PW 3/60 (Discontinued)

M-Bus level converter

Your benefits

- **Transparent mode of operation:**
  Unchanged transfer of read-out data to the communication device
- Several interference-proof interfaces (RS232 and RS485 for PW 60) for PC communication:
  Greater distances (up to 1000 m via RS485) possible between level converter and PC
- Operating status display via LED:
  Easy on-site analysis and troubleshooting
- Clearly marked connection terminals:
  Easy on-site installation

Applications

- Remote supply and remote reading of M-Bus end devices

Properties

- Signal converter from M-Bus to RS232
- M-Bus level converter for 3 or 60 M-Bus end devices with a standard load of 1,5 mA
- M-Bus protocol according to EN 13757-3
- Transfer rates: 300 ... 9'600 baud
- Permanent short-circuit protection
- Wide power supply range
- Operating indicator with three (PW 3) or four (PW 60) diodes

Additional for PW 60

- Signal converter from M-Bus to RS485
- Microcontroller-controlled functions
- Galvanic separated interfaces
- Protected against voltage peaks on the M-Bus

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Technical Data

Execution	PW 3	PW 60
Current consumption	**Via external mains adapter**	**Via external mains adapter**
Voltage	10,5…28 V DC / 10…27 V AC	20…45 V DC / 20…30 V AC
Power consumption	4 W (DC) / 6 W (AC)	15 W (DC/AC)
Housing		
Dimensions (HxWxD)	78x56x118 mm	78x70x118 mm
Protection class	IP20	IP20
Material	ABS plastic	ABS plastic
Colour	RAL 7035	RAL 7035
Installation	Wall- or hat rail TS35 (EN 50022)	Wall- or hat rail TS35 (EN 50022)
Weight	app. 180 g	app. 300 g
Ambient conditions		
Operating temperature	0 to +55 °C	0 to +55 °C
Storage temperature	-10 to +70 °C	-10 to +70 °C
Humidity (non-condensing)	10 to 70%	10 to 70%

Terminals

Terminals		
M-Bus (+), (-)	PW 3 PW 60	3 terminal pairs for M-Bus end devices 4 terminal pairs for M-Bus end devices
RS232	PW 3 und PW 60	Connection D-Sub-9 (female) or screw terminals (TXD, RXD, GND)
Supply		
V+, V-	PW 3	Mains adapter 10,5...28 V DC / 10...27 V AC
V+, V-	PW 60	Mains adapter 20...45 V DC / 20...30 V AC

M-Bus specifications

Execution		PW 3			PW 60		
Parameter		**min.**	**typ.**	**max.**	**min.**	**typ.**	**max.**
Max. no. of connectable devices (load unit 1,5 mA each)		-	-	3	-	-	60
Normal operating bus current	mA	-	-	5	-	-	90
Display alarm current	mA	-	35	-	90	-	110
Excessive current switch-off	mA	50	-	70	130	-	160
Bus voltage MARK (normal operating current)	V	29	30,5	32	36	-	41
Bus voltage SPACE (normal operating current)	V	-	21	-	24	-	27
Bit threshold end device > centre	mA	7	8	9	7	8	9
Collision threshold	mA	-	35	-	-	30	-
Maximum cable length	app. km	-	1[1)]	-	-	1[1)]	-

1) The maximum possible network reach (entire cable length) as well as the distance to the M-Bus end devices depends greatly on the network topology, the number of connected devices, the cross-section of the used cables and the transfer rate.