

<ul style="list-style-type: none"> • at rated input voltage 420 V • at rated input voltage 500 V 	<p><kein Wert> 0.4 A</p>
input current	
<ul style="list-style-type: none"> • at rated input voltage 120 V AC • at rated input voltage 120 V DC • at rated input voltage 240 V AC • at rated input voltage 240 V DC 	<p><kein Wert>; <kein Wert> <kein Wert> <kein Wert> <kein Wert></p>
input current at DC	
<ul style="list-style-type: none"> • at rated input voltage 500 V • at rated input voltage 550 V • at rated input voltage 600 V 	<p><kein Wert> <kein Wert> <kein Wert></p>
current limitation of inrush current at 25 °C maximum	20 A
duration of inrush current limiting at 25 °C	
<ul style="list-style-type: none"> • typical • maximum 	<p><kein Wert> <kein Wert></p>
I ² t value maximum	0.5 A ² ·s
fuse protection type	none
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 3 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
output	
voltage curve at output	Controlled, isolated DC voltage
number of outputs	<kein Wert>
output voltage at DC rated value	24 V
formula for output voltage	<kein Wert>
consumed input power maximum	<kein Wert>
consumed energy content maximum	<kein Wert>
cooling time maximum	<kein Wert>
output voltage	
<ul style="list-style-type: none"> • at output 1 at DC rated value • at output 2 at DC rated value • at output 3 at DC rated value • at output 4 at DC rated value • at output 5 at DC rated value • at output 6 at DC rated value • at output 7 at DC rated value • at output 8 at DC rated value • at AC rated value • at AC 	<p>24 V <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert> <kein Wert></p>
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 120 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul style="list-style-type: none"> • on slow fluctuation of input voltage • on slow fluctuation of ohm loading 	<p>0.1 % 0.1 %</p>
voltage compensation per sense line	<kein Wert>
residual ripple	
<ul style="list-style-type: none"> • maximum • typical 	<p>200 mV <kein Wert></p>
voltage peak	
<ul style="list-style-type: none"> • maximum • typical 	<p>240 mV <kein Wert></p>
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of V _{out} < 5 %
response delay maximum	1.5 s; <kein Wert>
type of outputs connection	<kein Wert>
voltage increase time of the output voltage	
<ul style="list-style-type: none"> • typical 	60 ms

<ul style="list-style-type: none"> • maximum 	500 ms
output current	
<ul style="list-style-type: none"> • rated value 	5 A
<ul style="list-style-type: none"> • minimum rated value 	<kein Wert>
<ul style="list-style-type: none"> • maximum rated value 	<kein Wert>
<ul style="list-style-type: none"> • per output 	<kein Wert>
<ul style="list-style-type: none"> • at output 1 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 2 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 3 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 4 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 5 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 6 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 7 rated value 	<kein Wert>
<ul style="list-style-type: none"> • at output 8 rated value 	<kein Wert>
<ul style="list-style-type: none"> • rated range 	0 ... 5 A; 6 A up to +45°C; +60 ... +70 °C: Derating 5%/K
supplied active power typical	120 W
short-term overload current	
<ul style="list-style-type: none"> • on short-circuiting during the start-up typical 	<kein Wert>
<ul style="list-style-type: none"> • at short-circuit during operation typical 	<kein Wert>; <kein Wert>
duration of overloading capability for excess current	
<ul style="list-style-type: none"> • on short-circuiting during the start-up 	<kein Wert>
<ul style="list-style-type: none"> • at short-circuit during operation 	<kein Wert>
constant overload current	
<ul style="list-style-type: none"> • on short-circuiting during the start-up typical 	<kein Wert>
<ul style="list-style-type: none"> • at short-circuit during operation typical 	<kein Wert>
parallel switching of outputs	<kein Wert>; <kein Wert>
bridging of equipment	Yes; <kein Wert>
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	89.5 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	14 W
<ul style="list-style-type: none"> • during no-load operation maximum 	<kein Wert>
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1 %
setting time	
<ul style="list-style-type: none"> • load step 50 to 100% typical 	3 ms
<ul style="list-style-type: none"> • load step 100 to 50% typical 	3 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
<ul style="list-style-type: none"> • load step 10 to 90% typical 	4 ms
<ul style="list-style-type: none"> • load step 90 to 10% typical 	4 ms
<ul style="list-style-type: none"> • maximum 	10 ms
protection and monitoring	
design of the overvoltage protection	protection against overvoltage in case of internal fault $V_{out} < 35 \text{ V}$
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
response value current limitation	<kein Wert>
<ul style="list-style-type: none"> • typical 	6.6 A
design of the current limitation	<kein Wert>
adjustable current response value current of the current-dependent overload release	<kein Wert>
type of response value setting	<kein Wert>
switching characteristic	

<ul style="list-style-type: none"> • of the excess current • of the current limitation 	<kein Wert>
overcurrent overload capability	<kein Wert>
<ul style="list-style-type: none"> • when switching on • in normal operation 	overload capability 150 % I _{out} rated up to 5 s/min
enduring short circuit current RMS value	8 A
<ul style="list-style-type: none"> • maximum • typical 	<kein Wert>
measuring point for output current	<kein Wert>; <kein Wert>
display version for overload and short circuit	<kein Wert>
design of the reset device/resetting mechanism	<kein Wert>
remote reset function	<kein Wert>

interfaces

product function communication function	<kein Wert>
design of the interface	<kein Wert>
<ul style="list-style-type: none"> • design of the interface PROFINET protocol 	<kein Wert>
protocol is supported	<kein Wert>
<ul style="list-style-type: none"> • EtherNet/IP protocol • OPC UA • IO-Link protocol 	<kein Wert>
IO-Link transfer rate	<kein Wert>
number of IO-Link ports	<kein Wert>
point-to-point cycle time between master and IO-Link device minimum	<kein Wert>
data volume of the address range of the outputs with cyclical transfer for all IO-Link ports maximum	<kein Wert>
data volume of the address range of the inputs with cyclical transfer for all IO-Link ports maximum	<kein Wert>
protocol between master and IO-Link device Version 1.1	<kein Wert>

safety

galvanic isolation between input and output	Yes
galvanic isolation	Output voltage: SELV, ES1 (IEC 62368-1), DVC As (IEC 61204-7)
operating resource protection class	Class I
leakage current	<kein Wert>
<ul style="list-style-type: none"> • maximum • typical 	<kein Wert>
protection class IP	IP20
degree of protection NEMA rating	<kein Wert>
Safety Integrity Level (SIL) according to IEC 61508	<kein Wert>

EMC

standard	EN 55022 Class B
<ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	EN 61000-3-2 EN 61000-6-2

standards, specifications, approvals

certificate of suitability	Yes
<ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • CCC approval • NEC Class 2 • SEMI F47 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 <kein Wert>; <kein Wert> Yes Yes <kein Wert> <kein Wert> No; <kein Wert> <kein Wert>
type of certification	Yes; R-41183539
<ul style="list-style-type: none"> • BIS • CB-certificate 	Yes
MTBF at 40 °C	500 000 h
MTBF at 25 °C	<kein Wert>; <kein Wert>

standards, specifications, approvals hazardous environments

certificate of suitability	
<ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • UKEX • CCC for hazardous zone according to GB standard • FM registration 	<p>No; <kein Wert></p> <p>No; <kein Wert></p> <p>No; <kein Wert></p> <p><kein Wert>; <kein Wert></p> <p><kein Wert></p> <p><kein Wert>; <kein Wert></p> <p>No; <kein Wert></p>

standards, specifications, approvals marine classification

shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) 	<p>Yes</p> <p>No</p> <p>Yes; <kein Wert></p> <p>No</p> <p><kein Wert></p>

standards, specifications, approvals other

certificate of suitability	
<ul style="list-style-type: none"> • railway application in accordance with EN 50121-3-2 • railway application in accordance with EN 50124-1 • railway application in accordance with EN 50125-1 • railway application in accordance with EN 50155 • railway application in accordance with EN 61373 • fire protection in accordance with EN 45545-2 	<p><kein Wert>; <kein Wert></p> <p><kein Wert>; <kein Wert></p> <p><kein Wert>; <kein Wert></p> <p><kein Wert>; <kein Wert></p> <p><kein Wert>; <kein Wert></p> <p><kein Wert>; <kein Wert></p>

standards, specifications, approvals Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	<p>392.9 kg</p> <p>12.9 kg</p> <p>379.6 kg</p> <p>0.37 kg</p>
Siemens Eco Profile (SEP)	<kein Wert>

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> • during operation • in horizontal mounting position during operation • in vertical mounting position during operation • during transport • during storage 	<p>-25 ... +70 °C; with natural convection</p> <p><kein Wert>; <kein Wert></p> <p><kein Wert></p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
installation altitude at height above sea level maximum	<kein Wert>
ambient condition relating to ambient temperature - air pressure - installation altitude	<kein Wert>
relative humidity with condensation according to IEC 60068-2-38 maximum	<kein Wert>; <kein Wert>
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation; <kein Wert>
chemical resistance to commercially available cooling lubricants	<kein Wert>; <kein Wert>
resistance to biologically active substances conformity according to EN 60721-3-3	<kein Wert>; <kein Wert>
resistance to chemically active substances conformity according to EN 60721-3-3	<kein Wert>; <kein Wert>
resistance to mechanically active substances conformity according to EN 60721-3-3	<kein Wert>; <kein Wert>
resistance to biologically active substances conformity according to EN 60721-3-6	<kein Wert>; <kein Wert>
resistance to chemically active substances conformity according to EN 60721-3-6	<kein Wert>; <kein Wert>
resistance to mechanically active substances conformity according to EN 60721-3-6	<kein Wert>; <kein Wert>
coating for equipped printed circuit board according to EN 61086	<kein Wert>; <kein Wert>

type of coating protection against pollution according to EN 60664-3	<kein Wert>; <kein Wert>
type of coating for electronic devices in railway applications according to EN 50155	<kein Wert>; <kein Wert>
type of test of the coating according to MIL-I-46058C	<kein Wert>; <kein Wert>
product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	<kein Wert>; <kein Wert>
connection method	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts • for signaling contact 	L1, L2, L3, PE: 1 screw terminal each for 0.05 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 2.5 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.2 ... 2.5 mm ² <kein Wert>
removable terminal at input	<kein Wert>
removable terminal at output	<kein Wert>
design of the interface for communication	<kein Wert>
suitability for interaction modular system	<kein Wert>
type of connection to system components	<kein Wert>
mechanical data	
width × height × depth of the enclosure	50 × 125 × 120 mm
installation width × mounting height	50 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	<kein Wert> <kein Wert> <kein Wert> <kein Wert>
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes No No
housing can be lined up	Yes
net weight	0.5 kg
accessories	
electrical accessories	Redundancy module, buffer module, selectivity module, DC UPS
mechanical accessories	Device identification label 20 mm × 7 mm, pale turquoise 3RT1900-1SB20
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAX-Download-Manager • to website: Industry Online Support 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax https://support.industry.siemens.com
identification link	<kein Wert>; <kein Wert>
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber 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	10	EC002540
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	12.9 kg
• global warming potential [CO2 eq] / during operation	379.6 kg
• global warming potential [CO2 eq] / after end of life	0.37 kg
• global warming potential [CO2 eq] / total	392.9 kg

Environment	General Product Approval				
	Manufacturer Declaration	Declaration of Conformity			China RoHS

General Product Approval			Maritime application		
			BIS CRS		

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