



Figure similar

SIMATIC PS305/DC24-110V/24V/2A/Outdoor

SIMATIC S7-300 with Regulated power supply PS305 input: 24-110 V DC output: 24 V DC/2 A

input	
type of the power supply network	DC voltage
supply voltage at DC	24 ... 110 V
input voltage at DC	16.8 ... 138 V
wide range input	Yes
overvoltage overload capability	154 V; 0.1 s
buffering time for rated value of the output current in the event of power failure minimum	10 ms
operating condition of the mains buffering	at V_{in} rated
input current	
• at rated input voltage 24 V	2.4 A
• at rated input voltage 110 V	0.6 A
current limitation of inrush current at 25 °C maximum	20 A
duration of inrush current limiting at 25 °C	
• maximum	10 ms
I^2t value maximum	5 A ² ·s
fuse protection type	T 6.3 A/250 V (not accessible)
fuse protection type in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C, suitable for DC
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
output voltage adjustable	No; -
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.2 %
• on slow fluctuation of ohm loading	0.4 %
residual ripple	
• maximum	150 mV
• typical	30 mV
voltage peak	
• maximum	240 mV
• typical	150 mV
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	No overshoot of V_{out} (soft start)
response delay maximum	3 s
voltage increase time of the output voltage	
• typical	5 ms

output current	
• rated value	2 A
• rated range	0 ... 3 A; 3 A up to +60°C at Vin > 24 V
supplied active power typical	48 W
short-term overload current	
• on short-circuiting during the start-up typical	9 A
• at short-circuit during operation typical	9 A
duration of overloading capability for excess current	
• on short-circuiting during the start-up	270 ms
• at short-circuit during operation	270 ms
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	75 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	16 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	2.5 %
setting time	
• load step 50 to 100% typical	2.5 ms
• load step 100 to 50% typical	2.5 ms
setting time	
• maximum	5 ms
protection and monitoring	
design of the overvoltage protection	Additional control loop, shutdown at approx. 30 V, automatic restart
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	3.3 ... 3.9 A
enduring short circuit current RMS value	
• maximum	2 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1 and EN 50178, creepage distances and clearances > 5 mm
operating resource protection class	Class I
protection class IP	IP20
standard	
• for emitted interference	EN 55011 Class A
• for mains harmonics limitation	not applicable
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; UL-Listed (UL 508), File E143289; CSA (CSA C22.2 No. 142)
• CSA approval	Yes; UL-Listed (UL 508), File E143289, CSA (CSA C22.2 No. 142)
• EAC approval	Yes
• NEC Class 2	No
type of certification	
• CB-certificate	No
MTBF at 40 °C	964 506 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	No
• FM registration	No

standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	512.2 kg
• during manufacturing	11.2 kg
• during operation	500.5 kg
• after end of life	0.36 kg
ambient conditions	
ambient temperature	
• during operation	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K5, transient condensation permitted
connection method	
type of electrical connection	screw terminal
• at input	L+1, M1, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• at output	L+, M: 3 screw terminals each for 0.5 ... 2.5 mm ²
• for auxiliary contacts	-
mechanical data	
width × height × depth of the enclosure	80 × 120
installation width × mounting height	80 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
fastening method	Can be mounted onto S7 rail
• standard rail mounting	No
• S7 rail mounting	Yes
• wall mounting	No
housing can be lined up	Yes
net weight	0.57 kg
accessories	
mechanical accessories	Mounting adapter for standard mounting rail (6ES7390-6BA00-0AA0)
further information internet links	
internet link	
• to website: Industry Mall	https://mall.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
security information	
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Classifications

	Version	Classification
eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval	Environment
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[Manufacturer Declaration](#) [Declaration of Conformity](#)



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