## **SIEMENS**

## **Data sheet**

6AG1222-1HF32-2XB0



SIPLUS S7-1200 SM 1222 8DQ RLY based on 6ES7222-1HF32-0XB0 with conformal coating, -40...+70  $^{\circ}$ C, start up -25  $^{\circ}$ C, digital output 8 DQ, relay 2 A

Figure similar

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General information	
Product type designation	SM 1222, DQ 8x relay/2 A
Supply voltage	
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
Digital outputs	
<ul> <li>from load voltage L+, max.</li> </ul>	11 mA/relay coil
Power loss	
Power loss, typ.	4.5 W
Digital outputs	
Number of digital outputs	8
• in groups of	2
Short-circuit protection	No; to be provided externally
Switching capacity of the outputs	
<ul> <li>with resistive load, max.</li> </ul>	2 A
on lamp load, max.	30 W with DC, 200 W with AC
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	
for signal "1" rated value	2 A
Output delay with resistive load	
• "0" to "1", max.	10 ms
• "1" to "0", max.	10 ms
Total current of the outputs (per group)	
horizontal installation	
— up to 50 °C, max.	10 A; Current per mass
Relay outputs	
<ul> <li>Number of relay outputs</li> </ul>	8
<ul> <li>Rated supply voltage of relay coil L+ (DC)</li> </ul>	24 V
Number of operating cycles, max.	mechanically 10 million, at rated load voltage 100 000
Switching capacity of contacts	
<ul><li>— with inductive load, max.</li></ul>	2 A
— on lamp load, max.	30 W with DC, 200 W with AC
— with resistive load, max.	2 A
Cable length	
shielded, max.	500 m

Diagnostics function	unshielded, max.	150 m
Diagnostics function  Alarms  Diagnosics  Diagnosics alarm  Pos  Diagnosics  Monitoring the supply voltage  Diagnosics indication LED  For status of the outputs  For status	·	
Diagnostic alarm   Yes		Yes
Monitoring the supply voltage  ■ Monitoring the supply voltage  ■ For status of the outputs  ■ for maintenance  Potential separation  Potential separation  Potential separation digital outputs  ■ between the channels  ■ between the channels, in groups of  ■ between the channels and backplane bus  ■ between the channels and backplane bus  Pormissible potential difference  between different circuits  ■ 750 V AC for 1 minute  Pogree and class of protection  IP20  Ambient conditions  Free fall  ■ Fall height, max.  ■ And red restart, min.  ■ At cold restart, min.  ■ Time, in (incl. condensation/frost); start-up @ -25 °C  Coulms of himminum position  ■ Time, in (incl. condensation/frost); start-up @ -25 °C  Ambient ari temperature during storage/fransportation  ■ Time, in (incl. condensation/frost); start-up @ -25 °C  To cold restart, min.  ■ Time, in (incl. condensation/frost); start-up @ -25 °C  To unimber of simultaneously sclivated outputs 4  (no adjacent points) for horizontal mounting position  ■ Time, in (incl. condensation/frost); start-up @ -25 °C  Time, in (incl. condensati	Alarms	
Monitoring the supply voltage Diagnostics indication LED  of or status of the outputs for maintenance Potential separation Potential separation (glidal outputs between the channels between the channels between the channels between the channels in groups of between the channels in groups of between different circuits Pore that separation  IP degree of protection  IP degree of protection  IP degree of protection  Free fall Fall height, max.  Ambient temperature during operation  in in. At cold restart, min. At cold restart,	Diagnostic alarm	Yes
Diagnostics indication LED     • for status of the outputs   Yes     • for maintenance   Yes     Potential separation digital outputs     • between the channels   Relay, dry contact     • between the channels   Tournels     • between the channels and backplane bus     • Degree and class of protection     IP degree of protection     IP degree of protection     IP degree of protection     Fall height, max.     • Fall height, max.     • Fall height, max.     • Fall height, max.     • Tour     • max.     • Tour     • max.     • Tour     • max.     • Tour     • Tou	Diagnoses	
• for status of the outputs  • for maintenance  • for maintenance  Potential separation  Potential separation digital outputs  • between the channels in groups of  • between the channels and backplane bus  • between the channels and backplane bus  1 500 V AC for 1 minute  Pormissible potential difference  between different circuits  5 750 V AC for 1 minute  Pormissible potential difference  between different circuits  5 750 V AC for 1 minute  Degree of protection  IP degree of protection  Free fall  • Fall height, max.  Ambient temperature during operation  • min.  • max.  At o °C; = Timax; Timax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  • min.  • max.  At o °C  Attitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Inim Timax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Timin (Timax > 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC  Relative humidity  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  — Resistant to commercially available coolants and lubricants  — Resistant to commercially available coolants and lubricants  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	Monitoring the supply voltage	Yes
• for maintenance  Potential separation  Potential separation digital outputs  • between the channels in groups of 2 • between the channels in groups of 2 • between the channels and backplane bus 1500 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Pormissible potential difference    Page of protection   P20	Diagnostics indication LED	
Potential separation  Potential separation digital outputs  • between the channels • between the channels, in groups of • between the channels, in groups of • between the channels and backplane bus  Permissible potential difference  between different circuits  750 V AC for 1 minute  Permissible potential difference  between different circuits  750 V AC for 1 minute  Pogree and class of protection  IP degree of protection  IP degree of protection  Free fall • Fall height, max.  Ambient temperature during operation  • min. • max.  At cold restart, min. •	for status of the outputs	Yes
Potential separation digital outputs  • between the channels and backplane bus 1500 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Pegree and class of protection  IP degree of protection IP20  Ambient conditions  Free fall  • Fall height, max. 0.3 m; five times, in product package  Ambient temperature during operation  • min. 40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C  Ambient temperature during storage/transportation  • min. 40 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  • min. 40 °C  Ambient temperature during storage/transportation  • min. 40 °C  • On 0 °C  •		Yes
between the channels in groups of 2     between the channels, in groups of 2     between the channels and backplane bus 1500 V AC for 1 minute  Pormissible potential difference  between different circuits 750 V AC for 1 minute  Degree and class of protection  IP degree of protection  IP degree of protection  Free fall      • Fall height, max. 0.3 m; five times, in product package  Ambient conditions  Free fall      • Fall height, max. 0.3 m; five times, in product package  Ambient temperature during operation      • min40 °C; = Timax; Timax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position      • At cold restart, min25 °C  Ambient temperature during storage/transportation      • min70 °C; = Timax; Timax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position      • At cold restart, min70 °C  Altitude during operation relating to sea level      • Installation altitude above sea level, max70 °C  Altitude during operation relating to sea level      • Installation altitude above sea level, max10 K) at 795 hPa540 hPa (+2 000 m) +2 000 m) // Timin (Timax - 20 K) at 658 hPa 540 hPa (+3 500 m) +5 000 m); above 2 000 m max. 132 V AC  Relative humidity      • With condensation, tested in accordance with IEC 60068-2-38, max.      • Resistant to commercially available coolants and lubricants      • Resistant to commercially available coolants and lubricants      • Resistant to commercially available coolants and lubricants      • Coolants and lu	Potential separation	
between the channels, in groups of between the channels and backplane bus  1 500 V AC for 1 minute  Permissible potential difference  between different circuits  750 V AC for 1 minute  Degree and class of protection  IP degree of protection  IP degree of protection  Free fall  Free fall  Free fall  Ambient temperature during operation  max.  O.3 m; five times, in product package  Ambient temperature during operation  max.  And "C; = Tmin (incl. condensation/frost); start-up @ -25 "C  70 "C; = Tmax; Tmax > +60 "C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  Ambient temperature during storage/transportation  min.  Ambient temperature during storage/transportation  min.  Ambient temperature during storage/transportation  min.  Ambient air temperature during storage/transportation  min.  Ambient air temperature-barometric pressure-altitude  nestallation altitude above sea level, max.  Ambient air temperature-barometric pressure-altitude  Nith condensation, tested in accordance with IEC 60088- 2-38, max.  Relative humidity  With condensation, tested in accordance with IEC 60088- 2-38, max.  Town in the product package  Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request  Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request  Yes; Class 3B3 on request	·	
between the channels and backplane bus  Pormissible potential difference  between different circuits  750 V AC for 1 minute  Pogree and class of protection  IP degree of protection  IP20  Ambient conditions  Free fall  Fall height, max.  Ambient temperature during operation  • min.  • max.  70 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C  70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  • At cold restart, min.  • At win.  • max.  Ambient temperature during storage/transportation  • min.  • max.  • An "C", = Tmin (incl. condensation/frost); start-up @ -25 °C  70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  • At cold restart, min.  • To cold restart, min.  • At		
Degree and class of protection   P20		
between different circuits    Degree and class of protection   IP20	·	1 500 V AC for 1 minute
Degree and class of protection		750 V AC for 4 minute
IP degree of protection  Ambient conditions  Free fall  Fall height, max.  Ambient temperature during operation  min.  At cold restart, min.  At cold restart, min.  Ambient temperature during storage/transportation  min.  Anticle temperature during storage/transportation  min.  At cold restart, min.  At cold restart, min.  Anticle temperature during storage/transportation  min.  max.  Ambient temperature during storage/transportation  min.  max.  Ambient temperature during storage/transportation  min.  max.  Ambient air temperature during to sea level  Installation altitude above sea level, max.  Ambient air temperature-barometric pressure-altitude  Timin Trans at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) +5 000 m); above 2 000 m max. 132 V AC  Relative humidity  Autient air temperature-barometric pressure-altitude air storage at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) // Train (Trans - 20 K) at 658 hPa 540 hPa (+3 500 m) // Train (Tran		750 V AC for 1 minute
Free fall  Free fall  Fall height, max.  Ambient temperature during operation  Ambient temperature during storage/transportation  Ambient temperature during st		IP20
Free fall  • Fall height, max.  Ambient temperature during operation  • min.  • max.  • At cold restart, min.  • At cold restart, min.  • max.  Abbient temperature during storage/transportation  • min.  • At cold restart, min.  • At cold restart min.  • At cold restart min.  • To °C  Ambient temperature during storage/transportation  • min.  • max.  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Mith condensation, tested in accordance with IEC 60068-2-38, max.  • With condensation, tested in accordance with IEC 60068-2-38, max.  • Resistant commercially available coolants and lubricants  — Resistant to commercially available coolants and lubricants  — To biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	<u> </u>	II 20
Fall height, max.  O.3 m; five times, in product package  Ambient temperature during operation  inin.  inin.  At cold restart, min.  At cold restart.  At cold restart.  At cold restart.  At 140 hPa 795 hPa (-1 000 m +2 000 m).// Tmin (Tmar.)  At 181 ta 40 hPa 795 hPa (-1 000 m +3 500 m).// Tmin (Tmar.)  At 181 ta 40 hPa 795 hPa (-1 000 m +3 500 m).// Tmin (Tmar.)  At 191 hPa 40 h		
Ambient temperature during operation  • min.  • max.  -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C  70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position  • At cold restart, min.  -25 °C  Ambient temperature during storage/transportation  • min.  • max.  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  — Resistant to commercially available coolants and lubricants  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3		0.3 m; five times, in product package
<ul> <li>min.</li> <li>-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C</li> <li>70 °C; = Tmax; Tmax &gt; +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position</li> <li>At cold restart, min.</li> <li>-25 °C</li> <li>Ambient temperature during storage/transportation</li> <li>min.</li> <li>-40 °C</li> <li>max.</li> <li>70 °C</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Coolants and lubricants</li> <li>— Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>— to biologically active substances according to EN 60721-3-3</li> <li>— to chemically active substances according to EN 60721-3-3</li> <li>— to chemically active substances according to EN 60721-3-3</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>		
* Max.     * At cold restart, min.     * At cold restart, min.     * At minest temperature during storage/transportation      * min.     * max.     * Altitude during operation relating to sea level      * Installation altitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude      * Mith condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  — To biologically active substances according to EN 60721-3-3  — to bemically active substances according to EN 60721-3-3  **To C C  Altitude during operation relating to sea level  **40 °C  **70 °C  **Am C C  **To C C  **Amax.  **2000 m  **Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 20 k) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC  **Relative humidity  **With condensation, tested in accordance with IEC 60068-2-38, max.  **Resistance**  Coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  **Yes; Class 382 mold, fungus and dry rot spores (with the exception of fauna); Class 383 on request  **Yes; Class 364 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class 304 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); **Yes; Class		-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
At cold restart, min.  At cold restart, min.  Ambient temperature during storage/transportation  min.  max.  Altitude during operation relating to sea level  Installation altitude above sea level, max.  Ambient air temperature-barometric pressure-altitude  Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC  Relative humidity  With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially active substances according to EN 60721-3-3  Testing a specific or commercially according to EN 60068-2-52 (severity degree 3); *	• max.	
Ambient temperature during storage/transportation  • min.  • max.  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3		(no adjacent points) for horizontal mounting position
<ul> <li>min.</li> <li>max.</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> <li>Coolants and lubricants</li> <li>Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>to biologically active substances according to EN 60721-3-3</li> <li>to chemically active substances according to EN 60721-3-3</li> <li>Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>	At cold restart, min.	-25 °C
Max.     Altitude during operation relating to sea level     Installation altitude above sea level, max.     Ambient air temperature-barometric pressure-altitude     Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC  Relative humidity     With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  - Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  - to biologically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3		
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<ul> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> <li>Coolants and lubricants</li> <li>Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>— to biologically active substances according to EN 60721-3-3</li> <li>— to chemically active substances according to EN 60721-3-3</li> <li>— to chemically active substances according to EN 60721-3-3</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>		70 °C
<ul> <li>Ambient air temperature-barometric pressure-altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> <li>Coolants and lubricants</li> <li>Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>to biologically active substances according to EN 60721-3-3</li> <li>to chemically active substances according to EN 60721-3-3</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC</li> <li>To 00 %; RH incl. condensation/frost (no commissioning under condensation conditions)</li> <li>Yes; Incl. diesel and oil droplets in the air</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>	<u> </u>	0.000
- 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC  Relative humidity  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	·	
● With condensation, tested in accordance with IEC 60068- 2-38, max.  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	Ambient air temperature-barometric pressure-aititude	- 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K)
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> <li>Coolants and lubricants</li> <li>Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>to biologically active substances according to EN 60721-3-3</li> <li>to chemically active substances according to EN 60721-3-3</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>	D. C. L. C.	at 658 hPa 540 hPa (+3 500 m +5 000 m); above 2 000 m max. 132 V AC
2-38, max. conditions)  Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	•	100 % PH incl. condensation/frost (no commissioning under condensation
Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3		· · · · · · · · · · · · · · · · · · ·
<ul> <li>Resistant to commercially available coolants and lubricants</li> <li>Use in stationary industrial systems</li> <li>to biologically active substances according to EN 60721-3-3</li> <li>to chemically active substances according to EN 60721-3-3</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>	Resistance	
lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3	Coolants and lubricants	
<ul> <li>to biologically active substances according to EN 60721-3-3</li> <li>to chemically active substances according to EN 60721-3-3</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request</li> <li>Yes; Class 3C4 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *</li> </ul>		Yes; Incl. diesel and oil droplets in the air
60721-3-3 Class 3B3 on request  — to chemically active substances according to EN 60721-3-3 Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Use in stationary industrial systems	
60721-3-3 degree 3); *		
to mach anicelly certified authorized according to EAL Vision Class COA inches		
— to mechanically active substances according to EN Yes; Class 3S4 incl. sand, dust, * 60721-3-3	<ul> <li>to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	Use on ships/at sea	
— to biologically active substances according to EN  Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request		
— to chemically active substances according to EN  Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *		
— to mechanically active substances according to EN Yes; Class 6S3 incl. sand, dust; * 60721-3-6		Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN</li> <li>Yes; Class 3 (excluding trichlorethylene)</li> </ul>		Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)		concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level
Remark	Remark	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and</li> <li>* The supplied plug covers must remain in place over the unused interfaces during operation!</li> </ul>		

ANSI/ISA-71.04	
Conformal coating	
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes; Class 2 for high reliability
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC- CC-830A</li> </ul>	Yes; Conformal coating, Class A
connection method	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	
Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	190 g

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