MDT Bus Power Supply

MDT Power Supply, MDRC

Version		
STR-0640.01	Redundant Bus Power Supply with diagnostic function	6 SU MDRC, 640 mA

The MDT KNX Power Supply with integrated choke supplies the KNX Bus with a constant, stabilized 30 V DC voltage.
The redundant Bus Power Supply has two integrated power supplies to increase operation reliability. If one mains voltage or one of the internal power supplies fails, the KNX bus voltage keeps stable by the second power supply.
The integrated bus coupling unit with diagnostic function monitors the bus voltage, bus current, bus overload and bus voltage failure/return. All events are stored with time stamp in the internal ring buffer. The ring buffer can be read out by a 14 Byte telegram.

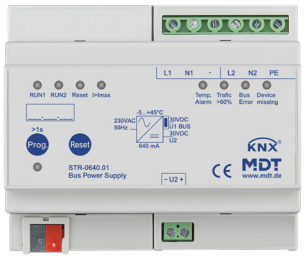
The current operating status is indicated via 8 colored LED on top of the device:

- RUN (green LED) : Normal operation
- I>Imax (red LED): Overcurrent
- Reset (redLED: Reset is active
- Temp. Alarm (red LED): Overtemperature
- Traffic > 60% (red LED): Overload KNX bus
- Bus error (red LED): Bus failure, collision of telegrams and not acknowledged telegrams
- Device Missing (red LED): Missing KNX device
- Prog. (red LED): Programming mode

If one mains voltage or one of the internal power supplies fails, the KNX bus voltage keeps stable by the second power supply. All devices are overload safe and have a choke free output.

The MDT KNX Power Supply is a modular installation device for fixed installation in dry rooms. It fits on DIN 35 mm rails in power distribution boards or closed compact boxes.

STR-0640.01



- Production in Germany, certified according to ISO 9001
- KNX power supply with integrated choke
- Two integrated power supplies for redundancy
- Mains voltage 230 V AC (separate FI circuits possible)
- If one mains voltage or one of the internal power supplies fails, the KNX bus voltage keeps stable by the second power supply
- Failure message by a telegram
- Short-circuit-proof
- Overload safe
- With additionally choke free output
- Integrated bus coupling unit with diagnostic function:
  - Bus voltage, bus current, bus overload
  - Bus voltage failure/return
  - All events are stored with time stamp in a ring buffer
  - Read out of the ring buffer by 14 Byte telegram
  - Safety functions to detect a failed device in the KNX line
- 3 years warranty

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Stand: 0825

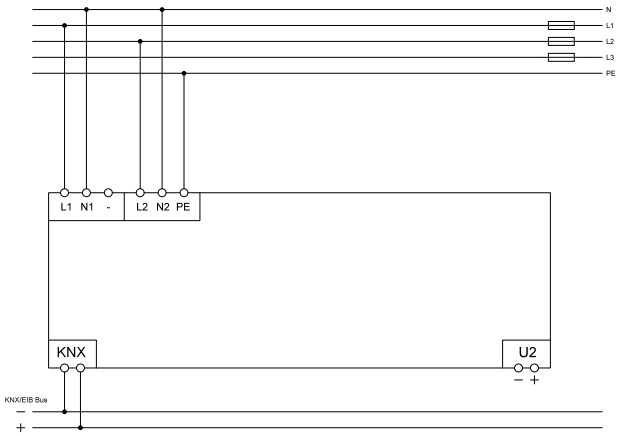
MDT Bus Power Supply

Technical Data	STR-0640.01		
Voltage	2 x 230 V AC / 50 Hz		
Supply voltage	30 VDC		
KNX output voltage	30 V DC SELV		
Choke free output voltage	30 V DC SELV		
Current			
Nominal current	640 mA		
Continuous current	960 mA		
Peak current	1200 mA		
Max. total current of both outputs*	900 mA		
Parallel connection possible	No		
Efficiency at nominal load typ.**	> 85 %		
Power loss no load operation typ.	< 1.2 W		
Specification KNX interface	TP-256		
Available application software	ETS 4/5		
Permitted wire gauge			
Screw terminal (max. 0,5Nm tightening torque)	0.5 - 4.0 mm^2 solid core 0.5 - 2.5 mm^2 finely stranded		
KNX busconnection terminal	0,8 mm Ø, solid core		
Operation temperature range	0 to + 45 °C		
Overvoltage category	III		
Enclosure	IP20		
Dimensions MDRC (Space Units)	6 TE		

* At higher total currents the red LED I>Imax lights up.

** Efficiency before choke

Examplary circuit diagram STR-0640.01



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