

## MDT Power Supply, MDRC

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

The MDT KNX Power Supply with integrated choke supplies the KNX Bus with a constant, stabilized 30VDC 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 diagnosis 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 14Byte telegram.

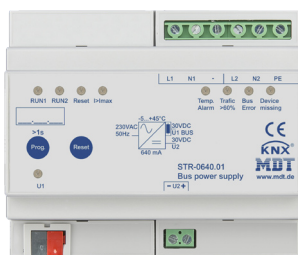
The current operating status is indicated via 8 colored LED on top of the device:

- 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 35mm rails in power distribution boards or closed compact boxes.

STR-0640.01



- Production in Germany, certified according to ISO 9001
- **Two integrated power supplies for redundancy**
- Mains voltage 230VAC (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 diagnosis 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 14Byte telegram
  - Safety functions to detect a failed device in the KNX line
- 3 years warranty
- Modular installation device for DIN 35mm rails
- Integrated bus coupling unit
- 3 years warranty

|  |   |  |  |
|--|---|--|--|
| <b>Technical Data</b>                    | STR-0640.01   |  |  |
| <b>Voltage</b>                           | 2 x 230VAC/50Hz   |  |  |
| Supply voltage                           | 30VDC   |  |  |
| KNX output voltage                       | 30VDC   |  |  |
| Choke free output voltage                | 30VDC   |  |  |
| <b>Current</b>                           |   |  |  |
| Nominal current                          | 640mA   |  |  |
| Continuous current                       | 960mA   |  |  |
| Peak current                             | 1200mA  |  |  |
| Max. total current of both outputs*      | 900mA   |  |  |
| <b>Parallel connection possible</b>      | Yes (without any distance)  |  |  |
| <b>Efficiency at nominal load typ.**</b> | > 85%   |  |  |
| <b>Power loss no load operation typ.</b> | < 1,2W  |  |  |
| <b>Specification KNX interface</b>       | TP-256  |  |  |
| <b>Available application software</b>    | ETS 4/5   |  |  |
| <b>Permitted wire gauge</b>              |   |  |  |
| Screw terminal                           | 0,5 - 4,0mm <sup>2</sup> solid core<br>0,5 - 2,5mm <sup>2</sup> finely stranded |  |  |
| KNX busconnection terminal               | 0,8mm Ø, solid core   |  |  |
| <b>Operation temperature range</b>       | 0 to + 45°C   |  |  |
| <b>Overvoltage category</b>              | III   |  |  |
| <b>Enclosure</b>                         | IP 20   |  |  |

\* At higher total currents the red LED I>I<sub>max</sub> lights up.

\*\* Efficiency before choke

### Exemplary circuit diagram STR-0640.01

