

SIPLUS S7-300 SM322 32 DO - 40-POLE -25 ... +70 DGR C WITH CONFORMAL COATING CONFORMITY WITH EN50155 T1 KAT 1 KL A/B BASED ON 6ES7322-1BL00-0AA0 . DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 32DO, 24V DC, 0.5A, 1 X 40 PIN, SUM OF OUTPUT CURRENTS 4A/GROUP (16A/MODULE)



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.	160 mA
from backplane bus 5 V DC, max.	110 mA
Power loss	
Power loss, typ.	6.6 W
Digital outputs	
Number of digital outputs	32
Limitation of inductive shutdown voltage to	L+ (-53 V)
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 $\Omega$

• upper limit	4 kΩ
<b>Output voltage</b>	
• for signal "1", min.	L+ (-0.8 V)
<b>Output current</b>	
• 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
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
<b>horizontal installation</b>	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
— up to 70 °C, max.	2 A
<b>vertical installation</b>	
— up to 40 °C, max.	2 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostic functions	No
<b>Alarms</b>	
• Diagnostic alarm	No
<b>Diagnostic messages</b>	
• Wire-break	No
• Short-circuit	No
• missing load voltage	No
<b>Diagnostics indication LED</b>	
• Rated load voltage PWR (green)	No
• Fuse OK FSG (green)	No
• Group error SF (red)	No
• Status indicator digital output (green)	Yes; per channel
• Channel fault indicator F (red)	No
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	Yes
• between the channels, in groups of	8
• between the channels and backplane bus	Yes; Optocoupler
<b>Permissible potential difference</b>	
between different circuits	75 V DC/60 V AC

<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Standards, approvals, certificates</b>	
CE mark	Yes
UL approval	Yes; File E239877
FM approval	Yes; CofC 3028431
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
<b>Railway application</b>	
• EN 50155	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• min.	-25 °C; = Tmin
• max.	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies
<b>Ambient temperature during storage/transportation</b>	
• min.	-40 °C
• max.	70 °C
<b>Altitude during operation relating to sea level</b>	
• Ambient air temperature-barometric pressure-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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Use in stationary industrial systems</b>	
— 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 chemically active substances according to 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 according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
<b>Connection method</b>	
required front connector	40-pin
<b>Dimensions</b>	
Width	40 mm

Height	125 mm
Depth	120 mm
Weights	
Weight	260 g
<b>last modified:</b>	11/20/2017