

DIZ

generation G

- ✓ For industrial applications and billing purposes
- ✓ Compact design (6 DIN modules)

Options:

- ✓ Reactive energy (4-Quadrant meter)
- ✓ Bidirectional meter with up to 4 tariffs
- ✓ Communication via M-Bus, LON®, SML or Modbus-RTU®



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Digital Industry Meter - DIZ generation G

		Transformer connected meter 1(6) A or 5(6) A	Direct connected meter 0,25 - 5(65) A, 0,25 - 5(80) A or 0,5 - 10(65) A
Voltage	4-wire meter	3 x 58/100 V, 3 x 63/110 V, 3 x 230/400 V, 3 x 290/500 V	3 x 230/400 V, 3 x 254/440 V
	3-wire meter	3 x 100 V, 3 x 110 V, 3 x 230 V, 3 x 400 V, 3 x 500 V	3 x 230 V, 3 x 400 V, 3 x 500 V
	2-wire meter	100 V, 230 V	230 V
Starting current		2 mA	20 mA
Frequency		50 Hz, 60 Hz, 16,7 Hz	50 Hz, 60 Hz
Accuracy	active energy reactive energy	Cl. B or Cl. A acc. to EN 50470-1, -3 Cl. 2 or Cl. 3 acc. to IEC 62053-23	
Measuring types	active energy reactive energy	+A, -A +R, -R	
Meter constants	LED	10 000...100 000 Imp./kWh (depending on meter type)	1 000...2 000 Imp./kWh (depending on meter type)
	primary output	1...1 000 Imp./kWh (depending on meter type, pulse length 100 or 500 ms)	---
	secondary output	100...100 000 Imp./kWh (depending on meter type, pulse length 30, 50 or 100 ms)	10...1 000 Imp./kWh (depending on meter type, pulse length 30, 50 or 100 ms)
	configuration ability	fixed parameterisation	
	certified version with Declaration of Conformity of MID	settable via mechanical button (lockable for billing purposes)	
Energy registers	number	max. 4 tariff register + 1 tariffless register for energy direction +P and -P; max. 2 tariff register + 1 tariffless register for each energy direction (+P, -P, +Q and -Q)	
Load profile	number of channels	max. 4	
	typical memory depth at 1 channel	12 000 entries	
	registering period	5, 10, 15, 30, 60 min	
Real Time Clock	registering type	state of energy register	
	accuracy	within ± 5 ppm	
	synchronisation	via data interface or line commutation	
Control input	running reserve Goldcap	max. 10 days (240 hours)	
	number	max. 1	
Data retention time	low voltage/system voltage	for external tariff switching	
		without voltage in the FLASH-ROM, at least 20 years	
Display	LC display	8 digits	
	digit size in the value range	3,4 x 6,8 mm	
Operation	reading without power supply (optional)	by buffer battery	
	mechanical button	for operation of display	
Data interface (optional)	M-Bus	acc. to EN 13757-2, -3 (300...9600 baud)	
	RS485	protocols: M-Bus, SML (Smart Message Language) or Modbus-RTU® (Remote Terminal Unit) acc. to ISO/IEC 14908-1, -2, -3, -4	
Outputs (optional)	LON®	max. 2	
	number	max. 250 V AC/DC, 100 mA for impulse transmission (fulfils S0-specifications)	
Energy supply	Opto-MOSFET	max. 27 V DC, 27 mA (passive)	
	S0-output	3-phase from the measuring voltage	
Power consumption per phase	switched-mode power supply		
	voltage path	< 2,0 VA/1,0 W	< 2,0 VA/1,0 W
EMC-characteristics	current path	< 0,5 VA	< 2,5 VA
	isolation resistance	Isolation: 4 kV AC, 50 Hz, 1 min	
Temperature range	surge voltage	EMC: 4 kV, Impulse 1,2/50 μ s, 2 Ω ISO: 6 kV, Impulse 1,2/50 μ s, 500 Ω 10 V/m (under load)	
	resistance against HF-fields	-25 °C...+55 °C	
Relative humidity	specified operating range	-40 °C...+70 °C	
	limit range for operation, storage and transport	max. 95 %, non-condensing, acc. to IEC 62052-11, EN 50470-1 and IEC 60068-2-30	
Housing	dimensions	6 modules (acc. to DIN 43880) = 107,5 x 89,5 x 64,0 (W x H x D) mm	
	class of protection	II	
	degree of protection housing	IP 20	
	degree of terminal block	IP 20	
	housing material	polycarbonate glass-fibre reinforced, without halogen, recyclable	
Environmental conditions	fire characteristics	acc. to IEC 62052-11	
	mechanical	M1 acc. to Measuring Instruments Directive (2004/22/EC)	
	electromagnetic	E2 acc. to Measuring Instruments Directive (2004/22/EC)	
Weight	intended location	indoor acc. to EN 50470-1	
Connection cross section		approx. 450 g	
	current or neutral terminals	max. 4,0 mm ² (max. 2,5 mm ² acc. to IEC 60999-1)	max. 25,0 mm ² (max. 16,0 mm ² acc. to IEC 60999-1)
Further features	voltage or additional terminals	max. 2,5 mm ²	max. 2,5 mm ²
	measuring of instantaneous values installation check buffer battery (optional)	powers, voltages, currents, neutral current, frequency via instantaneous values (service data) possible integrated buffer battery for reading the display without power	



Product specifications are subject to change without notice!