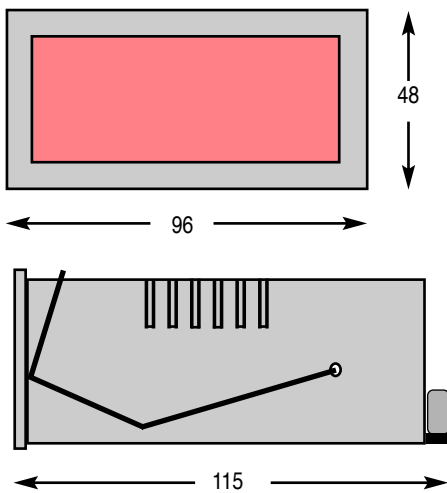


Digital Panel Meter DPM 645

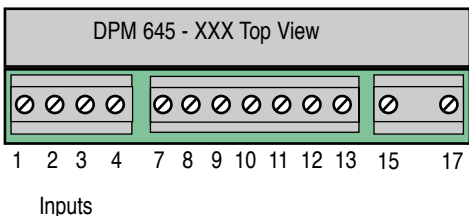
Meas. Display: 4 1/2 Digit
 Display: red LED 12,5 mm
 Zero Point: automatic zero point correction
 Polarity: automatic polarity - sign
 Meas. Rate: 2.5 Measurements per sec.
 Decimal Point: selectable setting
 Device Housing: ABS Plastic black
 Overload Meas.: 10 times of meas. Voltage range, max 250V
 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 wire link on the rear side of the 645



Decimal point	Wire link
1.9999	9 and 10
19.999	9 and 11
199.99	9 and 12
1999.9	9 and 13

DC-Voltage Type 645-001 ... 645-004

Meas. instrument with full +/- range from -19999 to +19999 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 645-011 ... 635-014

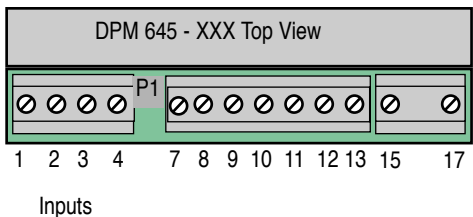
Meas. instrument with integrated rectifier for 'True RMS' measurements. Meas. display is in 'U rms' calibrated. Frequency range DC to 100Hz. Accuracy class +/-0.5% +/- 2 digits from measuring value. Measuring input terminals 1 and 2. Supply voltage terminals 15 and 17.

DC-Current Type 645-020 ... 645-025

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.

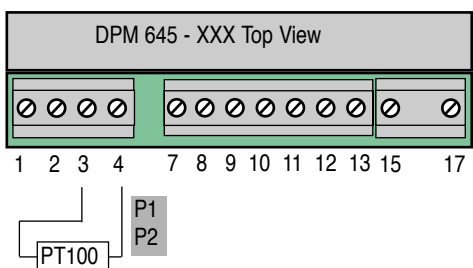
AC-Current Type 645-030 ... 645-035

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 2000mV range shunt is used with the deci-mal point set accordingly. Example: Shunt 2A/2000mV. The decimal point will be set to 1.9999. Measuring input terminals 1 and 2. Supply voltage terminals 15 and 17.



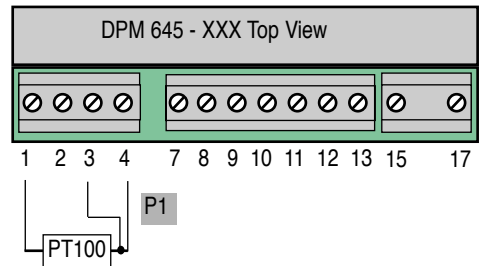
PT100 Temperature 2-wire Type 645-052

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: -100.0°C ---+750,0°C, resolution 0.1 Kelvin. Sensor terminals 2 and 3. Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



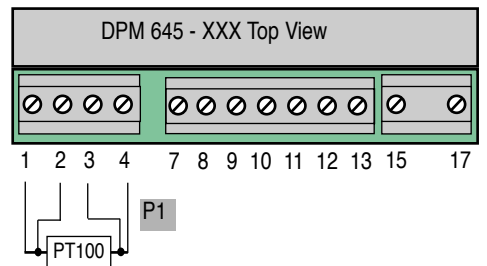
PT100 Temperature 3-wire Type 645-053

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: -100.0°C ... +750,0°C, resolution 0.1 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 645-054

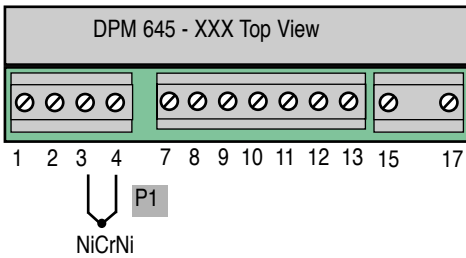
Temperature measuring device for PT100 sensor according to DIN 43760. With these models the line resistance is compensated automatically. Maximum measuring current 1.5mA. Accuracy: 0.1% +/-1 digit of the meas. value. Range : -150.0°C ...+750,0°C, resolution 0.1 Kelvin. Sensor terminals 1, 2 and 3, 4. Supply voltage terminals 15 and 17. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



NiCrNi Temperature Type 645-060

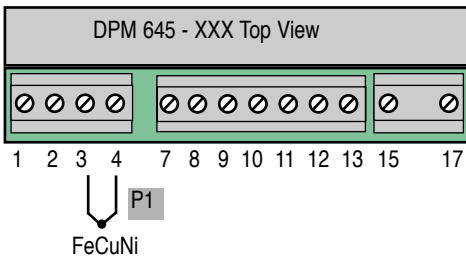
Temperature measuring device for NiCrNi sensor according to DIN 43710 with internal temperature compensation. Accuracy: 1% +/-4 digits of the meas. value. Range B1: 0.0°C ... +1300,0°C, resolution 1 Kelvin. Measuring input terminal 3 (red line of sensor) and terminal 4 (green line of sensor). Supply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

see next page



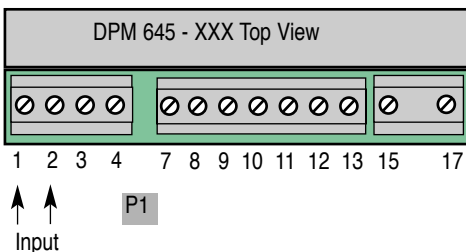
FeCuNi Temperature Type 635-070

Temperature measuring device for FeCuNi sensor according to DIN 43710 with internal temperature compensation. Accuracy class: $\pm 1.5\%$ ± 4 digits of the meas. value. Range B1: $-50,0^{\circ}\text{C} \dots +600,0^{\circ}\text{C}$, resolution 0,1 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 $\text{mV}/^{\circ}\text{C}$ on terminals 7 (Minus) and 8 (Plus).



Special Measuring Ranges Type 645-008/-009 and 645-027/-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 645 accuracy is 0.2% ± 1 digit of the measuring value.



Option: Dimension in Display Type 645-900

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 645-105/-107

On selected option a transformer with the respective primary voltage will be mounted and indicated on the device label (galvanic separation).

Order No.: 645-105 Input voltage 115V/AC. Order No.: 645-107 Input voltage 24V/AC.

Option: DC/DC Converter Type 645-522/-523

With this option a galvanic separation from the measuring signal is established.

Order No.: 645-522 Input 9 - 18V DC

Order No.: 645-523 Input 18 - 36V DC

Isolation voltage 500V. Terminal 15 Minus, terminal 17 Plus

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.