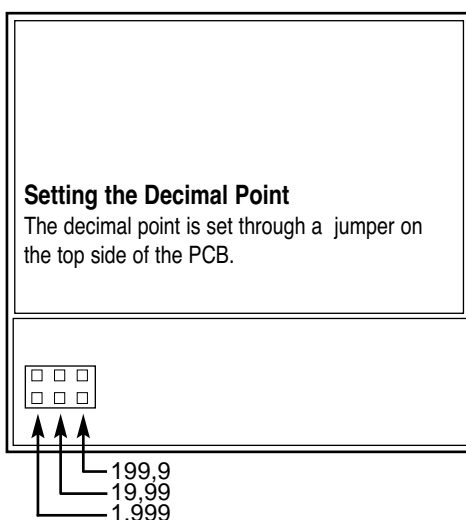


Digital Wall - Instrument Typ 780

Meas. Display:	3 1/2 Digits
Display:	57 mm LED rot
Zero Point:	automatic zero point correction
Polarity:	automatic polarity - sign
Meas. Rate:	2.5 Measurements per sec.
Decimal Point:	selectable setting
Overload Meas.:	10 times of meas. Voltage range, max 250V
Overload Meas.:	2 times of meas. Current range
Supply Voltage:	230 Volt AC, 5 VA
Common Mode:	CMRR better 80dB
Operating Temp.:	-10°C...+50°C
Protection Index:	IP 65 Front
Connector Type:	Lift Clamps
Sensor Supply:	24 V 30 mA
Case Dimensions:	H x W 290 x 258 mm

Attitudes and connections

The measuring range and supply voltage are shown in the equipment label in each case. The devices are by the factory doubly examined and calibrated. The decimal point is set for the imprinted range. When changes is to be proceeded in accordance with sketch. The skalenfaktor can for possible measured value adjustments at the potentiometer P1 over about + - 10% by the end of area to be varied.



DC-Voltage Type 780-001 ... 780-006

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 780-011 ... 780-016

Meas. instrument with integrated rectifier for sinus waves. Meas. display is in 'Ueff' calibrated. Frequency range 40 to 70 Hz. Accuracy class +/- 0.5% +/- 2 digits from measuring value. Measuring input terminals 1 and 2.

DC-Current Type 780-020 ... 780-025

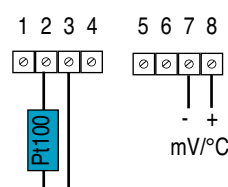
Meas. instrument with full +/- range from -19999 to +19999 digits. Accuracy class 0.2% +/- 1 digit from measuring value. Internal voltage drop max. 200mV. Measuring input terminals 1 (Minus) and 2 (Plus).

AC-Current Type 780-030 ... 780-035

Meas. instrument with integrated rectifier for sinus waves. Meas. display is in 'Ieff' calibrated. Frequency range 40 to 70 Hz. Accuracy class +/-0.5% +/- 2 digits from measuring value. For current measurements a 200mV range shunt is used with the decimal point set accordingly. Example: Shunt 20A/200mV. The decimal point will be set to 19.99. Measuring input terminals 1 and 2.

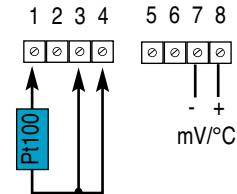
PT100 Temperature 2-wire Type 780-050/051

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. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



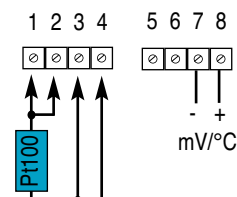
PT100 Temperature 3-wire Type 780-052/053

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. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



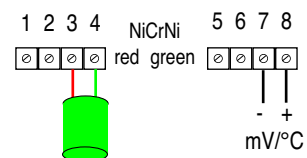
PT100 Temperature 4-wire Type 780-054/055

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. Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



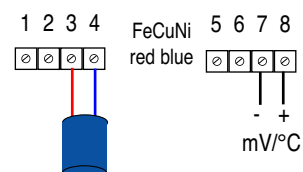
NiCrNi Temperature Type 780-060/061

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). Analog output in mV/°C on terminals 7 (Minus) and 8 (Plus).



FeCuNi Temperature Type 780-070

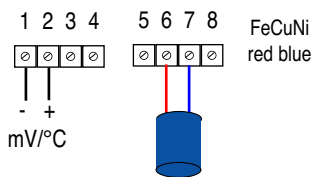
Temperature measuring device for FeCuNi sensor according to DIN 43710 with internal temperature compensation. Accuracy class: +/-1.5% +/-4 digits of the meas. value. Range B1: -50°C ... +600°C, resolution 1 Kelvin. Measuring input terminal 3 (red line of sensor) and terminal 4 (blue line of sensor).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



Special Range BV 031 - 008

FeCuNi Temperature Type 780-070 with HZ 542 - 200

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: $0^{\circ}\text{C} \dots +600^{\circ}\text{C}$, resolution 1 Kelvin. Measuring input terminal 6 (red line of sensor) and terminal 7 (blue line of sensor). Analog output in $\text{mV}/^{\circ}\text{C}$ on terminals 1 (Minus) and 2 (Plus).



Special Measuring Ranges Type 780-008/-009 and 780-027/-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).

Type 780-008/0-10V:

Accuracy 0.1% ± 1 digit from meas. value.
Display range from 0 to customer value.

Type 780-009/0-10V:

Accuracy class 0.1% ± 1 digit from meas. value.
Display range from + to - customer value.

Type 780-027/0-20mA:

Accuracy 0.2% ± 1 digit from meas. value.
Display range from 0 to customer value.

Type 780-028/0-20mA:

Accuracy 0.2% ± 1 digit from meas. value.
Display range from + to - customer value.

Type 780-029/4-20mA:

Accuracy 0.2% ± 1 digit from meas. value.
Display range from + to - customer value.

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.