## **SIEMENS**

## **Data sheet**

6AG1321-7TH00-4AB0



SIPLUS PCS 7 SM 321 16DI based on 6ES7321-7TH00-0AB0 with conformal coating, 0...+60 °C, digital input 16 DI; 24 V DC, 1x 40-pole, diagnostics-capable, for contacts (wired/ not wired), NAMUR encoder, 3/4-wire BERO, with chatter monitoring; pulse stretching, open-circuit detection connection IM 153-2 required

Figure similar

Supply voltage	
Load voltage L+	
<ul><li>Rated value (DC)</li></ul>	24 V
<ul> <li>Reverse polarity protection</li> </ul>	Yes
Input current	
from load voltage L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
Number of outputs	4
Type of output voltage	1Vs1/2Vs1: 18 V, 1Vs2/2Vs2: 8.2 V
Short-circuit protection	Yes; Electronic
additional (redundant) feed	No
Output current	
Rated value	190 mA; at 18V: 190mA, at 8.2V: 60mA
• permissible range, upper limit	Up to 60 degree: at 18V: 0 to 110mA, at 8.2V: 0 to 60mA; Up to 40 degree: at 18V: 0 to 190mA, at 8.2V: 0 to 60mA
Power loss	
Power loss, typ.	11 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	No
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
<ul> <li>Type of input voltage</li> </ul>	DC
Rated value (DC)	8.2 V; 8.2V/18V
Input current	
● for signal "0", min.	0.35 mA
<ul><li>for signal "0", max. (permissible quiescent current)</li></ul>	1.2 mA
• for signal "1", typ.	10 mA; for NAMUR: 2.1 to 7 mA, for 10k ohm/47k ohm contact: typical 10mA, for 4 wire BEROs: typical 10 mA
Input delay (for rated value of input voltage)	
for standard inputs	

	— at "0" to "1", min.	2.5 ms
	· · · · · · · · · · · · · · · · · · ·	
Cable length		
** shielded, max     ** unabhilded, max     ** Not permitted  Interrupt Alignostic sistatus information  Alarms     ** Yes     ** Diagnostics function     ** Yes     ** Diagnostics function     ** Yes     ** Diagnostic information readable     ** Pes     ** Diagnostic information readable     ** Wire-break     ** Wire-break     ** Wire-break     ** Satus indicator digital input (green)     ** Closupe error SF (red)     ** Satus indicator digital input (green)     ** Pes     ** Diagnostics indicator digital input (green)     ** Pes     ** Diagnostics indicator digital input (green)     ** Satus indicator digital input (green)     ** Pes     ** Diagnostics undicator digital input (green)     ** Pes     ** Diagnostics undicator digital input (green)     ** Pes     ** Detential separation Protential separation (green)     ** Pes     ** Detential separation digital inputs     ** Detween the channels     ** Detween the channels     ** Detween the channels in groups of     ** Detween the channels in groups o		0.0 1110
• unshielded, max  Not permitted  Interrupts/disgrostics/status information  Alarms  Ves  Diagnostic function  • Diagnostic alarm  • Diagnostic alarm  • Diagnostic alarm  • Diagnostic information readable • Alardown information readable • Wire-Dream  • Diagnostics information readable • Wire-Dream  • Wire-Dream  • Diagnostics information readable • Wire-Dream  • Wire-Dream  • Group error SF (red) • Status indicator digital input (green) • Status indicator digital input (green) • Potential separation  Potential separation  Potential separation  Potential separation  • Detween the channels, in groups of • Sebween the channels, in groups of • Sebween the channels and backplane bus  • Sebween the channels and backplane  • Sebween the channels and backplane  • Sebween the channels and backplane  • Sebween the channels  • Sebween the ch		400 m; max 200m with 8.2 V sensor, max 400m with 18 V sensor
Interrupts/diagnostics/status information  Alarms  Ves Diagnostic sunction  **Pes Diagnostic start  **Pes Diagnostic start  **Pes Diagnostic start  **Pes Diagnostic information readable  **Pes Diagnostic information teals and packplane bus  **Pes Determine the channels in proups of 8  **Detween the channels in groups of 8  **Detween the channels and backplane bus  **Detween the channels in groups of 8  **Detween the channels in groups of 9  **Pes CE mark  **Ves  **Pes  **Pes  **Pes  **Archein temperature during operation  **min.  **max.  **Archein targerature during operation  **min.  **max.  **Archein air temperature barometric pressure-  **arthein temperature during storage/transportation  **min.  **max.  **Archein air temperature barometric pressure-  **arthein air temperature barometric pressure-  **arthein air temperatur		
Paison	·	7.01 po
Diagnostics function  Name  Diagnostic claim  Ves  Hardware interrupt  Yes  Diagnostic information readable  Wes  Diagnostic information readable  Wes  Pes  Diagnostic information readable  Wes  Diagnostic indicated rigital input (green)  Encoder supply Vs (green)  Potential separation  Solution tested with  600 V DC  Standards, approvals, certificates  CE mark  Yes  UL approval  Yes  File E239877  Potential separation  Potential separa		Yes
Diagnosic slarm		
Dilagnostic alarm     Hardware interrupt     Ves     Dilagnostic information readable     Vere     Vere     Vere     Dilagnostic information readable     Ves     Vere     Dilagnostic information readable     Ves     Ves     Ves     Dilagnostic information readable     Ves		
Hardware Interrupt   Yes		Yes
Diagnostic information readable Yes  Wire-break Yes  Diagnostic information readable Yes  Obignostic information readable Yes  Forcoder supply Vs (green) Yes  Encoder supply Vs (green) Yes  Encoder supply Vs (green) Yes  Potential separation  Potential separation digital inputs  • between the channels in groups of 8  • between the channels in groups of 8  • between the channels and backplane bus Yes  Isolation  Isolation tested with 600 V DC  Standards, approvals, certificates  CE mark Yes  UL approval Yes; File E239877  RCM (formerly C-TICK) Yes  EAC (formerly Gost-R) Yes  Ambient temperature during operation  • min.  • max.  Ambient temperature during operation  • min.  • min.  • max.  Ambient temperature during storage/transportation  • min.  •		Yes
Potential separation digital input (green) Second supply Vs (green) Potential separation digital inputs Second supply Vs (green) Potential separation digital inputs Second supply Vs (green) Potential separation digital inputs Second supply Vs (green) Potential separation digital inputs (green) Potential separation digital reputs (green) Potential separation digital separation (gr	·	
Diagnostics indication LED  Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green)  Potential separation Obtential separation digital inputs between the channels between the channels in groups of between the channels and backplane bus between the channels and	Diagnostic information readable	Yes
Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green) Potential separation  Potential separation  Potential separation gital inputs between the channels and backplane bus yes    Isolation	Wire-break	Yes
Status indicator digital input (green) Potential separation Potential separation digital inputs  • between the channels, in groups of • between the channels and backplane bus  solation Isolation tested with  600 V DC  Standards, approvals, certificates  CE mark  UL approval  RCM (formerly C-TICK)  KC approval  FAC (formerly C-TICK)  FAC (grownerly C-TICK)  FAC (g	Diagnostics indication LED	
Potential separation  Potential separation digital inputs  • between the channels • between the channels in groups of 8 • between the channels and backplane bus Yes  Isolation  Isolation Isolation tested with 600 V DC  Standards, approvals, certificates  CE mark Yes  UL approval Yes; File E239877  RCM (formerly C-TiCK) Yes  RCA piproval Yes  EAC (formerly Gost-R) Yes  Ambient conditions  Ambient conditions  Ambient temperature during operation • min. 0 °C • max. 60 °C  Ambient temperature during storage/transportation • min. 40 °C  Ambient temperature during storage/transportation • min. 70 °C  Altitude during operation relating to sea level • Installation altitude above sea level, max. 4 Ambient air temperature-barometric pressure-altitude • Installation altitude above sea level, max. 5 000 m • Ambient air temperature-barometric pressure-altitude  With condensation, tested in accordance with IEC 60068-2-36, max.  Resistance  Use 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  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 biologically active substances according to EN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances according to FN 60721-3-6 — to chemically active substances	Group error SF (red)	Yes
Potential separation  Potential separation digital inputs  • between the channels • between the channels, in groups of • between the channels, in groups of • between the channels and backplane bus  Standards, approvals, certificates  CE mark  UL approval  CE mark  Ves  UL approval  RCM (formerly C-TICK)  KC approval  ARD (formerly G-STICK)  ARD (formerly G-STICK)  ARD (formerly Gost-R)  Ambient conditions  Ambient emperature during operation • min. • mi	<ul> <li>Status indicator digital input (green)</li> </ul>	Yes
Potential separation digital injusts  • between the channels in groups of • between the channels and backplane bus  **Settlement the channels and backplane	<ul> <li>Encoder supply Vs (green)</li> </ul>	Yes
between the channels, in groups of between the channels, in groups of between the channels and backplane bus    Solation	Potential separation	
between the channels, in groups of between the channels and backplane bus  solation    Solation	Potential separation digital inputs	
between the channels and backplane bus    Isolation   Isolati	• between the channels	Yes
Isolation Isolation tested with Isolation Isolation tested with Isolation Isolatio	<ul> <li>between the channels, in groups of</li> </ul>	8
Isolation tested with  Standards, approvals, certificates  CE mark  UL approval  RCM (formerly C-TICK)  KG approval  EAC (formerly Gost-R)  Ambient conditions  Ambient temperature during operation  • min. • max.  • max.  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 60088-2-38, max.  Resistance  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 60721-3-6 — 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 — 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  Yes: Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 Fee Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 Fee Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 Fee Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 Fee Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 Fee Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52	<ul> <li>between the channels and backplane bus</li> </ul>	Yes
Standards, approvals, certificates  CE mark  UL approval  RCM (formerly C-TICK)  KC approval  EAC (formerly Cost-R)  Ambient conditions  Ambient temperature during operation  • min.  • max.  Ambient temperature during storage/transportation  • min.  • max.  Ambient timperature during storage/transportation  • min.  • 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 (60082-238, max.  — to biologically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6 — to chemically active sub	Isolation	
CE mark  UL approval  RCM (formerly C-TICK)  Yes  EAC (formerly Gost-R)  Ambient demperature during operation  • min. • max.  • max.  • max.  Ambient temperature during storage/transportation  • min. • max.  • max.  Ambient temperature during storage/transportation  • min. • max.  Ambient temperature-during 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  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  Use on ships/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 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 — 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 substan	Isolation tested with	600 V DC
UL approval  RCM (formerly C-TICK)  KC approval  Pes  EAC (formerly Gost-R)  Ambient conditions  Ambient temperature during operation  • min.  • max.  • max.  • max.  • max.  • Anbient temperature during storage/transportation  • min.  • max.  • max.  • max.  • Anbient temperature during storage/transportation  • min.  • max.  • Max.  • Installation altitude above sea level, max.  • Anbient air temperature-barometric pressure-altitude  — Installation altitude above sea level, max.  • Anbient air temperature-barometric pressure-altitude  — Use 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 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 60721-3-3 — to the chamically active substances according to EN 60721-3-3 — to biologically active substances according to EN 60721-3-3 — to chamically active substances according to EN 60721-3-3 — to chamically 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 — 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 — t	Standards, approvals, certificates	
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Ambient conditions  Ambient temperature during operation  • min.  • max.  Ambient temperature during storage/transportation  • min.  • 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  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature during operation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient temperature during operation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient temperature during operation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient temperature during operation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient temperature during storage/transportation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature during storage/transportation  • min.  • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • To to hemically active substances according to EN 60721-3-3  • To to bendically active substances according to EN 60721-3-3  • To to bendically active substances according to EN 60721-3-6  • To to bendically active substances according to EN 60721-3-6  • To to bendically act	CE mark	Yes
KC approval  EAC (formerly Gost-R)  Ambient conditions  Ambient temperature during operation  • min. • max.  60 °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  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max. • Ambient temperature during operation • min. • max.  5 000 m  Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 658 hPa 5540 hPa (+3 500 m +5 000 m)  Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3  Use on ships/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 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-	UL approval	Yes; File E239877
EAC (formerly Gost-R)  Ambient temperature during operation  • min.  • 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  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient temperature during storage/transportation  • min.  -40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient temperature during storage/transportation  • min.  -40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  5 000 m  Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (+2 000 m +5 000 m) // Tmin (Tmax -20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (+2 000 m +5 000 m) // Tmin (Tmax -20 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa 540 hPa (+3 500 m ) +5 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa 540 hPa 540 hPa 658 hPa 540 hPa 5	RCM (formerly C-TICK)	Yes
Ambient temperature during operation  • min. • max.  Abliant temperature during storage/transportation  • min. • max.  Altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude  • Installation altitude above sea level, max. • Ambient air temperature during storage/transportation  • min. • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature during storage/transportation  • min. • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature during storage/transportation  • min. • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature during storage/transportation  • min. • 40 °C  70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-  altitude during operation relating to sea level  • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-  altitude during operation relating to sea level  • Installation altitude above sea level, max. • Author ham 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 658 hPa (+2 000 m +2 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (-3 500 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 795 hPa 658 hPa 658 hPa 540 hPa	KC approval	Yes
Ambient temperature during operation  • min.  • max.  Abient temperature during storage/transportation  • min.  • min.  • max.  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  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient air temperature during storage/transportation  • min.  • 40 °C  • 70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature during storage/transportation  • min.  • 40 °C  • 70 °C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature during storage/transportation  • min.  • 40 °C  • 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  • Installation altitude above sea level, and °C  • Tanin Tranx at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (+2 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (+2 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (+2 000 m +5 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (-1 000 m +2 000 m) // Tmin (Tmax -10 K) at 795 hPa 568 hPa (-1 000 m +	EAC (formerly Gost-R)	Yes
<ul> <li>min.</li> <li>max.</li> <li>min.</li> <li>max.</li> <li>max.</li> <li>max.</li> <li>max.</li> <li>max.</li> <li>a max.</li> <li>max.</li> <li>a min.</li> <li>max.</li> <li>a Mintitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>a Ambient air temperature-barometric pressureal littude</li> <li>max.</li> <li>a Ambient air temperature-barometric pressureal littude</li> <li>max.</li> <li>a Mintitude</li> <li>max.</li> <li>a Mintitude</li> <li>max.</li> <li>b Mintitude</li> <li>max.</li> <li>max.&lt;</li></ul>	Ambient conditions	
<ul> <li>max.</li> <li>Ambient temperature during storage/transportation</li> <li>min.</li> <li>max.</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 pressurealtitude</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</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>Use on ships/at sea</li> <li>to biologically active substances according to EN 60721-3-3</li> <li>Use on ships/at sea</li> <li>to biologically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to CN 60721-3-6</li> <li>to chemically active substance</li></ul>	Ambient temperature during operation	
Ambient temperature during storage/transportation  • min.  • max.  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient air temperature-barometric pressurealtitude  altitude  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6  — to chemically active su	• min.	0 °C
<ul> <li>min.</li> <li>max.</li> <li>Matitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressurealtitude</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>With condensation industrial systems</li> <li>Los in stationary industrial systems</li> <li>To chemically active substances according to EN 60721-3-3</li> <li>Use on ships/at sea</li> <li>To chemically active substances according to EN 60721-3-6</li> <li>Los in stationary industrial systems</li> <li>To biologically active substances according to EN 60721-3-6</li> <li>Use on ships/at sea</li> <li>To chemically active substances according to EN 60721-3-6</li> <li>Los on ships/at sea</li> <li>To chemically active substances according to EN 60721-3-6</li> <li>Los on ships/at sea</li> <li>To chemically active substances according to EN 60721-3-6</li> <li>Los on ships/at sea</li> <li>Los on ships/at sea</li> <li>To chemically active substances according to EN 60721-3-6</li> <li>Los on ships/at sea</li> <li>Los on ships/at sea<td>• max.</td><td>60 °C</td></li></ul>	• max.	60 °C
Nax.     Altitude during operation relating to sea level     Installation altitude above sea level, max.     Ambient air temperature-barometric pressurealtitude     altitude     Ambient air temperature-barometric pressurealtitude     Ambient air temperature-barometric presurealtitude     Ambient air temperature-barometric presurealtitude     Ambient air tempe	Ambient temperature during storage/transportation	
Altitude during operation relating to sea level  Installation altitude above sea level, max.  Ambient air temperature-barometric pressurealtitude  Ambient air temperature-barometric pressurealtitude  Ambient air temperature-barometric pressurealtitude  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)  Ambient air temperature-barometric pressurealtitude  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)  Ambient air temperature-barometric pressurealtitude  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)  Ambient air temperature-barometric pressurealtitude  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)  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)  Ambient air temperature-barometric pressurealtitude  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) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hP	• min.	
<ul> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressurealtitude</li> <li>Ambient air temperature-barometric pressurealtitude</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 (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</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>Use on ships/at sea</li> <li>— to biologically active substances according to EN 60721-3-6</li> <li>— to biologically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60068-2-52</li> </ul>	• max.	70 °C
<ul> <li>Ambient air temperature-barometric pressurealtitude</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 (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</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>Use on ships/at sea</li> <li>— to biologically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to EN 60721-3-6</li> <li>— to chemically active substances according to Pass SEA (EN 4 75 %) incl. salt spray acc. to EN 60068-2-52</li> <li>— to chemically active substances according to Pass SEA (EN 4 75 %) incl. salt spray acc. to EN 60068-2-52</li> </ul>		
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.  100 %; RH incl. condensation/frost (no commissioning under condensation conditions)  Resistance  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 mechanically active substances according to EN 60721-3-3  Use on ships/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 Pes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Pes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Pes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52		
Relative humidity  With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  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 mechanically active substances according to EN 60721-3-3  Use on ships/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 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 CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6 — to chemically active substances according to CN 60721-3-6  The following the first incl. condensation conditions (nonditions)  100 %; RH incl. condensation conditions  100 %;	·	
Relative humidity  • With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  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 mechanically active substances according to EN 60721-3-3  Use on ships/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 chemically active substances according to EN 60068-2-52	ailituue	
With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance  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 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 biologically active substances according to EN 60721-3-3  Use on ships/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 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 Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52	Relative humidity	, , , , , , , , , , , , , , , , , , , ,
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 mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3  Use on ships/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 60068-2-52  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 3B4 incl. salt spray acc. to EN 60068-2-52  Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B4 incl. salt spray acc. to EN 60068-2-52	With condensation, tested in accordance with IEC	
<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>to mechanically active substances according to EN 60721-3-3</li> <li>to mechanically active substances according to EN 60721-3-3</li> <li>to mechanically active substances according to EN 60721-3-3</li> <li>to biologically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> <li>Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> <li>Yes; Class 6C3 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52</li> </ul>	Resistance	
EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/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 chemically active substances according to EN 60068-2-52	Use in stationary industrial systems	
EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6  — to chemically active substances according to 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		
<ul> <li>to mechanically active substances according to EN 60721-3-3</li> <li>Use on ships/at sea</li> <li>to biologically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to Tes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> <li>to chemically active substances according to Yes; Class 6C3 (RH &lt; 75 %) incl. salt spray acc. to EN 60068-2-52</li> </ul>		
<ul> <li>to biologically active substances according to EN 60721-3-6</li> <li>to chemically active substances according to Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> <li>Tes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> <li>Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request</li> </ul>		· · · · · · · · · · · · · · · · · · ·
EN 60721-3-6 request  — to chemically active substances according to Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52	Use on ships/at sea	
— to chemically active substances according to Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52	to biologically active substances according to	
		Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52

<ul> <li>to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04</li> </ul>	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)
Remark	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
connection method / header	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
last modified:	12/18/2020 🗹