6ES7307-1EA01-0AA0

## **Data sheet**



SIMATIC PS307/1AC/24VDC/5A

SIMATIC S7-300 Regulated power supply PS307 input: 120/230 V AC, output: 24 V/5 A DC

type of the power supply network         1-phase AC           supply voltage AC         Automatic range selection           supply voltage         120 V/230 V           input voltage 1 at AC         85 132 V           input voltage at AC         170 264 V           wide range input         No           overvoltage overload capability         2.3 × Vin rated, 1.3 ms           buffering time for rated value of the output current in the event of power failure minimum         20 ms           operating condition of the mains buffering         at Vin = 93/187 V           line frequency         50/60 Hz           line frequency         47 63 Hz           input current         4 rated input voltage 120 V           • at rated input voltage 230 V         1.2 A           current limitation of inrush current at 25 °C maximum         20 A           duration of inrush current infilting at 25 °C         8           • maximum         1.2 A²-8           fuse protection type in the feeder         Recommended miniature circuit breaker: from 6 A characteristic C           output voltage at DC rated value         24 V           output voltage adjustable         No; -           e at output 1 at DC rated value         24 V           output voltage adjustable         No; -           <	input		
Supply voltage   14 AC   85 132 V	type of the power supply network	1-phase AC	
input vollage 1 at AC         85 132 V           input vollage 2 at AC         170 264 V           wide range input         No           overvoltage overfoad capability         2.3 x Vin rated, 1.3 ms           buffering time for rated value of the output current in the event of power failure minimum         20 ms           operating condition of the mains buffering         at Vin = 99/187 V           line frequency         50/60 Hz           line frequency         4 may 63 Hz           input current         2.3 A           at rated input voltage 230 V         2.3 A           current limitation of inrush current at 25 °C maximum         20 A           duration of inrush current limiting at 25 °C         3 ms           fuse protection type in the feeder         7 3.15 A/250 V (not accessible)           fuse protection type in the feeder         Recommended miniature circuit breaker: from 6 A characteristic C           output voltage at DC rated value         24 V           output voltage at DC rated value         24 V           output voltage adjustable         No; -           relative overall tolerance of the voltage         3 %           e at output 1 at DC rated value         24 V           output voltage adjustable         No; -           e natiow fluctuation of input voltage         <	supply voltage at AC	Automatic range selection	
Input vollage 2 at AC	supply voltage	120 V/230 V	
wide range input         No           overvoltage overload capability         2.3 × Vin rated, 1.3 ms           buffering time for rated value of the output current in the event of power failure minimum         20 ms           operating condition of the mains buffering         at Vin = 93/187 V           line frequency         47 · 63 Hz           line frequency         47 · 63 Hz           input current         at rated input voltage 120 V           a trated input voltage 230 V         1.2 A           current limitation of inrush current at 25 °C maximum         20 A           duration of inrush current limiting at 25 °C         maximum           12 Value maximum         3 ms           12t value maximum         1.2 A *s           fuse protection type         T 3,15 A/250 V (not accessible)           fuse protection type in the feeder         Recommended miniature circuit breaker: from 6 A characteristic C           output voltage curve at output         Controlled, isolated DC voltage           output voltage at DC rated value         24 V           output voltage adjustable         No;-           relative overall tolerance of the voltage         3 %           e on slow fluctuation of input voltage         0.1 %           e on slow fluctuation of input voltage         0.1 %           e on slow	input voltage 1 at AC	85 132 V	
overvoltage overload capability         2.3 × Vin rated, 1.3 ms           buffering time for rated value of the output current in the event of power failure minimum         20 ms           operating condition of the mains buffering         at Vin = 93/187 V           line frequency         50/60 Hz           line frequency         63 Hz           input current         2.3 A           at rated input voltage 230 V         2.3 A           at rated input soltage 230 V         1.2 A           current limitation of inrush current at 25 °C maximum         20 A           duration of insush current limiting at 25 °C         **           maximum         1.2 A²-8           12t value maximum         1.2 A²-8           fuse protection type in the feeder         Recommended miniature circuit breaker: from 6 A characteristic C           output         Voltage curve at output         Controlled, isolated DC voltage           output voltage at DC rated value         24 V           output voltage adjustable         No; -           relative overall tolerance of the voltage         3 %           e on slow fluctuation of input voltage         0.1 %           on slow fluctuation of input voltage         0.1 %           on slow fluctuation of ohn loading         0.5 %           residual ripple         10 mV	input voltage 2 at AC	170 264 V	
buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency line frequency line frequency   50/60 Hz   50/60	wide range input	No	
operating condition of the mains buffering at Vin = 93/187 V line frequency 50/60 Hz line frequency 47 63 Hz line frequency 47 63 Hz linut current  • at rated input voltage 230 V 12 A current limitation of inrush current at 25 °C maximum 20 A duration of inrush current limiting at 25 °C  • maximum 3 ms L2 Value maximum 12 2 A°s fuse protection type T 3,15 A/250 V (not accessible) fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic C  output  voltage curve at output 24 V output voltage at DC rated value 24 V output voltage adjustable No;  • at output 1 at DC rated value 24 V output voltage adjustable No;  relative overall tolerance of the voltage 3% relative overall tolerance of the voltage 0.1 % • on slow fluctuation of input voltage 4 V output voltage and push voltage 0.5 % residual ripple	overvoltage overload capability	2.3 × Vin rated, 1.3 ms	
line frequency 50/60 Hz line frequency 47 63 Hz input current  • at rated input voltage 120 V 2.3 A • at rated input voltage 230 V 1.2 A current limitation of inrush current at 25 °C maximum 20 A duration of inrush current limiting at 25 °C • maximum 3 ms l2t value maximum 1.2 A²-s fuse protection type T 3.15 A/250 V (not accessible) fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic C ooutput  voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage at DC rated value 24 V output voltage adjustable No;- relative overall tolerance of the voltage 3 % relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of ohm loading 0.5 % residual ripple • maximum 50 mV • typical 100 mV voltage peak • maximum 150 mV • typical 20 mV display version for normal operation Green LED for 24 V OK		20 ms	
line frequency 47 63 Hz  input current  • at rated input voltage 120 V 2.3 A  • at rated input voltage 230 V 1.2 A  current limitation of inrush current at 25 °C maximum 20 A  duration of inrush current limiting at 25 °C  • maximum 3 ms  12t value maximum 1.2 A²-s  fuse protection type in the feeder Recommended miniature circuit breaker; from 6 A characteristic C  output  voltage curve at output 24 V  output voltage at DC rated value 24 V  output voltage at DC rated value 24 V  output voltage adjustable No; -  relative overall tolerance of the voltage 3 %  relative control precision of the output voltage 0.1 %  • on slow fluctuation of input voltage 4 voltage 10.1 %  • on slow fluctuation of ohm loading 50 mV  • typical 10 mV  voltage peak  • maximum 50 mV  • typical 20 mV  display version for normal operation Green LED for 24 V OK	operating condition of the mains buffering	at Vin = 93/187 V	
input current  at rated input voltage 230 V  at rated input voltage 230 V  at rated input voltage 230 V  current limitation of inrush current at 25 °C maximum  duration of inrush current limiting at 25 °C  maximum  3 ms  12t value maximum  24 V  0utput voltage at DC rated value  24 V  0utput voltage at DC rated value  24 V  0utput voltage adjustable  10t value value  25 V  01t value value value  26 V  01t value value value  26 V  01t value value value  01t value value value  01t value value value  01t value value value value value  01t value value value value value value  01t value	line frequency	50/60 Hz	
at rated input voltage 230 V at rated input voltage 230 V 1.2 A  2.3 A  1.2 A  2.3 A  1.2 A  4. at rated input voltage 230 V 2.3 A  1.2 A  4. at rated input voltage 230 V 2.3 A  4. at rated input voltage 230 V 2.3 A  1.2 A  4. at rated input voltage 25 °C  ■ maximum 3 ms  1.2 A²-s  1	line frequency	47 63 Hz	
• at rated input voltage 230 V  current limitation of inrush current at 25 °C maximum  duration of inrush current limiting at 25 °C  • maximum  3 ms  12t value maximum  1.2 A²-s  fuse protection type in the feeder  Recommended miniature circuit breaker: from 6 A characteristic C  output  voltage curve at output  cutput voltage at DC rated value  • at output 1 at DC rated value  • at output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  • maximum  • typical  • typical  display version for normal operation  1.2 A  3 ms  1.2 A²-s	input current		
current limitation of inrush current at 25 °C maximum  duration of inrush current limiting at 25 °C  maximum  1.2 A²-s  fuse protection type fuse protection type  voltage curve at output  cutput voltage at DC rated value  at output 1 at DC rated value  voltuput voltage adjustable relative control precision of the output voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  voltage peak  maximum  typical  omaximum  typical  omaximum  typical  fuse protection type in the feeder  a maximum  typical  display version for normal operation  20 A  3 ms  1.2 A²-s  T. 3,15 A/250 V (not accessible)  Recommended miniature circuit breaker: from 6 A characteristic C  output voltage  Controlled, isolated DC voltage  24 V  voltage  24 V  voltage  24 V  voltage adjustable  No; -  18 A V  No; -  18 A V  No; -  19 A V  No; -  10 M V  10 M V  10 M V  10 M V  voltage peak  maximum  typical  On W  150 m V  Green LED for 24 V OK	<ul> <li>at rated input voltage 120 V</li> </ul>	2.3 A	
duration of inrush current limiting at 25 °C  • maximum  1.2 A²-s  fuse protection type  fuse protection type in the feeder  fuse protection type in the feeder  coutput  Voltage curve at output  Voltage curve at output  voltage at DC rated value  • at output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  voltage peak  • maximum  • typical  display version for normal operation  Green LED for 24 V OK	<ul> <li>at rated input voltage 230 V</li> </ul>	1.2 A	
maximum     3 ms  12t value maximum     1.2 A²-s fuse protection type fuse protection type in the feeder  recommended miniature circuit breaker: from 6 A characteristic C  recomposition type in the feeder  recommended miniature circuit breaker: from 6 A characteristic C  relative output voltage at DC rated value  output voltage  output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  output	current limitation of inrush current at 25 °C maximum	20 A	
I2t value maximum fuse protection type fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic C  output  voltage curve at output  voltage at DC rated value output voltage at output 1 at DC rated value  output voltage adjustable relative overall tolerance of the voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple  maximum typical output output outge peak maximum typical display version for normal operation  1.2 A²-s  T 3,15 A/250 V (not accessible) Recommended miniature circuit breaker: from 6 A characteristic C  Output voltage On tolater: from 6 A characteristic C  Output voltage Output voltage 24 V  Voltage 24 V  Output voltage On; So,	duration of inrush current limiting at 25 °C		
fuse protection type fuse protection type in the feeder  Recommended miniature circuit breaker: from 6 A characteristic C  output  voltage curve at output  output voltage at DC rated value  • at output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • maximum  • typical  output voltage peak  • maximum  • typical  display version for normal operation  T 3,15 A/250 V (not accessible)  Recommended miniature circuit breaker: from 6 A characteristic C  Output breaker: from 6 A characteristic C  Recommended miniature circuit breaker: from 6 A characteristic C  Recommended miniature circuit breaker: from 6 A characteristic C  Output breaker: from 6 A characteristic C  Controlled, isolated DC voltage  24 V  Output voltage  0 1 V  0 - Telefive control precision of the output voltage  0 1 %  0 1 %  0 5 %  Tesidual ripple  10 mV  Voltage peak  150 mV	maximum	3 ms	
fuse protection type in the feeder  output  voltage curve at output  output voltage at DC rated value  output voltage  output voltage  output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  voltage paak  maximum  typical  display version for normal operation  Recommended miniature circuit breaker: from 6 A characteristic C  Recommended miniature circuit breaker: from 6 A characteristic C  Recommended miniature circuit breaker: from 6 A characteristic C  Controlled, isolated DC voltage  24 V  Output voltage  24 V  Output voltage adjustable  No; -  14 V  No; -  15 OmV  15 OmV  15 OmV  Green LED for 24 V OK	I2t value maximum	1.2 A²·s	
voltage curve at output  voltage at DC rated value  output voltage  • at output 1 at DC rated value  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  • maximum  • typical  display version for normal operation  Controlled, isolated DC voltage  24 V  Controlled, isolated DC voltage  24 V  Output voltage  04 V  No; -  14 V  05 V  07 V  08 V  18 V  19 V  10 mV  150 mV  Green LED for 24 V OK	fuse protection type	T 3,15 A/250 V (not accessible)	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value  output voltage adjustable output voltage adjustable relative overall tolerance of the voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple • maximum • typical • maximum • typical  output voltage adjustable  150 mV display version for normal operation  Controlled, isolated DC voltage  24 V  Output voltage  04 V  Output voltage adjustable  No; -  24 V  Output voltage aljustable  No; -  24 V  Output voltage aljustable  No; -  3 %  Felative control precision of the output voltage  0.1 %  0.5 %  Fesidual ripple  • maximum  • typical  Green LED for 24 V OK	fuse protection type in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C	
output voltage at DC rated value  output voltage  • at output 1 at DC rated value  24 V  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  • maximum  • for mV  ottage peak  • maximum  • typical	output		
output voltage  • at output 1 at DC rated value  24 V  output voltage adjustable  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  • for DV  • typical  Green LED for 24 V OK	voltage curve at output	Controlled, isolated DC voltage	
at output 1 at DC rated value  Output voltage adjustable  relative overall tolerance of the voltage  relative control precision of the output voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  voltage peak  maximum  typical  on maximum  on typical  on maximum  on typical  on mov  on typical  on mov  on typical  on mov  on typical  on t	output voltage at DC rated value	24 V	
output voltage adjustable relative overall tolerance of the voltage relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum typical otypical otypica	output voltage		
relative overall tolerance of the voltage relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading on slow fluctuation of ohm loading residual ripple maximum typical otypical otypica	at output 1 at DC rated value	24 V	
relative overall tolerance of the voltage relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading on slow fluctuation of ohm loading residual ripple maximum typical otypical otypica	output voltage adjustable	No: -	
relative control precision of the output voltage  on slow fluctuation of input voltage on slow fluctuation of ohm loading  residual ripple  maximum typical  voltage peak maximum typical  maximum typical  maximum typical  maximum typical  maximum typical  from W  otypical  display version for normal operation  Green LED for 24 V OK		·	
<ul> <li>on slow fluctuation of input voltage</li> <li>on slow fluctuation of ohm loading</li> <li>residual ripple</li> <li>maximum</li> <li>typical</li> <li>voltage peak</li> <li>maximum</li> <li>typical</li> <li>typical</li> <li>typical</li> <li>of mv</li> <li>typical</li> <li>typical</li> <li>typical</li> <li>typical</li> <li>of mv</li> <li>typical</li> <li>of mv</li> <li>of mv</li> <li>of typical</li> <li>of ceen LED for 24 V OK</li> </ul>		<b>0</b> //0	
on slow fluctuation of ohm loading  residual ripple     maximum		0.1 %	
residual ripple      maximum	·		
<ul> <li>maximum</li> <li>typical</li> <li>typical</li> <li>maximum</li> <li>maximum</li> <li>typical</li> <li>typical</li> <li>display version for normal operation</li> <li>50 mV</li> <li>20 mV</li> <li>Green LED for 24 V OK</li> </ul>		0.0 /0	
● typical       10 mV         voltage peak <ul> <li>● maximum</li> <li>● typical</li> <li>● typical</li> <li>display version for normal operation</li> </ul> 150 mV         Green LED for 24 V OK       Company of the period	• •	50 mV	
voltage peak  • maximum  • typical  display version for normal operation  150 mV  20 mV  Green LED for 24 V OK			
<ul> <li>maximum</li> <li>typical</li> <li>display version for normal operation</li> <li>150 mV</li> <li>20 mV</li> <li>Green LED for 24 V OK</li> </ul>	•		
● typical 20 mV display version for normal operation Green LED for 24 V OK		150 mV	
display version for normal operation  Green LED for 24 V OK			
	<u> </u>		

response delay maximum	2 s
voltage increase time of the output voltage	
• typical	10 ms
output current	
rated value	5 A
rated range	0 5 A
supplied active power typical	120 W
short-term overload current	
<ul> <li>on short-circuiting during the start-up typical</li> </ul>	20 A
at short-circuit during operation typical	20 A
duration of overloading capability for excess current	
on short-circuiting during the start-up	100 ms
at short-circuit during operation	100 ms
bridging of equipment	Yes
efficiency	
efficiency in percent	87 %
power loss [W]	<i>C. 18</i>
at rated output voltage for rated value of the output	18 W
current typical	
closed-loop control	
relative control precision of the output voltage with rapid	0.1 %
fluctuation of the input voltage by +/- 15% typical	4.07
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1 %
setting time	
<ul><li>load step 50 to 100% typical</li></ul>	0.3 ms
load step 100 to 50% typical	0.3 ms
protection and monitoring	
design of the overvoltage protection	Additional control loop, shutdown at < 28.8 V, automatic restart
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	5.5 6.5 A
enduring short circuit current RMS value	
maximum	7 A
safety	
galvanic isolation between input and output	Yes
	0.61
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
galvanic isolation operating resource protection class	Class I
operating resource protection class	
operating resource protection class leakage current	Class I
operating resource protection class leakage current  • maximum	Class I  3.5 mA
operating resource protection class leakage current  • maximum  • typical	Class I  3.5 mA  0.5 mA
operating resource protection class leakage current	Class I  3.5 mA  0.5 mA
operating resource protection class  leakage current  • maximum  • typical  protection class IP  EMC	Class I  3.5 mA  0.5 mA
operating resource protection class  leakage current  • maximum  • typical  protection class IP  EMC  standard	Class I  3.5 mA  0.5 mA  IP20
operating resource protection class  leakage current  • maximum  • typical  protection class IP  EMC  standard  • for emitted interference  • for mains harmonics limitation	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B  EN 61000-3-2
operating resource protection class  leakage current	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B
operating resource protection class  leakage current	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B  EN 61000-3-2
operating resource protection class  leakage current	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B  EN 61000-3-2  EN 61000-6-2
operating resource protection class  leakage current	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B  EN 61000-3-2  EN 61000-6-2
operating resource protection class  leakage current	Class I  3.5 mA  0.5 mA  IP20  EN 55022 Class B  EN 61000-3-2  EN 61000-6-2  Yes  Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes Yes No
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes Yes Yes No  Yes; R-41183539
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes Yes Yes No  Yes; R-41183539 Yes
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes Yes Yes No  Yes; R-41183539
operating resource protection class  leakage current	Class I  3.5 mA 0.5 mA IP20  EN 55022 Class B EN 61000-3-2 EN 61000-6-2  Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 Yes Yes Yes Yes No  Yes; R-41183539 Yes

• IECEx	Yes; IECEx Ex nA nC IIC T3 Gc	
• ATEX	Yes; ATEX (EX) II 3G Ex nA nC IIC T3 Gc	
ULhazloc approval	Yes	
• cCSAus, Class 1, Division 2	No	
• UKEX	Yes	
<ul> <li>CCC for hazardous zone according to GB standard</li> </ul>	Yes	
FM registration	Yes; Class I, Div. 2, Group ABCD, T4	
standards, specifications, approvals marine classification		
shipbuilding approval	Yes	
Marine classification association		
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No	
French marine classification society (BV)	No	
Det Norske Veritas (DNV)	Yes	
Lloyds Register of Shipping (LRS)	Yes	
standards, specifications, approvals Environmental Product De	claration	
Environmental Product Declaration	Yes	
global warming potential [CO2 eq]	100	
• total	504.2 kg	
during manufacturing	11.3 kg	
during manufacturing     during operation	492.3 kg	
after end of life	0.41 kg	
ambient conditions	U.TI Ng	
ambient temperature	0 CO °C with netweet converti-	
during operation	0 60 °C; with natural convection	
during transport	-40 +85 °C	
during storage	-40 +85 °C	
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation	
connection method		
type of electrical connection	screw terminal	
• at input	L, N, PE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded	
• at output	L+, M: 3 screw terminals each for 0.5 2.5 mm <sup>2</sup>	
for auxiliary contacts	-	
mechanical data		
width × height × depth of the enclosure	60 × 125 × 120 mm	
installation width y mounting height	60 mm × 205 mm	
installation width × mounting height		
required spacing		
	40 mm	
required spacing	40 mm 40 mm	
required spacing  • top		
required spacing  • top  • bottom	40 mm	
required spacing  • top  • bottom  • left	40 mm 0 mm	
required spacing	40 mm 0 mm 0 mm	
required spacing	40 mm 0 mm Can be mounted onto S7 rail	
required spacing	40 mm 0 mm 0 mm Can be mounted onto S7 rail	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories  mechanical accessories	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No	
required spacing         • top             • bottom             • left             • right  fastening method             • DIN-rail mounting             • S7 rail mounting             • wall mounting             • wall mounting  housing can be lined up net weight  accessories mechanical accessories  further information internet links	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg	
required spacing	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes O.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)	
required spacing	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes O.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)	
required spacing         • top             • bottom             • left             • right  fastening method             • DIN-rail mounting             • S7 rail mounting             • wall mounting  housing can be lined up net weight  accessories  mechanical accessories  further information internet links internet link             • to website: Industry Mall             • to web page: selection aid TIA Selection Tool	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes O.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://www.siemens.com/tstcloud	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories  mechanical accessories  further information internet links  internet link  • to website: Industry Mall  • to web page: selection aid TIA Selection Tool  • to website: CAx-Download-Manager	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes O.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/cax	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories  mechanical accessories  further information internet links  internet link  • to website: Industry Mall  • to web page: selection aid TIA Selection Tool  • to website: CAx-Download-Manager  • to website: Industry Online Support	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes O.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://www.siemens.com/tstcloud	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories  mechanical accessories  further information internet links  internet link  • to website: Industry Mall  • to web page: selection aid TIA Selection Tool  • to website: CAx-Download-Manager  • to website: Industry Online Support  additional information	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://siemens.com/cax https://support.industry.siemens.com	
required spacing  • top  • bottom  • left  • right  fastening method  • DIN-rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  accessories  mechanical accessories  further information internet links  internet link  • to website: Industry Mall  • to web page: selection aid TIA Selection Tool  • to website: CAx-Download-Manager  • to website: Industry Online Support	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://siemens.com/cax https://support.industry.siemens.com  Specifications at rated input voltage and ambient temperature +25 °C (unless	
required spacing	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://siemens.com/tstcloud https://siemens.com/cax https://support.industry.siemens.com	
required spacing	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/cax https://support.industry.siemens.com  Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	
required spacing         • top             • bottom             • left             • right  fastening method             • DIN-rail mounting             • S7 rail mounting             • wall mounting             • to weight  accessories  mechanical accessories  further information internet links             • to website: Industry Mall             • to website: Industry Mall             • to website: CAx-Download-Manager             • to website: Industry Online Support  additional information  other information	40 mm 0 mm 0 mm Can be mounted onto S7 rail No Yes No Yes 0.6 kg  Mounting adapter for standard mounting rail (6EP1971-1BA00)  https://mall.industry.siemens.com https://siemens.com/cax https://support.industry.siemens.com  Specifications at rated input voltage and ambient temperature +25 °C (unless	

threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

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** 









**Miscellaneous** 



**General Product Ap**proval

EMV

**Test Certificates** 

Maritime application

**BIS CRS** 



Type Test Certificates/Test Report

Special Test Certificate

**Miscellaneous** 



Maritime application

other









CCS (China Classification Society)

Confirmation

other

**Environment** 

Miscellaneous



**Environmental Con**firmations



**Environmental Confirmations** 

last modified:

4/4/2025



