Type		IME Conto D4Pt-CE4DT12A2	M3PRO 80 MID
Technical data			
Article No.		29-20155	29-20170
Measurement	active energy / reactive energy consumed	• / •	
	active energy / reactive energy regenerated	– / –	• / •
Approval		–	calibrated (MID)
Accuracy class		–	
Connection type		3-wire	4-wire
Current measurement	Current transformer x / ..	5 A	–
	Direct input up to	–	80 A
	Power draw	0.7 VA/Phase	
	Input currents galvanically isolated	•	–
Voltage measurement	Voltage circuit	3× 57.7 / 100 V	92…276 / 160…480 V
	Ratio of current transformer	1...1500.0	–
	Power draw	1.5 VA	2 VA
	Frequency	50 Hz	
Voltage supply		self-supplied from voltage input	
Standard S0 pulse output (volt-free contact)	Number/use	1/active energy consumed or 1/reactive energy consumed	1/active energy consumed T1 and T2 1/reactive energy consumed T1 and T2
	Valency	10 Wh, 100 Wh, 1 kWh 10 kWh, 100 kWh, 1000 kWh	1, 2, 5, 10, 20, 50, 100, 200 per kWh
	Pulse duration	50, 100, 200, 300, 400, 500 ms	30…100 ms
	Contact load	110 V DC/AC / 50 mA	3…28 V AC / 90 mA, 3…39 V DC / 90 mA
	LED	10 000 Imp/kWh	1 000 Imp/kWh
LC-Display	backlit	•	
Bus connection		–	
Detection of faulty connections		•	
Tariffs		2	
Ingress protection	Enclosure	IP54	IP51
	Terminal block with cover	IP20	IP40
Input cable cross section	Current transformer	4 mm²	–
	Direct	–	33 mm²
Dimensions	(W x H x D) [mm]	122.5 x 100 x 58.5	72 x 90 x 64
	Width in HP	4	
Mounting	35 mm DIN rail	•	
Weight		260 g	412 g
Operating temperature		-5 … +55 °C	-25 … +55 °C
Special features		Resettable intermediate meter; Instantaneous and maximum active power	1 pulse each for imported active and reactive energy; infrared interface to connect communications module for Modbus / M-Bus

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Type		M3PRO 1-5 MID	M3PRO 1-5 MID M-Bus	M3PRO 80 MID M-Bus
Technical data				
Article No.		29-20171	29-20172	29-20173
Measurement	active energy / reactive energy consumed	• / •		
	active energy / reactive energy regenerated	• / •		
Approval		calibrated (MID)		
Accuracy class		B		
Connection type		4-wire		
Current measurement	Current transformer x / ..	1 A / 5 A		–
	Direct input up to	–		80 A
	Power draw	0.7 VA/Phase		
	Input currents galvanically isolated	•		–
Voltage measurement	Voltage circuit	92…276 / 160…480 V		
	Ratio of current transformer	–		
	Power draw	2 VA		
	Frequency	50 Hz		
Voltage supply		self-supplied from voltage input		
Standard S0 pulse output (volt-free contact)	Number/use	1/active energy consumed T1 and T2 1/reactive energy consumed T1 and T2	–	
	Valency	Dependent on current transformer ratio and pulse duration	–	
	Pulse duration	30…100 ms	–	
	Contact load	3…28 V AC / 90 mA, 3…39 V DC / 90 mA	–	
	LED	1 000 Imp/kWh		
LC-Display	backlit	•		
Bus connection		–	RS 485 / M-Bus	
Detection of faulty connections		•		
Tariffs		2		
Ingress protection	Enclosure	IP51		
	Terminal block with cover	IP40		
Input cable cross section	Current transformer	4mm²		–
	Direct	–		33 mm²
Dimensions	(W x H x D) [mm]	72 x 90 x 64		
	Width in HP	4		
Mounting	35 mm DIN rail	•		
Weight		335 g		
Operating temperature		-25 … +55 °C		
Special features		1 pulse each for imported active and reactive energy; infrared interface to connect communications module for Modbus / M-Bus	M-Bus interface for direct connection with the PQM via M-Bus coupler	

Type		M3PRO 1-5 MID ModBus	M3PRO 80 MID ModBus
Technical data			
Article No.		29-20174	29-20175
Measurement	active energy / reactive energy consumed	• / •	
	active energy / reactive energy regenerated	• / •	
Approval		calibrated (MID)	
Accuracy class		B	
Connection type		4-wire	
Current measurement	Current transformer x / ..	1 A / 5 A	–
	Direct input up to	–	80 A
	Power draw	0.7 VA/Phase	
	Input currents galvanically isolated	•	–
Voltage measurement	Voltage circuit	92…276 / 160…480 V	
	Power draw	2 VA	
	Frequency	50 Hz	
Voltage supply		self-supplied from voltage input	
Standard S0 pulse output (volt-free contact)	Number/use	–	
	Valency	–	
	Pulse duration	–	
	Contact load	–	
	LED	1 000 Imp/kWh	
LC-Display	backlit	•	
Bus connection		RS 485 / M-Bus	
Detection of faulty connections		•	
Tariffs		2	
Ingress protection	Enclosure	IP51	
	Terminal block with cover	IP40	
Input cable cross section	Current transformer	4 mm^2	–
	Direct	–	33 mm^2
Dimensions	(W x H x D) [mm]	72 × 90 × 64	
	Width in HP	4	
Mounting	35 mm DIN rail	•	
Weight		335 g	412 g
Operating temperature		-25 … + 55 °C	
Special features		Modbus interface for connection via Modbus RTU directly to the PQM. 1 system point required per counting channel or optionally 7 system points for additional data points such as current, voltage and powers.	

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Optional Accessories

Article-No.	Type	Description
29-20104	ECS MODBUS RTU	Modbus communication module. The communication between the module and the energy meter is realized via the infrared interface. Values: energy and power U, I, PF and F.
29-20105	ECS M-Bus	M-Bus communication module. The communication between the module and the energy meter is realized via the infrared interface. Values: energy and power U, I, PF and F.
29-20121	ECS SD-Card Data logger	SD Card data logger with SD Card. The communication between the module and the energy meter is realized via the infrared interface.

Please note that optional accessories are available for all energy meters except for IME Conto D4 Pt-CE4DT12A2.