SIEMENS

Data sheet



SITOP PSU8200/3AC/24VDC/20A

SITOP PSU8200 24 V/20 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/20 A

nput		
type of the power supply network	3-phase AC	
supply voltage at AC		
minimum rated value	400 V	
maximum rated value	500 V	
initial value	320 V	
• full-scale value	575 V	
wide range input	Yes	
buffering time for rated value of the output current in the event of power failure minimum	15 ms	
operating condition of the mains buffering	at Vin = 400 V	
line frequency	50/60 Hz	
line frequency	47 63 Hz	
input current		
 at rated input voltage 400 V 	1.2 A	
 at rated input voltage 500 V 	1 A	
current limitation of inrush current at 25 °C maximum	16 A	
I2t value maximum	0.8 A ² ·s	
fuse protection type	none	
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 6 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)	
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	Yes; via potentiometer	
adjustable output voltage	24 28 V; max. 480 W	
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	0.2 %	
residual ripple		
• maximum	100 mV	
• maximum	100 mV	
	100 mV	
maximum voltage peak		
maximum voltage peak maximum	200 mV	
maximum voltage peak maximum display version for normal operation	200 mV Green LED for 24 V OK	

voltage norease time of the cutput voltage * maximum output current * rated value * rated range 0 20 A +60 +70 °C. Denating 25kK supplied active power typical * short-term overload current * at short-circuit during operation typical of author-circuit during operation typical * at short-circuit during operation typical * at short-circuit during operation typical * on short circuiting during the start-up typical * on short circuit typical * on short circuit short of the output voltage with rapid fluctuation of the fluctive shippical * on during bury voltage for rated value of the output voltage indicates on the output voltage indicates of substant indi			
output current • rated value • as short-series vertical current • at short-series vertical current • at short-series vertical current • at short-series vertical quarting operation pipical • at short-series vertical quarting operation of constant overtical quarting operation • at short-series during operation • on short-series during peration • on short-series during peration • on short-series during the start-up typical • on short-series during the start-up typical • on short-series during the start-up typical • or parallel swelched opulpment resources for increasing efficiency • efficiency in percent • or parallel swelched opulpment resources for increasing efficiency • efficiency in percent • or short-series [V] • at rated output voltage of rated value of the output voltage with rapid fluctuation of the lapt voltage year the power • relative control proceision of the output voltage load step of relative control proceision of the output voltage at lead step of resistive load of 1900 for 50% typical • load step 10 to 50% typical • load	voltage increase time of the output voltage		
e rated range 20 A 20 x 490 x 170 °C; Densiting 25kK 2 supplied active power typical short-term overload current 4 x 4 short-circuit during operation typical 60 A 4 current overload current 5 x 4 short-circuit during operation typical 60 A 4 current overload current 6 x 4 short-circuit during operation typical 60 A 5 current 6 x 4 short-circuit during operation typical 7 current 6 x 5 current 6 x 5 current 6 x 5 current 7 x 6 current 6 x 6 current 7 x 6 curren	• maximum	500 ms	
• rated range 0 20 A; +60 +70 °C; Denating 2%/K supplied active power typical 4 at short incread during operation typical 4 at short forcial during operation typical 4 at short forcial during operation (and possibility for excess current) 5 at short forcial during operation 6 at short forcial during operation 7 birding of equipment • on short-excelling during the start-up typical 5 birding of equipment • at short forcial during operation • on short-excelling during the start-up typical • on short-excelling during the start-up typical • at rated output voltage for rated value of the output current typical • at rated output voltage for rated value of the output current typical • at rated output voltage for rated value of the output current typical • at a face output voltage with rapid fluctuation of the input voltage in the start of the output voltage with rapid fluctuation of the input voltage by 4-15% typical • load step 50 to 100% typical • load st	output current		
supplied setive power typical short-term overload current at a that not-cruit during operation typical duration of overloading capability for excess current at a that not-cruit during operation constant overload current or on short-during during the start-up typical or on short-during during the start-up typical bridging of equipment resources for increasing the power afficiency efficiency eff	rated value	20 A	
* and short-circuit during operation typical duration of overloading epablishy for excess current * at short-circuit during operation (* at short-circuiting during the start-up typical (* at most output wildings of equipment (* active or operation of the output output (* at most output violage for rated value of the output (* active output operation of the output voltage with read (* active output operation of the output voltage with read (* active output operation of the output voltage voltage load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage output voltage output voltage output voltage output ou	rated range	0 20 A; +60 +70 °C: Derating 2%/K	
* and short-circuit during operation typical duration of overloading epablishy for excess current * at short-circuit during operation (* at short-circuiting during the start-up typical (* at most output wildings of equipment (* active or operation of the output output (* at most output violage for rated value of the output (* active output operation of the output voltage with read (* active output operation of the output voltage with read (* active output operation of the output voltage voltage load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of the output voltage at load step of (* active output operation of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage at load step of (* active output operation output voltage output voltage output voltage output voltage output ou	supplied active power typical	480 W	
a standardizout during operation typical duration of overloading capability for excess current			
duration of overloading capability for excess current • at short-circuit during peration onstant overload current • on short-circuiting during the start-up typical bridging of equipment number of parallel-awtiched equipment resources for increasing the power efficiency efficiency efficiency efficiency in paramit power loss [W] • at rated output voltage for rated value of the output current yours enterly yours clease-Goop control • and step 50 to 100% typical • load step 10 to 90% typical • load step 50 to 100% typical • load step 50 to 100% typical • load step 50 to 100% typical • load step 10 to 90% typical • load step 50 to 100% typical • load step 10 to 90% typical • load step		60 A	
* as short-circuit during operation constant overland courset it — on short-circuiting during the start-up typical 2.2 A prising of equipment resources for increasing the power of circuit of the course of the cou		0071	
constant overload current • on short circuiting during the start up typical bridging of equipment number of parallel-switched equipment resources for increasing to power efficiency efficiency in precent • of a read output voltage for rated value of the output current typical • of a read output voltage for rated value of the output current typical • of a read output voltage for rated value of the output current typical classed-doop control relative carrier precision of the output voltage with rapid neckation of the input voltage by x+- 15% pyrical • load step 50 to 100% by pical • load step 50 to 100% by pical • load step 100 to 50% typical • load step 100 to 50% typical • load step 50 to 10% typical • load step 100 to 10% typical • load step 10 to 10% typical • load step 100 typical typical typical typical		25 ms	
on short-directling during the start-up typical bridging of equipment resources for increasing the power efficiency year of the cutput voltage for rated value of the output current typical control precision of the output voltage with rapid checkston of the floor body to the cutput voltage with rapid checkston of the floor body to the cutput voltage with rapid checkston of the floor body to the cutput voltage load step of resistive control precision of the output voltage load step of resistive control precision of the output voltage load step of resistive control precision of the output voltage load step of resistive load 1000000 typical eload step 100 to 50% typical setting time		20 1110	
bridging of equipment number of paralled-switched equipment resources for increasing by power officiency in percent power loss [W] a far tack output voltage for rated value of the output current typical a rated output voltage for rated value of the output current hybrical a rated output voltage for rated value of the output current hybrical cerest-loop control relative control precision of the output voltage with pape fluctuation of the input voltage by the 15th Sybrical relative control precision of the output voltage load step of resistive load Sylon5005 % typical a load step 50 to 100% typical boad step 50 to 100%		22 A	
### Company of the output voltage to 100 to 10% typical			
the power's difficiency efficiency in percent 94 % power loss [W] • at rated output voltage for rated value of the output current typical closed-loop control relative control precision of the output voltage with rapid fuctuation of the input voltage by 4.75% typical relative control precision of the output voltage load step of resistive load 50/10/50 % typical setting time • load step 50 to 100% typical • load step 50 to 100% typical • load step 10 to 50% typical • load step 10 to 50% typical • load step 50 to 100% typical • load step 10 to 50% typical • load step 10 to 50% typical • load step 10 to 50% typical • load step 10 to 10% typical • load step 10 t			
efficiency in percent 94 % efficiency in percent 94 % efficiency prover loss [M] e at rated output voltage for rated value of the output current typical closed-doop control relative control precision of the output voltage with rapid floctusation of the input voltage by 1-1-15% typical relative control precision of the output voltage load step of relative control precision of the output voltage load step of relative control precision of the output voltage load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control precision of the output voltage at load step of relative control procession of the output voltage at load step of relative control procession of the output voltage at load step of relative control procession of the output voltage at load step of relative control procession of the output voltage protection • Load step 90 to 10% typical • Load step 90 to 10% typical		2	
efficiency in percent power loss [W]	·		
power loss [W] a trated output voltage for rated value of the output current typical clossed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +1-15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical precisive of the output voltage load step of resistive load 50/100/50 % typical • load step 50 to 100% typical • load step 100 to 50% typical • load step 100 to 50% typical • load step 90 to 10% typical • load step 10 to 90% typical • load step 10 to 90% typical • load step 90 to 10% typical •	·	94 %	
a trated output viotage for rated value of the output current typical closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by 4-f-15% typical relative control precision of the output voltage load step of resistive load 501/0050 % typical eload step 50 to 100% typical • load step 10 to 50% typical • load step 10 to 50% typical • load step 10 to 90% typical • load step 90 to 10% typical • sypical • load step 90 to 10% typical			
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 501/0050 % typical setting time • load step 50 to 100% typical • load step 10 to 50% typical • load step 10 to 50% typical • load step 10 to 90% typical • load step 10 to 90% typical • load step 90 to 10% typical • typical design of short-circuit protection • typical • typical • typical • load t	at rated output voltage for rated value of the output	31 W	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/1000/50 k typical setting time load step 50 to 100% kypical 0.2 ms			
relative control pracision of the output voltage load step of realistive load 50/100/50 % typical load step 50 to 100% typical load step 50 to 100% typical load step 100 to 50% typical load step 100 to 50% typical load step 100 to 90% typical load step 100 to 90% typical load step 10 to 90% typical load step 90 to 10% typical load the overolitage protection load step 90 to 10% typical load the overolitage protection load step 90 to 10% typical load the overolitage protection load step 90 to 10% typical load the overolitage protection load load typical load t	relative control precision of the output voltage with rapid	0.1 %	
I load step 50 to 100% typical I load step 100 to 50% typical I resistive load 10/90/10 % typical I setting time I load step 100 to 90% typical I load step 90 to 10% typical I load step 10 to 90 ty	relative control precision of the output voltage load step of	1 %	
I load step 50 to 100% typical I load step 100 to 50% typical I resistive load 10/90/10 % typical I setting time I load step 100 to 90% typical I load step 90 to 10% typical I load step 10 to 90 ty			
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time load step 90 to 10% typical load step 90 to 10	load step 50 to 100% typical	0.2 ms	
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time • load step 10 to 90% typical 0.2 ms • load step 90 to 10% typical 0.2 ms • maximum 10 ms protection and monitoring design of the overvoltage protection 4 learn of the output short-circuit proof 4 yes design of the overvoltage protection 5 learn of the output short-circuit proof 5 leasing of short-circuit protection 6 learn of short-circuit protection 7 learn overload capability 150% lout rated up to 5 s/min 1 learn ove	**	0.2 ms	
• load step 10 to 90% typical • load step 90 to 10% typical • load step 90 to 10% typical • maximum design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical overcurrent overload capability • in normal operation enduring short circuit current RMS value • typical otypical ot	relative control precision of the output voltage at load step of		
• load step 10 to 90% typical • load step 90 to 10% typical • load step 90 to 10% typical • maximum design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical overcurrent overload capability • in normal operation enduring short circuit current RMS value • typical otypical ot	· ·		
● load step 90 to 10% typical ● maximum protection and monitoring design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection ● typical ● typical ● in normal operation ● overcurrent overload capability ● in normal operation ● overload capability 150 % lout rated up to 5 s/min enduring short circuit current RMS value ● typical ● table the transport overload and short circuit ■ teD yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output yes galvanic isolation between input and output safety Safety extra low output voltage Vout according to EN 60950-1 operating resource protection class leakage current ● maximum ● sypical ● protection class IP ENC ENC ENC ENC ENC EN 55022 Class B ● for maints harmonics limitation ● for interference ● for maints harmonics limitation ● for interference immunity EN 61000-3-2 tentificate of suitability ● CE marking ● UL approval Pes CL approval Yes CLLus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	-	0.2 ms	
• maximum 10 ms protection and monitoring design of the overvoltage protection Yes design of short-circuit protection Alternatively, constant current characteristic approx. 22 A or latching shutdown • typical 22 A overcurrent overfoad capability • in normal operation overload capability • typical 22 A display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output Yes galvanic isolation between input and output Safety screen Safety protection class IP EMC Standard • for emitted interference • for mains harmonics limitation • for interference immunity • for interference immunity • for interference immunity • for interference immunity • CE marking • Usa approval • CE marking • Usa approval • Ves certificate of suitability • CE marking • Usa approval • Ves cultus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	**	0.2 ms	
protection and monitoring design of the overvoltage protection	* **	10 ms	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical • in normal operation enduring short circuit current RMS value • typical galvanic isolation between input and output • maximum • typical • popical • popical • popical • positing resource protection class eakage current • maximum • typical • for emitted interference • for emitted interference • for interference immunity • for interference immunity • for emaking • CE marking • Ves Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 22 A or latching shutdown 22 A Alternatively, constant current characteristic approx. 24 or latching shutdown 4 Explaid application shutdown 5 Alternatively, constant current characteristic approx. 24 or latching shutdown 5 Alternatively, constant current characteristic approx. 24 or latching shutdown 5 Alternatively. 6 Alterna			
property of the output short-circuit proof design of short-circuit protection • typical overcurrent overload capability • in normal operation enduring short circuit current RMS value • typical otypical overcurent overload and short circuit enduring short circuit current RMS value • typical display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output Yes galvanic isolation between input and output operating resource protection class [eakage current • maximum • typical • (pyical) • (pyical) • (protection class IP) EMC Standard • for emitted interference • for mains harmonics limitation • for emitted interference immunity EN 61000-8-2 standards, specifications, approvals certificate of suitability • CE marking • UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	·	< 32 V	
design of short-circuit protection • typical 22 A overcurrent overload capability • in normal operation • typical 22 A display version for overload and short circuit safety galvanic isolation between input and output • maximum • typical • maximum • typical • maximum • typical • for emitted interference • for mains harmonics limitation • for or mains harmonics limitation • for emitted interference immunity • for interference immunity • CE marking • CE marking • CE marking • CE marking • CS A Case A Case A Case A Case A Case Case Case Case Case Case Case Case			
• typical 22 A overcurrent overload capability • in normal operation overload capability 150 % lout rated up to 5 s/min enduring short circuit current RMS value • typical 22 A display version for overload and short circuit safety galvanic isolation between input and output Yes galvanic isolation between input and output Yes galvanic protection class Class I leakage current • maximum 3.5 mA • typical 0.9 mA protection class IP IP20 EMC standard • for emitted interference EN 55022 Class B • for mains harmonics limitation EN 61000-6-2 standards, specifications, approvals certificate of suitability • CE marking Yes • UL uspproval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus			
overcurrent overload capability			
in normal operation overload capability 150 % lout rated up to 5 s/min enduring short circuit current RMS value itypical 22 A display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output Yes galvanic isolation operating resource protection class leakage current imaximum imaxim	· · · · · · · · · · · · · · · · · · ·	22 A	
enduring short circuit current RMS value • typical display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output galvanic isolation Safety extra low output voltage Vout according to EN 60950-1 Operating resource protection class Class I leakage current • maximum • typical • typical protection class IP EMC Standard • for emitted interference • for mains harmonics limitation • for interference immunity EN 61000-3-2 • for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability • CE marking • UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	•	available appoint to 150 0/ last rated up to 5 a/asia	
typical 22 A display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown" safety galvanic isolation between input and output Yes galvanic isolation Safety extra low output voltage Vout according to EN 60950-1 operating resource protection class leakage current		Overload capability 150 % lout rated up to 5 shillin	
display version for overload and short circuit safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval LED yellow for "overload", LED red for "latching shutdown" LED yellow for "overload", LED red for "latching shutdown" Yes Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Operating resource protection class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Vout according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Veta Safety according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Veta Safety according to EN 60950-1 Class I Pagivanic isolation Safety extra low output voltage Veta Safety according to EN 60950-1 Safety ex		22.4	
galvanic isolation between input and output galvanic isolation safety extra low output voltage Vout according to EN 60950-1 operating resource protection class leakage current maximum typical protection class IP IP20 EMC standard for emitted interference for mains harmonics limitation for interference immunity standards, specifications, approvals certificate of suitability CE marking UL approval Yes Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	· · · · · · · · · · · · · · · · · · ·		
galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval Yes Safety extra low output voltage Vout according to EN 60950-1 Class I Yes Safety extra low output voltage Vout according to EN 60950-1 Safety extra low output voltage		LED yellow for overload, LED red for fatching shutdown."	
galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval Safety extra low output voltage Vout according to EN 60950-1 Class I Class I Class I EN 610950-1 Class I EN 610950-1 Class I EN 610950-1 Class I EN 61000-6-2 Standards, Specifications, approvals Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus		V	
operating resource protection class leakage current • maximum • typical protection class IP EMC Standard • for emitted interference • for mains harmonics limitation • for interference immunity EN 61000-3-2 standards, specifications, approvals certificate of suitability • CE marking • UL approval Class I Class I Class I Class I EN 5.5 mA 0.9 mA IP20 EN 61000-6-2 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Standards, specifications, approvals Yes Yes Yes Yes Yes Yes Yes, cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus			
leakage current		, , ,	
 maximum typical protection class IP IP20 EMC standard for emitted interference for mains harmonics limitation for interference immunity for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability CE marking UL approval Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 		Class I	
 typical protection class IP IP20 EMC standard for emitted interference for mains harmonics limitation for interference immunity EN 61000-3-2 for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability CE marking UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	-		
protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity • for interference immunity EN 61000-3-2 • for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability • CE marking • UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	• maximum		
standard • for emitted interference • for mains harmonics limitation • for interference immunity • for interference immunity • for interference immunity • CE marking • UL approval Standards St	·	0.9 mA	
standard • for emitted interference • for mains harmonics limitation • for interference immunity • for interference immunity • CE marking • UL approval EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Standards, specifications, approvals Yes • UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	protection class IP	IP20	
 for emitted interference for mains harmonics limitation for interference immunity EN 61000-3-2 for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability CE marking UL approval Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	EMC		
 for mains harmonics limitation for interference immunity EN 61000-3-2 EN 61000-6-2 standards, specifications, approvals certificate of suitability CE marking UL approval Yes UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	standard		
 for interference immunity EN 61000-6-2 standards, specifications, approvals certificate of suitability CE marking UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	• for emitted interference	EN 55022 Class B	
standards, specifications, approvals certificate of suitability • CE marking • UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	 for mains harmonics limitation 	EN 61000-3-2	
certificate of suitability CE marking UL approval Yes Yes Yes, cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	• for interference immunity	EN 61000-6-2	
 CE marking UL approval Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	standards, specifications, approvals		
 CE marking UL approval Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus 	certificate of suitability		
UL approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	•	Yes	
	· ·		

CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	
	(CSA C22.2 No. 60950-1, UL 60950-1)	
 EAC approval 	Yes	
 Regulatory Compliance Mark (RCM) 	Yes	
NEC Class 2	No	
• SEMI F47	Yes	
type of certification		
• BIS	Yes; R-41188271	
CB-certificate	Yes	
MTBF at 40 °C	590 573 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	Yes	
Marine classification association		
American Bureau of Shipping Europe Ltd. (ABS)	Yes	
French marine classification society (BV)	No	
Det Norske Veritas (DNV)	Yes	
Lloyds Register of Shipping (LRS)	No	
standards, specifications, approvals Environmental Product De		
Environmental Product Declaration	Yes	
global warming potential [CO2 eq]		
• total	989 kg	
during manufacturing	18.9 kg	
during operation	970 kg	
after end of life	0.27 kg	
ambient conditions		
ambient temperature		
during operation	-25 +70 °C; With natural convection; startup tested starting from -40 °C nominal voltage	
 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	
	COLOW COLUMNICA	
• at input	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded	
at inputat output	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely	
·	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16	
at output for auxiliary contacts	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm²	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²	
at output for auxiliary contacts	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm²	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 50 mm	
at output for auxiliary contacts mechanical data	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 50 mm 0 mm	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 50 mm 0 mm	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right fastening method	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right fastening method DIN-rail mounting	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right fastening method DIN-rail mounting vall mounting wall mounting	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right fastening method DIN-rail mounting sylvant mounting wall mounting housing can be lined up	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No Yes	
at output for auxiliary contacts mechanical data width × height × depth of the enclosure installation width × mounting height required spacing top bottom left right fastening method DIN-rail mounting sy7 rail mounting wall mounting	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 4 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 1.5 mm² 70 × 125 × 125 mm 70 mm × 225 mm 50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No	

mechanical accessories

further information internet links

internet link

• 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

Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20

https://mall.industry.siemens.com

https://mall.industry.siemens.com

https://www.siemens.com/tstcloud

https://siemens.com/sitop

https://siemens.com/cax

https://siemens.com/cax

additional information

other information

Specifications at rated input voltage and ambient temperature +25 $^{\circ}$ 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	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval

CB

nn.

CB

CD.

Manufacturer Declaration Declaration of Conformity





General Product Approval

.





Miscellaneous

BIS CRS



Maritime application



Environment



last modified: 4/4/2025 🖸