## Data sheet 6ES7226-6RA32-0XB0



SIMATIC S7-1200, Relay output SM 1226, F-DQ 2x RLY 5A, PROFIsafe, 70 mm overall width, up to PL E (ISO 13849-1)/ SIL3 (IEC 61508)

General information		
Product type designation	SM 1226, F-DQ 2x relay/5 A	
Supply voltage		
permissible range, lower limit (DC)	20.4 V	
permissible range, upper limit (DC)	28.8 V	
power supply according to NEC Class 2 required	No	
Input current		
from backplane bus 5 V DC, max.	120 mA	
Digital outputs		
<ul> <li>from load voltage L+, max.</li> </ul>	300 mA	
Power loss		
Power loss, typ.	10 W	
Digital outputs		
Number of digital outputs	2	
Short-circuit protection	No	
Output voltage		
<ul> <li>Rated value (DC)</li> </ul>	5 V DC to 30 V DC	
Rated value (AC)	5 V AC to 250 V AC	
Output current		
<ul><li>for signal "1" permissible range, max.</li></ul>	5 A maximum per circuit and 10 A maximum of all circuits per module	
Relay outputs		
Number of relay outputs	2; 2 circuits per output	
Switching capacity of contacts		
— with inductive load, max.	0.1 Hz, accordance with IEC 60947-5-1, DC-13; 2 Hz, accordance with IEC 60947-5-1, AC-15	
— with resistive load, max.	2 Hz	
Cable length		
• shielded, max.	200 m	
unshielded, max.	200 m	
Interrupts/diagnostics/status information		
Diagnostics indication LED		
for status of the outputs	Yes	
Degree and class of protection		
IP degree of protection	IP20	
Standards, approvals, certificates		
CE mark	Yes	
cULus	Yes	
FM approval	Yes	
Highest safety class achievable in safety mode		
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	Category 4, PL e	

Probability of failure (for service life of 20 years and repair time of 100 hours)  - Low demand mode: PFDavg in accordance with SIL3  - High demand/continuous mode: PFH in accordance with SIL3  - High demand/continuous mode: PFH in accordance with SIL3  Ambient conditions  Free fail  • Fall height, max.  0.3 m; five times, in product package  Ambient temperature during operation  • min.  • max.  • 55 °C  • permissible temperature change  5°C to 55°C, 3°C / minute  Ambient temperature during storage/transportation  • min.  • max.  70 °C  Air pressure acc. to IEC 60068-2-13  • Storage/transport, min.  • Storage/transport, max.  1 080 hPa  Relative humidity  • Operation at 25 °C without condensation, max.  95 %  Mechanics/material  Enclosure material (front)  • Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	SIL acc. to IEC 61508	SIL 3	
SIL3  — High demand/continuous mode: PFH in accordance with SIL3  Ambient conditions  Free fall  • Fall height, max.  Ambient temperature during operation  • min.  • max.  • permissible temperature change  Ambient temperature during storage/transportation  • min.  • max.  • permissible temperature change  Ambient temperature during storage/transportation  • min.  • 40 °C  • max.  70 °C  Air pressure acc. to IEC 60068-2-13  • Storage/transport, min.  • Storage/transport, max.  • Storage/transport, max.  • Storage/transport, max.  Poperation at 25 °C without condensation, max.   Mochanics/material  Enclosure material (front)  • Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	Probability of failure (for service life of 20 years and repair time of 100 hours)		
Ambient conditions  Free fall  Free fall  Fall height, max.  O.3 m; five times, in product package  Ambient temperature during operation  min.  min.  max.  S5°C  permissible temperature change  Ambient temperature during storage/transportation  min.  min.  min.  Mo °C  imax.  Ali pressure acc. to IEC 60068-2-13  Storage/transport, min.  Storage/transport, max.  1 080 hPa  Storage/transport, max.  Relative humidity  Operation at 25 °C without condensation, max.  Mochanics/material  Enclosure material (front)  Plastic  Yes  Dimensions  Width  To mm  Height  Depth  75 mm  Weights		< 1.00E-05	
Free fall  Frae fall height, max.  Ambient temperature during operation  min. max. 55°C permissible temperature change 5°C to 55°C, 3°C / minute  Ambient temperature during storage/transportation min. min. min. min. min. min. min. min		< 4.00E-09	
Fall height, max.  O.3 m; five times, in product package  Ambient temperature during operation  incomparity of the product package  Ambient temperature change  or max.  or comparity of the product package  Ambient temperature change  for comparity of the product package  for comparity of the product package  for comparity of the product package  for comparity of com	Ambient conditions		
Ambient temperature during operation  • min. • min. • max. • 55 °C • permissible temperature change  Ambient temperature during storage/transportation • min. • min. • min. • 40 °C • max.  70 °C  Air pressure acc. to IEC 60068-2-13 • Storage/transport, min. • Storage/transport, max.  1 080 hPa  Storage/transport, max.  Relative humidity • Operation at 25 °C without condensation, max.  Mechanics/material  Enclosure material (front) • Plastic  Dimensions  Width 70 mm  Height 100 mm  Depth 75 mm  Weights	Free fall		
	Fall height, max.	0.3 m; five times, in product package	
<ul> <li>max.</li> <li>permissible temperature change</li> <li>5°C to 55°C, 3°C / minute</li> </ul> Ambient temperature during storage/transportation <ul> <li>min.</li> <li>-40 °C</li> <li>max.</li> <li>70 °C</li> </ul> Air pressure acc. to IEC 60068-2-13 <ul> <li>Storage/transport, min.</li> <li>Storage/transport, max.</li> <li>1 080 hPa</li> </ul> Relative humidity <ul> <li>Operation at 25 °C without condensation, max.</li> <li>95 %</li> </ul> Mechanics/material Enclosure material (front) <ul> <li>Plastic</li> <li>Yes</li> </ul> Dimensions Width <ul> <li>70 mm</li> <li>Height</li> <li>100 mm</li> <li>Depth</li> <li>75 mm</li> </ul> Weights Weights To monute 75 mm Weights Weights	Ambient temperature during operation		
permissible temperature change     Ambient temperature during storage/transportation      min.	• min.	0 °C	
Ambient temperature during storage/transportation  • min.  • max.  70 °C  Air pressure acc. to IEC 60068-2-13  • Storage/transport, min.  • Storage/transport, max.  1 080 hPa  Relative humidity  • Operation at 25 °C without condensation, max.  Mechanics/material  Enclosure material (front)  • Plastic  Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	• max.	55 °C	
	permissible temperature change	5°C to 55°C, 3°C / minute	
<ul> <li>max.</li> <li>Air pressure acc. to IEC 60068-2-13</li> <li>Storage/transport, min.</li> <li>Storage/transport, max.</li> <li>1 080 hPa</li> <li>Relative humidity</li> <li>Operation at 25 °C without condensation, max.</li> <li>95 %</li> <li>Mechanics/material</li> <li>Enclosure material (front)</li> <li>Plastic</li> <li>Yes</li> <li>Dimensions</li> <li>Width</li> <li>Height</li> <li>100 mm</li> <li>Depth</li> <li>75 mm</li> <li>Weights</li> </ul>	Ambient temperature during storage/transportation		
Air pressure acc. to IEC 60068-2-13  • Storage/transport, min. • Storage/transport, max.  1 080 hPa  Relative humidity • Operation at 25 °C without condensation, max.  95 %  Mechanics/material  Enclosure material (front) • Plastic  Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	• min.	-40 °C	
Storage/transport, min. Storage/transport, max.  1 080 hPa  1 080 hPa  Relative humidity  Operation at 25 °C without condensation, max.  Mechanics/material  Enclosure material (front) Plastic Yes  Dimensions  Width 70 mm Height 100 mm Depth 75 mm  Weights	• max.	70 °C	
Storage/transport, max.  Relative humidity  Operation at 25 °C without condensation, max.  Mechanics/material  Enclosure material (front)  Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	Air pressure acc. to IEC 60068-2-13		
Relative humidity	<ul> <li>Storage/transport, min.</li> </ul>	660 hPa	
Operation at 25 °C without condensation, max.  Mechanics/material  Enclosure material (front)  Plastic  Yes  Dimensions  Width  70 mm  Height  100 mm  Depth  75 mm  Weights	Storage/transport, max.	1 080 hPa	
Mechanics/material   Enclosure material (front)   ◆ Plastic Yes   Dimensions   Width 70 mm   Height 100 mm   Depth 75 mm   Weights	Relative humidity		
Enclosure material (front)	<ul> <li>Operation at 25 °C without condensation, max.</li> </ul>	95 %	
● Plastic Yes  Dimensions  Width 70 mm  Height 100 mm  Depth 75 mm  Weights	Mechanics/material		
Dimensions           Width         70 mm           Height         100 mm           Depth         75 mm           Weights         To me	Enclosure material (front)		
Width         70 mm           Height         100 mm           Depth         75 mm           Weights	Plastic	Yes	
Height 100 mm  Depth 75 mm  Weights	Dimensions		
Depth 75 mm Weights	Width	70 mm	
Weights	Height	100 mm	
	Depth	75 mm	
Weight grown	Weights		
vveignt, approx.	Weight, approx.	300 g	

9/22/2023

last modified: