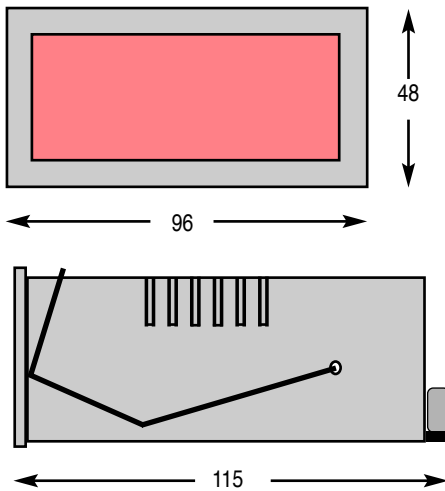


Digital Panel Meter DPM 635

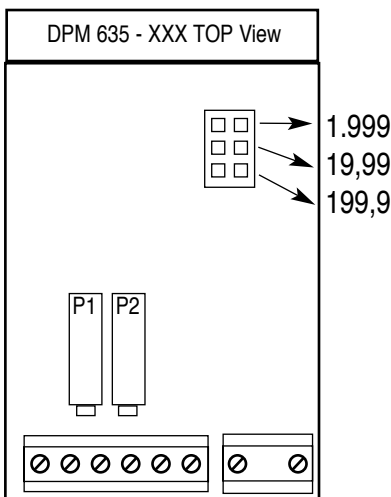
Meas. Display: 3 1/2 Digit
 Display: red LED 12,5 mm
 Zero Point: automatic zero point correction
 Polarity: automatic polarity - sign
 Meas. Rate: 2.5 Measurements per sec.
 Decimal Point: selectable setting
 Device Housing: ABS Plastic black
 Overload Meas.: 10 times of meas. Voltage range, max 250V
 Overload Meas.: 2 times of meas. Current range
 Supply Voltage: 230 Volt AC, 3 VA
 Common Mode: CMRR better 80dB
 Operating Temp.: -10°C...+50°C
 Protection Index: IP 50 Front
 IP 00 Rare acc. DIN 40050
 Connector Type: Lift Clamps
 Front Panel: H x W = 48 x 96 mm
 Panel cut-out: H x W = 44,5 x 90,5 mm
 Mounting Depth: D = 115 mm

Mechanical Dimensions:



Setting the Decimal Point

The decimal point is set through a jumper on the top side of the PCB.



DC-Voltage Type 635-001 ... 635-006

Meas. instrument with full +/- range from -1999 to +1999 digits. Accuracy class 0.1% +/- 1 digit from measuring value. Measuring input terminals 1 (Minus) and 2 (Plus). Supply voltage terminals 15 and 17.

AC-Voltage Type 635-011 ... 635-016

Meas. instrument with integrated rectifier for 'True RMS' measurements. Meas. display is in 'U rms' calibrated. Frequency range DC to 100Hz. Accuracy class +/-0.5% +/- 2 digits from measuring value. Measuring input terminals 1 and 2. Supply voltage terminals 15 and 17.

DC-Current Type 635-020 ... 635-025

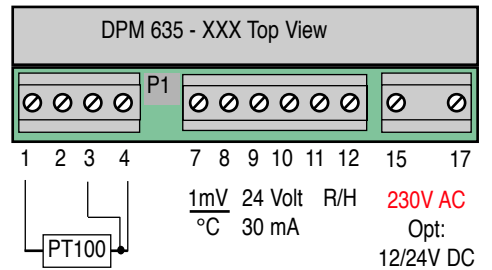
Meas. instrument with full +/- range from -19999 to +19999 digits. Accuracy class 0.2% +/- 1 digit from measuring value. Internal voltage drop max. 200mV. Measuring input terminals 1 (Minus) and 2 (Plus). Supply voltage terminals 15 and 17.

AC-Current Type 635-030 ... 635-035

Meas. instrument with integrated rectifier for 'True RMS' measurements. Meas. display is in 'I rms' calibrated. Frequency range DC to 100Hz. Accuracy class +/-0.5% +/- 2 digits from measuring value. For current measurements a 200mV range shunt is used with the deci-mal point set accordingly. Example: Shunt 20A/200mV. The decimal point will be set to 19.99. Measuring input terminals 1 and 2. Supply voltage terminals 15 and 17.

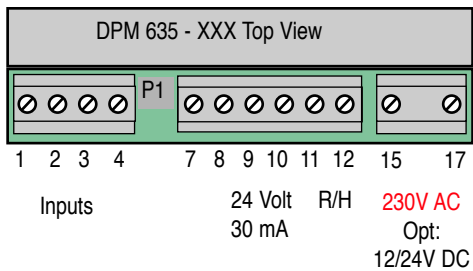
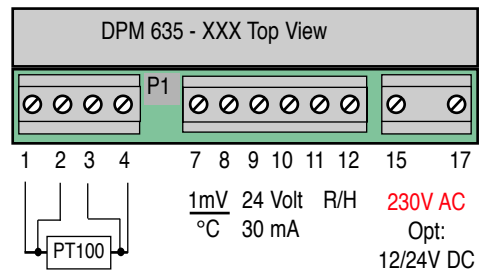
PT100 Temperature 3-wire Type 635-052/-053

Temperature measuring device for PT100 sensor according to DIN 43760. With these models the line resistance is compensated automatically. Maximum measuring current 1.5mA. Accuracy: 0.1% +/-1 digit of the meas. value. Range B1: -150.0°C ... +199.9°C, resolution 0.1 Kelvin. Range B2: -150°C ... +750°C, resolution 1 Kelvin. Sensor terminals 1, 3 and 4. Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



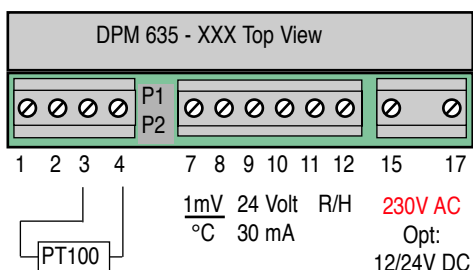
PT100 Temperature 4-wire Type 635-054/-055

Temperature measuring device for PT100 sensor according to DIN 43760. With these models the line resistance is compensated automatically. Maximum measuring current 1.5mA. Accuracy: 0.1% +/-1 digit of the meas. value. Range B1: -150.0°C ... +199.9°C, resolution 0.1 Kelvin. Range B2: -150°C ... +750°C, resolution 1 Kelvin. Sensor terminals 1, 2 and 3, 4. Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



PT100 Temperature 2-wire Type 635-050/-051

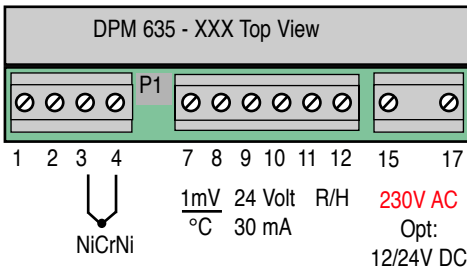
Temperature measuring device for PT100 sensor according to DIN 43760. The models are calibrated for a line resistance of 10 Ohm. Line resistance < 10 Ohm can be compensated with Pot. P2. Maximum measuring current 1.5mA. Accuracy: 0.1% +/-1 digit of the meas. value. Range B1: -100.0°C ... +199.9°C, resolution 0.1 Kelvin. Range B2: -100°C ... +750°C, resolution 1 Kelvin. Sensor terminals 2 and 3. Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



NiCrNi Temperature Type 635-060/-061

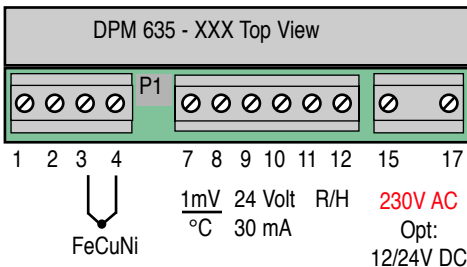
Temperature measuring device for NiCrNi sensor according to DIN 43710 with internal temperature compensation. Accuracy: 1% +/-4 digits of the meas. value. Range B1: 0.0°C ... +199.9°C, resolution 0.1 Kelvin. Range B2: 0°C ... +1300°C, resolution 1 Kelvin. Measuring input terminal 3 (red line of sensor) and terminal 4 (green line of sensor). Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).

see next page



FeCuNi Temperature Type 635-070

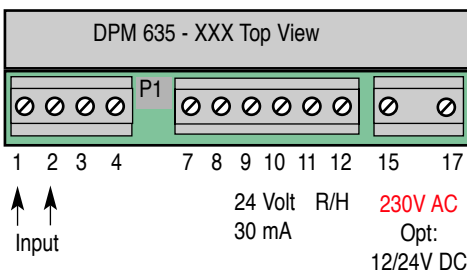
Temperature measuring device for FeCuNi sensor according to DIN 43710 with internal temperature compensation. Accuracy class: +/-1.5% +/-4 digits of the meas. value. Range B1: -50°C ... +600°C, resolution 1 Kelvin. Measuring input terminal 3 (red line of sensor) and terminal 4 (blue line of sensor). Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



Special Measuring Ranges

Type 635-008/-009 and 635-027/-029

These models provide for standard voltage- and current signals displays for different values. The ranges are set at factory site according to customer order and a zero point shift is indicated on the device label. Measuring input terminals 1 (Minus) and 2 (Plus). Supply voltage terminals 15 and 17. Type 635-008/0-10V: Accuracy 0.1% +/- 1digit from meas. value. Display range from 0 to customer value. Type 635-009/0-10V: Accuracy class 0.1% +/- 1digit from meas. value. Display range from + to - customer value. Type 635-027/0-20mA: Accuracy 0.2% +/- 1 digit from meas. value. Display range from 0 to customer value. Type 635-028/0-20mA: Accuracy 0.2% +/- 1 digit from meas. value. Display range from + to - customer value. Type 635-029/4-20mA: Accuracy 0.2% +/- 1 digit from meas. value. Display range from + to - customer value.



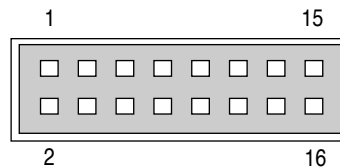
Option BCD Output Type 635-100

At the rare of the device are the connections of the 16-way socket.

Pin assignment:

1 Ground	9 Digit 2 A
2 Ground	10 Digit 2 B
3 Digit 1 D	11 Digit 3 D
4 Digit 1 C	12 Digit 3 C
5 Digit 1 A	13 Digit 3 B
6 Digit 1 B	14 Digit 3 A
7 Digit 1 D	15 Digit 4 A
8 Digit 1 C	16 Polarity

Polarity: High positive meas. value, Low negative meas. value. BCD output active High. Output signals are not isolated.



Voltage output 24V DC

Voltage output to supply external sensors with galvanic separated 24V 30mA. Voltage is available at terminal 9 (Minus) and 10 (Plus).

Run-Hold Function

Run-Hold: The measuring device runs its measuring cycle up to the end and holds the displayed value as long as the Run-Hold terminals are connected with each other.

Option: Dimension Display Type 635-900

A customer selected dimension display is placed inclusive illuminated field at the right side behind the front panel. The illuminated field holds a negative film with the desired dimension.

Option: AC Supplies Type 635-105/-107

On selected option a transformer with the respective primary voltage will be mounted and indicated on the device label (galvanic separation).
Order No.: 635-105 Input voltage 115V/AC. Order No.: 635-107 Input voltage 24V/AC.
These types do not provide the 24V Voltage output.

Option: DC/DC Converter Type 635-522/-523

With this option a galvanic separation from the measuring signal is established.
Order No.: 635-522 Input 9 - 18V DC
Order No.: 635-523 Input 18 - 36V DC
Isolation voltage 500V. Terminal 15 Minus, terminal 17 Plus. These types do not provide the 24V Voltage output.

Option: RS232-Output

9-way socket: Pin 7 RTS (Request to Send), Pin 5 GND (Ground), Pin 3 TXD (Transmit Data) and Pin 2 RXD (Receive Data).

Safety Precautions

Employing these instruments, regulations for working with high voltage equipment, as well as any Professional Trade Association regulation for working with electrical appliances and installations have to be observed.

CE-Guidelines

Meets the EMV Guideline (89/336/EWG) and the German EMV ruling by applying the Basic Standard EN 50081/ EN 50082. Meets the Low Voltage Guideline (73/23/EWG) by applying Product Standard EN 61010.

Guarantee Regulations

Regulations by law apply for guarantee within 6 month. All equipment is factory tested and calibrated. Excluded from the guarantee are normal wear and tear, defects due to misuse, negligence, chemical exposure, mechanical stress as well as equipment, which has been modified, re-labeled or otherwise altered or if attempts to repair have been made. All guarantee claims are subject to our scrutiny and approval.

Service

We are glad that you decided on an instrument from our product range. If there are what so ever any defects, please send the instrument (postage paid) to your distributor. For technical information contact us via E Mail: info@schwille.de
Technical changes reserved.