type
Nominal ratings

s_n

sa

U_o

Н

Nominal voltage Switching frequency Hysteresis Suitable for 2:1 technology Current consumption Measuring plate not detected Measuring plate detected Ambient conditions Ambient temperature Mechanical specifications Connection type Core cross-section Housing material Sensing face

Sensing face Degree of protection Cable Bending radius Note

General information

Use in the hazardous area Compliance with standards and directives Standard conformity NAMUR

Standards

Approvals and certificates UL approval CCC approval

Dimensions

Normally closed (NC)
NAMUR
4 mm
flush
0 3.04 mm
0.15
0.05
0.55
2-wire
8.2 V (R _i approx. 1 kΩ)
0 1000 Hz
≤ 20 % at 200°C
yes, Reverse polarity protection diode not required
≥3 mA
≤1 mA
0 200 °C (32 392 °F)
cable SIHE 5 m
0.34 mm^2
Stainless steel 1 4305 / AISI 303
PPS
IP65
> 7.5 x cable diameter
amplifier -25°C70°C
2 m PTFE cable between amplifier and oscillator
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see instruction manuals

EN 60947-5-6:2000 IEC 60947-5-6:1999 EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

cULus Listed, General Purpose CCC approval / marking not required for products rated ${\leq}36$ V



Electrical Connection





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Data for application in connection areas	with hazardous	
Equipment protection level		Ga , Gb , Da
Equipment protection level Ga		
Type of protection		intrinsic safety
CE marking		€€0102
Certificates		
Appropriate type		NJ4-30GM-N-200
ATEX certificate		PTB 00 ATEX 2048 X
ATEX marking		🐼 II 1G Ex ia IIC T6T1 Ga
Standards		EN 60079-0:2012+A11:2013 , EN 60079-11:2012
Effective internal inductivity	Ci	≤ 70 nF A cable length of 10 m is considered.
Effective internal inductance	Li	\leq 100 μH A cable length of 10 m is considered.
Maximum permissible ambient tem	perature T _{amb}	Also observe the maximum permissible ambient temperature stated in the general technical data. Keep to the lower of the two values. Refer to the relevant certificate to see the relationship between the connected circuit type, the maximum permitted ambient temperature, the effective inner reactances, and if applicable the surface temperature or the temperature class.
for ATEX		$\begin{array}{l} at \; U_i = 16 \; V \;, \; I_i = 25 \; mA \;, \; P_i = 34 \; mW \;, \\ at \; U_i = 16 \; V \;, \; I_i = 25 \; mA \;, \; P_i = 64 \; mW \;, \\ at \; U_i = 16 \; V \;, \; I_i = 52 \; mA \;, \; P_i = 169 \; mW \;, \\ at \; U_i = 16 \; V \;, \; I_i = 76 \; mA \;, \; P_i = 242 \; mW \end{array}$
Equipment protection level Gb		
Type of protection		intrinsic safety
CE marking		C€ 0102
Certificates		
Appropriate type		NJ4-30GM-N-200
ATEX certificate		PTB 00 ATEX 2048 X
ATEX marking		⟨ⓑ⟩ 1G Ex ia C T6T1 Ga
Standards		EN 60079-0:2012+A11:2013, EN 60079-11:2012
Effective internal inductivity	Ci	≤ 70 nF A cable length of 10 m is considered.
Effective internal inductance	Li	\leq 100 μ H A cable length of 10 m is considered.
Maximum permissible ambient tem	perature T _{amb}	Also observe the maximum permissible ambient temperature stated in the general technical data. Keep to the lower of the two values. Refer to the relevant certificate to see the relationship between the connected circuit type, the maximum permitted ambient temperature, the effective inner reactances, and if applicable the surface temperature or the temperature class. at $U_i = 16 V$, $I_i = 25 mA$, $P_i = 34 mW$, at $U_i = 16 V$, $I_i = 25 mA$, $P_i = 64 mW$, at $U_i = 16 V$, $I_i = 52 mA$, $P_i = 169 mW$, at $U_i = 16 V$, $I_i = 76 mA$, $P_i = 242 mW$
Equipment protection level Da		
Type of protection		intrinsic safety
CE marking		C€0102
Certificates		
Appropriate type		NJ4-30GM-N-200
ATEX certificate		PTB 00 ATEX 2048 X
ATEX marking		⟨E⟩ 1D Ex ia C T135°C Da
Standards		EN 60079-0:2012+A11:2013, EN 60079-11:2012
Effective internal inductivity	Ci	\leq 70 nF A cable length of 10 m is considered.
Effective internal inductance	Li	\leq 100 μ H A cable length of 10 m is considered.
Maximum permissible ambient tem	perature T _{amb}	Also observe the maximum permissible ambient temperature stated in the general technical data. Keep to the lower of the two values. Refer to the relevant certificate to see the relationship between the connected circuit type, the maximum permitted ambient temperature, the effective inner reactances, and if applicable the surface temperature or the temperature class. at $U_i = 16 V$, $I_i = 25 \text{ mA}$, $P_i = 34 \text{ mW}$: at $U_i = 16 V$, $I_i = 52 \text{ mA}$, $P_i = 64 \text{ mW}$, at $U_i = 16 V$, $I_i = 52 \text{ mA}$, $P_i = 169 \text{ mW}$, at $U_i = 16 V$, $I_i = 76 \text{ mA}$, $P_i = 242 \text{ mW}$