30 V Power Supplies,1 phase

30 V power supplies, 1 phase

3 A, 100 W

Suitable for UL class 2 circuits

LED operation indicator

Suitable for Safety and standard Masters/Gateways with the option "1 Gateway, 1 Power Supply for 2 AS-i networks, inexpensive power supplies"

optimized for use in ASi-5 networks

(figure similar)

Figure	Power supply [1]	Input voltage	Output voltage	Output current	Nominal power	Data decoupling coils [2]	Protection rating	Article No.
	30 V power supply, NEC class 2, optimized for ASi-5/ASi-3	100 ... 240 VAC, 1 phase	30 ... 31.2 VDC	3 A	100 W	integrated in the gateway	IP20	**BW4223**

(1) **ASi power supply:**
Special power supplies with integrated data decoupling unit for use in ASi-3 only networks. Suitable for all Bihl+Wiedemann ASi-3 gateways and safety monitors.

30 V power supply, NEC class 2, optimized for ASi-5/ASi-3:
The 30 V/3 A power supply is **UL certified (according to UL 508)**, has power limitation <100 W and is designed for use in **NEC class 2** networks. It is suitable for applications with 1 power supply per ASi network. In the case of power intensive applications, Bihl+Wiedemann recommends the use of a 30 V power supply without 100 W power limitation in combination with a power limitation module (BWU4189) for each ASi network.
The power supply is optimized for use with ASi-5/ASi-3 gateways and safety monitors with integrated decoupling coils (version "1 power supplies, 1 gateway for 2 ASi networks, inexpensive power supplies") and with all 24 V ASi-5/ASi-3 gateways.
In order to avoid interferences in ASi-5 communication, Bihl+Wiedemann recommends the use of power supplies optimized for ASi-5/ASi-3.

(2) **Integrated in the power supply:**
Data decoupling is performed in the special ASi power supply with integrated data decoupling unit. ASi gateways and safety monitors missing their own, integrated data decoupling unit require a special ASi power supply for each ASi network.

Integrated in the gateway:
Bihl+Wiedemann ASi gateways and safety monitors with integrated data decoupling unit (version "1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies") can be operated with an inexpensive 30 V standard power supply.

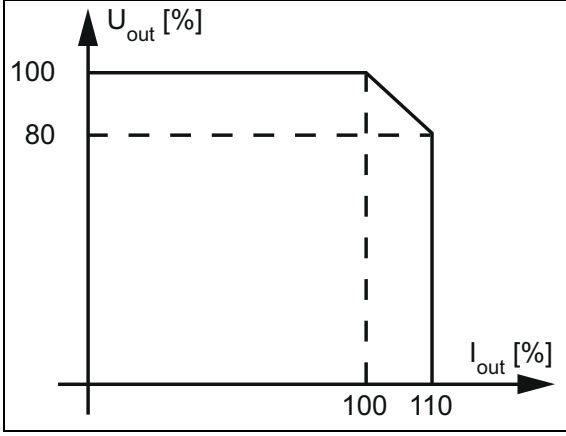
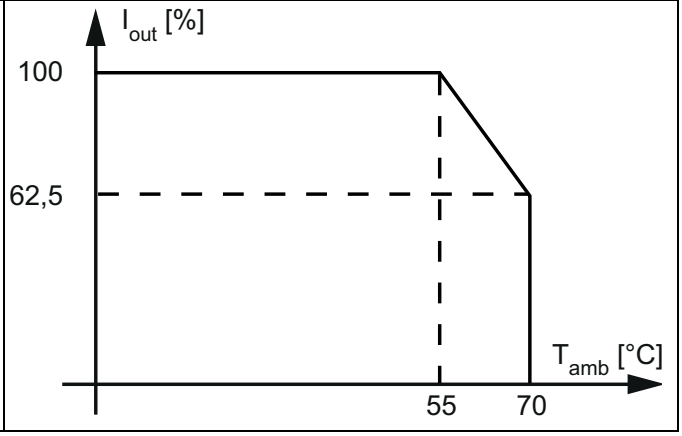
30 V Power Supplies,1 phase

Article No.	BW4223
Input	
Nominal voltage	100 ... 240 V_{AC}
Voltage range	85 ... 264 V_{AC}
Voltage derating	-2.5%/V_{AC} < 95 V_{AC}
Frequency range	47 ... 63 Hz
Nominal current (nominal load)	1.81 A at 100 V_{AC}; 0.91 A at 230 V_{AC}
Inrush current limitation	< 20 A, NTC
Turn-on time	0.10 s at 100 V_{AC}; 0.32 s at 230 V_{AC}
Mains buffer time	13 ms at 100 V_{AC}; 100 ms at 230 V_{AC}
Recommended power circuit breaker 8characteristics)	6 A, 10 A, 16 A (B, C)
Surge voltage protection (varistor)	yes
Output	
Nominal voltage	31 V_{DC}
Voltage range	30 ... 31.2 V_{DC}
Direct current	3 A
Nominal power	< 100 W
Current limitation (typical)	3.3 A
Parallel operation	no
Serial operation	yes (no class II)
Power losses (stand-by/nominal load)	2.3 W/14 W
Max. power losses	15 W at 264 V_{AC}/30.5 V/3 A
Efficiency (typical)	88%
Ripple (typical)	< 20 mV_{ss}
Resistance to reverse feed	max. 35 V_{DC}
Protection against internal surge voltage	max. 40 V_{DC}
Display	
LED POWER (green)	U_{out} >28,5 V_{DC}, relay contact "DC OK" closed
Connection	
Input/output	push-in terminals
Nominal cross section input	0.2 ... 2.5 mm^2 (AWG 24 ... 12)
Nominal cross section output	0.2 ... 2.5 mm^2 (AWG 24 ... 12)
Nominal cross section DC OK	0.2 ... 2.5 mm^2 (AWG 24 ... 12)

Article No.	BW4223
Environment	
Applied standards	EN 61010-1 EN 61010-2-201 EN 60335-1 IEC 60364-4-41 (DIN VDE 0100-410) EMV acc. EN 61204-3 CE acc. 2014/30/EU
Operating altitude	max. 2000 m
Ambient temperature	-25 °C … +70 °C (no condensation permitted)
Storage temperature	-25 °C … +85 °C
Housing	plastic, for DIN rail mounting
Required mounting distance (left/right)	–
Required mounting distance (over/under)	50 mm
Protection class acc. EN 61140	I
Overvoltage category	III
Pollution degree	2
Protection category acc. EN 60529	IP20
Weight	390 g
Dimensions (W / H / D in mm)	52 / 90 / 111

BW4223

Output characteristic



Derating: -2,5%/C > +55 °C