

# AS-i Power Supply 1,8 A

## AS-i Power Supply 1,8 A

AS-i Installation Power supply from 115 V<sub>AC</sub> up to 250 V<sub>AC</sub>

Primary switched-mode regulator 31,2 V/1,8 A

LED operation indicator



### Article no. BW2255 AS-i Power Supply 1,8 A

The power supply is continuous idle running protected and thus delivers a variable direct current of 0 - 1,8 A as output current.

Temperature indication and curve is based on the ambient temperatures from -5°C up to 40°C specified by the AS-i norm. However, the power supply is operating until an ambient temperature

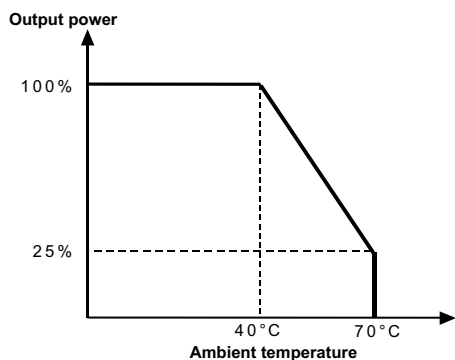
of approx. 60°C with nominal load. With higher temperatures the output voltage, that is the total power is adjusted and so the power supply is protected from destruction.

When temperature falls below 60°C, the power supply will again work in normal operation mode.

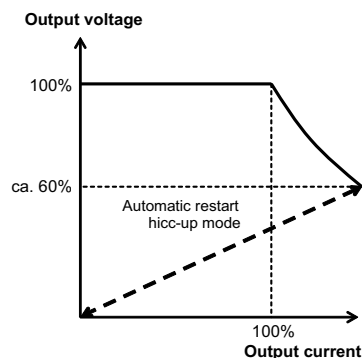
Article no	BW2255
<b>Input</b>	
Nominal input voltage	100 - 240 V <sub>AC</sub> , 47 - 63 Hz
Input voltage	94 - 265 V <sub>AC</sub>
Nominal input current	0,65 A at 230 V <sub>AC</sub> ; 1,0 A bei 115 V <sub>AC</sub>
Peak inrush current	$I_t^2 < 1,5 \text{ A}^2\text{s}$
Power factor cos $\varphi$	0,4 capacitive at 230 V <sub>AC</sub> ; 0,55 capacitive at 115 V <sub>AC</sub>
Applicable wire size of input clamps	0,5 ... 2,5 mm <sup>2</sup> (AWG20 ... AWG13)
Tightening torque of the input clamps	0,6 - 0,8 Nm
Insulation stripping length	10 mm
<b>Output</b>	
Output voltage U <sub>out</sub>	31,2V ± 3%
Output current I <sub>out</sub>	0 - 1,8 A
Ripple	< 50 mV <sub>pp</sub> (0 ... 10 kHz); < 10 mV <sub>pp</sub> (35 ... 500 kHz)
Current limitation typ.	2,3 A
Efficiency typ.	88%
Applicable wire size of output clamps	0,5 ... 2,5 mm <sup>2</sup> (AWG20 ... AWG13)
Tightening torque of the output clamps	0,6 - 0,8 Nm
Insulation stripping length	10 mm
<b>Regulation</b>	
Line regulation	< 0,2% at U <sub>in</sub> = 230 V <sub>AC</sub> ± 15%
Load regulation	< 0,5% at 0 A → 1,8 A
Dynamics	< 2 ms at 10 ↔ 90% (I <sub>out max</sub> ), peaks < 2%
<b>Protection and monitoring</b>	
Internal fuse	T2,5 A / 250 V TR5 IEC 60 127-3/IV
Current limitation	Protected against continuous short circuit (see diagram)
Overload protection	yes
Idle running protection	yes
Hold-up time	> 65 ms bei U <sub>in</sub> = 230 V <sub>AC</sub> ; > 10 ms bei U <sub>in</sub> = 115 V <sub>AC</sub>
<b>Safety</b>	
Output	Safety extra low voltage SELV
Protective system (EN 60 529)	Class II
Protection category	IP20
Leakage current	< 0,25 mA (47 - 63 Hz line frequency)
<b>EMV CE-certified</b>	
RFI suppression	EN 55 011, EN 50 082-1, EN 61 000-6-2
	EN 55 022, EN 55 011 class B

Static discharge ESD ref. (IEC 61 000-4-2)	8 kV contact discharge, 15 kV free air discharge (EN 61 000-4-2)
Electromagnetic fields ref. (IEC 61 000-4-3)	10 V/m (EN 61 000-4-3)
Burst ref. (IEC 61 000-4-4)	4 kV input, 2kV output/capacitive coupling clamp (EN 61 000-4-4)
Surge ref. (IEC 61 000-4-5)	4 kV unsymmetrical (EN 61 000-4-5)
Conducted disturbances ref. (IEC 61 000-4-6)	10V, 150 kHz ... 80 MHz (EN 61 000-4-6)
<b>AS-i Certification</b>	
AS-i Certification	Pending
<b>Operational data</b>	
Temperature range	-10°C ... +40°C, by free convection (start from -25°C)
Power derating	2,5% / K from +40°C (see diagram)
Storage temperature	-25°C ... +85°C
Max. tolerable shock load	10g, 11 ms, acc. EN 60068-2-27
Max. tolerable vibration stress	5 ... 9 Hz 7 mm <sub>pp</sub> /9 ... 500 Hz 10g, acc. EN 60068-2-6
<b>Displays</b>	
LED green	The green LED indicates normal operation (0 A ... 1,8 A)
<b>Mounting</b>	
Mounting position	vertikal as shown in figure
Input terminals	upper side
Output terminals	lower side
<b>Assembly</b>	Plastic slider for fastening to mounting rails DIN EN 50 022-35
<b>Mechanics</b>	
Dimensions max. (W / H / D):	45 / 72 / 105
Weight	approx. 0,2 kg

## Derating



## Current limitation curve



## Connections



## Dimensions (size in mm)



