

CS180001

Measuring transducer • Electricity meter

Active energy meter, 118x18x68mm, 176-276V AC, 1-phase, direct, 45A, 2x pulse outputs, RS485 communication, MID, screw connection, IP20



MID certification
Two pulse outputs

The CS18 series are single-phase modular energy meters for displaying the various energies consumed and generated as well as the power and other measured values directly on the backlit LCD. They can be connected directly up to 45 A and are suitable for use in sub-billing applications thanks to their MID certification.

Electrical features

Number of outputs	2
Display	LCD display LED display
Type of electrical connection	Clamped terminal connection
Operating frequency	45 - 65 Hz
Setting procedure	Parameterization
Power consumption	3 VA
Max. continuous current	45 A
Max. switching current	0.02 A
Min. current load	250 mA
Supported communication interface	Modbus RTU RS485
Operating voltage (AC 50Hz)	176 - 276 V
Operating voltage (AC 60Hz)	176 - 276 V
ardSOCA_ElektrischerAnschluss	Terminal connection
ardSOCA_Betriebsspannung	176-276VAC(50Hz) 176-276VAC(60Hz)
ardTEEL_Genauigkeit_Enum	Voltage measurement: 0.5% Current measurement: 1% Frequency measurement: 0.2% Power measurement (active, reactive, apparent power): 1% Power factor: 1%
ardTEEL_Strombelastbarkeiten	Pulse output 27mA at 5-27VDC
ardTEEL_Ueberspannungskategorie	300V CAT III-UC1 according to IEC 61010-1
ardTEEL_TransienteUeberspannungsfestigkeit	4kV 1minute, 6kV 1.2µs
ardTEEL_Impulseinstellungen	Pulse length 60 / 100 / 200ms Output 1: 0.001 / 0.01 / 0.1 / 1kWh per pulse Output 2: 1kWh per pulse
ardTEME_AderquerschnittMessklemmen	2,5 - 10 mm ²
ardTEEL_KurzzeitigeUeberlast	30 x I _{max} 10ms

Mechanical features

Width	18 mm
Height	68 mm
Storage temperature	-40 - 75 °C
Length	118 mm
Mounting method	Top hat rail
Degree of protection (IP)	IP20
Housing material	Plastic
Ambient temperature	-40 - 70 °C
ardSOCA_Abmessungen	118x18x68mm
ardTEME_AnzugsdrehmomentMessklemmen	1.5 Nm

Other features

Relative air humidity (non-condensing)	0 - 95 %
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Classification

ETIM 8

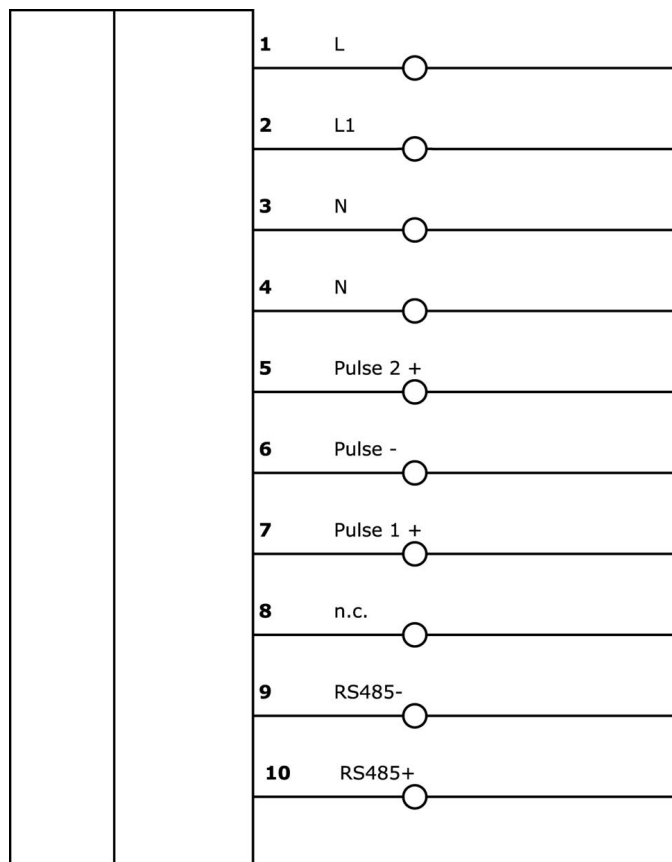
More

IPF Product Group	730 special devices (diverse)
packaging dimensions	105 x 40 x 75 mm
gross weight	127 g
Customs tariff number	90283011
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Important notes

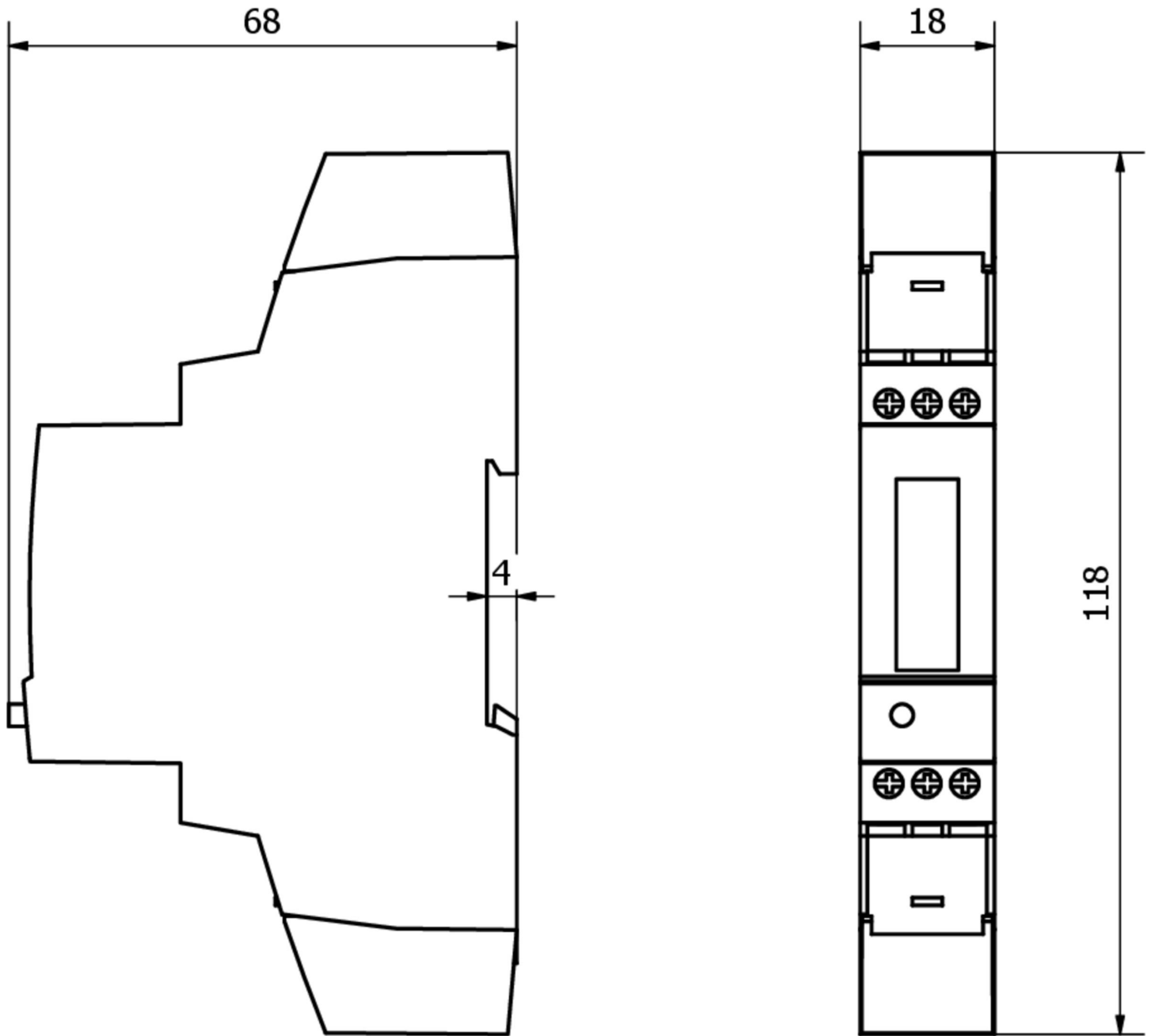
- / Wire cross section 0.5-1.5mm² for S0 and COM terminals. Tightening torque 0.2Nm.
- / Four tariffs can be managed via the communication interface

Connection



L: Mains input / L': Mains output

Dimensional drawing



Installation

Mounting / installation may only be carried out by a qualified electrician!



Disposal

WEEE number according to § 6 para. 3
ElektroG: 40951076

Safety warnings

- /** Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
- /** Never use these devices in applications where the safety of a person depends on their functionality.
- /** Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com