**Data sheet** 

6AG1337-3BA00-4AA0

## SIPLUS PS PSU100M



SIPLUS PS modular 40 A in 120/230 V AC out 24 V DC/40 A with conformal coating for medial exposure based on 6EP1337-3BA00

Input	
Input	1-phase AC
<ul><li>Note</li></ul>	Set by means of wire jumper on the device; starting from Vin > 95/190 V
supply voltage	
<ul> <li>1 at AC rated value</li> </ul>	120 V
<ul> <li>2 at AC rated value</li> </ul>	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	176 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering	at Vin = 230 V
Mains buffering at lout rated, min.	20 ms; at Vin = 230 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	15 A
at rated input voltage 230 V	8 A
Switch-on current limiting (+25 °C), max.	125 A
I²t, max.	26 A²-s
Built-in incoming fuse	Yes
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: 20 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
• output voltage at output 1 at DC rated value	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %

Residual ripple peak-peak, rivax. Spikes peak-peak, rivax. Spikes peak-peak, rivax. Spikes peak-peak, rivax. Adjustment range 24 - 28 8 V  Adjustment range 25 - 28 V  Adjustment range 26 - 28 V  Adjustment range 27 - 28 V  Adjustment range 28 - 28 V  Adjustment range 39 - 29 V  Signaling 40 via signaling modulu (BEP1961-3BA10)  Overshoot of Yout approx. 3 %  Overshoot of Yout approx. 4 8 A  Overshoot overshoot ourset  • all short-circuiting operation typical  duration of overdoading capability for excess current  • all short-circuiting operation ourset overshoot ourset overshoot ourset ours	Residual ripple peak-peak, max.	100 mV
Spikes peak, max, Cheardwidth: 20 MHz)		
Spikes peak-peak, typ, Chandwidth: 20 MHz)		
Adjustment range		
product function output voltage adjustable  Output voltage setting  Via potentiometer  Signaling  Via signaling		
Output voltage setting  Via potentiometer Status display  Green LED for 24 V OK Signaling  Via signaling module (6EP1981-3BA10) Omort behavior  Overshoot of Vout approx. 3 % Startup delay, max.  0.1 s  Voltage rise, typ. 50 ms Rated current value lout rated  40 A Current range • Note • Note • Note • All Current range • Note • All Current range • Note • All Current moverload current • all short-circuit during operation typical duration of overloading capability for excess current • on short-circuit during operation • at short-circuit during operation constant overload current • on short-circuit during operation • on short-circuit during operation constant overload current • on short-circuit during operation • on short-circuit during operation Constant overload current • on short-circuiting during in the start-up typical Parallel switchable units for enhanced performance Numbers of parallel switchable units for enhanced performance  2 refliciency  Efficiency  Efficiency  Efficiency  Efficiency  Efficiency  All Current imitation  5 ms  Clossed-doop controi  Dynamic load smoothing (fout: 50100/059 k), Dout ± typ. Load step setting time 50 to 100, k), Du Dynamic load smoothing (fout: 50100/059 k), Du Dynamic load smoothing (fout: 50100/059 k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dynamic load smoothing from 50 to 100, k), Du Dy		
Status display Signating On/off behavior Overshoot of Vout approx. 3 % Startup delay, max. O.1 s Startup delay, max. O.1 s Ontage rise, typ. So ms Rated current value lout rated 40 A Current range • Note • Note • Alber overshoot of Vout approx. 3 % One of Vout approx. 3 % One overshoot		
Signaling via signaling module (SEP1981-3BA10) Onioff behavior Overshoot of Vout approx. 3 % Startup delay, max. 0.1 s Voltage rise, typ. 50 ms Rated current value but rated 40 A Current range 040 A Note +60+70 °C: Derating 2.5%/K supplied active power typical 960 W short - at short-circuit during operation typical 120 A duration of overloading capability for excess current - at short-circuit during operation typical 25 ms on short-circuit during operation typical 25 ms constant overload current - at short-circuit during operation 25 ms on short-circuit during operation 25 ms constant overload current - 46 A Parallel switchable units for enhanced performance Yes; switchable characteristic Numbers of parallel switchable units for enhanced performance Pfficiency Efficiency 21 Vout rated, lout rated, approx. 88 % Power loss at Vout rated, lout rated, approx. 131 W Closed-loop control Dynamic load smoothing (lout: 60/100/50 %), Uout ± typ. 2 % Load step setting time 50 to 100% typ. 2 ms Load step setting time 50 to 100% typ. 2 ms setting time maximum 5 ms Sms Provection and monitoring Output overvoltage protection 46 A Overload/short-circuit protection 46 A Overload/short-circuit indicator 46 A Overload/short-circuit indicator 46 A Protection and monitoring 46 A Overload/short-circuit indicator 58 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Primary/secondary isolation 58 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Primary/secondary isolation 59 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Primary/secondary isolation 59 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Primary/secondary isolation 50 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Primary/secondary isolation 50 Setely extra-low output voltage Uout acc. to EN 60950-1 and EN 50178		•
On/off behavior  Startup delay, max.  Voltage rise, typ.  Fated current value lout rated  40 A  Current range  • Note  • Note  • Note  • A short-term overfoad current  • at short-circuit during operation typical  duration of overfoading capability for excess current  • at short-circuit during operation  • on short circuit proto to 50%, typ.  • on short circuit proto to 50%, typ.  • on short circuit protoction  • on short circuit during operation  • on short circuit dur		
Sartup delay, max.   0.1 s   S0 ms   Rated current value lout rated   40 A   0		
Voltage rise, typ.     50 ms       Rated current value lout rated     40 A       Current range     0 40 A       • Note     46 M +70 °C; Derating 2.5%/K       supplied active power typical     960 W       short-term overload current     120 A       • at short-circuit during operation typical     120 A       duration of overloading capability for excess current     • at short-circuit during operation       • at short-circuit guing be start-up typical     46 A       Parallel switching for enhanced performance     Yes; switchable characteristic       Numbers of parallel switchiable units for enhanced performance     2       Efficiency     2       Efficiency at Vout rated, lout rated, approx.     88 %       Power loss at Yout rated, Iout rated, approx.     1%       Opyramic mains compensation (Vin rated ±15 %), max.     1%       Dynamic mains compensation (Vin rated ±15 %), inax.     2 ms       Load step setting time 50 to 100%, typ.     2 ms       Load step setting time 50 to 100%, typ.     2 ms       Load step setting time 10 to 50%, typ.     2 ms       Upper value of the current RMI value     46 A       Protection and monitoring     46 A       Output overvoltage protection     43 V       Current limitation, typ.     46 A       Portection disas     46 A		· ·
Rated current value lout rated  Qurent range  Note  Note  Note  Note  Refined current value lout rated  O 40 A  Note  Note  Supplied active power typical  at short-circuit during operation typical  duration of overloading capability for excess current  at short-circuit during operation  at short-circuit during operation  oconstant overload current  o at short-circuit during operation  on short-circuitid gruing the start-up typical  Parallel switchable units for enhanced performance  Numbers of parallel switchable units for enhanced performance  Reficiency  Efficiency at Vour rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±16 %), max.  Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.  Load step setting time 100 to 50%, typ.  2 ms  Load step setting time 100 to 50%, typ.  2 ms  Setting time maximum  Frotection and monitoring  Output overvoltage protection  Qurpent limitation, typ.  property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Printary/secondary isolation  galvanic isolation  Safety  Printary/secondary isolation  galvanic isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50176  Class I  eakage current  • maximum  • typical  Output overloads of protection (EN 60529)  Ip20  Approvals  CE mark  Yes  EMCE  Emitted interference  En 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2	1 3	
Current range  Note  Not		
Note     supplied active power typical     short-term overfoad current     at a short-circuit during operation typical     at a short-circuit during operation     at a short-circuit during operation     at a short-circuit during operation     constant overfoad current     at short-circuit during operation     constant overfoad current     an short-circuiting during the start-up typical     Aparallel switching for enhanced performance     Numbers of parallel switchable units for enhanced     performance     Bifficiency     Ifficiency     All typical     Approximate an an an an analysis of parallel switchable units for enhanced     performance     Bifficiency     All typical     Dynamic mains compensation (Vin rated ±15 %), max.     Dynamic load smoothing (lout: 50/100/55 %), Uout ± typ.     Load step setting time 50 to 100%, typ.     Safety     Protection and monitoring     Output overvoltage protection     Alternatively, constant current characteristic approx. 46 A or latching shutdown     Protection class     Alternatively, constant current characteristic approx. 46 A or latching shutdown     and units of the output short-circuit proof     Yes     Short-circuit protection     Alternatively, constant current characteristic approx. 46 A or latching shutdown     and the output short-circuit indicator     Elb 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     Class I     leakage current     * maximum     * typical     Output of "overload", LED red for "latching shutdown"     Safety extra-low output voltage Uout acc. to EN 60950-1 a		
supplied active power typical short-term overload current • at short-circuit during operation typical utariation of overloading capability for excess current • at short-circuit during operation • at short-circuit during operation constant overload current • on short-circuiting during the start-up typical • at short-circuiting during the start-up typical • A parallel switching for enhanced performance Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Yout rated, lout rated, approx.  Efficiency at Yout rated, lout rated, approx.  Sas %  Power loss at Yout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic hains compensation (Vin rated ±15 %), max.  Dynamic hains compensation (Vin rated ±15 %), max.  Dynamic hains amonothing (loud in 501'00/50 %), Uout ±typ. 2 ms  Load step setting time 50 to 100%, typ. 2 ms  setting time maximum 5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ. 46 A  property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value • typical  of the output short-circuit indicator  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation galvanic isolation  Primary/secondary isolation aglivanic isolation  Primary/secondary isolation  1.5 mA  1.5 mA  1.5 mA  1.6 A  1.6 A  1.7 certain and monitoring  Output vervoltage protection  2.5 facts  2.6 certain  3.5 mA  2.7 maximum  4.9 typical  2.7 maximum  4.9 property  4.6 A  2.7 protection class  Class I  Leakage current  4.6 A  2.7 maximum  4.7 protection class  CE mark  Yes  EMCE  Emitted interference  EN 55022 Class B  Supply harmonics limitation  7. Noise immunity  EN 61000-6-2		
short-term overload current  at short-circuit during operation typical duration of overloading capability for excess current  at short-circuit during operation constant overload current  on short-circuiting during the start-up typical and short-circuiting during the start-up typical on short-circuiting during the start-up typical and short-circuit current extension by a start of the start-up typical by a start of the start-up typical and short-circuit current extension closed-loop control by a start of the st		-
● at short-circuit during operation typical duration of overloading capability for excess current ● at short-circuit during operation Onstant overload current ● on short-circuiting during the start-up typical Parallel switching for enhanced performance Numbers of parallel switchable units for enhanced performance Prower loss at Vout rated, lout rated, approx.  Bifficiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  88 % Power loss at Vout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic hains compensation (Vin rated ±15 %), max.  Load step setting time 100 to 50%, lyou ± typ. 2 ms Load step setting time 100 to 50%, typ. 2 ms Setting time maximum 5 ms  Protection and monitoring  Cutput overvoltage protection  Current limitation, typ.  property of the output short-circuit proof Short-circuit protection enduring short circuit current RMS value • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation galvanic isolation Protection class leakage current • maximum • typical  Degree of protection (EN 60529)  Approvals  CE mark  Emitted interference EN 55022 Class B Supply harmonics limitation - Noise immunity EN 25 ms  25 ms  25 ms  26 ms  26 ms  46 A  A Protection class B  EM 6000-6-2		900 VV
duration of overloading capability for excess current		120 Λ
• at short-circuit during operation  constant overload current • on short-circuiting during the start-up typical Parallel switching for enhanced performance Numbers of parallel switchable units for enhanced performance Pfficiency  Efficiency  Efficiency  Efficiency  Efficiency at Vout rated, lout rated, approx. Power loss at Vout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ. 2 % Load step setting time 50 to 100%, typ. 2 ms setting time maximum 5 ms  Protection and monitoring  Current limitation, typ. Quiput overvoltage protection  Current limitation, typ. 46 A  Property of the output short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 46 A or latching shutdown  Protection class  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation Protection class Class I  eakage current • maximum • typical  Output of Protection (EN 60529)  Approvals  CE mark Yes  Supply harmonics limitation Noise immunity  EN 61000-6-2		120 A
constant overload current  o on short-circuiting during the start-up typical Parallel switching for enhanced performance Numbers of parallel switchable units for enhanced performance Portion of parallel switchable units for enhanced performance Pifficiency Efficiency at Yout rated, lout rated, approx.  88 % Power loss at Yout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ. Load step setting time 50 to 100%, typ.  2 ms Load step setting time 100 to 50%, typ. 2 ms setting time maximum 5 ms  Protection and monitoring  Output overvoitage protection  Current limitation, typ. Trotection and monitoring  Output overvoitage protection Alternatively, constant current characteristic approx. 46 A or latching shutdown  enduring short circuit current RMS value  • typical  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation galvanic isolation Safety  Primary/secondary isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  leakage current  • maximum • typical  O, 4 mA  Degree of protection (EN 60529)  Approvals  CE mark Yes  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  EN 61000-6-2		25 ms
on short-circuiting during the start-up typical Parallel switching for enhanced performance Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency  Efficiency at Vout rated, lout rated, approx. Power loss at Vout rated, lout rated, approx.  Bynamic load smoothing (lout: 50/100/50 %), Lout ± typ. Load step setting time 50 to 100%, typ. 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. Short-circuit protection Alternatively, constant current characteristic approx. 46 A or latching shutdown  enduring short circuit current RMS value bylocal Overload/short-circuit indicator  Safety  Primary/secondary isolation galvanic isolation Protection (EN 60529)  Approvals CE mark Yes  EMC  Emited Not rated, 10st rated, 29 restauch 10st 10st 20st 20st 20st 20st 20st 20st 20st 2		20 1110
Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Yout rated, lout rated, approx.  Billiciency at Yout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic bad smoothing (lout: 50/100/50 %), Uout ± typ.  Load step setting time 50 to 100%, typ.  2 ms  Load step setting time 100 to 100%, typ.  2 ms  Setting time maximum  Frotection and monitoring  Output overvoltage protection  Current limitation, typ.  Protection and monitoring  Output overvoltage protection  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  galvanic isolation  Protection class  leakage current  • maximum  • typical  Overload/short-circuit indicator  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  leakage current  • maximum  • typical  Overload/short-circuit (EN 60529)  Approvals  CE mark  Yes  EMC  Emited interference  Supply harmonics limitation  Noise immunity  EN 61000-6-2		46 A
Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency  Efficiency at Vout rated, lout rated, approx. 131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max. 1 %  Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ. 2 %  Load step setting time 50 to 100%, typ. 2 ms  setting time maximum 5 ms  Protection and monitoring  Output overvoltage protection 3 to 46 A or latching shutdown  enduring short circuit current RMS value typical 46 A  Overload/short-circuit indicator 46 A  Overload/short-circuit indicator 46 A  Overload/short-circuit indicator 5 Safety  Primary/secondary isolation 5 Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class 1 Class 1  leakage current 6 Ms 29  Protection (EN 60529) 1P20  Approvals  CE mark 7 Yes  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation 5 Indicator 1 Safety Protestion Indicator 1 Supply Ammonics limitation 1 -  Noise immunity EN 661000-6-2		
performance  Efficiency  Efficiency at Vout rated, lout rated, approx. Power loss at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ. Load step setting time 50 to 100%, typ. 2 ms Load step setting time 100 to 50%, typ. 2 ms setting time maximum 5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ. 46 A property of the output short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 46 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 Yes galvanic isolation Yes galvanic isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Protection class leakage current • maximum • typical Output output voltage Uout acc. to EN 60950-1 and EN 50178 Protection (EN 60529) Approvals CE mark Yes  EMC  Emitted interference Supply harmonics limitation - Noise immunity EN 61000-6-2		
Efficiency at Yout rated, lout rated, approx.  Efficiency at Yout rated, lout rated, approx.  Power loss at Yout rated, lout rated, approx.  131 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.  Load step setting time 50 to 100%, typ.  2 ms  Load step setting time 100 to 50%, typ.  2 ms  setting time maximum  5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  46 A  property of the output short-circuit proof  Short-circuit protection  Alternatively, constant current characteristic approx. 46 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  leakage current  • maximum  • typical  Output overvoltion (EN 60529)  Approvals  CE mark  Yes  EMC  Emitted interference  Supply harmonics limitation  - Noise immunity  EN 61000-6-2	·	2
Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Is 13 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  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.  Load step setting time 100 to 50%, typ.  2 ms  Load step setting time 100 to 50%, typ.  2 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  Property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  galvanic isolation  Protection class  Class I  leakage current  • maximum  • maximum  • whycical  Outproads  Outproads  • maximum  • whycical  • maximum  • typical  Outproads  Class I  leakage current  • maximum  • maximum  • typical  Outproads  Class I  leakage current  • maximum  • Typical  Outproads  Class I  leakage current  • maximum  • Typical  • maximum  • Typical  Outproads  Class I  leakage current  • maximum  • Typical  • Typical  Outproads  Class I  leakage current  • maximum  • Typical  • Typical  Output vertical current characteristic approx. 46 A or latching shutdown*  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  leakage current  • Typical  • Typi		
Power loss at Vout rated, lout rated, approx.  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ. Load step setting time 50 to 100%, typ. 2 ms Load step setting time 100 to 50%, typ. 2 ms setting time maximum 5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ. 46 A  Property of the output short-circuit proof Short-circuit protection  Alternatively, constant current characteristic approx. 46 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 Yes galvanic isolation Yes galvanic isolation • maximum • typical Degree of protection (EN 60529)  Approvats  CE mark Yes  Emitted interference Supply harmonics limitation - Noise immunity  EN 61000-6-2		88 %
Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.  Load step setting time 50 to 100%, typ.  setting time maximum  5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  46 A  property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  galvanic isolation  Protection class  leakage current  • maximum  • typical  O, 4 mA  Degree of protection (EN 60529)  Approvals  CE mark  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  1 %  2 ms  2 ms  4 %  A maximum  1 %  1 %  2 ms  4 6 A  7 ves  Alternatively, constant current characteristic approx. 46 A or latching shutdown  4 6 A  Overload/short-circuit indicator  Safety  Primary/secondary isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  leakage current  • maximum  • typical  O, 4 mA  Degree of protection (EN 60529)  Approvals  CE mark  EMC  Emitted interference  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2		
Dynamic mains compensation (Vin rated ±15 %), max.  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.  46 A  property of the output short-circuit proof  Short-circuit protection  Alternatively, constant current characteristic approx. 46 A or latching shutdown  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  galvanic isolation  Protection class  Class I  leakage current  • maximum  • typical  O,4 mA  Degree of protection (EN 60529)  Approvals  CE mark  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  FN 60000-6-2		101 W
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.  2 ms  setting time maximum  5 ms  Protection and monitoring  Output overvoltage protection  Current limitation, typ.  property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  Protection class  leakage current  • maximum  • typical  • typical  • typical  Overload/short-circuit conduction  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  leakage current  • maximum  • typical  • typical  Overload/short-circuit conduction  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2		4.0/
Load step setting time 50 to 100%, typ.  Load step setting time 100 to 50%, typ.  setting time maximum  The protection and monitoring  Output overvoltage protection  Current limitation, typ.  property of the output short-circuit proof  Short-circuit protection  enduring short circuit current RMS value  • typical  Overload/short-circuit indicator  Safety  Primary/secondary isolation  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  leakage current  • maximum  • typical  Output of Maximum  • Typical  Out		
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. 46 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  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  leakage current  maximum  maximum  typical		
setting time maximum 5 ms  Protection and monitoring  Output overvoltage protection < 35 V  Current limitation, typ. 46 A property of the output short-circuit proof Yes Short-circuit protection Alternatively, constant current characteristic approx. 46 A or latching shutdown  enduring short circuit current RMS value  • typical 46 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 0.4 mA  Degree of protection (EN 60529) IP20  Approvals  CE mark Yes  Emitted interference EN 55022 Class B  Supply harmonics limitation - Noise immunity EN 61000-6-2		
Protection and monitoring Output overvoltage protection		
Output overvoltage protection <a href="#">&lt; 35 V</a> Current limitation, typ. 46 A property of the output short-circuit proof Yes Short-circuit protection Alternatively, constant current characteristic approx. 46 A or latching shutdown enduring short circuit current RMS value • typical 46 A Overload/short-circuit indicator LED yellow for "overload", LED red for "latching shutdown"  Safety Primary/secondary isolation Yes galvanic 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 0.4 mA Degree of protection (EN 60529) IP20  Approvals CE mark Yes  EMC  Emitted interference EN 55022 Class B Supply harmonics limitation Noise immunity EN 61000-6-2		5 IIIs
Current limitation, typ.  property of the output short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 46 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 Yes galvanic isolation Protection class Class I leakage current  • maximum • typical Degree of protection (EN 60529)  Approvals  CE mark Yes  EMC  Emitted interference Supply harmonics limitation Noise immunity  46 A  A or latching Yes  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Yes  LED yellow for "overload", LED red for "latching shutdown"  Safety  CED yellow for "overload", LED red for "latching shutdown"  Safety  LED yellow for "overload", LED red for "latching shutdown"  Safety  Ves  Glass I  LED yellow for "overload", LED red for "latching shutdown"  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Protection class  Class I  LED yellow for "overload", LED red for "latching shutdown"  Safety  For extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  LED yellow for "overload", LED red for "latching shutdown"  Safety  For extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  LED yellow for "overload", LED red for "latching shutdown"  Safety  For extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  LED yellow for "overload", LED red for "latching shutdown"  Safety  For extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  For extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  EN 6100-6-6-1  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2		0.517
property of the output short-circuit proof Short-circuit protection Alternatively, constant current characteristic approx. 46 A or latching shutdown  enduring short circuit current RMS value • typical Overload/short-circuit indicator  Safety Primary/secondary isolation galvanic isolation Protection class leakage current • maximum • typical Degree of protection (EN 60529)  Approvals CE mark  EMC Emitted interference Supply harmonics limitation Noise immunity  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Balt current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Alternatively, constant current characteristic approx. 46 A or latching shutdown  Balt current characteristic approx. 46 A or latching shutdown  Balt current current characteristic approx. 46 A or latching shutdown  Balt current current characteristic approx. 46 A or latching shutdown  Balt current curr		
Short-circuit protection  Alternatively, constant current characteristic approx. 46 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  Yes galvanic isolation  Protection class  Class I  leakage current  • maximum  • typical  Degree of protection (EN 60529)  Approvals  CE mark  Yes  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  A6 A  A or latching shutdown  46 A  C lass I  LED yellow for "overload", LED red for "latching shutdown"  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  LED yellow for "overload", LED red for "latching shutdown"  Safety  Yes  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2		
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  Protection class  Protection class  leakage current  • maximum  • typical  Degree of protection (EN 60529)  Approvals  CE mark  Pres  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  A6 A  A  46 A  A  A  46 A  LED yellow for "overload", LED red for "latching shutdown"  Safety  Yes  Class I  LED yellow for "overload", LED red for "latching shutdown"  A6 A  A  A  A  Fres  LED yellow for "overload", LED red for "latching shutdown"  Safety  Primary/secondary isolation  A5 AF  A6 A  A  A  A  A  Begree for "latching shutdown"  A6 A  A  LED yellow for "overload", LED red for "latching shutdown"  A6 A  A  A  A  Begree for "latching shutdown"  Safety  AF  Byes  EMC  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2		
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  Protection class  Class I  leakage current  • maximum  • typical  Degree of protection (EN 60529)  Approvals  CE mark  Yes  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  A LED red for "latching shutdown"  46 A  LED yellow for "overload", LED red for "latching shutdown"  Safety  LED yellow for "overload", LED red for "latching shutdown"  A LED yellow for "overload", LED red for "latching shutdown"  Safety  Fyes  EN 50178  LED yellow for "overload", LED red for "latching shutdown"  Safety  Fyes  EN 55022 Class B  Supply harmonics limitation  - Noise immunity  EN 61000-6-2	Short-circuit protection	
● typical 46 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 0.4 mA  Degree of protection (EN 60529) IP20  Approvals  CE mark Yes  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation -  Noise immunity EN 61000-6-2	enduring short circuit current RMS value	Silutiowii
Overload/short-circuit indicator  Safety  Primary/secondary isolation  galvanic isolation  Protection class  leakage current  maximum  typical  Degree of protection (EN 60529)  Approvals  CE mark  EMC  Emitted interference  Supply harmonics limitation  LED yellow for "overload", LED red for "latching shutdown"  Yes  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  LED yellow for "overload", LED red for "latching shutdown"  Yes  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  LED yellow for "overload", LED red for "latching shutdown"  Yes  Class I  1920  Approvals  CE mark  Yes  EN 55022 Class B  Supply harmonics limitation  Noise immunity  EN 61000-6-2	-	46 A
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       0.4 mA         Degree of protection (EN 60529)       IP20         Approvals       CE mark         CE mark       Yes         EMC       EN 55022 Class B         Supply harmonics limitation       -         Noise immunity       EN 61000-6-2		
Primary/secondary isolation  galvanic isolation  Protection class  leakage current  maximum  typical  Degree of protection (EN 60529)  Approvals  CE mark  Emitted interference  Supply harmonics limitation  Noise immunity  Yes  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class I  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Final En Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 60950-1 and EN 609		LED yellow for overload, LED fed for fatching structown
galvanic isolation  Protection class  leakage current	-	Voc
Protection class  leakage current		
leakage current		
		Class I
● typical 0.4 mA  Degree of protection (EN 60529) IP20  Approvals  CE mark Yes  EMC  Emitted interference EN 55022 Class B  Supply harmonics limitation -  Noise immunity EN 61000-6-2		2.5 mA
Degree of protection (EN 60529)  Approvals  CE mark  Yes  EMC  Emitted interference  Supply harmonics limitation  Noise immunity  IP20  IP20  EN 55022 Class B  EN 61000-6-2		
Approvals CE mark Yes  EMC  Emitted interference EN 55022 Class B Supply harmonics limitation Noise immunity EN 61000-6-2		
CE mark Yes  EMC  Emitted interference EN 55022 Class B Supply harmonics limitation - Noise immunity EN 61000-6-2		IP2U
Emitted interference EN 55022 Class B Supply harmonics limitation - Noise immunity EN 61000-6-2		
Emitted interference       EN 55022 Class B         Supply harmonics limitation       -         Noise immunity       EN 61000-6-2		Yes
Supply harmonics limitation - Noise immunity EN 61000-6-2	EMC	
Noise immunity EN 61000-6-2	Emitted interference	EN 55022 Class B
	Supply harmonics limitation	-
environmental conditions	Noise immunity	EN 61000-6-2
	environmental conditions	

ambient temperature in horizontal mounting position during operation	0 60; with natural convection
ambient temperature during storage and transport	-40 +85
installation altitude at height above sea level maximum	6 000 m
ambient condition relating to ambient temperature - air pressure - installation altitude	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m
relative humidity with condensation acc. to IEC 60068-2-38 maximum	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation
chemical resistance to commercially available cooling lubricants	Yes; incl. diesel and oil droplets in the air
resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request
resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust
resistance to biologically active substances conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)
resistance to chemically active substances conformity acc. to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity acc. to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust
coating for equipped printed circuit board acc. to EN 61086	Yes; Class 2 for high availability
type of coating protection against pollution according to EN 60664-3	Yes; Type 1 protection
type of test of the coating acc. to MIL-I-46058C	Yes; Discoloration of the coating during service life possible
product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal Coating, Class A
Mechanics	
Connection technology	screw-type terminals
Connections	
<ul><li>Supply input</li></ul>	L, N, PE: 1 screw terminal each for 0.2 4 mm² single-core/finely stranded
<ul><li>Output</li><li>Auxiliary</li></ul>	+, -: 2 screw terminals each for 0.5 10 mm²
width of the enclosure	240 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	120 111111
	50 mm
• top	50 mm 50 mm
• bottom	
• left	0 mm
• right	0 mm
Weight, approx.	2.9 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
electrical accessories	Buffer module, signaling module
MTBF at 40 °C	540 249 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

