

30 V Power Supplies, 1 phase



30 V power supplies, 1 phase

4 A, 8 A or 16 A

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⁾	Operating voltage	Output voltage	Output current	Nominal power	Data decoupling ⁽²⁾	Protection rating	Article No.
	30 V power supply, optimized for ASi-5/ASi-3	100 ... 240 VAC, 1 phase	30 ... 31.2 VDC	4 A	120 W	integrated in the gateway	IP20	BW4218
	30 V power supply, optimized for ASi-5/ASi-3	100 ... 240 VAC, 1 phase	30 ... 31.2 VDC	8 A	240 W	integrated in the gateway	IP20	BW4219
	30 V power supply, optimized for ASi-5/ASi-3	100 ... 240 VAC, 1 phase	30 ... 31.2 VDC	16 A	480 W	integrated in the gateway	IP20	BW4221

(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:

Inexpensive standard power supplies, suitable as an alternative for use with ASi gateways and safety monitors with integrated data decoupling unit (version "1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies") and with all 24 Volt ASi gateways.

30 V power supply, optimized for ASi-5/ASi-3:

Inexpensive standard power supplies, optimized for use with ASi-5/ASi-3 gateways and safety monitors with integrated data decoupling unit (version "1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies") and with all 24 Volt 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 an 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.

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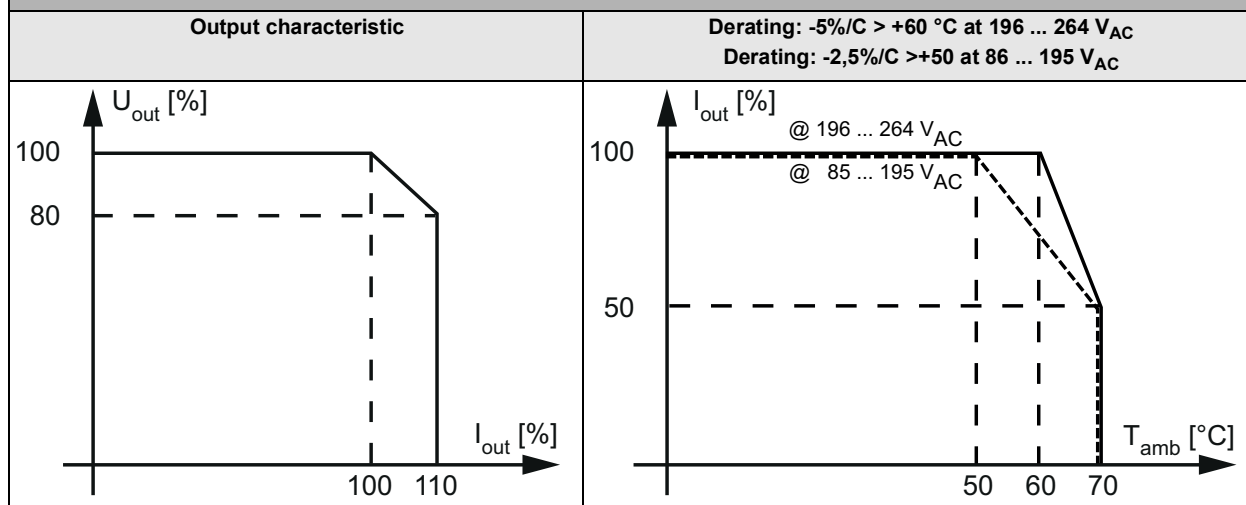
Article No.	BW4218		BW4219	BW4221
Input				
Nominal voltage	100 ... 240 V _{AC}			
Voltage range	85 ... 264 V _{AC}			
Voltage derating	-2.5%/V _{AC} < 97 V _{AC}	-2.5%/V _{AC} < 100 V _{AC}		
Frequency range	47 ... 63 Hz			
Nominal current (nominal load)	2.30 A at 100 V _{AC} ; 1.24 A at 230 V _{AC}	2.74 A at 100 V _{AC} ; 1.25 A at 230 V _{AC}	5.56 A at 100 V _{AC} ; 2.23 A at 230 V _{AC}	
Inrush current limitation	< 20 A, NTC	< 20 A, NTC active		
Turn-on time	0.25 s at 100 V _{AC} ; 0.20 s at 230 V _{AC}	1.30 s at 100 V _{AC} ; 0.25 s at 230 V _{AC}	0.45 s at 100 V _{AC} ; 0.20 s at 230 V _{AC}	
Mains buffer time	10 ms at 100 V _{AC} ; 80 ms at 230 V _{AC}	15 ms at 100 V _{AC} ; 17 ms at 230 V _{AC}	8 ms at 100 V _{AC} ; 20 ms at 230 V _{AC}	
Internal fuse	4 AT	6.3 AT	10 AT	
Recommended power circuit breaker (characteristics)	6 A, 10 A, 16 A (B, C)	10 A, 16 A (B, C)		
Surge voltage protection (varistor)	yes			
Output				
Nominal voltage	31.0 V _{DC}			
Voltage range	30 ... 31.2 V _{DC}			
Direct current	4 A	8 A	16 A	
Nominal power	120 W	240 W	480 W	
Current limitation (typical)	4.5 A, short-circuit and open-circuit proof	8 ... 9 A, short-circuit and open-circuit proof	17 A, short-circuit and open-circuit proof	
Parallel operation	yes			
Serial operation	yes			
Power losses (stand-by/nominal load)	1.2 W/1.6 W at 230 V _{AC}	6.6 W/24.4 W at 230 V _{AC}	7.2 W/42.4 W at 230 V _{AC}	
Max. power losses	19.4 W at 100 V _{AC} /30.5 V/4 A	31.3 W at 100 V _{AC} /30.5 V/8 A	68.3 W at 100 V _{AC} /30.5 V/16 A	
Efficiency (typical)	89%	91%	92%	
Ripple (typical)	< 30 mV _{ss}	< 50 mV _{ss}	< 70 mV _{ss}	
Resistance to reverse feed	max. 35 V _{DC}			
Protection against internal surge voltage	max. 41 V _{DC}	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)			0.75 ... 8 mm ² (AWG 20 ... 8)
Nominal cross section DC OK	0.2 ... 2.5 mm ² (AWG 24 ... 12)			

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Article No.	BW4218	BW4219	BW4221
Environment			
Applied standards	EN 61010-1, UL 61010-1 EN 61010-2-201, UL 61010-2-201 IEC 60364-4-41 (DIN VDE 0100-410) EMV acc. EN 61204-3 CE acc. 2014/30/EU		
	EN 60335-1	–	
UL reference number	PC-0130-040-0	PC-0130-080-0	PC-0130-160-0
Operating altitude	max. 2000 m		
Ambient temperature	-25 °C ... +70 °C (no condensation permitted)		
Storage temperature	-25 °C ... +85 °C		
Housing	aluminum, cover 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	590 g	930 g	1600 g
Dimensions (W / H / D in mm)	42 / 127 / 126	55 / 127 / 160	95 / 127 / 158

BW4218, BW4219, BW4221





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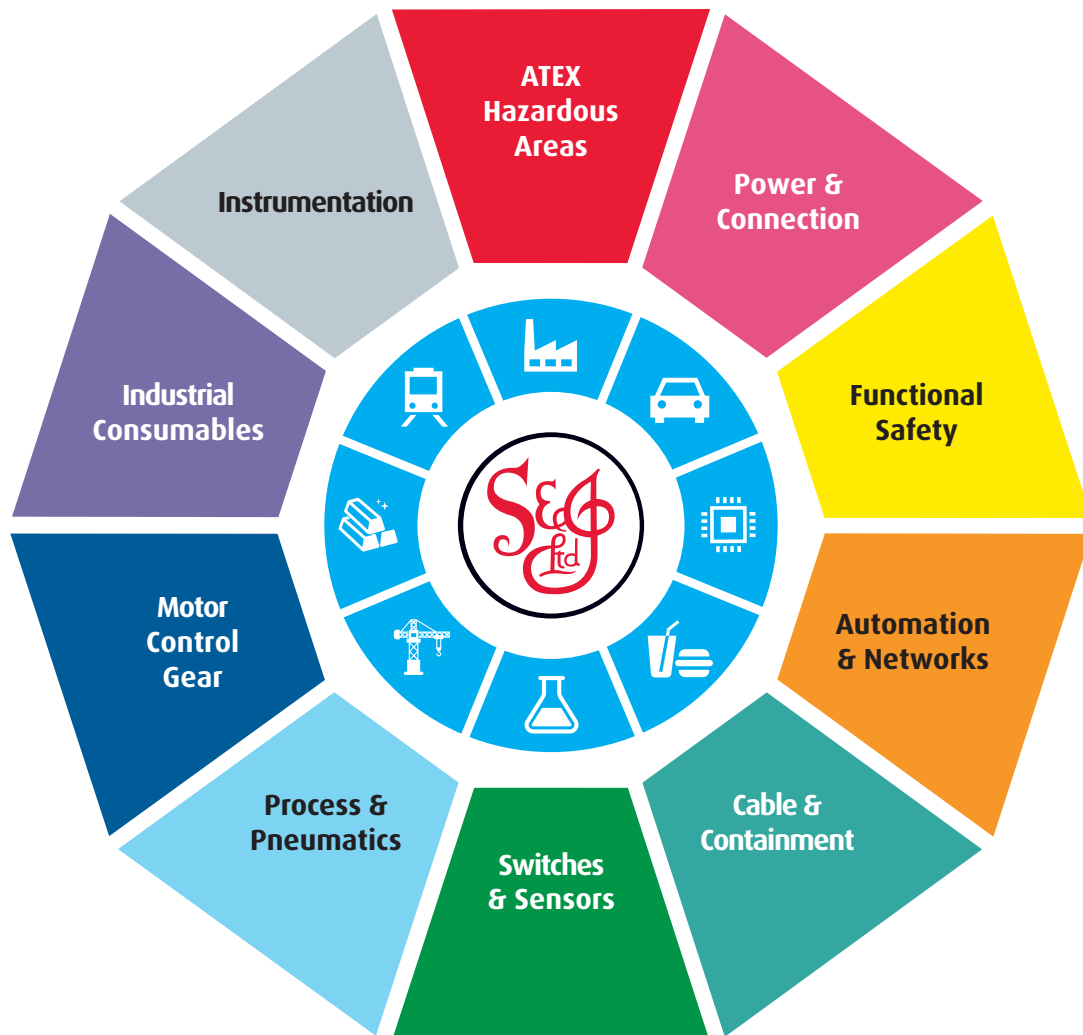
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