



SIPLUS S7-300 SM323 - 20-POLE -40 ... +70 DGR C WITH CONFORMAL COATING CONFORMITY TO EN50155 T1 CAT 1 CL A/B BASED ON 6ES7323-1BH01-0AA0 . DIGITAL MODULE OPTICALLY ISOLAT 8 DI AND 8 DO, 24V DC, 0.5A AGGREGATE CURRENT 2A

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	40 mA
from backplane bus 5 V DC, max.	40 mA
Power losses	
Power loss, typ.	3.5 W
Digital inputs	
Number of digital inputs	8
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
up to 60 °C, max.	8
Input voltage	

Type of input voltage	DC
Rated value, DC	24 V
for signal "0"	-30 to +5 V
for signal "1"	13 to 30 V
Input current	
for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
at "0" to "1", min.	1.2 ms
at "0" to "1", max.	4.8 ms
at "1" to "0", min.	1.2 ms
at "1" to "0", max.	4.8 ms
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
Lamp load, max.	5 W
Load resistance range	
lower limit	48 Ω
upper limit	4 k Ω
Output voltage	
for signal "1", min.	L+ (-0.8 V)
Output current	
for signal "1" rated value	0.5 A
for signal "1" minimum load current	5 mA
for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
"0" to "1", max.	100 μ s
"1" to "0", max.	500 μ s
Parallel switching of 2 outputs	
for increased power	No
for redundant control of a load	Yes ; only outputs of the same group

Switching frequency	
with resistive load, max.	100 Hz
with inductive load, max.	0.5 Hz
on lamp load, max.	10 Hz
Aggregate current of outputs (per group)	
horizontal installation	
up to 60 °C, max.	4 A
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	2 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Alarms	
Alarms	No
Diagnostic messages	
Diagnostic functions	No
Diagnostics indication LED	
Status indicator digital output (green)	Yes
Status indicator digital input (green)	Yes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels	Yes
between the channels, in groups of	8
between the channels and the backplane bus	Yes ; Optocoupler
Galvanic isolation digital outputs	
between the channels	Yes
between the channels, in groups of	8
between the channels and the backplane bus	Yes ; Optocoupler
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Standards, approvals, certificates	

CE mark	Yes
KC approval	Yes
UL approval	Yes ; File E239877
RCM (former C-TICK)	Yes
FM approval	Yes ; CofC 3028431
EAC (former Gost-R)	Yes
EN 50155	Yes ; T1 Cat. 1 Cl. A/B horizontal mounting position
Ambient conditions	
Operating temperature	
Min.	-40 °C ; = Tmin
max.	70 °C ; = Tmax; 60 °C @ UL/cUL, ATEX and FM use
Extended ambient conditions	
Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity	
With condensation, tested in accordance with IEC 60068-2-38, maximum	100 % ; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
to biologically active substances/conformity with EN 60721-3-3	Yes ; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
to chemically active substances/conformity with EN 60721-3-3	Yes ; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
to mechanically active substances/conformity with EN 60721-3-3	Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	220 g
Status	Jun 16, 2014