

Selection guide

AC and DC energy meters, current sensors and transformers COUNTIS

Which type
of network?Which load
current?Which
accuracy?

Type	AC - Single-phase			AC - Three-phase	
Active energy meters	COUNTIS P04/ P06	COUNTIS E18	COUNTIS P14	COUNTIS E28	COUNTIS P34/P36

Main specifications

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Connection mode	Single-phase - direct 45 A	Single-phase - direct 80 A	Single-phase - direct 100 A	Three-phase - direct 80 A	Three-phase - direct 100 A
Max. number of loads measured	1	1	1	1	1
MID module B+D certification (EN 50470)	•	•	•	•	•
Width (number of DIN modules)	1	2	2	4	4
Auxiliary power supply	Self-supplied	Self-supplied	Self-supplied	Self-supplied	Self-supplied
Input voltage	230 VAC	230 VAC	230 VAC	230...400 VAC	230...400 VAC
Current input type	Direct			Direct	
Number of pulse outputs	2	0	2	1	2

Communication

RS485 Modbus RTU	•/-	-	•	-	•/-
M-Bus	-/•	-	-	-	-/•
Ethernet Modbus TCP with integrated Web server	-	•	-	•	-

Functions

Total / partial bidirectional energy (kWh, kvarh, kVAh)	•	•	•	•	•
Instantaneous measurements (I, V, P, Q, S, F and FP)	•	•	•	•	•
Digital input for dual-tariff management	-	-	•	-	•
Max. number of tariffs managed	4	4	4	4	4
WEBVIEW software compatibility	•	•	•	•	•/-

Accuracy

Active energy (IEC 62053-21)	Class 1	Class 1	Class 1	Class 1	Class 1
Reactive energy (IEC 62053-23)	Class 2	Class 2	Class 2	Class 2	Class 2
Active energy (EN 50470-1/3)	Class B	Class B	Class B	Class B	Class B

Current sensors and transformers	Three-phase current transformers	Flexible Rogowski coils	Current transformers	Shunts
	p. 428	p. 514	p. 520	p. 534
Models	QCT-C-xx	RGW	TCx	Shunts
Current type	AC	AC	AC	DC
Product type	Solid-core	Split-core and flexible	Solid- and split-core	In series wiring
Meter compatibility	COUNTIS P44-xQCT	COUNTIS P44-RGW	COUNTIS P44/P46/E48	COUNTIS P43-DC
Connection mode	Via RJ12 quick-connect cable	On 2-wires terminal block	On 2-wires terminal block	Via screws on the shunt
Max. current	Up to 1000 A	Up to 6000 A	Up to 10 000 A	Up to 4000 A
Secondary output signal	100 mV	100 mV	1 A / 5 A	100 mV

MID
certification?

Which
communication
protocol?

View data on
the web server?

AC - Three-phase				DC
COUNTIS E48	COUNTIS P44-2QCT / P44-4QCT	COUNTIS P44-RGW	COUNTIS P44 / P46	COUNTIS P43-DC
				
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Three-phase - via CT 1/5 A	Three-phase via quickconnect three-phase CT blocks	Three-phase - via Rogowski coils	Three-phase - via CT 1/5 A	Via shunts up to 4000 A
1	2 (-2QCT), 4 (-4QCT)	1	1	1
•	•	•	•	-
4	4	4	4	2
Self-supplied	85-276 VAC 120-240 VDC	85-276 VAC 120-240 VDC	85-276 VAC 120-240 VDC	9-60 VDC
230...400 VAC	230...400 VAC	230...400 VAC	230...400 VAC	1000 VDC
1A / 5A	QCT-C 3ph CT blocks	RGW Rogowski coils	1 A / 5 A	Shunts 100 mV
1	0	2	2	1
-	•	•	•/-	•
-	-	-	-/•	-
•	-	-	-	-
•	•	•	•	•
•	•	•	•	•
-	-	•	•	-
4	4	4	4	4
•	•	•	•/-	•
Class 0,5s	Class 1	Class 1	Class 0,5s	Class 1 (IEC 62053-41)
Class 2	Class 2	Class 2	Class 2	-
Class C	Class B	Class B	Class C	-