







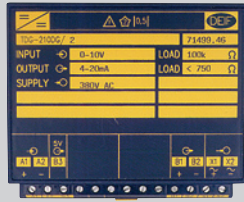


	Current Transducers, TAC-311DG 	Current Transducers, TAC-321DG 	
Size, DIN rail (mm):	55 × 75	55 × 75	
Accuracy class:	0.5	0.5	
Connection:	Single phase	Single phase	
Measuring principle:	Average measurement	Average measurement	
Measuring current:	1.0...7.25A AC (≤1.2VA)	0...1A AC (≤2.0VA) 0...5A AC (≤2.3VA)	
Measuring voltage:	–	–	
Measuring range:	0...100% I nom	0...100% I nom	
Meas. frequency:	45...65Hz	45...65Hz	
Output (0...100%):	0...5, 0...10, 0...20mA DC, 0...10V DC Span adjustment ±20% of FS output Zero adjustment for all span adjustments	0...10, 0...20mA DC Span adjustm. +10% -20% of FS output	
Output (20...100%):	4...20mA, Output limit <22mA Span adjustm. ±20%, Zero adjustm. ±20%	–	
Output (±100%):	–	–	
Auxiliary supply:	110/230/440V AC ±20% ≤2.5VA 24V DC -25/+30% ≤2W 48...110, 88...220V DC -25/+30% ≤2W	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 (≤0.3VA) 88...132V AC (≤0.3VA)	57.7-500V AC (≤2.8VA)	
Measuring range:	0...100% U nom/67...100% U nom	0-100% U nom	
Meas. frequency:	45...65Hz	45-65Hz	
Output (0-100%):	0...5, 0...10, 0...20mA DC, 0...10V DC Span adjustment ±20% of FS output Zero adjustment for all span adjustments	0...10, 0...20mA DC 0...10V DC Span adjustm. +10% -20% of FS output	
Output (20-100%):	4...20mA, Output limit <22mA Span adjustm. ±20%, Zero adjustm. ±20%	–	
Auxiliary supply:	110/230/440V AC ±20% ≤2.5VA 24V DC -25/+30% ≤2W 48...110, 88...220V DC -25/+30% ≤2W	No separate auxiliary supply	

	Selectable AC-transducers, TAS-331DG 	Selectable AC-transducers, TAS-311DG 
Size, DIN rail (mm):	99.7 × 75	99.7 × 75
Accuracy class:	0.5	0.5
Connection:	Single phase and 3 phase network	Single phase
Measuring principle:	RMS	RMS
Measuring voltage:	57...690V AC <1VA	57...690V AC <1VA
Measuring range:	0...P/Q - P/Q...0...P/Q	0...57V/690V, 0...0.5A/8A, 20...80Hz
Meas. frequency:	20...80Hz	20...80Hz
Output (0...100%):	0...1mA, 0...5mA, 0...10mA, 0...20mA 0...1V, 0...5V 0...10V	0...1mA, 0...5mA, 0...10mA, 0...20mA 0...1V, 0...5V 0...10V
Output (20...100%):	0.2...1mA, 1...5mA, 2...10mA, 4...20mA 0.2...1V, 1...5V, 2...10V	0.2...1mA, 1...5mA, 2...10mA, 4...20mA 0.2...1V, 1...5V, 2...10V
Output (±100%):	±1mA, ±5mA, ±10mA, ±20mA, ±1V, ±5V, ±10V	±1mA, ±5mA, ±10mA, ±20mA ±1V, ±5V, ±10V
Output (±10...100%):	0.1...1mA, 0.5...5mA, 1...10mA, 2...20mA 0.1...1V, 0.5...5V, 1...10V	0.1...1mA, 0.5...5mA, 1...10mA, 2...20mA 0.1...1V, 0.5...5V, 1...10V
Auxiliary supply:	57...690V AC/24...220V DC	57...690V AC/24...220V DC
	Selectable AC-transducers, TAS-321DG 	Temperature transducers, TEMAX-3 
Size, DIN rail (mm):	99.7 × 75	200 × 190, base mounting
Accuracy class:	0.5	1.0
Connection:	Single phase and 3 phase network	2-wire transducer for remote monitoring of 2, 3 or 4 temperatures
Measuring principle:	RMS current with sign	PT100Ω sensors, 2-wire
Measuring voltage:	57...690V AC <1VA	–
Measuring range:	-8/-0.5A...0.5/8A, 0...P/Q -P/Q...0...P/Q	0...150°C/0...200°C (other ranges on request)
Meas. frequency:	20...80Hz	–
Output (0-100%):	0...1mA, 0...5mA, 0...10mA, 0...20mA 0...1V, 0...5V 0...10V	4...20mA
Output (20-100%):	0.2...1mA, 1...5mA, 2...10mA, 4...20mA 0.2...1V, 1...5V, 2...10V	–
Output (±100%):	±1mA, ±5mA, ±10mA, ±20mA, ±1V, ±5V, ±10V	–
Output (±10-100%):	0.1...1mA, 0.5...5mA, 1...10mA, 2...20mA 0.1...1V, 0.5...5V, 1...10V	–
Auxiliary supply:	57...690V AC/24...220V DC	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 ±1-50mA
Voltage input:	Different ranges available within the limit of ±60mV-400V
Measuring range:	–
Meas. frequency:	–
Output (0...100%):	0...1mA, 0...5mA, 0...10mA, 0...20mA 0...1V, 0...10V
Output (20...100%):	0.2...1mA, 1...5mA, 2...10mA, 4...20mA 0.2...1V, 2...10V
Output (-100...0...100%):	±1mA, ±5mA, ±10mA, ±20mA, ±1V, 10V
Auxiliary supply, DC:	24...48...110...220V DC (2.5W) DC/DC
Auxiliary supply, AC:	57.7...440V AC ±20%, 3.5VA (45...65Hz)

Multi-Transducers, MTR-2, MTR-2F



Size (mm):	100 × 75 (35 mm DIN-rail)
Main function:	Measurement of voltage, current, directional current, 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
Output:	0 analogue, RS485 Modbus (MTR-2-015) 2 analogue, RS485 Modbus (MTR-2F-215) 3 analogue, RS485 Modbus (MTR-2-315) 4 analogue, RS485 Modbus (MTR-2-415)
Measuring current:	-1A or -5A
Measuring voltage:	87...866V AC phase - phase
Auxiliary voltage, DC:	19...300V DC
Auxiliary supply, AC:	40...276V AC
Response time:	MTR-2 <300 ms, MTR-2F <50 ms
Output types:	All between -20...20mA and between -10...10V Example: 4...12...20mA or 0...1V