SIEMENS

Data sheet

6AG1221-1BF32-2XB0



SIPLUS S7-1200 SM 1221 8DI based on 6ES7221-1BF32-0XB0 with conformal coating, -40...+70 $^\circ C$, start up -25 $^\circ C$, digital input 8 DI, 24 V DC, sink/source

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General information		
Product type designation	SM 1221, DI 8x24 V DC	
Supply voltage		
Rated value (DC)	24 V	
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.	105 mA	
Digital inputs		
 from load voltage L+ (without load), max. 	4 mA; per channel	
output voltage / header		
supply voltage of the transmitters / header		
 product function / supply voltage for transmitters 	Yes	
Power loss		
Power loss, typ.	1.5 W	
Digital inputs		
Number of digital inputs	8	
• in groups of	2	
Input characteristic curve in accordance with IEC 61131, type 1	Yes	
Number of simultaneously controllable inputs		
all mounting positions		
— up to 40 °C, max.	8	
horizontal installation		
— up to 40 °C, max.	8	
— up to 50 °C, max.	8	
vertical installation		
— up to 40 °C, max.	8	
Input voltage		
 Rated value (DC) 	24 V	
● for signal "0"	5 V DC at 1 mA	
• for signal "1"	15 V DC at 2.5 mA	
Input current		
 for signal "0", max. (permissible quiescent current) 	1 mA	
● for signal "1", min.	2.5 mA	
● for signal "1", typ.	4 mA	
Input delay (for rated value of input voltage)		
for standard inputs		

Importance (ranke) Yes Gable length 500 m • shielded, max. 300 m • unshielded, max. 300 m • Diagnostic shatts information Yes Diagnostic shatts information Yes • Monitoring the supply voltage Yes • For status of the inputs Yes • Or status of the inputs Yes • For maintenance Yes • Potential separation 1920 • Protential separation 1920 • Protential separation 1920 • Ambient conditions 1920 • Protential separation 1920 • Ambient conditions 1920 • Fail height, max. 0.3 m; five times, in product package • Fail height, max. 0.3 m; five times, in product package • min. -90 °C = Thm; (incl. condensation/first); startup @: 25 °C • min. -90 °C = Thm; (incl. condensation/first); startup @: 25 °C • min. -90 °C number of simultaneously activated inputs 4 (not 00 m, 4 00 °C, = Thm; (incl. condensation/first); startup @: 25 °C • min. -90 °C • Molecular durage/ramsportation -90 °C <	— parameterizable	Yes; 0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, selectable in groups of four
Cable tength 500 m • shelded, max, 500 m • unshelded, max, 300 m Interruptidiagnosticitizaties information Yes Diagnostic alarm Yes Obignostic alarm Yes Obignostic alarm Yes Obignostic alarm Yes Potential separation Yes Potential separation Yes Potential separation digital inputs Yes • Dotiveon the channels, in groups of 2 Pagnes and class of protection IP20 Ambient conditions Free fail • Fine fail • Or or chanicanous y for horizontal mounting position • An cold restart, min. -40 °C = min (min, condensation/fronts); start-up @-25 °C • Installation alticle above sea level, max, and the above sea level,	for interrupt inputs	
• enhalded, max. S00 m enhalded, max. S00 m S00 m S00 m S00 m S00 m		Yes
• unshelded, max 300 m Interruptabilingrosticastics information Ves Diagnostic clarm Yes Objects Yes Diagnostic clarm Yes Objects Objects Objects Train (necl. condensaton/fost); start-up @-25 °C Free fall Objects Objects Train (necl. condensaton/fost); start-up @-25 °C Objects Train (necl. condensaton/fost); start-up @-25 °C <		500 m
Interpretability of the second seco		
Dispression Yes Alamis • Disprosition • Disprosition Yes Disprosition Yes Disprosition Yes Operation Yes Potential separation IP degree of protection IP degree of protection IP20 Ambient conditions Free fail • Fail height, max. 0.3 m. five times, in product package Ambient temperature during storage/transportation -40 °C • min. -25 °C Ambient temperature during storage/transportation -40 °C • mix. -26 °C • Anbient air temperature during to seas level -5 °C • Instalation altitude above sea level, max. -40 °C • Ambient conditions -70 °C Altitude during storage/transportation -10 °C, immax - 10 % Jat 758 hPa (-1 000 m +2 000 m +3 000 m.) // Tmin • Instalation altitude above sea level, max. -A0 °C		
Alarms Yes • Diagnostic alarm Yes • Montoring the supply votage Yes • For status of the inputs Yes • for maintenance Yes Potential separation digital inputs Yes • Detween the channels, in groups of 2 Perform the channels, in groups of 2 Perform the channels, in groups of 2 Page and class of protection IP20 Ambient conditions IP20 Free fail - Fail height, max. 0.3 m; five times, in product package • min. -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C • min. -40 °C; Tmin (incl. condensation/frost); start-up @ -25 °C • min. -40 °C; To: - • min. -40 °C - - • min. -40 °C - - • min. -40 °C - - - • min. -40 °C - - - - - - - - - - - -		Yes
Diagnoses Yes • Monitoring the supply voltage Yes • Diagnostics indication LED • for status of the inputs Yes • for maintenance Yes Potential separation digital inputs • between the channels, in groups of 2 Potential separation digital inputs • between the channels, in groups of 2 Pegres and class of protection IP20 Ambient conditions File legith, max. 0.3 m; five times, in product package Ambient conditions • Fiel I height, max. 0.3 m; five times, in product package -40 °C; = Trim (incl. condensation/frost); start-up (g) -25 °C • min. -40 °C; = Trim (incl. condensation/frost); start-up (g) -25 °C -70 °C • max. 70 °C; - Trimax > +60 °C number of simultaneously activated inputs 4 (in a digacent points) for horizontal mounting position -40 °C • min. -70 °C -70 °C -70 °C Ambient endings borsge/transportation -10 °C; - Trimax > 140 YB A 735 hPa (-1 000 m +2 000 m) // Tmin (Trimax > 10 X) at 558 hPa 560 hPa (-3 000 m) // Tmin (Trimax > 10 X) at 558 hPa 560 hPa (-3 000 m) // Tmin (Trimax > 10 X) at 558 hPa 560 hPa (-3 000 m) // Tmin (Trimax > 10 X) at 528 hPa 563 hPa (-2 000 m) +2 000 m) // Tmin (Trimax > 10 X) at 528 hPa 560		
• Monitoring the supply voltage Yes Diagnostics indication LED • for status of the inputs Yes • for status of the inputs Yes • Potential separation of optication separation Z Degree and least of protection IP20 • Pagree and least of protection IP20 • Fee fall 0.3 m; five times, in product package • Fee fall 0.3 m; five times, in product package • Miniter timepreture during operation -40 °C; = Tma; Tma; Tma; > 400 °C number of simultaneousy activated inputs 4 (no seljacent points) for horizontal mounting position • Antibient temperature during storage/transportation -20 °C • max. 70 °C Ambient temperature during storage/transportation -5000 m • Instation attitude abox sea level, max. 5000 m • Instation attitude abox sea level, max. 5000 m • Ambient air temperature-barometric pressure- atticude -5000 m • Mith condensation, tested in accordance with IEC 100 %; RH incl. condensation/frost); start-yee 0.20 m) // Tmin (Tmax + 20 K) at 658 Pra 540 Pra (+3000 m , +2 000 m) // Tmin (Tmax + 20 K) at 658 Pra 540 Pra (+3 500 m , +5 000 m) • Instationary industrial systems - to biologically active substances according to EN 60721-3.3 • Use in stationary industrial systems Yes - to thologically active substances according to EN 60721-3.6 <td>Diagnostic alarm</td> <td>Yes</td>	Diagnostic alarm	Yes
Diagnostics indication LED Ves • for status of the inputs Yes • for instituance Yes Potential separation Potential separation Potential separation digital inputs • • between the channels, in groups of 2 Degree and class of protection IP20 Ambient conditions IP20 Free fail • • Fail height, max. 0.3 m, five times, in product package Ambient conditions - • min. -40 °C; = Tmin (incl. condensation/frost); start-up @: 25 °C • Mittude during operation - • max. - • At cold restart, min. -40 °C • max. - • min. - • min. - • Instalation attude abore sea level, max. - • Instalation attude abore sea level, max. - • Ambient at temperature barometric pressure- attude - • Colonis and lubricants - • Relative humidity - • With condensation, tested in accordance with IEC 000 %; RH incl. condensa	Diagnoses	
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Potential separation digital inputs • between the channels, in groups of 2 Orgres and class of protection IP degree of protection Ambient conditions • Fail height, max. 0.3 m; five times, in product package Ambient temperature during operation -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C • min. -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C • At cold restart, min. -40 °C; • At cold restart, min. -40 °C; • mix. -70 °C • Attuide during operation relating to seal level • Installation altitude above seal level, max. • Installation altitude above seal level, max. 5 000 m • Installation altitude above seal level, max. 5 000 m • Installation altitude above seal level, max. 5 000 m • Installation altitude above seal level, max. 100 %; RH incl. condensation/frost (no commissioning under condensation/frost) alto the above seal level, max. • Installation altitude above seal level, max. 100 %; RH incl. condensation/frost (no commissioning under condensation/frost (no commercially available coolants and lubricants • The biologically active substances according to Existant to commercially available coolants and lubricants Yes; Class 3B2 mold, fungus and dry rot spores (with		Yes
• between the channels, in groups of 2 Degree and class of protection IP degree of protection IP degree of protection IP degree of protection Ambient conditions Free fail • Fail height, max. 0.3 m; five times, in product package Ambient temperature during operation • min. • fail height, max. 10 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C 70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position • At cold restart, min. • 25 °C Ambient temperature during storage/transportation • min. • at cold restart, min. • 25 °C Ambient temperature during storage/transportation • min. • at cold restart, min. • 10 °C; • Tmax 1 140 PPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 104 kr76. hPa 795 Pha (-1.000 m+2.000 m) // Tmin (Tmax - 20 K) at 755 Pha 540 Pha (+3.500 m+5 000 m) relative humidity • With condensation, tested in accordance with IEC foodes-2-38, max. Coolants and lubricants - Resistance Coolants and lubricants - Resistant to commercially available coolants ard lubricants · To biologically active substances according to EN 60721-3.3 Use on shipsiat sea - to biologically active substances according to EN 60721-3.4 Use of stationary industrial systems - Le biologically active substances according to EN 60721-3.4 Use class 6G3 (PH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3).* - To echamically active substances according to EN 60721-3.4 EN 6		
Degree and class of protection IP20 Ambient conditions Free fall • Free fall • Fall height, max. 0.3 m; five times, in product package Ambient conditions • min. • 40 °C; = Tmax; Tmax > +60 °C; number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position • max. • max. • 70 °C; Ambient temperature during storage/transportation • 40 °C; • min. • 40 °C; • max. 70 °C Altitude during operation relating to sea level • • Installation altitude above sea level, max. • 5000 m • Ambient air temperature-barometric pressure- atitude • • With condensation, tested in accordance with IEC 5000 m • Resistantic • • To biologically active substances according to EN 60721-33 Yes; Class 3E2 mold, fungus and dry rot spores (with the exception of fauna), Class 3B2 mold, fungus and dry rot spores (with the exception of fauna), Class 3B2 mold, fungus and dry rot spores (with the exception of fauna		
IP degree of protection IP20 Amblent conditions Free fail Fail height, max. 0.3 m; five times, in product package Amblent temperature during operation inin. anx. At cold restart, min. -25 °C Amblent temperature during storage/transportation inin. anx. -40 °C; = Tmax, Tmax > +60 °C number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position -25 °C Amblent temperature during storage/transportation min. -40 °C; Tmax, Tmax > +50 °C number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position -25 °C Amblent air temperature-barometric pressure-attitude Installation altitude above sea level, max. Amblent air temperature-barometric pressure-attitude With condensation, tested in accordance with IEC 60066-2-38, max. Coolants and lubricants - Resistance Coolants and lubricants - Resistance to industrial systems - to biologically active substances according to EN 60721-3-3 Use in stationary industrial systems - to chemically active substances according to EN 60721-3-3 Use on statips'at sea - to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically a		2
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Free fail • Eal height, max. 0.3 m; five times, in product package Ambient temperature during operation • (in). • max. • (in). • max. • (in). • At cold restart, min. • 40 °C; • At cold restart, min. • 40 °C • min. • (in). • inin. • 40 °C • min. • 40 °C • Mibient air temperature-barometric pressure- • 100 m 10k pl 3756 PBa (-1 000 m +2 000 m) // Tmin • Mithation altitude • 10 m condensation, frostly and 580 PB - (+2 000 m +5 000 m) • Resistance • Colonta and lubricants • Colontas and lubricants • Yes; Class 322 mold, fungus and dry rot spores (with the exception of	5 1	IP20
• Fall height, max. 0.3 m; five times, in product package Ambient temperature during operation -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C • max. 70 °C; = Tmax, Tmax > +60 °C number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position • At cold restart, min. -25 °C • Ambient temperature during storage/transportation -40 °C • inin. -40 °C • max. 70 °C Altitude during operation relating to sea level -00 °C • Installation altitude above sea level, max. 5 000 m • Installation altitude above sea level, max. 5 000 m • Installation altitude Tmin		
Ambient temperature during operation 40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C • nin. -40 °C; = Tmax; Tmax > +60 °C number of simultaneously activated inputs 4 (no adjacent points) for horizontal mounting position • At cold restart, min. -25 °C Ambient temperature during storage/transportation -40 °C • min. -40 °C • hotstallation altitude above sea level		0.3 m; five times, in product package
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inputs 4 (no adjacent points) for horizontal mounting position -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 • 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 mechanically 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 60721-3-6 to mechanically active subst		
Ambient temperature during storage/transportation -40 °C • min. -40 °C • max. 70 °C Altitude during operation relating to sea level • • Installation altitude above sea level, max. • • Ambient air temperature-barometric pressure- altitude 5 000 m • Timin Tmax at 1 140 hPa795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 k) at 795 hPa (-3 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity • • With condensation, tested in accordance with IEC 60088-2-38, max. 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) Resistance • Coolants and lubricants • Resistant to commercially available coolants and lubricants Yes to biologically active substances according to EN 60721-3-3 Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request to biologically 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); * to biologically active substances according to EN 60721-3-6 Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * to chemically active substances according to EN 60721-3-6 Yes; Class 6C3 (RH < 75 %) incl.		inputs 4 (no adjacent points) for horizontal mounting position
 min40 °C max. 70 °C Altitude during operation relating to sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressure- alitude Installation altitude above sea level, max. Ambient air temperature-barometric pressure- alitude (Tmax - 10 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa (-2 000 m +3 000 m) Relative humidity With condensation, tested in accordance with IEC 60068-2-38, max. Coolants and lubricants mesistance Coolants and lubricants mesistant to commercially available coolants and lubricants The biologically active substances according to EN 60721-3-3 more chanically active substances according to EN 60721-3-3 Use on ships/at sea more chanically active substances according to EN 60721-3-6 Ves; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class		-25 °C
max. 70 °C Altitude during operation relating to sea level installation altitude above sea level, max. Ambient air temperature-barometric pressure- altitude installation altitude above sea level, max. Ambient air temperature-barometric pressure- altitude Trnin Trmax at 1140 hPa 795 hPa (-1 000 m +2 000 m) // Trnin (Tmax -10 K) at 795 hPa 540 hPa (+2 000 m +3 500 m) // Trnin (Tmax -20 K) at 658 hPa 540 hPa (+2 000 m +3 500 m) // Trnin (Tmax -20 K) at 658 hPa 540 hPa (+2 000 m +3 500 m) // Trnin (Tmax -20 K) at 658 hPa 540 hPa (+2 000 m +3 500 m) // Trnin (Tmax -20 K) at 658 hPa 540 hPa (+2 000 m +4 000 m) Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. Coolants and lubricants - Resistant to commercially available coolants and lubricants - to biologically active substances according to EN 60721-3-3 - to mechanically active substances according to EN 60721-3-3 - to biologically active substances according to EN 60721-3-3 - to biologically active substances according to EN 60721-3-3 - to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6	· · · ·	
Attitude during operation relating to sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressure- altitude Installation altitude above sea level, max. Ambient air temperature-barometric pressure- altitude 5 000 m Immin 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 -10 K) at 795 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) (Tmin (Tmax -10 K) at 795 hPa 658 hPa 540 hPa (+3 500 m +5 000 m) (Tmin (Tmax -10 K) at 795 hPa 540 hPa (+3 500 m +5 000 m) With condensation, tested in accordance with IEC 60068-2-38, max. Toologically active substances according to EN 60721-3-3 The biologically active substances according to EN 60721-3-3 To mechanically active substances according to EN 60721-3-6 Ves; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt		
 Installation altitude above sea level, max. Ambient air temperature-barometric pressure- altitude Ambient air temperature-barometric pressure- altitude Trini 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 +3 000 m) Relative humidity With condensation, tested in accordance with IEC 60068-2-38, max. Coolants and lubricants - Resistant to commercially available coolants and lubricants Yes Use in stationary industrial systems - to biologically active substances according to EN 60721-3-3 Use on ships/at sea - to biologically active substances according to EN 60721-3-3 Use on ships/at sea - to biologically active substances according to EN 60721-3-3 Use on ships/at sea - to chemically active substances according to EN 60721-3-6 Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6C3 (RH < 75 %) incl. salt spray acc.		70 °C
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altitude (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) Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. 60068-2-38, max. Coolants and lubricants - Resistance Vuse in stationary industrial systems - to biologically active substances according to EN 60721-3-3 - to mechanically active substances according to EN 60721-3-3 - to mechanically active substances according to EN 60721-3-3 - to biologically active substances according to EN 60721-3-3 - to chemically active substances according to EN 60721-3-3 - 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 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6		
With condensation, tested in accordance with IEC 60068-2-38, max. Interface test of the second secon	altitude	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin
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— to biologically active substances according to EN 60721-3-6Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request— to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6C3 incl. sand, dust; *Usage in industrial process technologyYes; Class 3 (excluding trichlorethylene)— Against chemically active substances acc. to EN 60654-4Yes; Class 3 (excluding trichlorethylene)— Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas		Yes; Class 3S4 incl. sand, dust, *
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EN 60721-3-6 Usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, Yes; Level GX group A/B (excluding trichlorethylene; harmful gas		
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EN 60654-4 — Environmental conditions for process, Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	Usage in industrial process technology	
		Yes; Class 3 (excluding trichlorethylene)

71.04	level LC3 (salt spray) and level LB3 (oil)		
Remark			
 — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	* The supplied plug covers must remain in place over the unused interfaces during operation!		
Conformal coating			
 Coatings for printed circuit board assemblies acc. to EN 61086 	Yes; Class 2 for high reliability		
 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection		
 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Discoloration of coating possible during service life		
 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	Yes; Conformal coating, Class A		
connection method / header			
required front connector	Yes		
Mechanics/material			
Enclosure material (front)			
Plastic	Yes		
Dimensions			
Width	45 mm		
Height	100 mm		
Depth	75 mm		
Weights			
Weight, approx.	170 g		

last modified:

4/1/2022 🖸