## **SIEMENS**

Data sheet 6EP1333-2BA20

SITOP PSU100S 24 V/5 A SITOP PSU100S 24 V/5 A STABILIZED POWER SUPPLY INPUT: 120/230 V AC OUTPUT: 24 V/5 A DC



Input	
Input	1-phase AC
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
• Note	Automatic range selection
Input voltage	
● 1 at AC	85 132 V
• 2 at AC	170 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at lout rated, min.	20 ms; at Vin = 93/187 V
Rated line frequency	50 60 Hz
Rated line range	47 63 Hz
Input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	2.34 A
<ul> <li>at rated input voltage 230 V</li> </ul>	1.36 A
Switch-on current limiting (+25 °C), max.	40 A
I²t, max.	1 A²·s

Efficiency at Vout rated, lout rated, approx.  88 %  Power loss at Vout rated, lout rated, approx.  16 W	Built-in incoming fuse	T 3,15 A/250 V (not accessible)
Output Controlled, isolated DC voltage Rated voltage Vout DC 24 V  Static mains compensation, approx. 0.1 %  Static load balancing, approx. 150 mV Residual ripple peak-peak, max. 150 mV  Spikes peak-peak, max. (bandwidth: 20 MHz) 240 mV  Spikes peak-peak, typ. (bandwidth: 20 MHz) 140 mV  Adjustment range 22.8 28 V  Product function Output voltage adjustable Yes  Output voltage setting via potentiometer via potentiometer Status display Green LED for 24 V OK  Spikeling peak-peak, typ. (bandwidth: 20 MHz) 150 mV  Real control (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"  On/off behavior Overshoot of Vout < 3 %  Startup delay, max. 0.3 s  Voltage rise, typ. 15 ms  Rated current value lout rated 5 A  Current range 0 6 A  Ga up to +45°C; +60 +70 °C: Derating 1.6%/K  Active power supplied typical 144 W  Short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical • at short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical 7 ex short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical 2 file A  • at short-circuit during operation typical 2 file A  • at short-circuit during operation typical 3 file A  File Control of the control o	Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic C
Output Controlled, isolated DC voltage Rated voltage Vout DC 24 V  Static mains compensation, approx. 0.1 %  Static load balancing, approx. 150 mV Residual ripple peak-peak, max. 150 mV  Spikes peak-peak, max. (bandwidth: 20 MHz) 240 mV  Spikes peak-peak, typ. (bandwidth: 20 MHz) 140 mV  Adjustment range 22.8 28 V  Product function Output voltage adjustable Yes  Output voltage setting via potentiometer via potentiometer Status display Green LED for 24 V OK  Spikeling peak-peak, typ. (bandwidth: 20 MHz) 150 mV  Real control (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"  On/off behavior Overshoot of Vout < 3 %  Startup delay, max. 0.3 s  Voltage rise, typ. 15 ms  Rated current value lout rated 5 A  Current range 0 6 A  Ga up to +45°C; +60 +70 °C: Derating 1.6%/K  Active power supplied typical 144 W  Short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical • at short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical 7 ex short-circuit during operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up typical 2 file A  • at short-circuit during operation typical 2 file A  • at short-circuit during operation typical 3 file A  File Control of the control o	Output	
Total tolerance, static ± 3 % Static mains compensation, approx. 0.1 % Static load balancing, approx. 1 % Residual ripple peak-peak, max. 150 mV Residual ripple peak-peak, max. 150 mV Spikes peak-peak, max. (bandwidth: 20 MHz) 240 mV Spikes peak-peak, max. (bandwidth: 20 MHz) 140 mV Adjustment range 22.8 28 V Product function Output voltage adjustable Yes Output voltage setting via potentioneter 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 < 3 % Startup delay, max. 0.3 s Voltage rise, typ. 15 ms Rated current value lout rated 5 A Current range 0 6 A Short-term overload current value fouring the start-up typical 0 4 ta W  Divastion of overloading capability for excess current 0 on short-circuit during operation typical 2 4 ta W  Duration of overloading capability for excess current 0 a short-circuit during operation with some of parallel switchable units for enhanced performance Yes  Parallel switching for enhanced performance Yes Fificiency at Vout rated, lout rated, approx. 88 % Power loss at Vout rated, lout rated, approx. 88 % Power loss at Vout rated, lout rated, approx. 16 W  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.		Controlled, isolated DC voltage
Static mains compensation, approx.  Static load balancing, approx.  Residual ripple peak-peak, typ.  Spikes peak-peak, kp.  Spikes peak-peak, kp.  Spikes peak-peak, typ.  Spikes peak-peak. Spikes. Spi	Rated voltage Vout DC	24 V
Static load balancing, approx.  Residual ripple peak-peak, max.  Residual ripple peak-peak, typ.  30 mV  Spikes peak-peak, typ.  Spikes peak-peak, typ.  Spikes peak-peak, typ.  Adjustment range  22.8 28 V  Product function Output voltage adjustable  Ves  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"  Signaling  Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"  On/off behavior  Overshoot of Vout < 3 %  Startup delay, max.  0.3 s  Voltage rise, typ.  15 ms  Rated current value lout rated  5 A  Current range  Note  Active power supplied typical  Short-term overload current  o nshort-circuiting during the start-up typical  a st short-circuit during operation typical  Parallel switching for enhanced performance  a t short-circuit during operation  Parallel switching for enhanced performance  Parallel switching for enhanced performance  Ficiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  By a minumic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  1 % Closed-loop control  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Total tolerance, static ±	3 %
Residual ripple peak-peak, max.  Residual ripple peak-peak, typ.  Spikes peak-peak, typ.  Spikes peak-peak, typ.  Adjustment range  22.8 28 V  Product function Output voltage adjustable  Yes  Output voltage setting  Status display  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 < 3 %  Startup delay, max.  0.3 s  Voltage rise, typ.  15 ms  Rated current value lout rated  5 A  Current range  • Note  • Note  • Note  • on short-circuiting during the start-up typical  • at short-circuit during operation typical  Duration of overloading capability for excess current  • on short-circuit during operation  • at short-circuit during operation  • at short-circuit during deperation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  150 mV  22.8 m. 28 V  23.8 m. 27 m	Static mains compensation, approx.	0.1 %
Residual ripple peak-peak, typ.  Spikes peak-peak, max. (bandwidth: 20 MHz)  Adjustment range  Product function Output voltage adjustable  Output voltage setting  Status display  Signaling  Chrofit behavior  Startup delay, max.  Voltage rise, typ.  Rated current value lout rated  Active power supplied typical  Short-eirrouiting during the start-up  • at short-circuit during operation  Parallel switchable units for enhanced performance  Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  140 mV  22.8 28 V  740 mV  240 mV  258 28 V  Pes  Output voltage setting  via potentiometer  Stable peak-peak, typ.  15 m partitioneter  25 A  26 A 4 D to +45°C; +60 +70 °C: Derating 1.6%/K  4 th W  26 A 4 D to +45°C; +60 +70 °C: Derating 1.6%/K  27 Derating 1.6%/K  28 A  28 B  28 B  29 B  20 B	Static load balancing, approx.	1 %
Spikes peak-peak, max. (bandwidth: 20 MHz)  Spikes peak-peak, typ. (bandwidth: 20 MHz)  Adjustment range  22.8 28 V  Product function Output voltage adjustable  Ves  Output voltage setting  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 < 3 %  Startup delay, max.  0.3 s  Outrent range  Note  Note  Active power supplied typical  **Ontor two every supplied typical  **at short-circuit during operation typical  **at short-circuiting during the start-up  **at short-circuiting during the start-up  **at short-circuiting during the start-up  **at short-circuiting for enhanced performance  Parallel switching for enhanced performance  Fificiency  Efficiency at Vout rated, lout rated, approx.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  140 VM  140 mV  22.8 28 V  22.8 28 V  22.8 28 V  22.8 28 V  24 V OK  Sepace  Via potentiometer  Via potentiometer  Via potentiometer  Via potentiometer  Vour short of Vout < 3 %  4 U V OK  5 Max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  240 mV  252 m 28 V  260 mV  260 mV  270 ment LeD for 24 V OK  Relay contact, rating 60 V DC/ 0.3 A) for "24 V OK"  Overshoot of Vout < 3 %  270 ment LeD for 24 V OK  Relay contact, rating 60 V DC/ 0.3 A) for "24 V OK"  Overshoot of Vout < 3 %  15 ms  Rate outrent value lout on 2 %  28 ment 29 v Overshoot of Vout < 3 %  28 ment 29 v Overshoot of Vout < 3 %  29 ment 29 v Overshoot of Vout < 3 %  29 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 ment 29 v Overshoot of Vout < 3 %  20 ment 29 v Overshoot of Vout < 3 ment 29 v Overshoot of Vout <	Residual ripple peak-peak, max.	150 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)  Adjustment range  22.8 28 V  Product function Output voltage adjustable  Ves  Output voltage setting  Via potentiometer  Status display  Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"  On/off behavior  Overshoot of Vout < 3 %  Startup delay, max.  0.3 s  Voltage rise, typ.  15 ms  Rated current value lout rated  5 A  Current range  • Note  Active power supplied typical  Short-term overload current  • on short-circuiting during the start-up typical  • at short-circuit during operation typical  Duration of overloading capability for excess current  • on short-circuiting during the start-up  • at short-circuiting during peration  Parallel switching for enhanced performance  Parallel switching for enhanced performance  Parallel switching for enhanced performance  Prower loss at Vout rated, lout rated, approx.  88 %  Power loss at Vout rated, lout rated, approx.  88 %  Power loss at Vout rated, lout rated, approx.  80 %  Nonax.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Residual ripple peak-peak, typ.	30 mV
Adjustment range 22.8 28 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 < 3 %  Startup delay, max. 0.3 s  Voltage rise, typ. 15 ms  Rated current value lout rated 5 A  Current range 0 6 A  • Note 6 A up to +45°C; +60 +70 °C; Derating 1.6%/K  Active power supplied typical 144 W  Short-term overload current  • on short-circuiting during the start-up typical 2 at short-circuiting operation typical 18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up 400 ms  • at short-circuit during operation 800 ms  Parallel switching for enhanced performance Yes  Numbers of parallel switchable units for enhanced performance  Ficiency  Efficiency at Vout rated, lout rated, approx. 88 %  Power loss at Vout rated, lout rated, approx. 16 W  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Product function Output voltage adjustable 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 < 3 % Startup delay, max. 0.3 s Voltage rise, typ. Rated current value lout rated 5 A Current range • Note Active power supplied typical Short-term overload current • on short-circuiting during the start-up typical at short-circuiting during the start-up • at short-circuit during operation at short-circuit during operation Startup for enhanced performance Ves Numbers of parallel switchable units for enhanced performance  Fificiency Efficiency at Vout rated, lout rated, approx. Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Spikes peak-peak, typ. (bandwidth: 20 MHz)	140 mV
Output voltage setting 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 < 3 % Startup delay, max. 0.3 s Voltage rise, typ. 15 ms Rated current value lout rated 5 A Current range Note Note Active power supplied typical Short-term overload current on short-circuiting during the start-up typical at short-circuit during operation typical Duration of overloading capability for excess current on short-circuiting during the start-up at short-circuiting during the start-up at short-circuiting for enhanced performance Ves Numbers of parallel switchable units for enhanced performance Fificiency Efficiency at Vout rated, lout rated, approx. Dynamic mains compensation (Vin rated ±15 %), max. Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Adjustment range	22.8 28 V
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 < 3 %  Startup delay, max.  Voltage rise, typ.  Rated current value lout rated  5 A  Current range  • Note  • Note  Active power supplied typical  Short-term overload current  • on short-circuiting during the start-up typical  • at short-circuit during operation typical  Duration of overloading capability for excess current  • on short-circuiting during the start-up  • at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Fificiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  88 %  Power loss at Vout rated, lout rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Product function Output voltage adjustable	Yes
Signaling  On/off behavior  Or/off behavior  Overshoot of Vout < 3 %  Startup delay, max.  0.3 s  Voltage rise, typ.  Rated current value lout rated  5 A  Current range  • Note  Active power supplied typical  Short-term overload current  • on short-circuiting during the start-up typical  • at short-circuiting during the start-up  • at short-circuiting during the start-up  • at short-circuiting during the start-up  • at short-circuiting for enhanced performance  Numbers of parallel switchable units for enhanced performance  Fificiency  Efficiency at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± type.	Output voltage setting	via potentiometer
On/off behavior  Startup delay, max.  O.3 s  Voltage rise, typ.  Rated current value lout rated  5 A  Current range  Note  Note  Active power supplied typical  Short-term overload current  on short-circuiting during the start-up typical  at short-circuiting during the start-up  on short-circuiting during the start-up  at short-circuiting during the start-up  on short-circuiting during the start-up  start-up  on short-circuiting during the start-up  on short-circuiting during the start-up  on short-circuiting during the start-up  start-up  on short-circuiting during the start-up  start-up  on short-circuiting during the start-up  on short-circuiting during the start-up  start-up  start-up  on short-circuiting during the start-up  start-u	Status display	Green LED for 24 V OK
Startup delay, max.  Voltage rise, typ.  Rated current value lout rated  5 A  Current range Note Note Active power supplied typical Short-term overload current on short-circuiting during the start-up typical at short-circuiting during the start-up on short-circuitid during operation typical  Duration of overloading capability for excess current on short-circuitid during operation at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Ficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
Voltage rise, typ.  Rated current value lout rated  5 A  Current range  Note  Note  6 A up to +45°C; +60 +70 °C: Derating 1.6%/K  Active power supplied typical  Short-term overload current  on short-circuiting during the start-up typical  at short-circuit during operation typical  Puration of overloading capability for excess current  on short-circuiting during the start-up  at short-circuiting during the start-up  short-circuiting during the start-up  short-circuiting during the start-up  short-circuit during operation  800 ms  Parallel switching for enhanced performance  Yes  Numbers of parallel switchable units for enhanced performance  Fificiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	On/off behavior	Overshoot of Vout < 3 %
Rated current value lout rated  Current range Note  Note  Active power supplied typical Short-term overload current on short-circuiting during the start-up typical at short-circuit during operation typical on short-circuiting during the start-up at short-circuit during operation Short-term overload current at short-circuit during operation typical at short-circuit during operation Short-term overloading capability for excess current at short-circuit during operation at short-circuit during operation Short-term overloading capability for excess current at short-circuit during operation at short-circuit during operation Short-term overloading capability for excess current at short-circuit during operation at short-circuit during operation Short-term overloading capability for excess current at short-circuit during operation at short-circuit during operation Short-term overloading overloading operation typical short-circuit during operation short-circuit	Startup delay, max.	0.3 s
Current range  Note  Note  Active power supplied typical  Short-term overload current  on short-circuiting during the start-up typical  at short-circuit during operation typical  Duration of overloading capability for excess current  on short-circuit during operation  at short-circuit during operation  value at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Fificiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Voltage rise, typ.	15 ms
Note     6 A up to +45°C; +60 +70 °C: Derating 1.6%/K  Active power supplied typical  Short-term overload current      on short-circuiting during the start-up typical     at short-circuit during operation typical  Ouration of overloading capability for excess current     on short-circuiting during the start-up     at short-circuiting during the start-up     at short-circuit during operation  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.  Power loss at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Rated current value lout rated	5 A
Active power supplied typical  Short-term overload current  on short-circuiting during the start-up typical at short-circuit during operation typical  on short-circuiting during the start-up typical at short-circuit during operation typical at short-circuiting during the start-up at short-circuiting during the start-up at short-circuit during operation  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.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Current range	0 6 A
Short-term overload current  • on short-circuiting during the start-up typical  • at short-circuit during operation typical  18 A  Duration of overloading capability for excess current  • on short-circuiting during the start-up  • at short-circuiting during the start-up  • at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Performance  Efficiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	• Note	6 A up to +45°C; +60 +70 °C: Derating 1.6%/K
on short-circuiting during the start-up typical     at short-circuit during operation typical  Duration of overloading capability for excess current     on short-circuiting during the start-up     at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Pefficiency  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Active power supplied typical	144 W
at short-circuit during operation typical  Duration of overloading capability for excess current  on short-circuiting during the start-up  at short-circuit during operation  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.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  18 A  800 ms  800 ms  2  2  488  89  89  80  80  80  80  80  80  80	Short-term overload current	
Duration of overloading capability for excess current  • on short-circuiting during the start-up  • at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  **Fficiency**  Efficiency**  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  **Closed-loop control**  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.  **The start-up 800 ms 800 ms 900 ms  **Efficiency**  2  **The start-up 800 ms 900 ms  2  **The start-up 800 ms 900 ms  2  **The start-up 800 ms  88 %  **Power loss at Vout rated, lout rated, approx.  16 W  **Closed-loop control**  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	<ul> <li>on short-circuiting during the start-up typical</li> </ul>	18 A
on short-circuiting during the start-up     at short-circuit during operation  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.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	<ul> <li>at short-circuit during operation typical</li> </ul>	18 A
• at short-circuit during operation  Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Duration of overloading capability for excess current	
Parallel switching for enhanced performance  Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	<ul> <li>on short-circuiting during the start-up</li> </ul>	800 ms
Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	at short-circuit during operation	800 ms
Numbers of parallel switchable units for enhanced performance  Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Parallel switching for enhanced performance	Yes
Efficiency  Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.		2
Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	performance	
Efficiency at Vout rated, lout rated, approx.  Power loss at Vout rated, lout rated, approx.  16 W  Closed-loop control  Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Efficiency	
Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.		88 %
Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Power loss at Vout rated, lout rated, approx.	16 W
Dynamic mains compensation (Vin rated ±15 %), max.  Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	Closed-loop control	
Dynamic load smoothing (lout: 10/90/10 %), Uout ± typ.	<u>`</u>	0.3 %
typ.	max.	
Load step setting time 10 to 90%, typ. 1 ms		3 %
	Load step setting time 10 to 90%, typ.	1 ms

Protection and monitoring	
	ainst overvoltage in case of internal fault Vout < 33 V
Current limitation 6 7.1 A	
Property of the output Short-circuit proof Yes	
Short-circuit protection Constant cur	rent characteristic
Enduring short circuit current RMS value	
• typical 7.1 A	
Overcurrent overload capability in normal operation overload cap	ability 150 % lout rated up to 5 s/min
Overload/short-circuit indicator -	
Safety	
Primary/secondary isolation Yes	
Galvanic isolation Safety extra- 50178	ow output voltage Uout acc. to EN 60950-1 and EN
Protection class Class I	
Leakage current	
• maximum 3.5 mA	
• typical 0.4 mA	
CE mark Yes	
UL/CSA approval	
	(UL 508, CSA C22.2 No. 107.1), File E197259, A C22.2 No. 60950-1, UL 60950-1, UL 1604)
cCSAus (CS.	nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; A C22.2 No. 213-M1987, ANSI/ISA-12.12.01-2007) 2, Group ABCD, T4
Certificate of suitability IECEx Yes	, ,
Certificate of suitability NEC Class 2 No	
FM approval -	
CB approval Yes	
Marine approval GL, BV	
Degree of protection (EN 60529) IP20	
EMC	
Emitted interference EN 55022 CI	ass B
Supply harmonics limitation EN 61000-3-	2
Noise immunity EN 61000-6-	2
Operating data	
-	
Ambient temperature	
Ambient temperature	
Ambient temperature  • during operation  -25 +70 °C	convection
Ambient temperature  ● during operation  — Note  -25 +70 °C  with natural of	convection

Mechanics	
Connection technology	screw-type terminals
Connections	
Supply input	L, N, PE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded
<ul><li>Output</li></ul>	+, -: 2 screw terminals each for 0.5 2.5 mm²
<ul><li>Auxiliary</li></ul>	Alarm signals: 2 screw terminals for 0.5 2.5 mm²
Width of the enclosure	50 mm
Height of the enclosure	125 mm
Depth of the enclosure	120 mm
Weight, approx.	0.5 kg
Product property of the enclosure housing for side- by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Electrical accessories	Buffer module
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)