## **SIEMENS**

## **Data sheet**

6ES7222-1BF32-0XB0



SIMATIC S7-1200, Digital output SM 1222, 8 DO, 24 V DC, transistor 0.5 A

Product type designation  SM 1222, DQ 8x24 V DC/0.5 A  Supply voltage permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, upper limit (DC)  Input current  from backplane bus 5 V DC, max.  120 mA  Power loss  Power loss, typ. 1.5 W  Digital outputs  Number of digital outputs  • in groups of 1  Short-circuit protection Limitation of inductive shutdown voltage to Switching capacity of the outputs  • with resistive load, max. • on lamp load, max.  • for signal "1", min.  Output voltage  • Rated value (DC) • for signal "1", min.  Output current • for signal "1" rated value • for signal "1" rated value • for signal "0" residual current, max.  Output delay with resistive load • "0" to "1", max. • "1" to "0", max. • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0	General information	
Supply voltage   permissible range, lower limit (DC)   20.4 V   permissible range, upper limit (DC)   28.8 V		SM 1222 DO 8×24 V DC/0.5 A
permissible range, lower limit (DC) 20.4 V permissible range, upper limit (DC) 28.8 V Input current from backplane bus 5 V DC, max. 120 mA  Power loss Power loss Power loss, typ. 1.5 W Digital outputs Number of digital outputs 8  • in groups of 1 Short-circuit protection No; to be provided externally Limitation of inductive shutdown voltage to typ. (L+) -48 V  Switching capacity of the outputs  • with resistive load, max. 0.5 A • on lamp load, max. 0.5 A  Output voltage • Rated value (DC) 24 V • for signal "1", min. 20 V DC  Output current • for signal "1" rated value 0.5 A • for signal "1" rated value 0.5 A • for signal "0" residual current, max. 10 µA  Output delay with resistive load • "0" to "1", max. 50 µs • "1" to "0", max. 200 µs  Total current of the outputs (per group) horizontal installation - up to 50 "C, max. 4 A; Current per mass  Relay outputs  Switching capacity of contacts - with inductive load, max. 5 W - with resistive load, max. 5 SW	31	31VI 1222, DQ 0824 V D0/0.3 M
permissible range, upper limit (DC)   28.8 V     Input current		20.41/
Input current from backplane bus 5 V DC, max.  Power loss  Power loss.  Power loss, typ.  Digital outputs  Number of digital outputs  • in groups of  1  Short-i-cruit pretection  Limitation of inductive shutdown voltage to  switching capacity of the outputs  • with resistive load, max.  • on lamp load, max.  • for signal "1", min.  Output current  • for signal "1" rated value • for signal "1" rated value • for signal "1" rated value • or signal "0" residual current, max.  10 µA  Output delay with resistive load • "0" to "1", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max.  • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to "0", max. • "1" to		
from backplane bus 5 V DC, max.  Power loss, typ.  Digital outputs  Number of digital outputs  • in groups of  Short-circuit protection  Limitation of inductive shutdown voltage to  Switching capacity of the outputs  • with resistive load, max.  • on lamp load, max.  • on lamp load, max.  • for signal "1", max.  • for signal "1", min.  Output current  • for signal "1" rated value  • for signal "1" rated value  • or or signal "1", max.  • for signal "1", max.  • for signal "1", max.  • for signal "1" rated value  • for signal "0" residual current, max.  10 µA  Output delay with resistive load  • "0" to "1", max.  • "1" to "0", max.  • "1" to "0", max.  • "1" to "0", max.  A A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — up to 50 "C, max.  A A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — on lamp load, max.  — with resistive load, max.  — of S00 m  • shielded, max.  • unshielded, max.		28.8 V
Power loss, typ. 1.5 W  Digital outputs  Number of digital outputs 8  ● in groups of 1  Short-circuit protection No; to be provided externally typ. (L+) -48 V  Switching capacity of the outputs  ● with resistive load, max. 0.5 A  ● on lamp load, max. 5 W  Output voltage  ● Rated value (DC) 24 V  • for signal "0", max. 0.1 V; with 10 kOhm load 0.1 V; with 10 kOhm load 0.2 V DC  Output current  ● for signal "1" rated value 0.5 A  • for signal "1" rated value 0.5 A  • for signal "1" rated value 0.5 A  • for signal "0" residual current, max. 10 µA  Output delay with resistive load  ● "0" to "1", max. 50 µs  • "1" to "0", max. 200 µs  Total current of the outputs (per group)  horizontal installation  — up to 50 "C, max. 4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max. 5 W  — on lamp load, max. 5 W  — with resistive load, max. 5 SO D M  • shielded, max. 500 m  • shielded, max. 500 m  • unshielded, max. 500 m  • unshielded, max. 500 m  • unshielded, max. 500 m		
Power loss, typ. 1.5 W  Digital outputs  Number of digital outputs 8  • in groups of 1  Short-circuit protection No; to be provided externally typ. (L+) -48 V  Switching capacity of the outputs  • with resistive load, max. 0.5 A  • on lamp load, max. 5 W  Output voltage  • Rated value (DC) 24 V  • for signal "0", max. 0.1 V; with 10 kOhm load  • for signal "1" rated value 0.5 A  • for signal "1" rated value 0.5 A  • for signal "1" rated value 0.5 A  • for signal "0" residual current, max. 10 µA  Output delay with resistive load  • "0" to "1", max. 50 µs  • "1" to "0", max. 200 µs  Total current of the outputs (per group)  horizontal installation  — up to 50 "C, max. 4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max. 5 W  — with resistive load, max. 5 W  — with resistive load, max. 5 W  — with resistive load, max. 5 SO m  • with resistive load, max. 5 SO m  • shielded, max. 500 m  • shielded, max. 500 m  • unshielded, max. 500 m  • unshielded, max. 500 m  • unshielded, max. 500 m		120 mA
Digital outputs         Number of digital outputs       8         • in groups of       1         Short-circuit protection       No; to be provided externally         Limitation of inductive shutdown voltage to       typ. (L+) -48 V         Switching capacity of the outputs       • with resistive load, max.       0.5 A         • on lamp load, max.       5 W         Output voltage       • Rated value (DC)       24 V         • for signal "0", max.       0.1 V; with 10 kOhm load         • for signal "1", min.       20 V DC         Output current       • for signal "1" rated value       0.5 A         • for signal "0" residual current, max.       10 μA         Output delay with resistive load       • "0" to "1", max.       50 μs         • "1" to "0", max.       200 μs         Total current of the outputs (per group)       horizontal installation         - up to 50 °C, max.       4 A; Current per mass         Relay outputs       Switching capacity of contacts         - with inductive load, max.       5 W         - on lamp load, max.       5 W         - on lamp load, max.       0.5 A         - with resistive load, max.       0.5 A         - shielded, max.       500 m         • shielded, max. </td <td></td> <td></td>		
Number of digital outputs         8           • in groups of         1           Short-circuit protection         No, to be provided externally           Limitation of inductive shutdown voltage to         typ. (L+) -48 V           Switching capacity of the outputs         • with resistive load, max.           • on lamp load, max.         5 W           Output voltage         • Rated value (DC)         24 V           • for signal "0", max.         0.1 V; with 10 kOhm load           • for signal "1", min.         20 V DC           Output current         • for signal "1" rated value         0.5 A           • for signal "0" residual current, max.         10 μA           Output delay with resistive load         • "0" to "1", max.         50 μs           • "1" to "0", max.         200 μs           Total current of the outputs (per group)         horizontal installation           — up to 50 °C, max.         4 A; Current per mass           Relay outputs         Switching capacity of contacts           — with inductive load, max.         5 W           — on lamp load, max.         5 W           — on lamp load, max.         0.5 A           — with resistive load, max.         0.5 A           • shielded, max.         500 m           • unshielded, max.<	Power loss, typ.	1.5 W
• in groups of Short-circuit protection No; to be provided externally Limitation of inductive shutdown voltage to Switching capacity of the outputs • with resistive load, max. • on lamp load, max. • on lamp load, max.  • Rated value (DC) • for signal "0", max. • for signal "1", min.  Output current • for signal "1" rated value • for signal "1" rated value • for signal "0" residual current, max.  • for signal "0" residual current, max.  • for "0" to "1", max. • "1" to "0", max. • "1" to "0", max.  Total current of the outputs (per group) horizontal installation — up to 50 °C, max.  Relay outputs  Switching capacity of contacts — with inductive load, max. — on lamp load, max. — on lamp load, max. — with resistive load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max. — Soo m  Shielded, max. • unshielded, max. • unshielded, max. • unshielded, max.	Digital outputs	
Short-circuit protection Limitation of inductive shutdown voltage to typ. (L+) -48 V Switching capacity of the outputs  • with resistive load, max. • on lamp load, max.  • Ontput voltage • Rated value (DC) • for signal "0", max. • of signal "1", min.  Output current • for signal "1" rated value • for signal "0" residual current, max.  • of or signal "0" residual current, max.  10 µA  Output delay with resistive load • "0" to "1", max. • "1" to "0", max. • "1" to "0", max.  Total current of the outputs (per group) horizontal installation — up to 50 °C, max.  Relay outputs  Switching capacity of contacts — with inductive load, max. — on lamp load, max. • Su W • with resistive load, max. — with resistive load, max. — with resistive load, max.  — with resistive load, max.  — with resistive load, max.  — on lamp load, max.  • 5W • shielded, max. • 500 m • unshielded, max.  • shielded, max.  • unshielded, max.  • shielded, max.  • unshielded, max.	Number of digital outputs	8
Limitation of inductive shutdown voltage to  Switching capacity of the outputs  • with resistive load, max. • on lamp load, max.  • on lamp load, max.  • on lamp load, max.  • on lamp load, max.  • on lamp load, max.  • on lamp load, max.  • on lamp load, max.  • on signal "0", max. • for signal "1", min.  20 V DC  Output current  • for signal "1" rated value • for signal "0" residual current, max.  10 μA  Output delay with resistive load  • "0" to "1", max. • "1" to "0", max.  • "1" to "0", max.  Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  Relay outputs  Switching capacity of contacts — with inductive load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max.  — with resistive load, max. — with resistive load, max.  — with resistive load, max.  5 W  Cable length • shielded, max. • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.  • unshielded, max.	• in groups of	1
Switching capacity of the outputs  • with resistive load, max. • on lamp load, max.  • on lamp load, max.  • Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  Relay outputs  Switching capacity of the outputs (per group)  - with riductive load, max.  — with riesistive load, max. — on lamp load, max. — with resistive load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max. — with resistive load, max. — on lamp load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max. — with resistive load, max. — on lamp load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max. — on lamp load, max. — on la	Short-circuit protection	No; to be provided externally
<ul> <li>with resistive load, max.</li> <li>on lamp load, max.</li> <li>5 W</li> <li>Output voltage</li> <li>Rated value (DC)</li> <li>for signal "0", max.</li> <li>of or signal "1", min.</li> <li>20 V DC</li> <li>Output current</li> <li>for signal "1" rated value</li> <li>of or signal "0" residual current, max.</li> <li>of or signal "0" residual current, max.</li> <li>Utput delay with resistive load</li> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> <li>200 µs</li> <li>Total current of the outputs (per group)</li> <li>horizontal installation</li> <li>— up to 50 °C, max.</li> <li>4 A; Current per mass</li> <li>Relay outputs</li> <li>Switching capacity of contacts</li> <li>— with inductive load, max.</li> <li>— on lamp load, max.</li> <li>— with resistive load, max.</li> <li>— with resistive load, max.</li> <li>5 W</li> <li>— with resistive load, max.</li> <li>5 SO M</li> <li>— with resistive load, max.</li> <li>5 SO M</li> <li>— with resistive load, max.</li> <li>5 SO M</li> <li>— with resistive load, max.</li> <li>500 m</li> <li>unshielded, max.</li> <li>unshielded, max.</li> <li>150 m</li> </ul>	Limitation of inductive shutdown voltage to	typ. (L+) -48 V
on lamp load, max.  Output voltage  Rated value (DC)  of r signal "0", max.  of r signal "1", min.  20 V DC  Output current  of r signal "1" rated value  of r signal "0" residual current, max.  10 μA  Output delay with resistive load  of "0" to "1", max.  of "1" to "0", max.  of the outputs (per group)  horizontal installation  — up to 50 °C, max.  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  with resistive load, max.  of W  of	Switching capacity of the outputs	
Output voltage  • Rated value (DC) • for signal "0", max. • for signal "1", min. 20 V DC  Output current • for signal "1" rated value • for signal "0" residual current, max. 10 µA  Output delay with resistive load • "0" to "1", max. • "1" to "0", max. • "1" to "0", max.  • "1" to "0", max.  200 µs  Total current of the outputs (per group) horizontal installation — up to 50 °C, max.  Relay outputs  Switching capacity of contacts — with inductive load, max. — on lamp load, max. — with resistive load, max.  - with resistive load with resistive load.	<ul> <li>with resistive load, max.</li> </ul>	0.5 A
<ul> <li>Rated value (DC)</li> <li>for signal "0", max.</li> <li>for signal "1", min.</li> <li>20 V DC</li> </ul> Output current <ul> <li>for signal "1" rated value</li> <li>for signal "0" residual current, max.</li> <li>µA</li> </ul> Output delay with resistive load <ul> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> <li>200 μs</li> </ul> Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max. <li>A A; Current per mass</li> Relay outputs  Switching capacity of contacts  — with inductive load, max. <li>— on lamp load, max.</li> <li>— with resistive load, max.</li> <li>— with resistive load, max.</li> <li>— with resistive load, max.</li> <li>5 W</li> <li>— with resistive load, max.</li> <li>0.5 A</li> Cable length <ul> <li>shielded, max.</li> <li>unshielded, max.</li> </ul> 150 m	• on lamp load, max.	5 W
<ul> <li>for signal "0", max.</li> <li>for signal "1", min.</li> <li>20 V DC</li> </ul> Output current <ul> <li>for signal "1" rated value</li> <li>for signal "0" residual current, max.</li> <li>μA</li> </ul> Output delay with resistive load <ul> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> </ul> Total current of the outputs (per group) horizontal installation — up to 50 °C, max. <li>A A; Current per mass</li> Relay outputs  Switching capacity of contacts — with inductive load, max. <li>— on lamp load, max.</li> <li>— with resistive load, max.</li> <li>— with resistive load, max.</li> <li>S A</li> Cable length <ul> <li>shielded, max.</li> <li>unshielded, max.</li> </ul> 500 m <li>unshielded, max.</li> <li>150 m</li>	Output voltage	
<ul> <li>for signal "1", min.</li> <li>20 V DC</li> <li>Output current</li> <li>for signal "1" rated value</li> <li>for signal "0" residual current, max.</li> <li>μA</li> <li>Output delay with resistive load</li> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> <li>200 μs</li> <li>Total current of the outputs (per group)</li> <li>horizontal installation</li> <li>- up to 50 °C, max.</li> <li>4 A; Current per mass</li> <li>Relay outputs</li> <li>Switching capacity of contacts</li> <li>- with inductive load, max.</li> <li>- on lamp load, max.</li> <li>- with resistive load, max.</li> <li>- with resistive load, max.</li> <li>- shielded, max.</li> <li>shielded, max.</li> <li>unshielded, max.</li> <li>150 m</li> </ul>	<ul> <li>Rated value (DC)</li> </ul>	24 V
Output current  • for signal "1" rated value • for signal "0" residual current, max.  Output delay with resistive load  • "0" to "1", max. • "1" to "0", max.  Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max.  — with resistive load, max.  Sound  Sound  Cable length • shielded, max. • unshielded, max.  • unshielded, max.  • unshielded, max.  10 µA  4 A; Current  9 0 µs  10 µs	• for signal "0", max.	0.1 V; with 10 kOhm load
<ul> <li>for signal "1" rated value</li> <li>for signal "0" residual current, max.</li> <li>0 μA</li> <li>Output delay with resistive load</li> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> <li>200 μs</li> <li>Total current of the outputs (per group)</li> <li>horizontal installation</li> <li>— up to 50 °C, max.</li> <li>4 A; Current per mass</li> <li>Relay outputs</li> <li>Switching capacity of contacts</li> <li>— with inductive load, max.</li> <li>— on lamp load, max.</li> <li>— with resistive load, max.</li> <li>— with resistive load, max.</li> <li>S A</li> <li>Cable length</li> <li>shielded, max.</li> <li>unshielded, max.</li> <li>unshielded, max.</li> <li>150 m</li> </ul>	• for signal "1", min.	20 V DC
• for signal "0" residual current, max.  Output delay with resistive load  • "0" to "1", max.  • "1" to "0", max.  Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  Relay outputs  Switching capacity of contacts  — with inductive load, max. — on lamp load, max. — with resistive load, max. — with resistive load, max.  — with resistive load, max.  Solution	Output current	
Output delay with resistive load  • "0" to "1", max.  • "1" to "0", max.  200 µs  Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — with resistive load, max.  — with resistive load, max.  5 W  Cable length  • shielded, max.  • unshielded, max.  150 m	<ul><li>for signal "1" rated value</li></ul>	0.5 A
• "0" to "1", max. • "1" to "0", max.  200 µs  Total current of the outputs (per group)  horizontal installation — up to 50 °C, max.  4 A; Current per mass  Relay outputs  Switching capacity of contacts — with inductive load, max. — on lamp load, max. — with resistive load, max.  5 W  Cable length • shielded, max. • unshielded, max.  • unshielded, max.  150 m	• for signal "0" residual current, max.	10 μΑ
• "1" to "0", max.  Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max.  4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — with resistive load, max.  — with resistive load, max.  5 W  Cable length  • shielded, max.  • unshielded, max.  150 m	Output delay with resistive load	
Total current of the outputs (per group)  horizontal installation  — up to 50 °C, max. 4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max. 0.5 A  — on lamp load, max. 5 W  — with resistive load, max. 0.5 A  Cable length  • shielded, max. 500 m  • unshielded, max. 150 m	• "0" to "1", max.	50 μs
horizontal installation  — up to 50 °C, max.  4 A; Current per mass  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — with resistive load, max.  Switching capacity of contacts  — with inductive load, max.  5 W  — with resistive load, max.  5 W  Cable length  • shielded, max.  • unshielded, max.  150 m	• "1" to "0", max.	200 μs
— up to 50 °C, max.  Relay outputs  Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — with resistive load, max.  Substituting the street of the stre	Total current of the outputs (per group)	
Relay outputs  Switching capacity of contacts  - with inductive load, max.  - on lamp load, max.  - with resistive load, max.  - with resistive load, max.  0.5 A  Cable length  • shielded, max.  • unshielded, max.  150 m	horizontal installation	
Switching capacity of contacts  — with inductive load, max.  — on lamp load, max.  — with resistive load, max.  5 W  — with resistive load, max.  0.5 A  Cable length  • shielded, max.  • unshielded, max.  150 m	— up to 50 °C, max.	4 A; Current per mass
<ul> <li>with inductive load, max.</li> <li>on lamp load, max.</li> <li>with resistive load, max.</li> <li>O.5 A</li> </ul> Cable length <ul> <li>shielded, max.</li> <li>unshielded, max.</li> </ul> 500 m <ul> <li>unshielded, max.</li> </ul> 150 m	Relay outputs	
<ul> <li>— on lamp load, max.</li> <li>— with resistive load, max.</li> <li>Cable length</li> <li>• shielded, max.</li> <li>• unshielded, max.</li> <li>150 m</li> </ul>	Switching capacity of contacts	
— with resistive load, max.  Cable length  ● shielded, max.  • unshielded, max.  150 m	— with inductive load, max.	0.5 A
Cable length  • shielded, max.  • unshielded, max.  150 m	— on lamp load, max.	5 W
<ul> <li>shielded, max.</li> <li>unshielded, max.</li> <li>500 m</li> <li>150 m</li> </ul>	— with resistive load, max.	0.5 A
• unshielded, max. 150 m	Cable length	
•	<ul><li>shielded, max.</li></ul>	500 m
Interrupts/diagnostics/status information	<ul><li>unshielded, max.</li></ul>	150 m
	Interrupts/diagnostics/status information	

Alarma	
Alarms	Vee
Diagnostic alarm  Diagnostics indication LED	Yes
Diagnostics indication LED	Yes
• for status of the outputs	res
Potential separation	
Potential separation digital outputs	
between the channels, in groups of	1
between the channels and backplane bus	500 V AC
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Marine approval	Yes
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-20 °C
• max.	60 °C
<ul> <li>horizontal installation, min.</li> </ul>	-20 °C
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-20 °C
<ul> <li>vertical installation, max.</li> </ul>	50 °C
<ul> <li>permissible temperature change</li> </ul>	5°C to 55°C, 3°C / minute
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
<ul> <li>Storage/transport, min.</li> </ul>	660 hPa
<ul> <li>Storage/transport, max.</li> </ul>	1 080 hPa
Relative humidity	
<ul> <li>Operation at 25 ℃ without condensation, max.</li> </ul>	95 %
connection method / header	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	Von
Plastic  Piransians	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	180 g
last modified:	2/26/2021 🗗