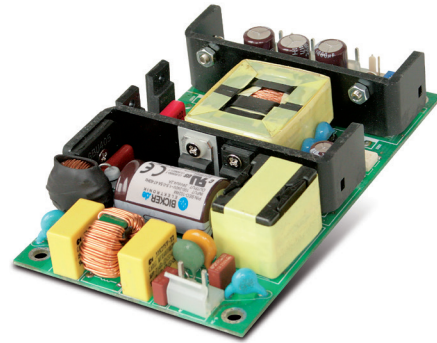


## BEO-1000M

100 Watt

- ✓ Tested for industrial and medical applications
- ✓ Extremely slim, installation height only 26.7 mm!
- ✓ 100 Watt continuous fanless power

The power supply series BEO-1000M is characterized by its high efficiency of up to 91 % and a very low standby uptake rate of <0.5 watts. It delivers its full power of 100 watts up to an ambient temperature of +50 °C without active cooling. Thanks to the high quality of the installed parts and its excellent circuit design, high reliability and long economic life are guaranteed. The BEO-1000M series is tested for medical and industrial applications.



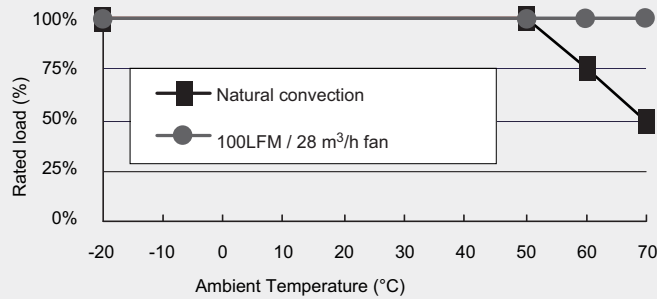
**No update to EN60601-1 Edition 3.1!  
For new designs we recommend the BEO-1500M!**

Technical data	
Input voltage	90...264 V AC, active PFC
Input frequency	47...63 Hz
Input current	1.5 A (100 V AC) / 0.5 A (240 V AC)
Inrush current	<80 A (240 V AC)
Efficiency	83...91 % depending on model
Standby consumption	<0.5 W at 0 A load
Hold up time	App. 16 ms (115 V AC)
Protection	Short circuit protection: Switch off with auto recovery Overload protection: App. 150 % typ., switch off with auto recovery Overvoltage protection: Switch off
Insulation voltage	Input/Output 5971 VDC (2xMOPP) Input/FG 2279 VDC (1xMOPP) Output/FG 2121 VDC (1xMOPP)
Insulation resistance	Input/Output and Input/FG 100 MΩ at 500 VDC test voltage
Line regulation	±0.5 % at nominal load and input voltage change from 90 to 264 V AC
Load regulation	±1 % (A1, load step from 100 % to 10 %)
Earth leakage current	<100 μA (264 V AC / 63 Hz)
Safety / EMC	EN60950-1, UL60950-1, CE, IEC60601-1:2005 (3rd Edition), EN60601-1:2006 (3rd Edition), ANSI/AAMI ES60601-1:2005 (3rd Edition)
Temperature	Operating: -20...+70 °C / Storage: -20...+85 °C
Derating	+50...+70 °C, 2.5 % / °C (fanless)
Max. operating altitude	3000 m
MTBF	200 000 h according to MIL-HDBK-217F at +25 °C
Humidity	Operating: 10...85 % RH, non-condensing / Storage: 10...90 % RH, non-condensing
Dimensions (WxDxH)	76.2 x 127 x 26.7 mm ±1 mm
Weight (net)	0.27 kg
Product specific data	
Remote sense	Control range 0.5 V
Adjustment range / VR	±5 %

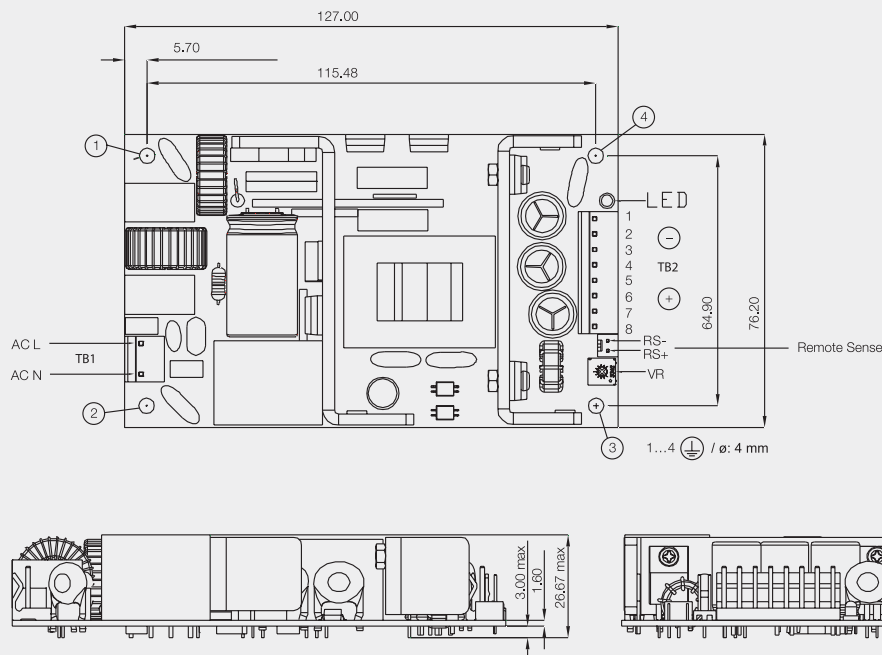
Article No.	Output voltage	Output current		Ripple & Noise	Efficiency
		min	max load		
BEO-1005M	+5 V	0 A	20 A	<100 mV <sub>SS</sub>	83 %
BEO-1012M	+12 V	0 A	8.4 A	<120 mV <sub>SS</sub>	89 %
BEO-1015M	+15 V	0 A	6.7 A	<150 mV <sub>SS</sub>	89 %
BEO-1018M	+18 V	0 A	5.6 A	<180 mV <sub>SS</sub>	90 %
BEO-1024M	+24 V	0 A	4.2 A	<240 mV <sub>SS</sub>	91 %
BEO-1028M	+28 V	0 A	3.6 A	<280 mV <sub>SS</sub>	91 %
BEO-1036M	+36 V	0 A	2.8 A	<360 mV <sub>SS</sub>	91 %
BEO-1048M	+48 V	0 A	2.1 A	<480 mV <sub>SS</sub>	91 %

100 W continuous power without fan (-20...+50 °C), from +50...+70 °C a 100 LFM/28 m<sup>3</sup>/h fan is needed. Ripple and Noise was measured by a 20 MHz bandwidth limited oscilloscope with connected 100 nF and 220 µF capacitors at the output.  
As a power component this PSU is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards.

## Derating



## Drawing BEO-1000M



### Connector:

TB1: AC input / Molex 0009501031 or identical  
TB2: DC output / Molex 0009501081 or identical  
PIN1,2,3,4: (-), PIN5,6,7,8: (+)

Tolerance ±1 mm

## Optional Accessories

▷▷▷ For detailed information please visit our website [www.bicker.de](http://www.bicker.de) and refer to the article number.

### CB-BEO-1000M | DC output cable

8-pole, length 600 mm, AGW 18, ends open



### PSZ-1007 | Cover

Chassis for BEO-1000M and BEO-1500M



### PSZ-1009 | Male adapter

DCplug: 2.5 x 5.5 mm, AWG 26-12



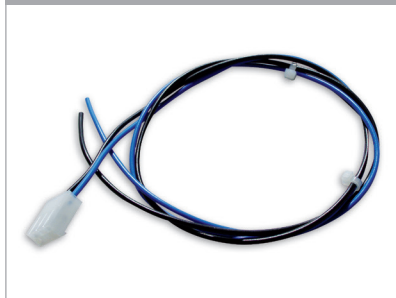
### PSZ-1019 | EMC-Filter

IEC connector filter incl. cable and ferrite



### X1-024 | AC input cable

2-pole, length 620 mm, AWG18, ends open



### X1-061 | AC input cable

3-pole, length 600 mm, AWG18, ends open, M3 ring terminal



### X1-061-B2 | AC input cable

3-pole, length 610 mm, AWG18, ends open, M4 ring terminal  
For Chassis mounting



Power supplies

Specification is subject to change without notice. Errors excepted. Status as at: 25.09.2017