SIEMENS

Data sheet

6ES7307-1BA01-0AA0



SIMATIC PS307/1AC/24VDC/2A

SIMATIC S7-300 Regulated power supply PS307 input: 120/230 V AC, output: 24 V DC/2 A

type of the power supply network 1-phase AC supply voltage at AC Automatic range selection supply voltage 20 V • 1 at AC rated value 20 V • 2 at AC rated value 20 V input voltage 20 V • 1 at AC 55 132 V • 2 at AC 170 264 V design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V power failure minimum 20 ms operating condition of the mains buffering at Vin = 93/187 V power failure minimum 60 Hz in rated value 60 Hz in rated input voltage 230 V 0.9 A out at rated input voltage 230 V 0.9 A out at rated input voltage 230 V 0.5 A current limitation of innush current at 25°C maximum 3 ms 12t value maximum 1 A²s fuse protection type T 1.6 A/250 V (not accessible) in in the feeder Controlled, isolated DC voltage output voltage at DC rated value	Input	
initial value Automatic range selection supply voltage 120 V • 1 at AC rated value 230 V Input Voltage 230 V • 1 at AC rated value 230 V input Voltage 55 132 V • 2 at AC 170 264 V design of Input wide range input No overvoltage overload capability 23 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V puffering 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 Hz • 1 rated value 60 Hz in put current 60 Hz input voltage 120 V 0.9 A • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A • at rated input voltage 210 V 0.9 A • at rated input voltage 20 V 0.5 A • at rated input voltage 20 C 7 63 Hz in the feeder 7 63 Hz in tated input voltage 20 C maximum 1	type of the power supply network	1-phase AC
supply voltage 12 V • 1 at AC rated value 220 V input voltage 230 V input voltage 5132 V • 1 at AC 45132 V • 2 at AC 170264 V design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 03/187 V 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 in a trade value 50 Hz line frequency 47 63 Hz input outge 120 V 0.9 A • at rated input voltage 120 V 0.9 A • at rated input voltage 120 V 0.5 A current limitation of inush current at 25 °C • • maximum 1 A*s fuse protection type 1 A*s fuse protection type 1 A*s voltage curve at output Controlled, isolated DC voltage output voltage at D C rated value 24 V e at at blorence of the voltage 24 V e in the feeder Controlled, isolated DC voltage output voltage at D C rated value 24 V elat	supply voltage at AC	
• 1 at AC rated value 120 V • 2 at AC rated value 230 V input voltage 30 V • 1 at AC 85 132 V • 2 at AC 170 264 V • design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V 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 • 1 rated value 60 Hz • 1 rated value 60 Hz • a trated input voltage 120 V 0.9 A • a trated input voltage 220 V 0.5 A • current limitation of inrush current at 25 °C maximum 22 A 0 duration of inrush current limiting at 25 °C • a trated input voltage 230 V 0.5 A current limitation of inrush current limiting at 25 °C • urrent limitation of inrush current 100 P 22 A • output voltage 210 V 0.9 A • a trated input voltage 25 °C • a trated input voltage 25 °C • a trated input voltage 25 °C • a trated input voltage 27 °C • a trated inpu	initial value	Automatic range selection
• 2 at AC rated value 230 V input voltage - • 1 at AC 85 132 V • 2 at AC 170 264 V design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms opporating condition of the mains buffering at Vin = 93/187 V buffering time for rated value of the output current in the event of power failure minimum 20 ms opporating condition of the mains buffering at Vin = 93/187 V line frequency 0 Hz • 1 rated value 60 Hz ine frequency 60 Hz • 2 rated value 60 Hz ine frequency 47 63 Hz • at rated input voltage 120 V 0.5 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A 21 Value maximum 1 Ax*s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Controlled, isolated DC voltage • voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V • ot output 1 at DC rated value 24 V • at output 1 at DC rated value 24 V • ot output 1 at DC rated value 24 V • ot output 1 at DC rated	supply voltage	
Input voltage i at AC i at Vin = 304 V design of input wide range input No overvoltage overload capability i at Vin = 93/187 V i at Vin = 93/187 V i at Vin = 93/187 V i at the or rated value of the output current in the event of power failure minimum operating condition of the mains buffering at Vin = 93/187 V i at at	• 1 at AC rated value	120 V
• 1 at AC 85 132 V • 2 at AC 170 264 V design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V 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 at Vin = 93/187 V • 1 rated value 50 Hz • 2 rated value 60 Hz line frequency 47 63 Hz • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.9 A ourrent limitation of inrush current at 25 °C maximum 22 A duration of inrush current insting at 25 °C maximum in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage t DC rated value 24	• 2 at AC rated value	230 V
• 2 at AC170 264 Vdesign of input wide range inputNoovervoltage overload capability2.3 × Vin rated, 1.3 msoperating condition of the mains bufferingat Vin = 93/187 Vbuffering time for rated value of the output current in the event of power failure minimum20 msoperating condition of the mains bufferingat Vin = 93/187 VIne frequency50 Hz• 1 rated value60 Hz• 1 rated value60 Hz• 1 rated value60 Hz• 1 rated input voltage 120 V0.9 A• at rated input voltage 230 V0.5 A• outrent limitation of inrush current at 25 °C maximum3 ms121 value maximum1 A*sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputControlled, isolated DC voltageoutput voltage at DC rated value24 Voutput voltage at DC rated value24 Vrelative control precision of the voltage3 %• on slow fluctuation of input voltage3 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of input voltage0.2 %	input voltage	
design of input wide range input No overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V 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 ine frequency at Vin = 93/187 V ine frequency 60 Hz • 1 rated value 60 Hz input current 60 Hz input current 60 Hz • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current at 25 °C maximum 3 ms 12t value maximum 1 A*s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Output voltage at 0DC rated value voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output 1 at DC rated value 24 V relative control precision of the output voltage 3 % e nasion ufficient of the voltage 3 %	• 1 at AC	85 132 V
overvoltage overload capability 2.3 × Vin rated, 1.3 ms operating condition of the mains buffering at Vin = 93/187 V 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 20 ms 20 ms operating condition of the mains buffering at Vin = 93/187 V Ine frequency 50 Hz • 1 rated value 60 Hz line frequency 47 63 Hz input current 0.9 A • at rated input voltage 120 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current at 25 °C maximum 3 ms 121 value maximum 1 A² s fuse protection type 7 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker; 3 A characteristic C Output V voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 3 % • at solup 11 at DC rated value 24 V output voltage 3 % • an slow fluctuation of input voltage 3 % • an slow fluctuation of input voltage 3 %	• 2 at AC	170 264 V
operating condition of the mains bufferingat Vin = 93/187 Vbuffering time for rated value of the output current in the event of power failure minimum20 msoperating condition of the mains bufferingat Vin = 93/187 Vline frequency50 Hz• 1 rated value60 Hz• 2 rated value60 Hzine frequency47• at rated input voltage 120 V0.9 A• at rated input voltage 230 V0.5 Acurrent limitation of inrush current at 25 °C maximum22 Aduration of inrush current limiting at 25 °C• maximum1 A*sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputVoltage at DC rated value24 Voutput voltage3 %• at output 1 at DC rated value3 %• at output 1 at DC rated value3 %• at output voltage3 %• at output voltage3 %• at output voltage3 %• at output voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of input voltage0.2 %	design of input wide range input	No
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 Hz • 1 rated value 60 Hz • 2 rated value 60 Hz input current - 63 Hz • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current at 25 °C maximum 3 ms 121 value maximum 1 A²-s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output 24 V voltage curve at output Controlled, isolated DC voltage output voltage 41 DC rated value 24 V output voltage 3 % relative coverall tolerance of the voltage 3 % relative coverall tolerance of the voltage 0.1 % • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of input voltage 0.2 %	overvoltage overload capability	2.3 × Vin rated, 1.3 ms
power failure minimum at Vin = 93/187 V ine frequency at Vin = 93/187 V line frequency 50 Hz • 1 rated value 60 Hz line frequency 47 63 Hz input current - • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current limiting at 25 °C - • maximum 3 ms 12t value maximum 1 A²-s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 11 C rated value 24 V output voltage - • at output 1 at DC rated value 24 V output voltage 3 % relative overall tolerance of the voltage 3 % output voltage 0.1 % output voltage 0.1 % output right 0.1 %	operating condition of the mains buffering	at Vin = 93/187 V
Ine frequency 50 Hz • 1 rated value 60 Hz line frequency 47 63 Hz input current 60 Hz • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current at 25 °C maximum 3 ms 12t value maximum 1 A².s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V • at output 1 at DC rated value 24 V e at output 1 at DC rated value 24 V output voltage 3 % relative overall tolerance of the voltage 3 % • at output 1 at DC rated value 24 V output voltage 0.1 % • at output 1 outpare 0.1 % • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of ohm loading 0.2 %		20 ms
• 1 rated value50 Hz• 2 rated value60 Hzline frequency47 63 Hzinput current0.9 A• at rated input voltage 120 V0.9 A• at rated input voltage 230 V0.5 Acurrent limitation of inrush current at 25 °C maximum22 Aduration of inrush current at 25 °C maximum3 ms12t value maximum1 A²-sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputOutputvoltage at DC rated value24 V• at output 1 at DC rated value24 V• on slow fluctuation of input voltage3 %• relative control precision of the output voltage3 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of ohm loading0.2 %	operating condition of the mains buffering	at Vin = 93/187 V
• 2 rated value60 Hzline frequency47 63 Hzinput current-• at rated input voltage 120 V0.9 A• at rated input voltage 230 V0.5 Acurrent limitation of inrush current at 25 °C maximum22 Aduration of inrush current limitig at 25 °C-• maximum3 ms12t value maximum1 A²·sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutput24 Vvoltage at DC rated value24 V• at output 1 at DC rated value24 Vrelative overall tolerance of the voltage3 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of hinput voltage0.1 %• on slow fluctuation of hinbading0.2 %	line frequency	
Ine frequency 47 63 Hz input current 0.9 A • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current limiting at 25 °C	• 1 rated value	50 Hz
input current 0.9 A • at rated input voltage 120 V 0.9 A • at rated input voltage 230 V 0.5 A current limitation of inrush current at 25 °C maximum 22 A duration of inrush current limiting at 25 °C • maximum 1 A ² ·s 1 A ² ·s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Voltage curve at output voltage curve at output Controlled, isolated DC voltage output voltage 24 V output 1 at DC rated value 24 V relative control precision of the output voltage 3 % relative control precision of the output voltage 0.1 % • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of ohm loading 0.2 %	• 2 rated value	60 Hz
• at rated input voltage 120 V0.9 A• at rated input voltage 230 V0.5 Acurrent limitation of inrush current at 25 °C maximum22 Aduration of inrush current limiting at 25 °C-• maximum3 ms12t value maximum1 A²-sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputOutputvoltage curve at outputControlled, isolated DC voltageoutput voltage24 Voutput 1 at DC rated value24 Vrelative overall tolerance of the voltage3 %relative control precision of the output voltage0.1 %• on slow fluctuation of ohm loading0.2 %	line frequency	47 63 Hz
• at rated input voltage 230 V0.5 Acurrent limitation of inrush current at 25 °C maximum22 Aduration of inrush current limiting at 25 °C-• maximum3 ms12t value maximum1 A²-sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputOutputvoltage curve at outputControlled, isolated DC voltageoutput voltage at DC rated value24 Voutput 1 at DC rated value24 Vrelative control precision of the output voltage3 %relative control precision of the output voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of ohm loading0.2 %	input current	
current limitation of inrush current at 25 °C maximum 22 A duration of inrush current limiting at 25 °C 3 ms i Value maximum 3 ms l2t value maximum 1 A ² ·s fuse protection type T 1.6 A/250 V (not accessible) e in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 24 V output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % on slow fluctuation of input voltage 0.1 % output ripple 0.2 %	 at rated input voltage 120 V 	0.9 A
duration of inrush current limiting at 25 °C 3 ms intermediation of inrush current limiting at 25 °C 3 ms l2t value maximum 1 A²-s fuse protection type T 1.6 A/250 V (not accessible) e in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 24 V output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % e on slow fluctuation of input voltage 0.1 % e on slow fluctuation of ohm loading 0.2 %	 at rated input voltage 230 V 	0.5 A
• maximum3 msI2t value maximum1 A²-sfuse protection typeT 1.6 A/250 V (not accessible)• in the feederRecommended miniature circuit breaker: 3 A characteristic COutputVoltage curve at outputoutput voltage at DC rated valueControlled, isolated DC voltageoutput voltage24 Voutput 1 at DC rated value24 Vrelative overall tolerance of the voltage3 %relative control precision of the output voltage3 %on slow fluctuation of input voltage0.1 %• on slow fluctuation of ohm loading0.2 %	current limitation of inrush current at 25 °C maximum	22 A
I2t value maximum 1 A ² ·s fuse protection type T 1.6 A/250 V (not accessible) • in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage	duration of inrush current limiting at 25 °C	
fuse protection type T 1.6 A/250 V (not accessible) e in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Outgage curve at 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 e at output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % o on slow fluctuation of input voltage 0.2 %	• maximum	3 ms
• in the feeder Recommended miniature circuit breaker: 3 A characteristic C Output Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 24 V • at output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of ohm loading 0.2 %	l2t value maximum	1 A ² ·s
Output voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 24 V output voltage 3% relative overall tolerance of the voltage 3% relative control precision of the output voltage 0.1 % out slow fluctuation of input voltage 0.2 %	fuse protection type	T 1.6 A/250 V (not accessible)
voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 24 V output voltage 24 V • at output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % • on slow fluctuation of ohm loading 0.2 %	• in the feeder	Recommended miniature circuit breaker: 3 A characteristic C
output voltage at DC rated value 24 V output voltage 24 V • at output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % • on slow fluctuation of input voltage 0.2 % residual ripple	Output	
output voltage 24 V • at output 1 at DC rated value 24 V relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % • on slow fluctuation of input voltage 0.2 % residual ripple	voltage curve at output	Controlled, isolated DC voltage
• at output 1 at DC rated value24 Vrelative overall tolerance of the voltage3 %relative control precision of the output voltage0.1 %• on slow fluctuation of input voltage0.1 %• on slow fluctuation of ohm loading0.2 %	output voltage at DC rated value	24 V
relative overall tolerance of the voltage 3 % relative control precision of the output voltage 0.1 % • on slow fluctuation of input voltage 0.1 % • on slow fluctuation of ohm loading 0.2 % residual ripple	output voltage	
relative control precision of the output voltage 0.1 % • on slow fluctuation of input voltage 0.2 % residual ripple 7	• at output 1 at DC rated value	24 V
on slow fluctuation of input voltage on slow fluctuation of ohm loading 0.1 % 0.2 % residual ripple	relative overall tolerance of the voltage	3 %
on slow fluctuation of ohm loading 0.2 % residual ripple	relative control precision of the output voltage	
residual ripple	 on slow fluctuation of input voltage 	0.1 %
	 on slow fluctuation of ohm loading 	0.2 %
• maximum 50 mV	residual ripple	
	• maximum	50 mV

e typical	5 m)/
typical	5 mV
voltage peak	450
• maximum	150 mV
• typical	20 mV
product function output voltage adjustable	No
type of output voltage setting	•
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	2 s
voltage increase time of the output voltage	
• typical	10 ms
output current	
rated value	2 A
rated range	0 2 A
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 	90 ms
 at short-circuit during operation 	90 ms
product feature	
 bridging of equipment 	Yes
number of parallel-switched equipment resources for increasing	2
the power	
Efficiency	
efficiency in percent	84 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	9 W
Closed-loop control	
relative control precision of the output voltage with rapid	0.1 %
fluctuation of the input voltage by +/- 15% typical	
relative control precision of the output voltage load step of	0.8 %
resistive load 50/100/50 % typical	
setting time	
 load step 50 to 100% typical 	0.5 ms
 load step 100 to 50% typical 	0.5 ms
setting time	
• maximum	1 ms
Protection and monitoring	
design of the overvoltage protection	Additional control loop, shutdown at < 28.8 V, automatic restart
response value current limitation	2.2 2.6 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
• maximum	2 A
display version for overload and short circuit	•
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
typical	0.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
cCSA approva cCSAus, Class 1, Division 2	No
- 000Aus, 01035 1, DIVISIUITZ	110

• ATEX	Yes; ATEX (EX) II 3G Ex nA nC IIC T4 Gc
certificate of suitability	
• relating to ATEX	IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; cULus (ANSI/ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455
• IECEx	Yes; IECEx Ex nA nC IIC T4 Gc
NEC Class 2	No
ULhazloc approval	Yes
• FM registration	Yes; Class I, Div. 2, Group ABCD, T4
type of certification CB-certificate	Yes
certificate of suitability	
EAC approval	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	In S7-300 system
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	No
	No
 French marine classification society (BV) DNV GL 	No
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
 for emitted interference 	EN 55022 Class B
 for mains harmonics limitation 	not applicable
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
 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
Mechanics	
type of electrical connection	screw-type terminals
• at input	L, N, PE: 1 screw terminal each for 0.5 2.5 mm ² single-core/finely stranded
 at output 	L+, M: 2 screw terminals each for 0.5 2.5 mm ²
at output for auxiliary contacts	
-	L+, M: 2 screw terminals each for 0.5 2.5 mm ²
for auxiliary contacts	L+, M: 2 screw terminals each for 0.5 2.5 mm ²
for auxiliary contacts width of the enclosure	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm
for auxiliary contacts width of the enclosure height of the enclosure	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm 120 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing • top	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm 120 mm 40 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm 120 mm 40 mm 40 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm 120 mm 40 mm 0 mm 0 mm
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right net weight	L+, M: 2 screw terminals each for 0.5 2.5 mm ² - 40 mm 125 mm 120 mm 40 mm 0 mm 0 mm 0 mm 0.4 kg
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right net weight product feature of the enclosure housing can be lined up	L+, M: 2 screw terminals each for 0.5 2.5 mm ² 40 mm 125 mm 120 mm 40 mm 40 mm 0 mm 0 mm 0 mm 0.4 kg Yes
 for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right net weight product feature of the enclosure housing can be lined up fastening method 	L+, M: 2 screw terminals each for 0.5 2.5 mm ² 40 mm 125 mm 120 mm 40 mm 40 mm 0 mm 0 mm 0 mm 0.4 kg Yes Can be mounted onto S7 rail
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right net weight product feature of the enclosure housing can be lined up fastening method mechanical accessories	L+, M: 2 screw terminals each for 0.5 2.5 mm ² 40 mm 125 mm 120 mm 40 mm 40 mm 0 mm 0 mm 0 mm 0 mm 0.4 kg Yes Can be mounted onto S7 rail Mounting adapter for standard mounting rail (6EP1971-1BA00)
for auxiliary contacts width of the enclosure height of the enclosure depth of the enclosure required spacing top bottom left right net weight product feature of the enclosure housing can be lined up fastening method	L+, M: 2 screw terminals each for 0.5 2.5 mm ² 40 mm 125 mm 120 mm 40 mm 40 mm 0 mm 0 mm 0 mm 0.4 kg Yes Can be mounted onto S7 rail