## **SIEMENS**

Data sheet \_\_\_\_\_6EP1334-3BA10

SITOP PSU200M 24 V/10 A SITOP PSU200M 10 A Stabilized power supply input: 120/230-500 V AC output: DC 24 V/10 A



1-phase and 2-phase AC
120 230 V
230 500 V
Set by means of selector switch on the device
85 264 V
176 550 V
Yes
1300 Vpeak, 1.3 ms
25 ms; at Vin = 120/230 V, typ. 150 ms at Vin = 400 V
50 Hz
60 Hz
47 63 Hz
4.4 A
2.4 A
1.1 A

Switch-on current limiting (+25 °C), max.	35 A
I²t, max.	4 A <sup>2</sup> ·s
Built-in incoming fuse	T 6.3 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	24 28.8 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	1 s
Voltage rise, typ.	50 ms
Rated current value lout rated	10 A
Current range	0 10 A
• Note	+60 +70 °C: Derating 2%/K (at 120 V, 230 V) or 3.5%/K (at 400
	V)
Supplied active power typical	240 W
Short-term overload current	
at short-circuit during operation typical	30 A
Duration of overloading capability for excess current	
<ul> <li>at short-circuit during operation</li> </ul>	25 ms
Constant overload current	
<ul> <li>on short-circuiting during the start-up typical</li> </ul>	12 A
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced	2
performance	
Efficiency	
Efficiency at Vout rated, lout rated, approx.	91 %
Power loss at Vout rated, lout rated, approx.	24 W
Power loss [W] during no-load operation maximum	6 W

Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 50/100/50 %), Uout ± 1/yp.  Load step setting time 50 to 100%, typ.  Load step setting time 100 to 50%, typ.  Setting time maximum  Sms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  12 A  Properly of the output Short-circuit proof  Short-circuit protection  Alternatively, constant current characteristic approx. 12 A or latching short circuit protection  Enduring short circuit current RMS value  • typical  • typical  Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation  Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  O 32 mA  CE mark  UL/cUL (CSA) approval  CE mark  Ves  UL/cUL (CSA) approval  CE mark  UL/cUL (CSA) approval  CE mark  UL/cUL (CSA) approval  CEE x n a n CI ICT 4 Gc; ATEX (EX) II 3G Ex n a n CI IICT 4 Gc (für AC 120-230)/230-400 V; ccSAus (CSA C22.2 No. 213, ANS/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  ANS/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  ANS/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  Protection (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-8-2  Operating data  Ambient temperature  • during operation  — Note	Closed-loop control	
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.  Load step setting time 50 to 100%, typ.  Load step setting time 100 to 50%, typ.  Setting time maximum  5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  12 A  Property of the output Short-circuit proof  Short-circuit protection  Enduring short circuit current RMS value  • typical  12 A  Overload/short-circuit indicator  Enduring short circuit indicator  Enduring short circuit indicator  Enduring short-circuit indicator  Enduring short-circuit indicator  Enduring short circuit indicator  Yes  Class I  LeD yellow for "overload", LED red for "latching shutdown"  Safety  Frimary/secondary isolation  Yes  Class I  Clus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 50950-1, UL 60950-1)  Explosion protection  Explosion protection  Explosion protection  Explosion protection (EN 60529)  Explosion protection (EN 60529)  IP20  EMC  Emitted interference  En 55022 Class B  Supply harmonics limitation  EN 61000-6-2  Operating data  Ambient temperature  • during operation		0.1 %
typ. Load step setting time 50 to 100%, typ. 2 ms Setting time 100 to 50%, typ. 2 ms Setting time maximum 5 ms  Protection and monitoring Output overvoltage protection Current limitation, typ. 12 A Property of the output Short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 12 A or latching shutdown Enduring short circuit current RMS value • typical 12 A Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety Primary/secondary isolation Safety varra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Protection class Class I Leakage current • maximum • typical Ozermark Ves UL/cUL (CSA) approval CE mark UL/cUL (CSA) approval CE mark UL/cUL (CSA) approval CEXE x nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230)/230-400 V); cCSAus (CSA C22.2 No. 213, ANS/ISA-12.12 01) Class I, Div. 2, Group ABCD, T3 CB approval ABS, DNV GL Degree of protection (EN 60529)  EMC  Emitted interference Supply harmonics limitation En 1500-6-2  Operating data Ambient temperature • during operation — Note With natural convection; startup tested starting from -40 °C With natural convection; startup tested starting from -40 °C	max.	
Load step setting time 50 to 100%, typ.  Load step setting time 100 to 50%, typ.  Setting time maximum  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  12 A  Property of the output Short-circuit proof  Short-circuit protection  Enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Enduring short-circuit indicator  Yes  Galvanic isolation  Safety  Primary/secondary isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  Leakage current  • maximum  • typical  O.32 mA  Class I  Leakage current  • maximum  • typical  O.32 mA  CE mark  Yes  UL/CUL (CSA) approval  CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  Explosion protection  ECEX Ex nA nC IIC T4 Gc, ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  ABS, DNV GL  Degree of protection (EN 60529)  IP20  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-8-2  Operating data  Ambient temperature  • during operation	Dynamic load smoothing (lout: 50/100/50 %), Uout ±	3 %
Load step setting time 100 to 50%, typ.  Setting time maximum  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  Property of the output Short-circuit proof Short-circuit protection  Alternatively, constant current characteristic approx. 12 A or latching shutdown  Enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation  Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  OE mark  Yes  UL/CUL (CSA) approval  CE mark  Yes  UL/CUL (CSA) approval  EXPLOSED TO THE ELEPYSES;  CCSAUS (CSA C22.2 No. 107.1), File E197259;  CCSAUS (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  IECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc (für AC 120-230/230-400 V); CCSAUS (CSA C22.2 No. 213, ANSI/SA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Percondition (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  En 61000-6-2  Operating data  Ambient temperature  • during operation  - Note  With natural convection: startup tested starting from -40 °C	typ.	
Setting time maximum 5 ms  Protection and monitoring Output overvoltage protection <a href="#"><a href<="" td=""><td>Load step setting time 50 to 100%, typ.</td><td>2 ms</td></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>	Load step setting time 50 to 100%, typ.	2 ms
Protection and monitoring  Output overvoltage protection <a href="#">&lt; 35 V</a> Current limitation, typ.  Property of the output Short-circuit proof  Short-circuit protection Alternatively, constant current characteristic approx. 12 A or latching shutdown  Enduring short circuit current RMS value  • typical 12 A  Overloads/short-circuit indicator LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation Yes  Galvanic isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  Leakage current  • maximum 3.5 mA  • typical 0.32 mA  CE mark Yes  UL/CUL (CSA) approval CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection IECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc (für nCA 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval Yes  Marine approval ABS, DNV GL  Degree of protection (EN 60529) IP20  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation EN 61000-3-2  Roise immunity EN 61000-6-2  Operating data  Ambient temperature  • during operation -25 +70 °C  With natural convection; startup tested starting from -40 °C	Load step setting time 100 to 50%, typ.	2 ms
Output overvoltage protection   <35 V   Current limitation, typ.   12 A   Property of the output Short-circuit proof   Yes   Short-circuit protection   Alternatively, constant current characteristic approx. 12 A or latching short circuit current RMS value   • typical   12 A   Overload/short-circuit indicator   LED yellow for "overload", LED red for "latching shutdown"   Safety   Primary/secondary isolation   Yes   Galvanic isolation   Safety   Safet	Setting time maximum	5 ms
Current limitation, typ. 12 A Property of the output Short-circuit proof Yes Short-circuit protection Alternatively, constant current characteristic approx. 12 A or latching shutdown  Enduring short circuit current RMS value  • typical 12 A Overload/short-circuit indicator LED yellow for "overload", LED red for "latching shutdown"  Safety Primary/secondary isolation Yes Galvanic isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class Class I Leakage current  • maximum 3.5 mA • typical 0.32 mA CE mark Yes UL/cUL (CSA) approval cUL-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection IECEX EX nA nC IIC T4 Gc (Rir AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  Yes Marine approval ABS, DNV GL Degree of protection (EN 60529) IP20  EMC  Emitted interference EN 55022 Class B Supply harmonics limitation EN 61000-6-2  Operating data Ambient temperature  • during operation -25 +70 °C With natural convection; startup tested starting from -40 °C	Protection and monitoring	
Property of the output Short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 12 A or latching short circuit current RMS value • typical 12 A Overload/short-circuit indicator LED yellow for "overload", LED red for "latching shutdown"  Safety Primary/secondary isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Protection class Class I Leakage current • maximum • typical OLICUL (CSA) approval CE mark Ves ULICUL (CSA) approval Explosion protection IECEX EX NA NC IIC T4 Gc; ATEX (EX) II 3G EX NA NC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3 CB approval ABS, DNV GL Degree of protection (EN 60529)  EMC Emitted interference Supply harmonics limitation EN 61000-6-2  Operating data Ambient temperature • during operation — Note  Ves With natural convection; startup tested starting from -40 °C With natural convection; startup tested starting from -40 °C	Output overvoltage protection	< 35 V
Short-circuit protection  Alternatively, constant current characteristic approx. 12 A or latching short circuit current RMS value  • typical  Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation  Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  Outpical  CE mark  Ves  UL/cUL (CSA) approval  Explosion protection  LECX Ex na nc IIC 14 Gc, Arrax (Ex) II 3G Ex na nc IIC 14 Gc (für Ac 120-230/230-400 V); ccSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  ABS, DNV GL  Degree of protection (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-8-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Current limitation, typ.	12 A
Enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  CE mark  UL/cUL (CSA) approval  Explosion protection  LECX Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  ABS, DNV GL  Degree of protection (EN 60529)  END  END  END  END  END  END  END  EN	Property of the output Short-circuit proof	Yes
• typical 12 A  Overload/short-circuit indicator LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation Yes  Galvanic isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class Class I  Leakage current  • maximum • typical 0.32 mA  CE mark Yes  UL/cUL (CSA) approval cllus-Listed (UL 508, CSA C22, 2 No. 107.1), File E197259; cCSAus (CSA C22, 2 No. 60950-1, UL 60950-1)  Explosion protection IECEX EX nA nC IIC T4 Gc, ATEX (EX) II 3G EX nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22, 2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval Yes  Marine approval ABS, DNV GL  Degree of protection (EN 60529) IP20  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation EN 61000-3-2  Noise immunity EN 61000-6-2  Operating data  Ambient temperature  • during operation -25 +70 °C  — Note With natural convection; startup tested starting from -40 °C	Short-circuit protection	• •
Overload/short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety Primary/secondary isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  CE mark  UL/cUL (CSA) approval  CEMark  UL/cUL (CSA) approval  Explosion protection  Explosion protection  ECE Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Marine approval  Degree of protection (EN 60529)  EMC  Emitted interference  En 55022 Class B  Supply harmonics limitation  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Enduring short circuit current RMS value	
Primary/secondary isolation  Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum • typical  CE mark  UL/GUL (CSA) approval  CE mark  UL/GUL (CSA) approval  CCSAus (CSA C22.2 No. 107.1), File E197259; CCSAus (CSA C22.2 No. 107.1), File E197259; CCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  ECE Ex na nc IIC T4 Gc; ATEX (EX) II 3G Ex na nc IIC T4 Gc (für AC 120-230/230-400 V); CCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Yes  Marine approval  Degree of protection (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	• typical	12 A
Primary/secondary isolation  Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  O.32 mA  CE mark  UL/cUL (CSA) approval  Explosion protection  Explosion protec	Overload/short-circuit indicator	LED yellow for "overload", LED red for "latching shutdown"
Galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  Leakage current  • maximum  • typical  CE mark  Ves  UL/cUL (CSA) approval  cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  Explosion protection  Explosion protection  (IECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Marine approval  Degree of protection (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Safety	
Fortection class	Primary/secondary isolation	Yes
Leakage current  • maximum  • typical  O.32 mA  CE mark  Ves  UL/cUL (CSA) approval  Explosion protection  Explosion protection  Explosion protection  Explosion protection  CB approval  Yes  Marine approval  Degree of protection (EN 60529)  EMC  Emitted interference  Supply harmonics limitation  EN 61000-3-2  Noise immunity  CB approtating data  Ambient temperature  • during operation  — Note  Note  Output  Degree of typical (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  EICEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  Ves  ABS, DNV GL  IP20  EMC  En 61000-3-2  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Galvanic isolation	
<ul> <li>maximum</li> <li>typical</li> <li>U./cull (CSA) approval</li> <li>CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)</li> <li>Explosion protection</li> <li>Explosion protection</li> <li>IECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3</li> <li>CB approval</li> <li>Marine approval</li> <li>ABS, DNV GL</li> <li>Degree of protection (EN 60529)</li> <li>IP20</li> <li>EMC</li> <li>Emitted interference</li> <li>EN 55022 Class B</li> <li>Supply harmonics limitation</li> <li>EN 61000-3-2</li> <li>Noise immunity</li> <li>EN 61000-6-2</li> <li>Operating data</li> <li>Ambient temperature</li> <li>during operation</li> <li>-25 +70 °C</li> <li>With natural convection; startup tested starting from -40 °C</li> </ul>	Protection class	Class I
● typical  CE mark  Ves  UL/cUL (CSA) approval  CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259;  cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  IECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc  (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213,  ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  Yes  Marine approval  ABS, DNV GL  Degree of protection (EN 60529)  IP20  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  ● during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Leakage current	
CE mark  Ves  UL/cUL (CSA) approval  cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  IECEX Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Yes  Marine approval  ABS, DNV GL  Degree of protection (EN 60529)  IP20  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	• maximum	3.5 mA
CE mark  UL/cUL (CSA) approval  cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Yes  Marine approval  ABS, DNV GL  Degree of protection (EN 60529)  IP20  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	• typical	0.32 mA
CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  ECEX EX nA nC IIC T4 Gc; ATEX (EX) II 3G EX nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Marine approval  ABS, DNV GL  Degree of protection (EN 60529)  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C		Yes
cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)  Explosion protection  IECEX Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc (für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval  Yes  Marine approval  ABS, DNV GL  Degree of protection (EN 60529)  IP20  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C		cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259;
(für AC 120-230/230-400 V); cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3  CB approval Yes Marine approval ABS, DNV GL  Degree of protection (EN 60529) IP20  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation EN 61000-3-2 Noise immunity EN 61000-6-2  Operating data  Ambient temperature  • during operation — Note With natural convection; startup tested starting from -40 °C	· / · · ·	
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Emitted interference  Supply harmonics limitation  EN 61000-3-2  Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  — Note  EN 55022 Class B  EN 61000-3-2  EN 61000-6-2  With natural convection; startup tested starting from -40 °C	EMC	
Noise immunity  EN 61000-6-2  Operating data  Ambient temperature  • during operation  — Note  EN 61000-6-2   EN 61000-6-2  With natural convection; startup tested starting from -40 °C		EN 55022 Class B
Operating data  Ambient temperature  • during operation  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Supply harmonics limitation	EN 61000-3-2
Ambient temperature  ● during operation  — Note  Ambient temperature  -25 +70 °C  With natural convection; startup tested starting from -40 °C	Noise immunity	EN 61000-6-2
<ul> <li>◆ during operation</li> <li>-25 +70 °C</li> <li>With natural convection; startup tested starting from -40 °C</li> </ul>	Operating data	
— Note With natural convection; startup tested starting from -40 °C	Ambient temperature	
	during operation	-25 +70 °C
	— Note	

<ul> <li>during transport</li> </ul>	-40 +85 °C
<ul><li>during storage</li></ul>	-40 +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

Mechanics	
Connection technology	screw-type terminals
Connections	
Supply input	L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded
<ul><li>Output</li></ul>	+, -: 2 screw terminals each for 0.2 2.5 mm²
<ul><li>Auxiliary</li></ul>	13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²
Width of the enclosure	70 mm
Height of the enclosure	125 mm
Depth of the enclosure	121 mm
Required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
● right	0 mm
Weight, approx.	0.8 kg
Product feature of the enclosure housing for side-by- side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Electrical accessories	Buffer module
MTBF at 40 °C	1 055 408 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)