



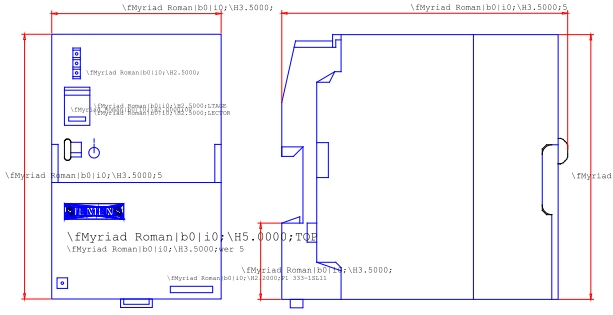
SIMATIC S7-300 OUTDOOR STABILIZED POWER
SUPPLY PS305 INPUT: 24-110 V DC OUTPUT: 24 V DC/2
A

Technical specifications

Product	PS 305
Power supply, type	24 V/2 A
Input	
Input	DC voltage
Supply voltage / at DC	24 ... 110 V
Input voltage / at DC	16.8 ... 138 V
Wide-range input	Yes
Overvoltage resistance	154 V; 0.1 s
Mains buffering at I _{out} rated, min.	10 ms
Mains buffering	at V _{in} rated
Input current / at nominal level of the input voltage 24 V	2.4 A
Input current / at nominal level of the input voltage 110 V	0.6 A
Switch-on current limiting (+25 °C), max.	20 A
Duration of current limiting / at 25 °C / maximum	10 ms
I ² t, max.	5 A ² ·s
Built-in incoming fuse	T 6.3 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 A, characteristic C, suitable for DC
Output	
Output	Controlled, isolated DC voltage

Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.2 %
Static load balancing, approx.	0.4 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	150 mV
Product feature / output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	3 s
Voltage rise, typ.	5 ms
Rated current value Iout rated	2 A
Current range	0 ... 3 A
• Note	(3 A up to +60 °C)
delivered active power / typ.	48 W
short-term overload current / at short-circuit during run-up / typical	9 A
Duration of overloading ability for excess current / on short-circuiting during the start-up	270 ms
short-term overload current / at short-circuit during operation / typical	9 A
Duration of overloading ability for excess current / on short-circuiting during the operational phase	270 ms
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	75 %
Power loss at Vout rated, Iout rated, approx.	16 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.3 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	2.5 %
Load step setting time 50 to 100%, typ.	2.5 ms
Load step setting time 100 to 50%, typ.	2.5 ms
Setting time / maximum	5 ms
Protection and monitoring	
Output overvoltage protection	Additional control loop, shutdown at approx. 30 V, automatic restart
Current limitation	3.3 ... 3.9 A
Characteristic feature of the output / short-circuit protected	Yes
Short-circuit protection	Electronic shutdown, automatic restart

Enduring short circuit current / Effective level / maximum	2 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
Potential separation	Safety extra low output voltage Vout according to EN 60950-1 and EN 50178, creepage distances and clearances > 5 mm
Protection class	Class I
stray current / maximum	3.5 mA
stray current / typical	0.7 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	UL-Listed (UL 508), File E143289, CSA (CSA C22.2 No. 142)
Explosion protection	-
FM approval	-
CB approval	No
Marine approval	-
Degree of protection (EN 60529)	IP20
EMC	
Emitted interference	EN 55011 Class A
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature / in operation	-25 ... +70 °C
• Note	with natural convection
Ambient temperature / on transport	-40 ... +85 °C
Ambient temperature / in storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K5, transient condensation permitted
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	L+1, M1, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded
Connections / Output	L+, M: 3 screw terminals each for 0.5 ... 2.5 mm²
Connections / Auxiliary	-
Width / of the housing	80 mm
Height / of the housing	125 mm
Depth / of the housing	120 mm
Installation width	80 mm
Mounting height	225 mm
Weight, approx.	0.57 kg
Product feature / of the housing / housing for side-by-side mounting	Yes

Type of mounting / wall mounting	No
Type of fixing / cap rail mounting	No
Type of mounting / S7-300 rail mounting	Yes
Installation	Can be mounted onto S7 rail
Mechanical accessories	Mounting adapter for standard mounting rail (6ES7390-6BA00-0AA0)
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)  The technical drawing shows two views of the device. The left view is a front elevation with dimensions: width 100 mm, height 100 mm, and a mounting rail width of 35 mm. The right view is a side elevation showing the device's profile and mounting rail. Dimensions include a total width of 100 mm, a mounting rail width of 35 mm, and a device height of 100 mm. The drawing also shows the device's internal components and the mounting rail's structure.

letzte Änderung:

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