

SIPLUS S7-300 PS 305 -25...+70 °C with conformal coating according to EN 50155 T1 Cat 1 CI A/B based on 6ES7305-1BA80-0AA0 . Stabilized power supplies Input: 24-110 V DC Output: 24 V DC/2 A



Figure similar

Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
• 48 V DC	Yes
• 72 V DC	Yes
• 96 V DC	Yes
• 120 V DC	Yes; Rated value 110 V DC
Mains buffering	
• Mains/voltage failure stored energy time	10 ms; Corresponds to S2 and C1 of EN 50155
• Repeat rate, min.	1 s
Input current	
Rated value at 24 V DC	2.7 A
Rated value at 48 V DC	1.3 A
Rated value at 72 V DC	0.9 A
Rated value at 96 V DC	0.65 A
Rated value at 110 V DC	0.6 A
Inrush current, max.	20 A

$I^2t$	5 A <sup>2</sup> ·s
Leakage current, typ.	0.7 mA
Leakage current, max.	3.5 mA
Overcurrent overload capability	270 ms on short circuit during startup and operation

#### Output voltage

Rated value (DC)	24 V
permissible range, lower limit (DC)	23.27 V
permissible range, upper limit (DC)	24.72 V
Power up time, max.	3 s
Residual ripple, typ.	30 mV; Peak - peak
Residual ripple, max.	150 mV; Peak - peak

#### Output current

Current output (rated value)	2 A; 2 for connection in parallel
Short-circuit protection	Yes; Electronic

#### Power

Active power input, typ.	64 W
Efficiency	75 %

#### Power loss

Power loss, typ.	16 W
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#### Interrupts/diagnostics/status information

Diagnostics indication LED	
<ul style="list-style-type: none"> <li>Status indicator output 24 V OK (green)</li> </ul>	Yes

#### Potential separation

primary/secondary	Yes; SELV output voltage $U_a$ according to EN 60950-1 and EN 50178
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#### Isolation

Isolation tested with	Rated insulation voltage (24 V against input): 150 V AC tested with: 2800 V DC
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#### EMC

EMC interference immunity	EN 61000-6-2
EMC interference emission	EN 55011 Class A

#### Degree and class of protection

Equipment protection class	I
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#### Standards, approvals, certificates

CE mark	Yes
Railway application	
<ul style="list-style-type: none"> <li>EN 50155</li> </ul>	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007

#### Ambient conditions

<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<p>-25 °C; = Tmin</p> <p>70 °C; = Tmax; for use on railway vehicles according to EN 50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/UL hazardous use applies</p>
<b>Altitude during operation relating to sea level</b>	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> <li>• Ambient air temperature-barometric pressure-altitude</li> </ul>	<p>2 000 m</p> <p>Tmin ... 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 ... +5 000 m); above 2 000 m max. 75 V DC</p>
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	<p>100 %; RH incl. condensation/frost (no commissioning under condensation conditions)</p>
<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 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; *
<b>Use on land craft, rail vehicles and special-purpose vehicles</b>	
— 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; *
<b>Use on ships/at sea</b>	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically 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 mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
<b>Usage in industrial process technology</b>	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	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)
<b>Remark</b>	

— 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!

#### Dimensions

Width	80 mm
Height	125 mm
Depth	120 mm

#### Weights

Weight, approx.	740 g
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**last modified:** 10/13/2020