TECHNICAL DATA

ABB i-bus® KNX
SV/S
KNX-Power Supplies

Description of product
KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled from the power supply by an integrated choke.

The voltage output is short-circuit and overload protected.

The two-color LED indicates device output status.

Device type SV/S 30.640.3.1 has an additional 30 V DC short-circuit and overload protected voltage output that can be used to power an additional bus line (in combination with a separate choke).

Technical data			
Supply	Supply voltage U_s	100 – 240 V AC, 50/60 Hz (85…265 V AC)	
	Power consumption - SV/S 30.160.1.1 - SV/S 30.320.1.1 - SV/S 30.640.3.1	Normal operation 6.6 W 12.5 W 24 W	Maximum 21 W 30 W 55 W
	Power loss - SV/S 30.160.1.1 - SV/S 30.320.1.1 - SV/S 30.640.3.1	Normal operation 1.8 2.5 W 4 W	Maximum 4.4 6 W 9 W
Outputs	KNX voltage output I_1 - Rated voltage U_N - Minimum distance between 2 SV/S in one line	1 line with integrated choke 30 V DC +1/-2 V, SELV 200 m (KNX bus line)	
	Voltage output I_2 (SV/S 30.640.3.1 only) - Rated voltage U_N	without choke 30 V DC +1/-1 V, SELV The voltage output without choke may only be used to power an additional bus line in combination with a separate choke.	
	Current - SV/S 30.160.1.1 - SV/S 30.320.1.1 - SV/S 30.640.3.1 (total current I_1 and I_2)	Rated current I_N 160 mA 320 mA 640 mA	
	Current - SV/S 30.160.1.1 - SV/S 30.320.1.1 - SV/S 30.640.3.1 (total current I_1 and I_2)	Overload current I_{Ovl} 0.3 A 0.5 A 0.9 A	
	Current - SV/S 30.160.1.1 - SV/S 30.320.1.1 - SV/S 30.640.3.1 (total current I_1 and I_2)	Short-circuit current I_{Sc} 0.5 A 0.8 A 1.4 A	
	Power failure buffering time	200 ms	
Connections	KNX	Bus connection terminal	
	Mains voltage input	Screw terminal 0.2…2.5 mm^2 fine-strand 0.2…4 mm^2 solid	
	Tightening torque	Maximum 0.6 Nm	
Operating and display elements	LED status (two-colored green/red)	Green: $I < I_{Ovl}$ Red: overload. Red, flashing: short-circuit	

Degree of protection	IP 20	EN 60 529
Protection class	II	EN 61 140
Isolation category	Overvoltage category	III under EN 60 664-1
	Pollution degree	2 under EN 60 664-1
Temperature range	Operation	- 5 °C...+45 °C
	Storage	-25 °C...+55 °C
	Transport	-25 °C...+70 °C
Ambient conditions	Maximum air humidity	93 %, no condensation allowed
Design	Modular installation device (MDRC)	Modular installation device, Pro M
	Main dimensions	90 x 72 x 64.5 mm (H x W x D)
	Mounting width	4 x 18 mm modules
	Mounting depth	64.5 mm
Mounting	On 35 mm mounting rail	EN 60 715
Mounting position	As required	
Weight	Approx. 0.25 kg	
Housing, color	Plastic housing, gray	
Approvals	KNX under EN 50 090-1, -2	
CE mark	In accordance with the EMC guideline and low voltage guideline	

Ordering details					
Device type	**Product Name**	**Order No.**	**bbn 40 16779 EAN**	**Weight 1 pcs. [kg]**	**Packaging [pcs.]**
SV/S 30.160.1.1	KNX Power Supply, 160 mA, MDRC	2CDG110144R0011	86666 8	0.25	1
SV/S 30.320.1.1	KNX Power Supply, 320 mA, MDRC	2CDG110166R0011	90619 7	0.25	1
SV/S 30.640.3.1	KNX Power Supply, 640 mA, MDRC	2CDG110167R0011	90621 0	0.25	1

NOTE

Please refer to the SV/S KNX-Power Supplies product manual for a detailed description of the application. It is available free of charge at www.abb.com/knx.

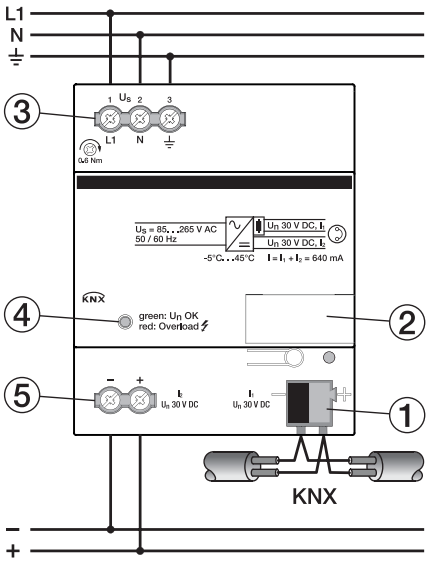
IMPORTANT
If the device overheats due to extended overload (> 100 °C in housing) it switches off automatically. All LEDs are OFF. The device can be switched on again only after it has been disconnected from the mains for 60 seconds and has cooled to operational temperature internally.
Eliminate the cause of the overload before switching back on.

When commissioning the device, ensure that the rated current is not continuously exceeded.

The voltage output without choke (I_2) is not electrically isolated from the KNX voltage output (I_1).
It may only be used to power an additional bus line in combination with a separate choke. It may not, for example, be used to power IP devices (see SELV guidelines).

Devices are designed for continuous operation. They are not approved for frequent switching on and off.

Connection



LEGEND

1 Bus connection terminal
2 Label carrier
3 Power supply connection U_s
4 Status LED
5 Voltage output without choke, I_2 (SV/S 30.640.3.1 only)

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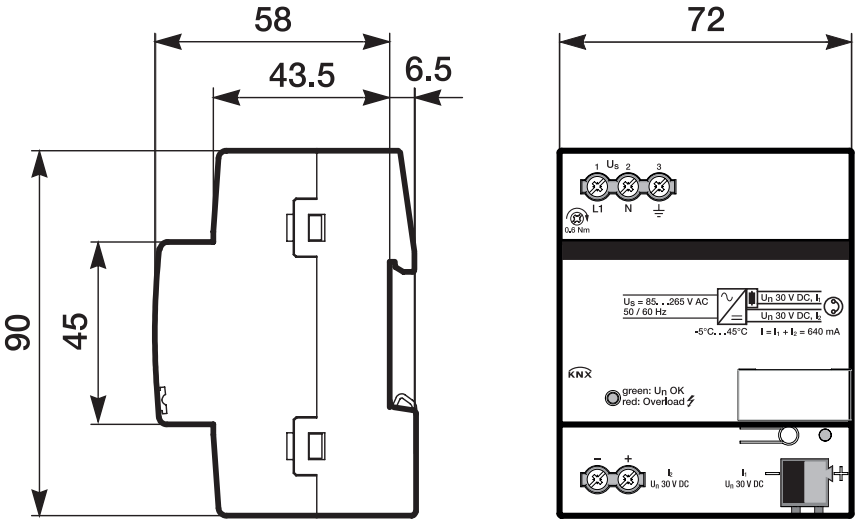
Dimension drawing



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