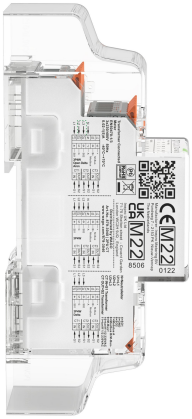
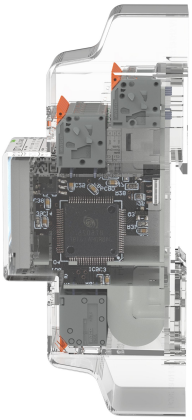
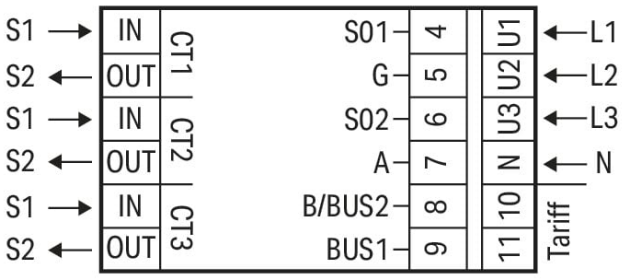
Data Sheet | Item Number: 879-3040

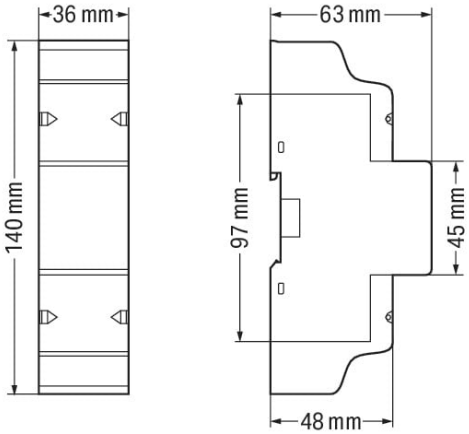
Energy meter (MID); for transformer connection; 1 A / 5 A; 3x230/400V; 50Hz; Modbus® and M-Bus; 2 x S0 interface; 2PU CT

https://www.wago.com/879-3040









Short description:
Crucial for trimming costs, comprehensive energy measurement is necessary to optimize energy consumption. WAGO's portfolio now has new energy meters that simplify this task while offering several key advantages. They use push-in connection technology with a lever, making them connect quickly and easily. Versions for current transformers are even slimmer at only 35 mm. These slim profiles save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency, as well as current, voltage and power for all phases. And the user can conveniently scan all of these energy characteristics at a glance on a large, illuminated display.
Features:

- Push-in CAGE CLAMP® and lever save time at every stage
- Real space savings: 35 mm wide (2PUCT)
- Measurement of supply and purchase
- Energy measurement in four tariffs
- The communications pro: M-Bus/Modbus® interface and two S0 pulse outputs
- Full transparency at a glance: display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: touch-sensitive controls and configuration app via *Bluetooth®*

Technical data

Configuration

Configuration options	Touch-sensitive controls Configuration app via *Bluetooth®*

Input

Input signal type	Voltage Current
Network configuration	Two-wire, three-wire and four-wire networks
Reference current I_{ref}	1 A
Current transformer (secondary)	1 A 5 A
Current transformer ratio	1:1 ... 9999 : 1 / 5:5 ... 9995 : 5
Measured variable	Voltage Current Electrical output Mains frequency
Nominal input voltage $U_{i\,nom}$	3 x AC 230 ... 400 V
Input voltage range	±20 %
Input current I_i	≤ 5 A
Frequency range	45 ... 60 Hz

Communication

Communication	Modbus® M-Bus *Bluetooth®*
Interface	RS-485 (2-wire); 2x S0 interfaces (configurable)
Indicators	LCD with backlight
Rate control input	230 VAC

Signal processing

Measured variables (calculated)	Active and reactive energy in supply and reference direction
Measurement type (load profile)	No

Measurement error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power supply

Power supply type	Via measurement circuit
Power consumption $P_{max.}$ (phase; active power)	2 W
Power consumption $P_{max.}$ (phase; apparent power)	10 VA

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Safety and protection

Dielectric strength	4 kV; 1 min
Impulse withstand voltage (1.2/50 µs)	6 kV
Pollution degree	2
Protection class	II
Protection type	IP51 / IP20; IP51 (front side); IP20 (connection)

Connection data

Connection object type 1

Connection type 1	Voltage/current
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Actuation type	Lever
Strip length	9 … 11 mm / 0.35 … 0.43 inches
Solid conductor	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 2.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 2.5 mm²

Connection object type 2

Connection type 2	Communication/rate control input
Connection technology 2	Push-in CAGE CLAMP®
WAGO connector 2	WAGO 2604 Series
Actuation type 2	Lever
Strip length 2	9 … 11 mm / 0.35 … 0.43 inches
Solid conductor 2	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor 2	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor; with insulated ferrule 2	0.25 … 2.5 mm²
Fine-stranded conductor; with uninsulated ferrule 2	0.25 … 2.5 mm²

Physical data

Width	36 mm / 1.417 inches
Height	97 mm / 3.82 inches
Depth	63 mm / 2.48 inches
Note (dimensions)	Height with cover: 140 mm

Mechanical data

Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure

Material data

Housing material	PC 940A
Fire load	0 MJ
Weight	165 g

Environmental requirements

Ambient temperature (operation)	-40 … +70 °C
Relative humidity	≤ 75% (during storage ≤ 95 %)

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Standards and specifications

Conformity marking	CE
Standards/specifications	EN 50470-1/3 MID-compliant

Commercial data

ETIM 8.0	EC002048
ETIM 7.0	EC002048
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
Customs tariff number	90283019000

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 879-3040

Documentation

Manual

Product Manual WAGO Energy Meters (MID)	V 1.6 26.09.2022	pdf 3668.98 KB	

Bid Text

879-3040	xml 6.84 KB	
879-3040	docx 29.50 KB	
ausschreiben.de 879-3040		

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Instruction Leaflet			
Energy consumption meter	V 1.15 16.02.2022	pdf 934.38 KB	

Application Notes

Application Note e!COCKPIT			
e!COCKPIT Application Note WagoAppPower-Measurement	2021-11-08 06.12.2021	pdf 930.71 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 879-3040	

CAE data	
EPLAN Data Portal 879-3040	
ZUKEN Portal 879-3040	

Libraries

e!COCKPIT libraries			
e!COCKPIT Library Description WagoAppPowerMeasurement	1.7.4.0 25.05.2021	pdf 1369.41 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Communication

1.1.1.1 Communication module

Item No.: 879-9000
Communication module; Modbus TCP

1.1.2 Current transformer

1.1.2.1 Plug-in current transformer

Item No.: 855-305/300-509
Plug-in current transformer; Primary rated current 300 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/300-509
Plug-in current transformer; Primary rated current 300 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/750-509
Plug-in current transformer; Primary rated current 750 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/750-509
Plug-in current transformer; Primary rated current 750 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/100-209
Plug-in current transformer; Primary rated current: 100 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/150-209
Plug-in current transformer; Primary rated current: 150 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/200-209
Plug-in current transformer; Primary rated current: 200 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/200-509
Plug-in current transformer; Primary rated current: 200 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

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1.1.2.1 Plug-in current transformer

Item No.: 855-405/250-209
Plug-in current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/250-509
Plug-in current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/400-509
Plug-in current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/400-509
Plug-in current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/500-509
Plug-in current transformer; Primary rated current: 500 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/500-509
Plug-in current transformer; Primary rated current: 500 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-305/600-509
Plug-in current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes

Item No.: 855-405/600-509
Plug-in current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 0.5; for billing purposes