

## 8 Technical details

<b>General</b>	
Approvals	CE, FCC, IC, TÜV, cULus Listed
Sensor's mode of operation	Transponder
<b>Transponder</b>	
Energy supply to transponder	passive (battery free)
Frequency band	125 kHz
<b>Electrical data</b>	
Supply voltage	
Voltage	24 V
Kind	DC
Voltage tolerance	-15 %/+10 %
Output of external power supply (DC) at no load	1 W
Residual ripple DC	20 %
Duty cycle	100 %
Status indicator	LED
<b>Inputs</b>	
Number	3
Signal level at "0"	-3 - +5 V DC
Signal level at "1"	15 - 30 V DC
Voltage at inputs	24 V DC
Input current range	2 mA
Galvanic isolation	No
<b>Semiconductor outputs</b>	
Overall performance ext. loading, semiconductor	9 W
Number of positive-switching single-pole semiconductor outputs	13
Switching capability	
Voltage	24 V
Current	50 mA
Signal level at "1"	UB - 0.5 VDC
Residual current at "0"	0,4 mA
Short circuit-proof	yes
<b>Times</b>	
Switch-on delay	
after UB is applied	1 s
Supply interruption before de-energisation	20 ms
Switchover delay t1	50 ms
Operating time button 1 ... 4	50 ms ... 5 s
Operating time, service button	5 s ... 10 s
<b>Environmental data</b>	
Climatic suitability	DIN IEC 60068-2-3

<b>Environmental data</b>	
Ambient temperature	
Temperature range	<b>-20 - 60 °C</b>
Storage temperature	
Temperature range	<b>-25 - 70 °C</b>
Climatic suitability	
In accordance with the standard	<b>EN 60068-2-78</b>
Humidity	<b>95 % r. h. at 40 °C</b>
EMC	<b>EN 60947-5-1</b>
Vibration	
In accordance with the standard	<b>EN 60068-2-6</b>
Frequency	<b>10 - 55 Hz</b>
Amplitude	<b>0,35 mm</b>
Airgap creepage	
In accordance with the standard	<b>EN 60664-1</b>
Overvoltage category	<b>II</b>
Pollution degree	<b>2</b>
Rated insulation voltage	<b>60 V</b>
Rated impulse withstand voltage	<b>0,8 kV</b>
Protection type	
Mounting area (e.g. control cabinet)	<b>IP65</b>
Housing	<b>IP20</b>
Terminals	<b>IP20</b>
<b>Mechanical data</b>	
Operating distances	
Typical operating distance So	<b>5 mm</b>
Max. cable length	<b>1000 m</b>
Material	
Bottom	<b>ST + 10µ Zn</b>
Front	<b>ABS</b>
Connection type	<b>Spring-loaded terminal, plug-in, screw terminal, plug-in</b>
Conductor cross section with screw terminals	
1 core flexible	<b>0,25 - 1,5 mm<sup>2</sup>, 28 - 16 AWG</b>
Max. torque setting for fixing screws	<b>0,3 Nm</b>
Torque setting with screw terminals	<b>0,25 Nm</b>
Conductor cross section with spring-loaded terminals:	
Flexible with/without crimp connector	<b>0,2 - 2,5 mm<sup>2</sup>, 24 - 12 AWG</b>
Spring-loaded terminals: Terminal points per connection	<b>1</b>
Stripping length with spring-loaded terminals	<b>9 mm</b>
Dimensions	
Height	<b>55 mm</b>
Width	<b>98 mm</b>
Depth	<b>43 mm</b>
Weight	<b>160 g</b>