





	Current Transducers, TAC-311DG 	Current Transducers, TAC-321DG 	
Size, DIN rail (mm):	55 × 75	55 × 75	
Accuracy class:	0.5	0.5	
Connection:	Single phase	Single phase	
Measuring principle:	Average measurement	Average measurement	
Measuring current:	1.0...7.25A AC (≤1.2 VA)	0...1A AC (≤2.0 VA) 0...5A AC (≤2.3 VA)	
Measuring voltage:	–	–	
Measuring range:	0...100% I nom	0...100% I nom	
Measuring frequency:	45...65 Hz	45...65 Hz	
Output (0...100%):	0...5, 0...10, 0...20 mA DC, 0...10V DC Span adjustment ±20% of FS output Zero adjustment for all span adjustments	0...10, 0...20 mA DC Span adjustment +10% -20% of FS output	
Output (20...100%):	4...20 mA, Output limit <22 mA Span adjustment ±20% Zero adjustment ±20%	–	
Output (±100%):	–	–	
Auxiliary supply:	110/230/440V AC ±20% ≤2.5 VA 24V DC -25/+30% ≤2 W 48...110, 88...220V DC -25/+30% ≤2 W	No separate auxiliary supply	

	Voltage Transducers, TAV-311DG 	Voltage Transducers, TAV-321DG 	
Size, DIN rail (mm):	55 × 75	55 × 75	
Accuracy class:	0.5	0.5	
Connection:	Single phase	Single phase	
Measuring principle:	Average measurement	Average measurement	
Measuring voltage:	57.7...500V AC (≤0.3 VA) 88...132V AC (≤0.3 VA)	57.7-500V AC (≤2.8 VA)	
Measuring range:	0...100% U nom/67...100% U nom	0-100% U nom	
Measuring frequency:	45...65 Hz	45...65 Hz	
Output (0-100%):	0...5, 0...10, 0...20 mA DC, 0...10V DC Span adjustment ±20% of FS output Zero adjustment for all span adjustments	0...10, 0...20 mA DC, 0...10V DC Span adjustment +10% -20% of FS output	
Output (20-100%):	4...20 mA, Output limit <22 mA Span adjustment ±20% Zero adjustment ±20%	–	
Auxiliary supply:	110/230/440V AC ±20% ≤2.5 VA 24V DC -25/+30% ≤2 W 48...110, 88...220V DC -25/+30% ≤2 W	No separate auxiliary supply	

Selectable AC-transducers, TAS-331DG



Selectable AC-transducers, TAS-311DG



Size, DIN rail (mm):	99.7 × 75
Accuracy class:	0.5
Connection:	Single phase and 3-phase network
Measuring principle:	RMS
Measuring voltage:	57...690V AC <1 VA
Measuring range:	0...P/Q - P/Q...0...P/Q
Measuring frequency:	20...80 Hz
Output (0...100%):	0...1 mA, 0...5 mA, 0...10 mA, 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...20 mA 0.1...1 V, 0.5...5 V, 1...10 V
Auxiliary supply:	57...690V AC/24...220V DC

Size, DIN rail (mm):	99.7 × 75
Accuracy class:	0.5
Connection:	Single phase
Measuring principle:	RMS
Measuring voltage:	57...690V AC <1 VA
Measuring range:	0...57 V/690 V, 0...0.5 A/8 A, 20...80 Hz
Measuring frequency:	20...80 Hz
Output (0...100%):	0...1 mA, 0...5 mA, 0...10 mA, 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...20 mA 0.1...1 V, 0.5...5 V, 1...10 V
Auxiliary supply:	57...690V AC/24...220V DC

Selectable AC-transducers, TAS-321DG



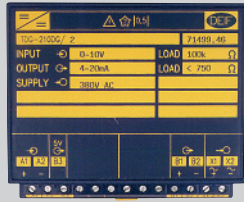
Temperature Transducers, TEMAX-3



Size, DIN rail (mm):	99.7 × 75
Accuracy class:	0.5
Connection:	Single phase and 3-phase network
Measuring principle:	RMS current with sign
Measuring voltage:	57...690V AC <1 VA
Measuring range:	-8/-0.5 A...0.5/8 A, 0...P/Q -P/Q...0...P/Q
Measuring frequency:	20...80 Hz
Output (0-100%):	0...1 mA, 0...5 mA, 0...10 mA, 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...20 mA 0.1...1 V, 0.5...5 V, 1...10 V
Auxiliary supply:	57...690V AC/24...220V DC
Protection:	-

Size, DIN rail (mm):	200 × 190, base mounting
Accuracy class:	1.0
Connection:	2-wire transducer for remote monitoring of 2, 3 or 4 temperatures
Measuring principle:	Pt100 Ω sensors, 2-wire
Measuring voltage:	-
Measuring range:	0...150°C/0...200°C (other ranges on request)
Measuring frequency:	-
Output (0-100%):	4...20 mA
Output (20-100%):	-
Output (±100%):	-
Output (±10-100%):	-
Auxiliary supply:	13...36V DC
Protection:	IP65

DC/DC Insulation Amplifiers, TDG-210DG



Main function:	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, DIN rail (mm):	108 × 98.4
Accuracy class:	0.5
Connection:	–
Measuring principle:	–
Measuring voltage:	–
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
Measuring range:	–
Measuring frequency:	–
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 ±20%, 3.5 VA (45...65 Hz)

Multi-transducers, MTR-3, MTR-3F



Size (mm):	100 × 75 (35 mm DIN-rail)
Main function:	Measurement of voltage, current, directional current, kWh, kVAR, active-, reactive- and apparent power, CosPhi, frequency, THD, demand functions
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 voltage, DC:	19...300V DC
Auxiliary supply, AC:	40...276V AC
Response time:	MTR-3 <200 ms, MTR-3F <50 ms, data refresh time 50 ms
Output types:	All between -20...20 mA and between -10...10 V Example: 4...12...20 mA or 0...1 V