



Figure similar

spare part SIPLUS S7-300 SM 326F DQ8 based on 6ES7326-2BF41-0AB0 with conformal coating, -25...+60 °C, digital output F-DQ 8x 24 V DC/2A PM fail-safe digital output sinking-sourcing up to category 4 (EN 954-1), SIL 3 (IEC 61508)

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
• Rated value (DC)	24 V; 2L+, 3L+
• Reverse polarity protection	No
Input current	
from supply voltage 1L+, max.	75 mA
from load voltage 2L+ (without load), max.	100 mA
from load voltage 3L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	12 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	L+ (-33 V)
Switching capacity of the outputs	
• on lamp load, max.	5 W
Output voltage	
• for signal "1", min.	L+ (-1.0 V)
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 40 °C, min.	7 mA
• for signal "1" permissible range for 0 to 40 °C, max.	2 A; with horizontal installation, 1 A with vertical installation
• for signal "1" permissible range for 40 to 60 °C, min.	7 mA
• for signal "1" permissible range for 40 to 60 °C, max.	1 A; for horizontal installation
• for signal "0" residual current, max.	0.5 mA
Switching frequency	
• with resistive load, max.	30 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	7.5 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	5 A

Cable length	
• shielded, max.	200 m; 200 m for SIL 3, AK 6, Cat 4
• unshielded, max.	200 m
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnoses	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Potential separation	
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	500V AC for 1 min (internal voltage limiting to $\pm 120V$)
Standards, approvals, certificates	
CE mark	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Highest safety class achievable in safety mode	
• acc. to EN 954	Cat. 4
• Performance level according to ISO 13849-1	e
• SIL acc. to IEC 61508	SIL 3
Railway application	
• EN 50155	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	60 °C; = Tmax; the rated temperature range of -25 ... +55 °C (T1) applies for the use on railway vehicles according to EN50155
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 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	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 acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on land craft, rail vehicles and special-purpose vehicles	
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 (ST2); *
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 incl. sand, dust; *
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!

Connection method	
required front connector	40-pin
Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	465 g
Classifications	

	Version	Classification
eClass	16	27-24-22-04
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates	
General Product Approval	

[Miscellaneous](#)

[Manufacturer Declaration](#)

[Declaration of Conformity](#)

[China RoHS](#)

[TUEV](#)



EMV	Test Certificates
 	TUEV

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