

MTR-3 - Multi-transducer

• **Main function:** DEIF's multi-transducer is used for measuring on single-phase and 3-phase network topologies. All measurements are available on the RS485 Modbus communication and up to four analogue outputs can rapidly and easily be configured by a USB 2.0 interface. MTR-3 provides a cost-effective, compact and powerful solution for your transducer application.

- **Size (mm):** 100 × 75 (35 mm DIN-rail)
- **Connection:** Single phase, 3-phase 3-wire balanced load, 3-phase 4-wire balanced load, 3-phase 3-wire unbalanced load, 3-phase 4-wire unbalanced load
- **Accuracy class:** 0.5 and 0.3 on Modbus
- **Output :** 0 analogue, RS485 Modbus (MTR-3-015)
2 analogue, RS485 Modbus (MTR-3F-215)
3 analogue, RS485 Modbus (MTR-3-315)
4 analogue, RS485 Modbus (MTR-3-415)



- **Measuring current:** -/1 A or -/5 A
- **Measuring voltage:** 87...1000V AC phase-phase
- **Auxiliary supply:** 19...300V DC, 40...276V AC
- **Output types:** All between -20...20mA and between -10...10 V
- **Response time:** MTR-3 <200 ms, MTR-3F <50 ms, data refresh time 50ms

TAS-311DG - Selectable AC-transducer

• **Main function:** TAS-311DG is a micro-controller-based AC-transducer with 1 analogue output for measurement of RMS-voltages, RMS current, phase angle or frequency on an AC-network. The PC configuration software allows free choice of voltage, current, phase angle or frequency measurement including configuration of the measuring range and output range without any mechanical settings or adjustments inside the transducer.

- **Size (mm):** 99.7 × 75
- **Accuracy class:** 0.5
- **Connection:** Single phase and 3-phase network

- **Output (0...100%):** 0...1 mA, 0...5 mA, 0...10mA, 0...20 mA / 0...1 V, 0...5 V, 0...10 V
- **Output (20...100%):** 0.2...1 mA, 1...5 mA, 2...10 mA, 4...20 mA / 0.2...1 V, 1...5 V, 2...10 V
- **Output (±100%):** ±1 mA, ±5 mA, ±10 mA, ±20 mA, ±1 V, ±5 V, ±10 V
- **Output (±10...100%):** 0.1...1 mA, 0.5...5 mA, 1...10 mA, 2...20mA/0.1...1 V, 0.5...5V, 1...10V



- **Measuring principle:** RMS
- **Measuring voltage:** 57..690VAC<1VA
- **Measuring range:** 0...57 V/690 V, 0...0.5 A/8 A, 20...80 Hz

TAS-331DG - Selectable AC-transducer

• **Main function:** TAS-331DG is a micro-controller-based AC-transducer with 1 analogue output for measurement of power or reactive power on an AC-network. The transducer holds no mechanical moving parts like potentiometers and therefore the calibration stability is excellent.

- **Size (mm):** 99.7 × 75
- **Accuracy class:** 0.5
- **Connection:** Single phase and 3-phase network

- **Output (0...100%):** 0...1 mA, 0...5 mA, 0...10mA, 0...20 mA / 0...1 V, 0...5 V, 0...10 V
- **Output (20...100%):** 0.2...1 mA, 1...5 mA, 2...10 mA, 4...20 mA / 0.2...1 V, 1...5 V, 2...10 V
- **Output (±100%):** ±1 mA, ±5 mA, ±10 mA, ±20 mA, ±1 V, ±5 V, ±10 V
- **Output (±10...100%):** 0.1...1mA, 0.5...5mA, 1...0mA, 2...20mA / 0.1...1V, 0.5...5V, 1...10V



- **Measuring principle:** RMS
- **Measuring voltage:** 57...690VAC<1VA
- **Measuring range:** 0..P/Q-P/Q..0..P/Q

TAC-311DG - AC current single function transducer

• **Main function:** The current transducer types TAC-311DG or TAC-321DG are transducers for measurement of a sinusoidal AC current converted into a DC current signal proportional to the measured value on a single-phase network. PLCs, PCs, microprocessor control, indicators, alarm units etc. can be operated by the output signal.



- **Size (mm):** 55 x 75
- **Measuring principle:** Average measurement
- **Measuring range:** 0...100% I nom
- **Output (0...100%):** 0...5, 0...10, 0...20mA DC, 0...10V DC
- Span adjustment $\pm 20\%$ of FS
- output Zero adjustment for all
- span adjustments
- **Accuracy class:** 0.5
- **Measuring current:** 1.0...7.25A AC ($\leq 1.2\text{VA}$)
- **Meas. frequency:** 45...65Hz
- **Output (20...100%):** 4...20mA, Output limit $< 22\text{mA}$, Span adjustm. $\pm 20\%$, Zero adjustm. $\pm 20\%$
- **Auxiliary supply:** 110/230/440VAC $\pm 20\%$ $\leq 2.5\text{VA}$, 24VDC -25/+30% $\leq 2\text{W}$, 48...110, 88...220VDC -25/+30% $\leq 2\text{W}$

TAC-321DG - AC current single function transducer

• **Main function:** The current transducer types TAC-311DG or TAC-321DG are transducers for measurement of a sinusoidal AC current converted into a DC current signal proportional to the measured value on a single-phase network. PLCs, PCs, microprocessor control, indicators, alarm units etc. can be operated by the output signal.



- **Size (mm):** 55 x 75
- **Measuring principle:** Average measurement
- **Measuring range:** 0...100% I nom
- **Output (0...100%):** 0...10, 0...20mA DC Span adjustm.
- +10% -20% of FS output
- **Accuracy class:** 0.5
- **Measuring current:** 0...1A AC ($\leq 2.0\text{VA}$) 0...5A AC ($\leq 2.3\text{VA}$)
- **Meas. frequency:** 45...65Hz
- **Auxiliary supply:** No separate auxiliary supply

TAV 311 - AC voltage single function transducer

• **Main function:** The voltage transducers type TAV-311DG or TAV-321DG are transducers for measurement of a sinusoidal AC voltage converted into a DC current or DC voltage signal proportional to the measured value on a single-phase or 3-phase network. PLCs, PCs, microprocessor control, indicators, alarm units etc. can be operated by the output signal.



- **Size (mm):** 55 x 75
- **Accuracy class:** 0.5
- **Connection:** single-phase
- **Measuring voltage:** 57.7...500V AC ($\leq 0.3\text{VA}$) / 88...132V AC ($\leq 0.3\text{VA}$)
- **Measuring principle:** Average measurement
- **Output (0...100%):** 0...5, 0...10, 0...20 mA DC, 0...10V DC. Span adjustment $\pm 20\%$ of FS output . Zero adjustment for all span adjustments
- **Output (20...100%):** 4...20 mA, Output limit $< 22\text{mA}$. Span adjustment $\pm 20\%$. Zero adjustment $\pm 20\%$
- **Measuring range:** 0...100% U nom/67...100% U nom
- **Meas. frequency:** 45...65Hz
- **Auxiliary supply:** 110/230/440V AC $\pm 20\%$ $\leq 2.5\text{VA}$, 24V DC -25/+30% $\leq 2\text{W}$, 48...110, 88...220V DC -25/+30% $\leq 2\text{W}$

TAV 321 - AC voltage single function transducer

- Main function:** The voltage transducers type TAV-311DG or TAV-321DG are transducers for measurement of a sinusoidal AC voltage converted into a DC current or DC voltage signal proportional to the measured value on a single-phase or 3-phase network. PLCs, PCs, microprocessor control, indicators, alarm units etc. can be operated by the output signal.
- Size (mm):** 55 x 75
- Accuracy class:** 0.5
- Connection:** single-phase
- Measuring voltage:** 57.7-500V AC (≤ 2.8 VA)
- Measuring principle:** Average measurement.
- Output (0...100%):** 0...10, 0...20 mA DC, 0...10V DC. Span adjustment +10% -20% of FS output.
- Measuring range:** 0-100% U nom
- Meas. frequency:** 45...65Hz
- Auxiliary supply:** No separate auxiliary supply.



TDG-210DG - Insulation amplifiers

- Main function:** TDG-210DG is a CE-marked DC/DC amplifier with galvanic separation between input and output. Converting one type of DC signal into another DC signal, separating a number of earthing points, galvanic separation of current signals, conversion of measuring signal, adaption of measuring range, separation of measuring circuits, measuring on DC shunts or measuring of DC voltages.
- Size (mm):** 108 x 98.4
- Accuracy class:** 0.5
- Current standard input:** Different ranges available within the limit of ± 1 -50 mA.
- Voltage input:** Different ranges available within the limit of ± 60 mV-400 V.
- Output (0...100%):** 0...1 mA, 0...5 mA, 0...10 mA, 0...20 mA / 0...1 V, 0...10 V
- Output (20...100%):** 0.2...1 mA, 1...5 mA, 2...10 mA, 4...20 mA / 0.2...1 V, 2...10 V
- Output (-100...0...100%):** ± 1 mA, ± 5 mA, ± 10 mA, ± 20 mA, ± 1 V, 10 V
- Auxiliary supply DC:** 24...48...110...220V DC (2.5 W) DC/DC.
- Auxiliary supply AC:** 57.7...440V AC $\pm 20\%$, 3.5 VA (45...65 Hz)

