

ABB i-bus® KNX

KNX Power Supply, 160 mA/320 mA/640 mA, MDRC

SV/S 30.160.1.1, 2CDG110044R0011, SV/S 30.320.1.1, 2CDG110066R0011,
SV/S 30.640.3.1, 2CDG110067R0011



Product description

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).

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Technical data

Supply	Supply voltage U_s	85...265 V AC, 50/60 Hz		
	Power consumption	Normal operation	Maximum	
	- SV/S 30.160.1.1	6.6 W	21 W	
	- SV/S 30.320.1.1	12.5 W	30 W	
	- SV/S 30.640.3.1	24 W	55 W	
	Power loss	Normal operation	Maximum	
- SV/S 30.160.1.1	1.8 W	4.4 W		
- SV/S 30.320.1.1	2.5 W	6 W		
- SV/S 30.640.3.1	4 W	9 W		
Outputs	KNX voltage output I_1	1 line with integrated choke		
	Rated voltage U_N	30 V DC +1/-2 V, SELV		
	Minimum distance between 2 SV/S in one line	200 m (KNX bus line)		
	Voltage output I_2 (SV/S 30.640.3.1 only)	without choke		
	- Rated voltage U_N	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	Rated curr.	Overload curr.	Short-circuit curr.
		I_N	I_{OV}	I_{Sc}
	- SV/S 30.160.1.1	160 mA	0.3 A	0.5 A
	- SV/S 30.320.1.1	320 mA	0.5 A	0.8 A
- SV/S 30.640.3.1 (total current I_1 and I_2)	640 mA	0.9 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: $I < I_{OV}$ 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 (H x W x D)	90 x 72 x 64.5 mm		
	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. 0.26 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			

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Important
If the device overheats due to extended overload (> 100 °C in housing) it switches off automatically. The LED is 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.

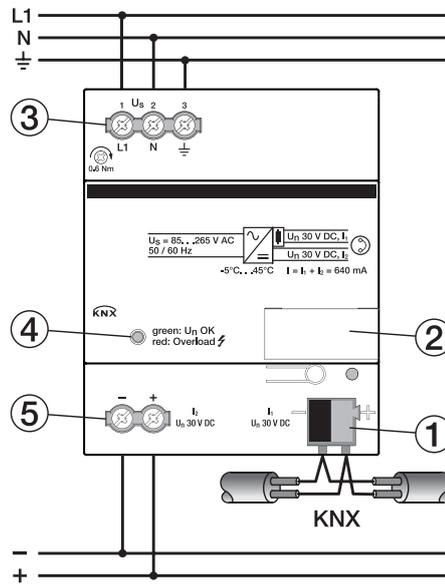
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Connection schematic



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- 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)

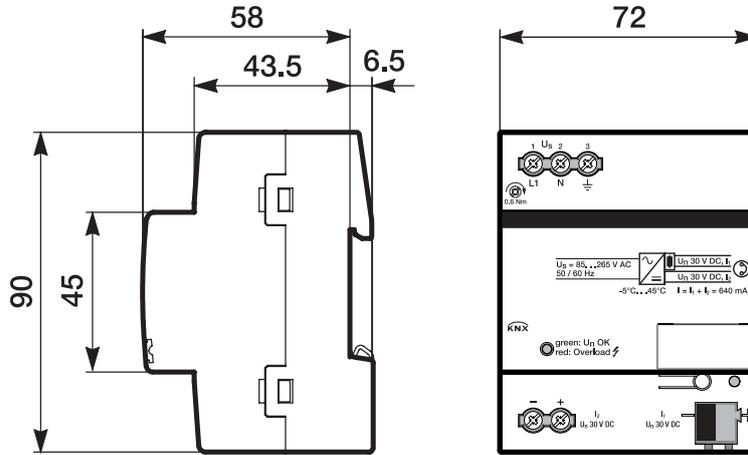
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Dimension drawing



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