



Model Number

NBN3-F25F-E8-V1-3D-Y180449

Technical Data

General specifications

Switching function		2 x normally open (NO)
Output type		PNP
Rated operating distance	s_n	3 mm
Installation		flush mountable
Output polarity		DC
Assured operating distance	s_a	0 ... 2.43 mm
Actual operating distance	s_r	2.7 ... 3.3 mm typ.
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		1
Reduction factor r_{St37}		1.1
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		all connections
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Design data		
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	≤ 500 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

Standard conformity

EMC in accordance with	IEC / EN 60947-5-2:2004
Standards	IEC / EN 60947-5-2:2004

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Note	Mounted on mechanical drive

General information

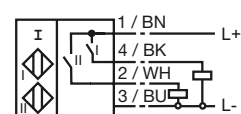
Use in the hazardous area	see instruction manuals
Category	3D

Dimensions



Electrical Connection

E8



Equipment protection level Dc

CE marking



ATEX marking

⊕ II 3D IP67 T 124 °C (255.2 °F) X



Directive conformity	94/9/EG
Standards	EN 50281-1-1 Protection via housing Use is restricted to the following stated conditions
Special conditions	
Maximum heating (Temperature rise)	dependant of the load current I_L and the max. operating voltage U_{Bmax} Information can be taken from the following list. The maximum surface temperature at maximum ambient temperature is given in the Ex identification of the apparatus.
at $U_{Bmax}=30\text{ V}$, $I_L=200\text{ mA}$	54 K
at $U_{Bmax}=30\text{ V}$, $I_L=100\text{ mA}$	41 K
at $U_{Bmax}=30\text{ V}$, $I_L=50\text{ mA}$	37 K
at $U_{Bmax}=30\text{ V}$, $I_L=25\text{ mA}$	34 K

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