



Current transformers (CTs) &

▲ Measurement and instrumentation

Standard industrial transformers

TCR
Wound primary
▶ page 113



TCR
Cable/busbar primary
▶ page 114



TCR
Busbar primary
▶ page 117



TCRO
Split core
▶ page 118



TC CLIP
Split core
▶ page 121



Adaptable industrial transformers

JVR
Wound primary
▶ page 124



JVO
Cable primary
▶ page 125



JVO
Cable/busbar primary
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JVP
Busbar primary
▶ page 128



Transformers for energy metering

JVS
Cable/busbar primary
▶ page 130



JVS
Busbar primary
▶ page 132



shunts

Transformers for price metering

Single-phase, single-rating

JVP 1045B
▶ page 134



JVO 40-100
▶ page 135



Single-phase, multi-rating

JVO 40-100S
▶ page 136



JVO 90-160S
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JVS 1145S
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Three-phase, single-rating

TRI 500
▶ page 139



Three-phase, multi-rating

TRI 700
▶ page 140



Current summation

JVM 15
▶ page 141



Associated product

PRTC
CT short-circuiting switch
▶ page 142



Shunts

Class 0.5

76/2 – 77/2 range
▶ page 145

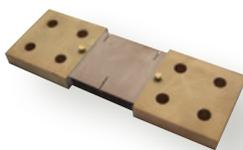


SHMO range
DIN rail mounting
▶ page 150



Class 1

SHMI range
▶ page 147



SHEL range
▶ page 149





Choosing your **standard industrial**

Choosing your **adaptable** industrial current transformer: page 106
 Choosing your transformer **for energy metering**: page 108

Current transformers (CTs)

Measurement and instrumentation

TCR Wound primary				TCR Cable/busbar primary						
▶ page 113				▶ page 114						
										
	TCR 10	TCR 11	TCR 15	TCR 21	TCR 31	TCR 41	TCR 51	TCR 61	TCR 71	TCR 75
Wound primary (threaded rod)	aperture 25 x 25	Ø M6	wire 16 mm ²							
Cable primary (mm)				Ø 20	Ø 22	Ø 26	Ø 28	Ø 44	Ø 63	
Busbar primary (mm)				15 x 10 20 x 10 25 x 5	20 x 12 25 x 11 30 x 10	20 x 20 25 x 12 30 x 10	20 x 25 30 x 15 40 x 10	50 x 30 60 x 12	50 x 50 60 x 37 80 x 30	3 x 100 x 10
Primary	5 A									
	10 A									
	15 A									
	20 A									
	25 A									
	30 A									
	40 A									
	50 A									
	60 A									
	75 A									
	100 A									
	125 A									
	150 A									
	200 A									
	250 A									
	300 A									
	400 A									
	500 A									
	600 A									
	750 A									
	800 A									
	1000 A									
	1200 A									
	1500 A									
	2000 A									
	2500 A									
	3000 A									
	4000 A									
	5000 A									
Strengths	Combining a high level of accuracy and compact design.			Come in a wide range of primaries. Mounting accessories supplied as standard.						

5 A or 1 A secondary as standard

5 A secondary as standard
1 A on request

5 A secondary only



Choosing your **adaptable industrial**

Choosing your **standard** industrial current transformer: page 104

Choosing your transformer **for energy metering**: page 108

Current transformers (CTs)

Measurement and instrumentation

		JVR Wound primary			JVO Cable primary						
		▶ page 124			▶ page 125						
											
		JVR 64	JVR 75	JVR 86	JVO 12-46	JVO 18-51	JVO 21-64	JVO 21-75	JVO 32-75	JVO 36-75	J3R 80 B
Wound primary (threaded rod)		M8	M8 - M10	M8 - M10							
Cable primary (mm)					Ø 12	Ø 18	Ø 21	Ø 21	Ø 32	Ø 36	Ø 66
Busbar primary (mm)											
Primary	5 A										
	10 A										
	15 A										
	20 A										
	25 A										
	30 A										
	40 A										
	50 A										
	60 A										
	75 A										
	100 A										
	125 A										
	150 A										
	200 A										
	250 A										
	300 A										
	400 A										
	500 A										
	600 A										
	750 A										
	800 A										
	1000 A										
	1200 A										
	1250 A										
	1500 A										
	2000 A										
	2500 A										
	3000 A										
Strengths		Primary connection via threaded rod for more compact size.			A wide choice of primaries.						
		SPECIFIC PRODUCTS POSSIBLE IN THIS RANGE									

5 A secondary as standard / 1 A on request



Choosing your current transformer for

Choosing your **standard** industrial current transformer: page 104

Choosing your **adaptable** industrial current transformer: page 106

▲ Measurement and instrumentation Current transformers (CTs)

JVS Cable/busbar primary
JVS Busbar primary

▶ page 130



▶ page 132



		JVS 25B	JVS 26B	JVS 30B	JVS 38B	JVS 39B	JVS 40	JVS 50	JVS 60
Cable primary (mm)		Ø 26	Ø 28	Ø 44	Ø 63				
Busbar primary (mm)		20 x 20 25 x 12 30 x 10	20 x 25 30 x 15 40 x 10	50 x 30 60 x 12	50 x 50 60 x 30 80 x 30	3 x 100 x 10	100 x 20	100 x 30	125 x 60
Primary	100 A								
	150 A								
	200 A								
	250 A								
	300 A								
	400 A								
	500 A								
	600 A								
	750 A								
	800 A								
	1000 A								
	1200 A								
	1500 A								
2000 A									
2500 A									
3000 A									
4000 A									
5000 A									
Strengths		High-accuracy range with very low phase shift, ideal for electronic measurement instruments, including energy metering							

5 A secondary as standard

5 A secondary as standard with individual test certificate

1 A secondary with individual test certificate on request

energy and price metering

	Single-phase single-rating		Single-phase multi-rating			Three-phase single-rating	Three-phase multi-rating			
	▶ pages 134-135		▶ pages 136-137-138			▶ page 139	▶ page 140			
										
	JVP 1045 B	JVO 40-100	JVO 40-100 S bi-rating	JVO 90-160 S tri-rating	JVS 1145 S tri-rating	TRI 500	TRI 700 S 50-100/5 A	TRI 700 S 100-200/5 A	TRI 700 S 200-500/5 A	TRI 700 100-200- 500/5 A
Accuracy class (according to EN 60044-1)	0.5	0.5	0.2s	0.2s	0.2s	0.5	0.2s	0.2s	0.2s	0.5
Cable primary (diameter in mm)		Ø 42 mm	Ø 40 mm	Ø 90 mm	Ø 40 mm					
Busbar primary (mm)	100 x 40				63 x 12 100 x 12					
Cable clamp (section in mm ²)						22 to 240 mm ²	50 to 240 mm ²	50 to 240 mm ²	50 to 240 mm ²	50 to 240 mm ²
Primary (secondary 5 A)	50 A									
	100 A									
	150 A									
	200 A									
	300 A									
	500 A									
	1000 A									
	2000 A									



Info & advice

TRANSFORMERS

Function

Current transformers power low-voltage measuring instruments and isolate them from the network. They supply their secondary winding with a standard current proportional to the primary current. They are divided into four main families:

- wound primaries;
- split-core primaries;
- cable primaries;
- busbar primaries.

These transformers can be used with all types of measuring instruments: ammeters, energy meters, power monitors, etc.

How to choose a current transformer?

The choice is based on two main criteria:

- the current on the primary (transformation ratio $I_p / 5 A$);
- the type of installation.

In other words, the choice **depends on the type of cable or busbar** on the installation and the **intensity of the currents flowing through them**.

Determining a CT's accuracy class

The accuracy class of a current transformer depends on the transformer's apparent power (VA) and the consumption of the entire measurement line. It is the result of the measurement errors of each element in the line and must therefore be less than or equal to the accuracy class of the measuring instrument which it supplies, particularly for energy metering where accuracy has a direct impact on billing. For a given accuracy class, the measurement line's consumption must not exceed the current transformer's apparent power (VA).

Example of measurement chain consumption at 20 °C

Copper-wire section (mm ²)	Power dissipated per metre of line (2 ways)	
	Secondary 5 A	Secondary 1 A
1.5	0.61	0.025 VA
2.5	0.37	0.015 VA
4	0.23	0.009 VA
6	0.15	0.006 VA
<hr/>		
Enerium 50 Power Monitor	0.15 VA	
5 m of double 2.5 mm ² wire	0.37 x 5 = 1.85 VA	
Measurement line consumption	0.15 + 1.85 = 2 VA	

The transformer's accuracy class can then be deduced from the results obtained by referring to the table opposite (provided as an example):

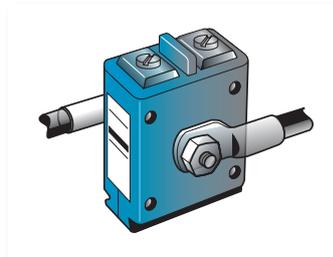
- Class 3 for a CT with a ratio of 150/5
- Class 1 for a CT with a ratio of 200/5
- Class 0.5 for a CT with a ratio of 250/5



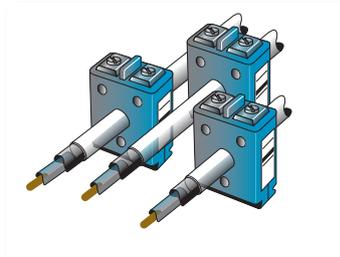
Primary	Power (VA) on Class		
	0.5	1	3
100 A	-	1	1.5
125 A	-	1	1.5
150 A	1	1.75	2.5
200 A	1.5	2.75	3.75
250 A	2	3.25	3.75
300 A	2.5	3.25	4
400 A	3	3.75	5
500 A	3.5	3.75	5
600 A	3.75	5	7.5

SELECTING A TRANSFORMER

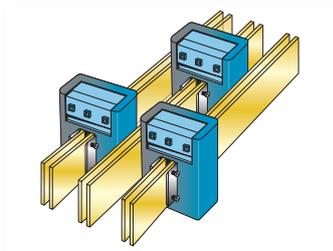
Enerdis current transformers offer 4 types of connection:



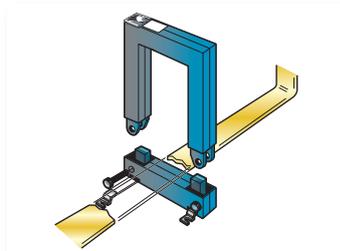
WOUND PRIMARY
for currents less than 200 A



CABLE PRIMARY
for currents between 40 and 2,500 A



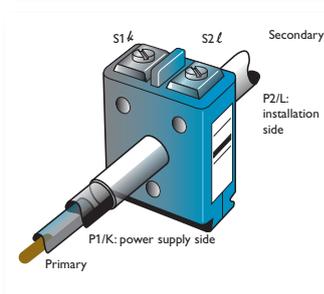
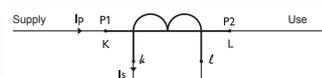
BUSBAR PRIMARY
for currents between 750 and 5,000 A



SPLIT CORE PRIMARY
for easy connection to an existing installation
using a busbar or cable primary

CONNECTING YOUR CT

It is important to always install the transformer in the right direction, especially on three-phase networks, so as not to invert the phase shift between the current and the voltage on one or more of the phases.



Accuracy limit tables according to the IEC 60044-1 standard

Class	Limit errors – Table 1			
	± Error (in %) depending on In (in %)			
	5	20	100	120
0.2	0.75	0.35	0.20	0.20
0.5	1.50	0.75	0.50	0.50
1	3.00	1.50	1.00	1.00

Class	Limit errors – Table 2				
	± Error (in %) depending on In (in %)				
	1	5	20	100	120
0.2 S	0.75	0.35	0.20	0.20	0.20
0.5 S	1.50	0.75	0.50	0.50	0.50

FOCUS

Financial impact of a TC's accuracy class

For a consumption of 12,000 MWh/year and a cost of € 0.10/kWh

- CT class 1: ±120,000 kWh = ±€ 12,000
- CT class 0.5: ±60,000 kWh = ±€ 6,000
- CT class 0.2S: ±2,500 kWh = ±€ 2,500

This calculation takes into account neither the class of the measuring instruments, nor loss occurring on the network cables.

CT safety rules

You must never open the secondary circuit of a CT supplied on the primary. The very high voltage created may cause bodily harm or irreparable damage to the transformer.

Before working on the secondary of a CT, it must be short-circuited.

When a CT is not in use (secondary open) the secondary must be short-circuited before powering up the system.



TCR Range

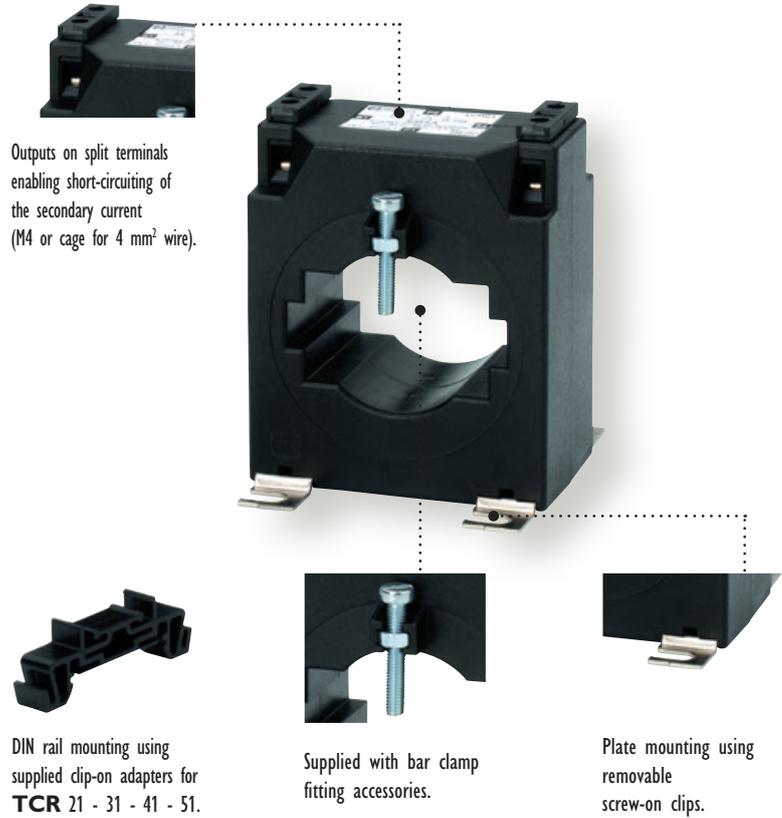
CTs designed for submetering. Accuracy class 0.5/1/3

Current transformers (CTs)

Measurement and instrumentation

PRODUCT ADVANTAGES

- +** **EXTENDED RANGE:**
primary currents from 5 to 5,000 A and 5 A or 1 A secondary currents
- +** **DIN RAIL MOUNTING:**
on plate mounting or fixed around busbars
- +** **COMPACT DESIGN**



Outputs on split terminals enabling short-circuiting of the secondary current (M4 or cage for 4 mm² wire).

DIN rail mounting using supplied clip-on adapters for TCR 21 - 31 - 41 - 51.

Supplied with bar clamp fitting accessories.

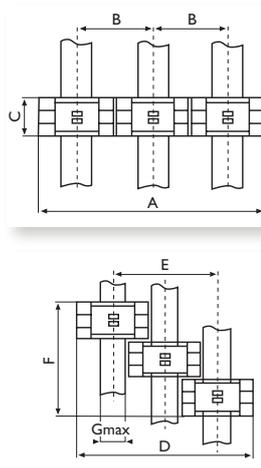
Plate mounting using removable screw-on clips.

► General specifications

Reference standards:
EN 60044-1 (ex IEC 185)
Maximum network voltage:
720 Vac
Dielectric test voltage:
3 kV/50 Hz/1 min
Frequency response: 50/60 Hz
Short-circuit thermal current (I_{th}): 60 I_n - 1 second
Dynamic current (I_{dyn}): 2.5 I_{th}
Safety factor: < 5

Operating conditions
Temperature: -10°C to +50°C
Relative humidity: < 90%
Protection
Protection rating: IP 50 (terminal covers supplied)
Dry winding with self-extinguishing ABS covering (UL 94VO)

► 3CT Mounting



Model	Dimensions						
	A	B	C	D	E	F	G
TCR 10	-	-	-	-	-	-	-
TCR 11	-	-	-	-	-	-	-
TCR 15	-	-	-	-	-	-	-
TCR 21	176	59	32	143.6	85.6	98	25.6
TCR 31	176	59	32	148.6	90.6	98	30.6
TCR 41	194	65	44	160.6	96.6	134	30.6
TCR 51	194	65	44	170.6	106.6	134	40.6
TCR 61	255.5	85.5	50	231.6	147.1	152	60.6
TCR 71	326	109	50	298.6	190.6	152	80.6
TCR 80	287	96	59	215	120	179	23
TCR 90	347	116	44	264	149	134	32
TCR 100	374	125	44	310	186	134	60

► Mounting accessories

Model	DIN rail fittings	Plate mounting fittings	Sealable terminal cover*
TCR 10	1923 0021	•	•
TCR 11	1923 0021	•	•
TCR 15	•	•	•
TCR 21	•	•	1923 0022
TCR 31	•	•	1923 0022
TCR 41	•	•	1923 0022
TCR 51	•	•	1923 0022
TCR 61	•	•	1923 0022
TCR 71	•	•	1923 0022
TCR 75	•	•	1923 0022
TCR 80	•	•	•
TCR 90	•	•	•
TCR 100	•	•	•

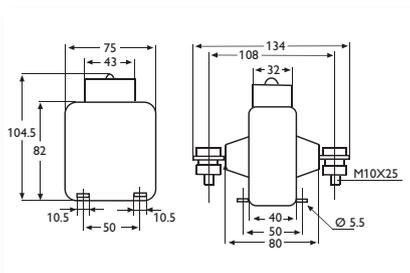
• Standard accessories

* sold in pairs

TCR Wound primary

TCR 10

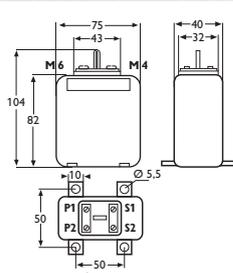
25 x 25 mm aperture



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
5 A	15	20	30	0.70
10 A	15	20	30	0.70
15 A	15	20	30	0.70
20 A	15	20	30	0.70
25 A	15	20	30	0.70
30 A	15	20	30	0.70
40 A	15	20	30	0.70
50 A	15	20	30	0.80
60 A	15	20	30	0.80
75 A	15	20	30	0.75
100 A	15	20	30	0.70
125 A	15	20	30	0.70
150 A	15	20	30	0.70

TCR 11

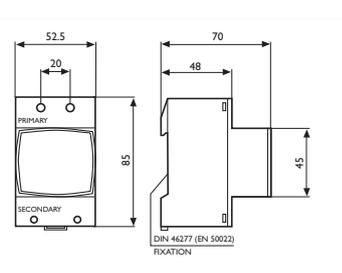
Ø M4 and M6



Primary	Power (VA) class		Weight (kg)
	1	3	
5 A	5	5	0.50
10 A	5	5	0.50
15 A	5	5	0.50
20 A	5	5	0.50
25 A	5	5	0.50
30 A	5	5	0.50
40 A	5	5	0.50
50 A	5	5	0.50
60 A	5	5	0.50

TCR 15

Primary: 16 mm² wire
Secondary: 4 mm² wire



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
5 A	2.5	5	7	0.28
10 A	2.5	5	7	0.28
15 A	2.5	5	7	0.28
20 A	2.5	5	7	0.28
25 A	2.5	5	7	0.28
30 A	2.5	5	7	0.28
40 A	2.5	5	7	0.28
50 A	2.5	5	7	0.28

TO ORDER

Primary	Secondary 1 A	Secondary 5 A
5 A	1921 1507	1920 1507
10 A	1921 1512	1920 1512
15 A	1921 1514	1920 1514
20 A	1921 1515	1920 1515
25 A	1921 1516	1920 1516
30 A	1921 1517	1920 1517
40 A	1921 1518	1920 1518
50 A	1921 1519	1920 1519
60 A	1921 1521	1920 1521
75 A	1921 1523	1920 1523
100 A		1920 1525
125 A		1920 1526
150 A		1920 1528

Primary	Secondary 1 A	Secondary 5 A
5 A	1921 1607	1920 1607
10 A	1921 1612	1920 1612
15 A	1921 1614	1920 1614
20 A	1921 1615	1920 1615
25 A	1921 1616	1920 1616
30 A	1921 1617	1920 1617
40 A	1921 1618	1920 1618
50 A	1921 1619	1920 1619
60 A	1921 1621	1920 1621

Primary	Secondary 1 A	Secondary 5 A
5 A	1921 1707	1920 1707
10 A	1921 1712	1920 1712
15 A	1921 1714	1920 1714
20 A	1921 1715	1920 1715
25 A	1921 1716	1920 1716
30 A	1921 1717	1920 1717
40 A	1921 1718	1920 1718
50 A	1921 1719	1920 1719

► Associated products

PRTC
CT protection unit

► page 143



Mounting
accessories

► page 112





TCR Range

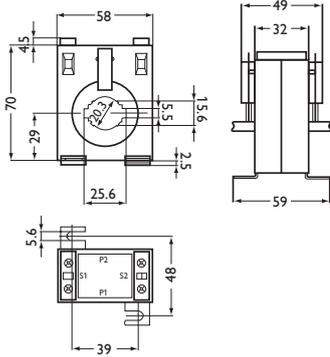
Cable/busbar primary

Current transformers (CTs)

► Measurement and instrumentation

TCR 21

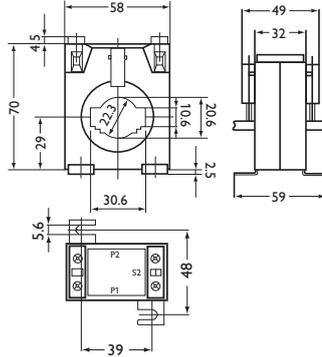
Cable Ø 20 mm
Bar: 15 x 10 mm - 20 x 10 mm
25 x 5 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
40 A	-	-	1.5	0.41
50 A	-	-	3	0.42
60 A	-	1.25	3.5	0.43
75 A	-	2	3.5	0.44
100 A	1.5	2.5	3.75	0.44
125 A	1.75	3.5	5	0.45
150 A	2.5	3.5	5	0.29
200 A	3.75	5	5	0.30
250 A	5	7.5	7.5	0.31

TCR 31

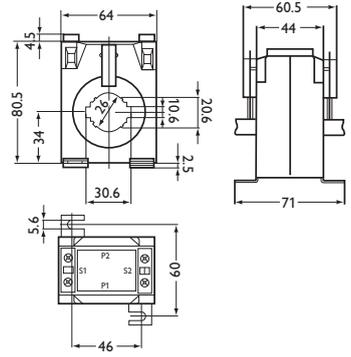
Cable Ø 22 mm
Bar: 20 x 12 mm - 25 x 11 mm
30 x 10 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	1	1.5	0.53
125 A	-	1	2	0.53
150 A	1	2	2.5	0.53
200 A	2.5	3	3.5	0.54
250 A	3.5	3.75	5	0.54
300 A	3.5	3.75	5	0.51
400 A	3.5	5	7.5	0.51
500 A	5	7.5	10	0.51
600 A	5	7.5	10	0.52

TCR 41

Cable Ø 26 mm
Bar: 20 x 20 mm - 25 x 12 mm
30 x 10 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	1.75	3.75	7.5	0.53
125 A	3.75	7.5	10	0.53
150 A	5	7.5	10	0.53
200 A	7.5	10	10	0.54
250 A	7.5	10	15	0.54
300 A	10	10	15	0.51
400 A	10	10	15	0.51
500 A	15	15	20	0.51
600 A	15	20	25	0.51

TO ORDER

Primary	Secondary 1 A	Secondary 5 A
40 A	1921 2318B	1920 2318B
50 A	1921 2319B	1920 2319B
60 A	1921 2321B	1920 2321B
75 A	1921 2323B	1920 2323B
100 A	1921 2325B	1920 2325B
125 A	1921 2326B	1920 2326B
150 A	1921 2328B	1920 2328B
200 A	1921 2330B	1920 2330B
250 A	1921 2331B	1920 2331B

Primary	Secondary 1 A	Secondary 5 A
100 A	1921 2425B	1920 2425B
125 A	1921 2426B	1920 2426B
150 A	1921 2428B	1920 2428B
200 A	1921 2430B	1920 2430B
250 A	1921 2431B	1920 2431B
300 A	1921 2433B	1920 2433B
400 A	1921 2435B	1920 2435B
500 A	1921 2436B	1920 2436B
600 A	1921 2438B	1920 2438B

Primary	Secondary 1 A	Secondary 5 A
100 A	1921 2525B	1920 2525B
125 A	1921 2526B	1920 2526B
150 A	1921 2528B	1920 2528B
200 A	1921 2530B	1920 2530B
250 A	1921 2531B	1920 2531B
300 A	1921 2533B	1920 2533B
400 A	1921 2535B	1920 2535B
500 A	1921 2536B	1920 2536B
600 A	1921 2538B	1920 2538B

► Associated products

PRTC
CT protection unit

► page 142



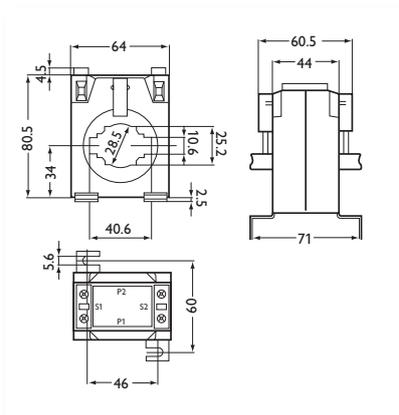
Mounting
accessories

► page 112



TCR 51

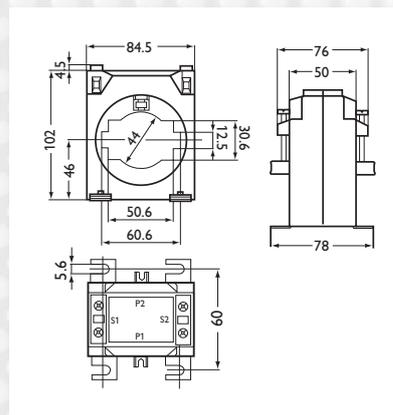
Cable \varnothing 28 mm
Bar: 20 x 25 mm - 30 x 15 mm
40 x 10 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	0.5	1	2.5	0.36
125 A	0.75	1.5	3.75	0.37
150 A	1	3.5	5	0.37
200 A	3.5	5	7.5	0.38
250 A	5	7.5	10	0.39
300 A	5	7.5	10	0.40
400 A	5	7.5	10	0.41
500 A	7.5	10	15	0.41
600 A	7.5	10	15	0.42
750 A	10	15	20	0.43
800 A	10	15	20	0.44

TCR 61

Cable \varnothing 44 mm
Bar: 50 x 30 mm - 60 x 12 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
400 A	5	7.5	10	0.5
500 A	7.5	10	15	0.52
600 A	10	15	20	0.52
750 A	15	20	25	0.59
800 A	15	20	30	0.60
1000 A	15	20	30	0.61
1200 A	15	20	30	0.63
1500 A	15	20	30	0.65

TO ORDER

Primary	Secondary 1 A	Secondary 5 A
100 A	1921 3425B	1920 3425B
125 A	1921 3426B	1920 3426B
150 A	1921 3428B	1920 3428B
200 A	1921 3430B	1920 3430B
250 A	1921 3431B	1920 3431B
300 A	1921 3433B	1920 3433B
400 A	1921 3435B	1920 3435B
500 A	1921 3436B	1920 3436B
600 A	1921 3438B	1920 3438B
750 A	1921 3440B	1920 3440B
800 A	1921 3441B	1920 3441B

Primary	Secondary 1 A	Secondary 5 A
400 A	1921 4735B	1920 4735B
500 A	1921 4736B	1920 4736B
600 A	1921 4738B	1920 4738B
750 A	1921 4740B	1920 4740B
800 A	1921 4741B	1920 4741B
1000 A	1921 4742B	1920 4742B
1200 A	1921 4751B	1920 4751B
1500 A	1921 4744B	1920 4744B

► Associated products

PRTC
CT protection unit

► page 142



Mounting
accessories

► page 112





TCR Range

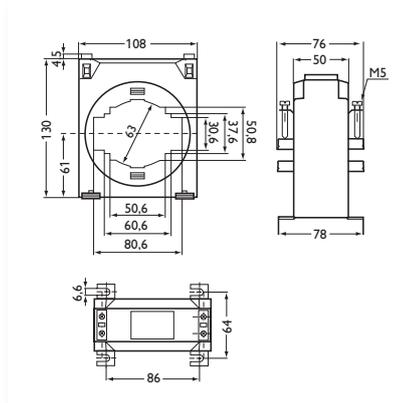
Cable/busbar primary

Current transformers (CTs)

▶ Measurement and instrumentation

TCR 71

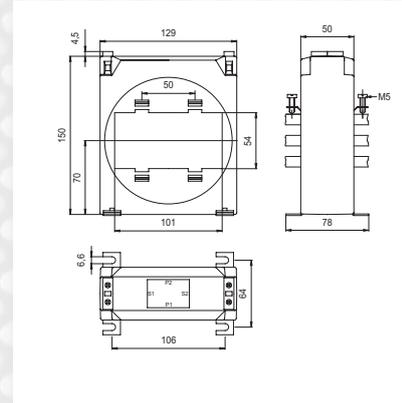
Cable Ø 63 mm
Bar: 50 x 50 mm - 60 x 37 mm
80 x 30 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
400 A	5	7.5	10	0.82
500 A	5	7.5	10	0.80
600 A	7.5	10	15	0.83
750 A	7.5	10	15	0.88
800 A	7.5	10	15	0.66
1000 A	10	15	20	0.72
1200 A	10	15	20	0.68
1500 A	15	20	25	0.84
2000 A	15	20	25	0.82
2500 A	15	20	30	0.88
3000 A	15	20	30	0.88

TCR 75

Bar: 3 x 100 mm x 10 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
1500 A	15	20	30	1.47
2000 A	15	20	30	1.55
2500 A	20	30	40	1.63
3000 A	30	40	60	1.71
4000 A	35	40	60	1.87

TO ORDER

Primary	Secondary 1 A	Secondary 5 A
400 A	1921 4635B	1920 4635B
500 A	1921 4636B	1920 4636B
600 A	1921 4638B	1920 4638B
750 A	1921 4640B	1920 4640B
800 A	1921 4641B	1920 4641B
1000 A	1921 4642B	1920 4642B
1200 A	1921 4651B	1920 4651B
1500 A	1921 4644B	1920 4644B
2000 A	1921 4645B	1920 4645B
2500 A	1921 4646B	1920 4646B
3000 A	1921 4647B	1920 4647B

Primary	Secondary 1 A	Secondary 5 A
1500 A	1921 5044B	1920 5044B
2000 A	1922 5045B	1920 5045B
2500 A	1923 5046B	1920 5046B
3000 A	1924 5047B	1920 5047B
4000 A	1925 5049B	1920 5049B

▶ Associated products

PRTC
CT protection unit

▶ page 142



Mounting
accessories

▶ page 112

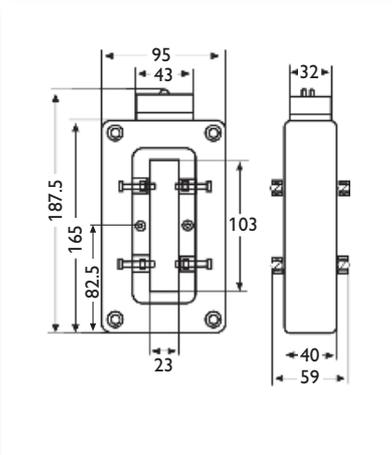


TCR Range

Busbar primary

TCR 80

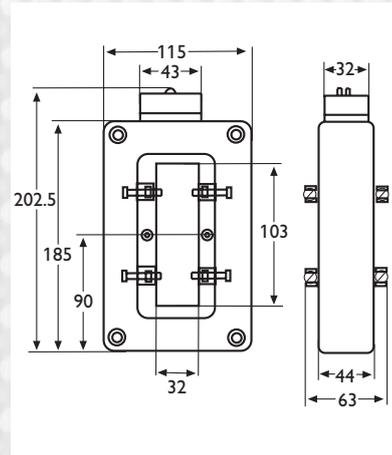
Bar: 100 x 20 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
750 A	15	20	30	0.80
800 A	15	20	30	0.80
1000 A	15	20	30	0.76
1200 A	15	20	30	0.76
1500 A	15	30	40	0.76
2000 A	20	40	50	0.76

TCR 90

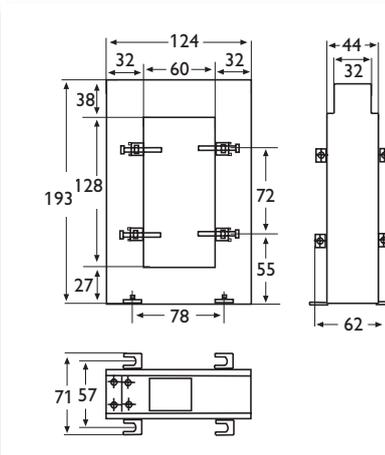
Bar: 100 x 30 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
1500 A	15	30	40	0.76
2000 A	20	40	50	0.82
2500 A	20	40	50	0.78
3000 A	20	45	60	0.90
4000 A	35	50	70	0.90

TCR 100

Bar: 125 x 60 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
1000 A	15	20	30	0.75
1200 A	15	20	30	0.80
1500 A	15	20	30	0.83
2000 A	15	20	30	0.92
2500 A	20	30	40	1.01
3000 A	30	40	60	1.09
4000 A	35	50	70	1.21
5000 A	40	60	80	1.44

TO ORDER

Primary	Secondary 1 A	Secondary 5 A
750 A	1921 5640	1920 5640
800 A	1921 5641	1920 5641
1000 A	1921 5642	1920 5642
1200 A	1921 5651	1920 5651
1500 A	1921 5644	1920 5644
2000 A	1921 5645	1920 5645

Primary	Secondary 1 A	Secondary 5 A
1500 A	1921 6644	1920 6644
2000 A	1921 6645	1920 6645
2500 A	1921 6646	1920 6646
3000 A	1921 6647	1920 6647
4000 A	1921 6649	1920 6649

Primary	Secondary 1 A	Secondary 5 A
1000 A	1921 6842	1920 6842
1200 A	1921 6851	1920 6851
1500 A	1921 6844	1920 6844
2000 A	1921 6845	1920 6845
2500 A	1921 6846	1920 6846
3000 A	1921 6847	1920 6847
4000 A	1921 6849	1920 6849
5000 A		1920 6850

► Associated products

PRTC
CT protection unit

► page 142





TCRO Range

CTs designed for insertion on electrical installations without opening the conductor.

Current transformers (CTs)

Measurement and instrumentation

PRODUCT ADVANTAGES

- +** **PRIMARY**
from 200 to 5,000 A
and wide choice of
primary options
- +** **FULLY OPENING**
primary

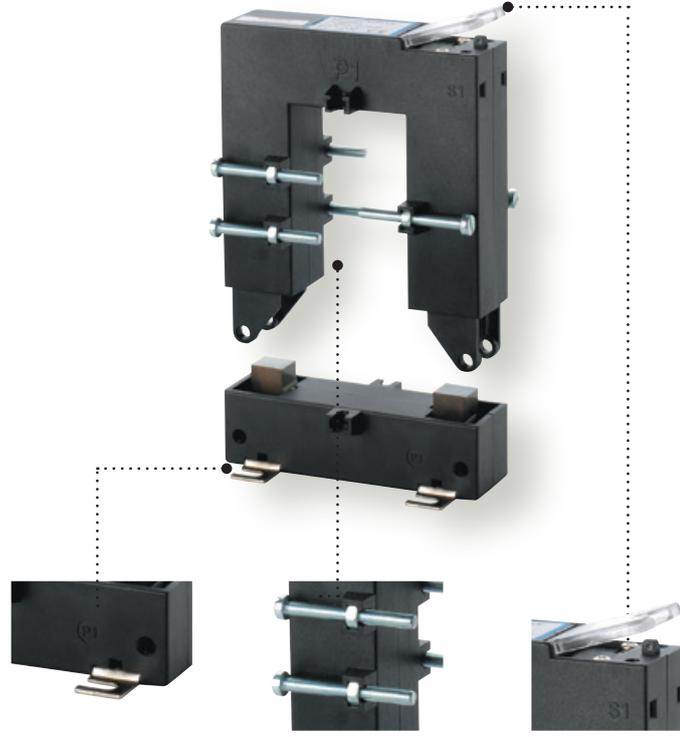


Plate mounting fitting

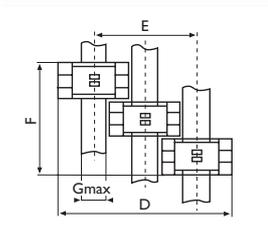
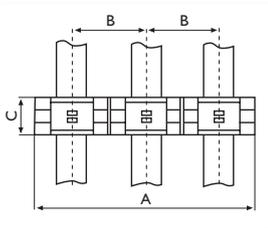
Bar clamp fitting

Captive sealable terminal covers. Split output terminals enabling risk-free short-circuiting of the secondary current (cage for 4 mm² wire)

► General specifications

Reference standard:
EN 60044-1 (ex IEC 185)
Maximum network voltage:
720 Vac
Dielectric test voltage:
3 kV/50 Hz/1 min
Frequency response: 50/60 Hz
Short-circuit thermal current (I_{th}): 60 I_n - 1 second
Dynamic current (I_{dyn}): 2.5 I_{th}
Safety factor: < 5

Operating conditions:
Temperature: -10°C to +50°C
Relative humidity: < 90%
Protection:
Protection rating: IP 50 (terminal covers supplied)
Dry winding with self-extinguishing ABS covering (UL 94 VO)



► 3CT Mounting

Model	Dimensions						
	A	B	C	D	E	F	G
TCRO 2030	269	90	40	200	111	122	20
TCRO 5080	344	115	32	280	166	98	50
TCRO 8080	434	145	32	370	226	98	80
TCRO 80120	434	145	32	370	226	98	80
TCRO 80160	554	185	52	450	266	158	80

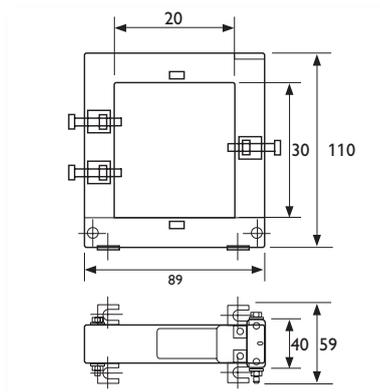
► Mounting accessories

Model	Plate mounting fittings	Busbar clamp
	Model	
TCRO 2030	•	•
TCRO 5080	•	•
TCRO 8080	•	•
TCRO 80120	•	•
TCRO 80160	•	•

• Standard accessories

TCRO 2030

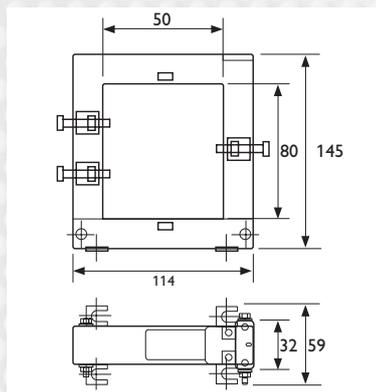
Bar: 20 x 30 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	1.5	0.75
150 A	-	-	2	0.75
200 A	-	1.5	2.5	0.75
250 A	-	2	4	0.75
300 A	1.5	4	6	0.75
400 A	2.5	6	10	0.75

TCRO 5080

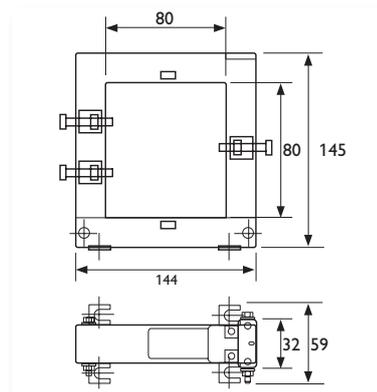
Bar: 50 x 80 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
250 A	1	2	4	0.90
300 A	1.5	3	6	0.90
400 A	1.5	3	10	0.90
500 A	2.5	5	15	0.90
600 A	2.5	5	17.5	0.90
800 A	3	7	18	0.90
1000 A	5	10	20	0.90

TCRO 8080

Bar: 80 x 80 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
250 A	1	2	4	1.00
300 A	1.5	3	6	1.00
400 A	1.5	3	10	1.00
500 A	2.5	5	15	1.00
600 A	2.5	5	17.5	1.00
800 A	3	7	18	1.00
1000 A	5	10	20	1.00

TO ORDER

Primary	Secondary 5 A
100 A	1920 8328
150 A	1920 8329
200 A	1920 8330
250 A	1920 8331
300 A	1920 8333
400 A	1920 8335

1 A on request

Primary	Secondary 5 A
250 A	1920 8431
300 A	1920 8433
400 A	1920 8435
500 A	1920 8436
600 A	1920 8438
800 A	1920 8441
1000 A	1920 8442

1 A secondary on request

Primary	Secondary 5 A
250 A	1920 8531
300 A	1920 8533
400 A	1920 8535
500 A	1920 8536
600 A	1920 8538
800 A	1920 8541
1000 A	1920 8542

1 A secondary on request

► Associated products

PRTC
CT protection unit

► page 142





TCRO Range

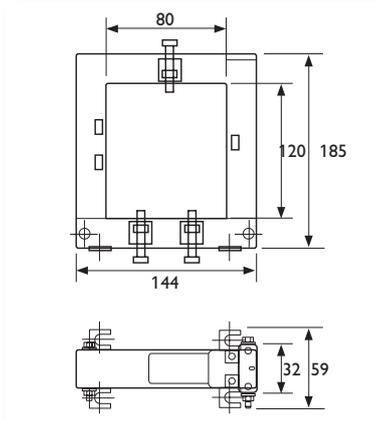
Split core

Current transformers (CTs)

Measurement and instrumentation

TCRO 80120

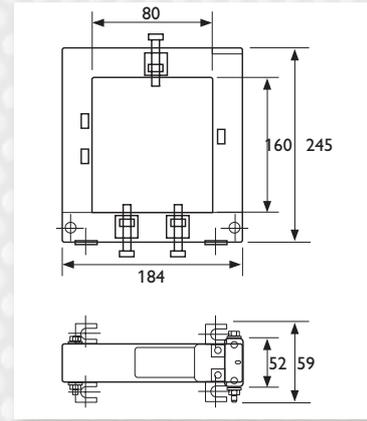
Bar: 80 x 120 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
500 A	-	4	12	1.20
600 A	-	5	14	1.20
800 A	3	7	18	1.20
1000 A	5	9	20	1.20
1200 A	6	11	28	1.20
1500 A	8	17	30	1.20

TCRO 80160

Bar: 80 x 160 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
1000 A	10	15	20	3.50
1500 A	15	20	25	3.50
2000 A	15	20	25	3.50
2500 A	15	20	25	3.50
3000 A	20	25	30	3.50
4000 A	20	25	30	3.50
5000 A	20	25	30	3.50

TO ORDER

Primary	Secondary 5 A
500 A	1920 8636
600 A	1920 8638
800 A	1920 8641
1000 A	1920 8642
1200 A	1920 8643
1500 A	1920 8644

1 A on request

Primary	Secondary 5 A
1000 A	1920 8742
1500 A	1920 8744
2000 A	1920 8745
2500 A	1920 8746
3000 A	1920 8747
4000 A	1920 8749
5000 A	1920 8750

1 A on request

► Associated products

PRTC
CT protection unit

► page 142



TC CLIP Range

Very compact current transformer for inclusion on electrical installations without disconnecting the power cables

PRODUCT ADVANTAGES

- + **QUICK AND EASY IMPLEMENTATION**
without cutting off the power
- + **Built-in SHORT-CIRCUITING SWITCH**
- + **REINFORCED HINGE**
- + **VERY COMPACT**
- + **PRIMARY**
from 60 to 600 A



► General specifications

Maximum network voltage: 720 Vac
Dielectric test voltage: 3 kV 50 Hz 1 min
Secondary current: 1 A
Power: 0.5 VA
Frequency: 50/60 Hz
Operating temperature: -20°C to +50°C
Storage temperature: -30°C to 90°C
Accuracy class: 1 %

The **TC CLIP** models are compatible with all the measuring products with input on CT available on the market, and particularly ENERIUM power monitors and ULYS submeters from ENERDIS®.

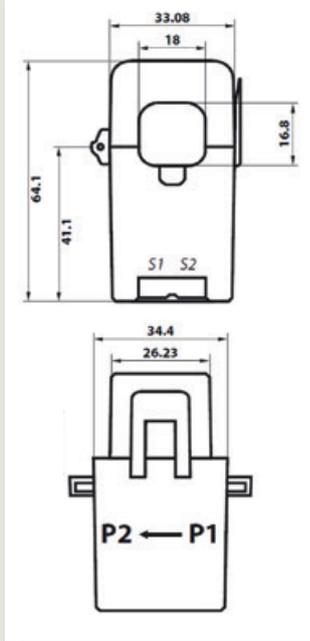


Current transformers (CTs)

Measurement and instrumentation

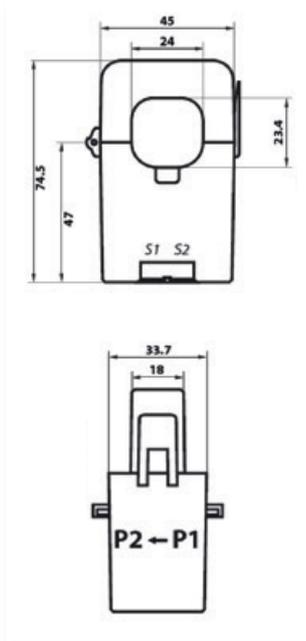
TCC176

Cable Ø 17 mm



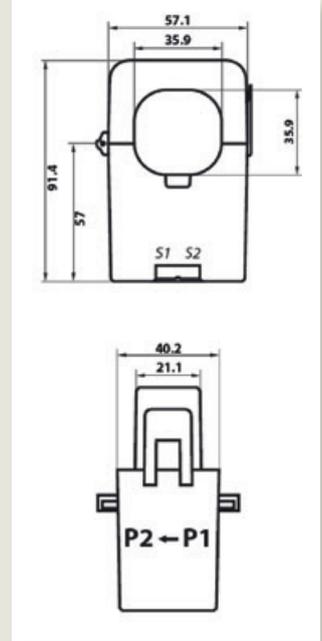
TCC241 / TCC242

Cable Ø 24 mm



TCC364 / TCC366

Cable Ø 36 mm



	TCC 176	TCC 241	TCC 242	TCC 364	TCC 366
Primary	60 A	100 A	250 A	400 A	600 A
Secondary	1A				
Power	0,2 VA				0,5 VA
Accuracy class	3 %				1 %
Diameter	17 mm	24 mm	24 mm	36 mm	36 mm
Dimensions (mm)	64 x 33 x 34,4	74,5 x 45 x 34	74,5 x 45 x 34	91 x 57 x 40,5	91 x 57 x 40,5
Weight (g)	128	162	187	263	300

TO ORDER

Model	Primary / Secondary	Reference	Pack of 3 TC CLIP	Reference
TCC 176	60 A / 1 A	P01379609	Pack of 3 TCC 176	P01379610
TCC 241	100 A / 1 A	P01379601	Pack of 3 TCC 241	P01379605
TCC 242	250 A / 1 A	P01379602	Pack of 3 TCC 242	P01379606
TCC 364	400 A / 1 A	P01379603	Pack of 3 TCC 364	P01379607
TCC 366	600 A / 1 A	P01379604	Pack of 3 TCC 366	P01379608

Associated products

RENOV ENERGY
Metering solutions

► page 52



JVR-JVO-JVP Ranges

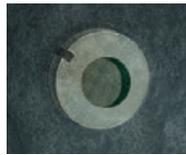
CTs designed to supply analogue or digital measurement instruments.
Accuracy class 0.5/1/3

PRODUCT ADVANTAGES

- + COMPLETE RANGE:**
primary from 1 to 3,000 A
and 5 A or 1 A secondary
- + TOTALLY ADAPTABLE RANGE**
for specific requirements
(primary, secondary,
power class, frequency)



Sealable cover
M5 terminals with
2 grooves for dual
connection on secondary



Central pipe accessory on cable
primary JVO for compact lateral
primary connection



Mounting on symmetrical
rail (except for JVP) or plate
mounting in cabinet

► General specifications

Reference standard: EN 60044-1
(ex IEC 185)

Maximum network voltage:
720 Vac

Dielectric test voltage:
3 kV/50 Hz/1 min

Frequency response: 50/60 Hz

Short-circuit thermal current (I_{th}):

JVO, JVP: 80 I_n

JVR 86: 60 I_n

JVR 64, JVR 75: 40 I_n

Dynamic current (I_{dyn}): 2.5 I_{th}

Safety factor: 5 in Class 1

Operating conditions:

Temperature: -5°C to +50°C

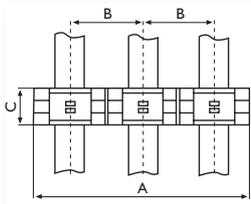
Relative humidity: 93% at 40°C

Protection:

Protection rating: IP 50

(with terminal cover supplied)

Dry winding with self-extinguishing ABS
covering (UL 94 VO)



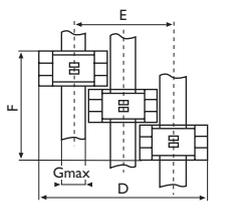
► 3 CT mounting

Dimensions

Model	A	B	C	D	E	F	G
JVO 25 CR	227	76	45	184.5	109.5	137	32.5
JVO 32 CR	260	87	58	214.5	128.5	176	40.5
JVP 624	296	99	35	220	122	107	22
JVP 1025	344	115	45	252	138	137	22
JVP 1045	404	135	45	312	178	137	42

► Mounting accessories

For model	1CT mounting rail	2CT mounting rail	3CT mounting rail
JVR	ACCE 7652	ACCE 7653	ACCE 7655
JVO 12-18	ACCE 7650	ACCE 7651	ACCE 7654
JVO 21-25-32-36	ACCE 7652	ACCE 7653	ACCE 7655
J3R 80 B	ACCE 7640		





JVR-JVO-JVP Ranges

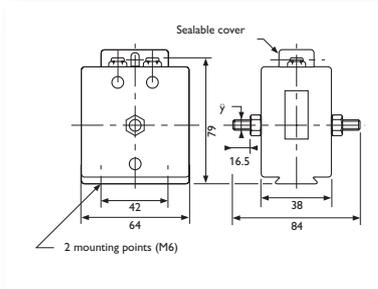
JVR – Wound primary

Current transformers (CTs)

Measurement and instrumentation

JVR 64

Ø M8

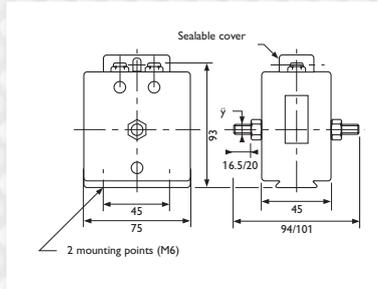


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
5 A	*	5	5	0.45
10 A	*	5	5	0.45
15 A	*	5	5	0.45
20 A	*	5	5	0.45
25 A	*	5	5	0.45
30 A	*	5	5	0.45
40 A	*	5	5	0.45
50 A	*	5	5	0.45
60 A	*	5	5	0.45
75 A	*	5	5	0.45
100 A	*	5	5	0.45

*On request

JVR 75

Ø M8/M10 > 75 A

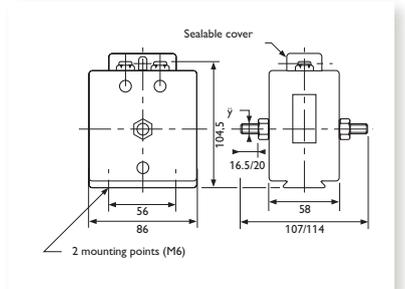


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
5 A	*	10	10	0.6
10 A	*	10	10	0.6
15 A	*	10	10	0.6
20 A	*	10	10	0.6
25 A	*	10	10	0.6
30 A	*	10	10	0.6
40 A	*	10	10	0.6
50 A	*	10	10	0.6
60 A	*	10	10	0.6
75 A	*	10	10	0.6
100 A	*	10	10	0.6
125 A	*	10	10	0.6
150 A	*	10	10	0.6
200 A	*	10	10	0.6

*On request

JVR 86

Ø M8/M10 > 75 A



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
5 A	*	20	30	1.2
10 A	*	20	30	1.2
15 A	*	20	30	1.2
20 A	*	20	30	1.2
25 A	*	20	30	1.2
30 A	*	20	30	1.2
40 A	*	20	30	1.2
50 A	*	20	30	1.2
60 A	*	20	30	1.2
75 A	*	20	30	1.2
100 A	*	20	30	1.2
125 A	*	20	30	1.2
150 A	*	20	30	1.2
200 A	*	20	30	1.2

*On request

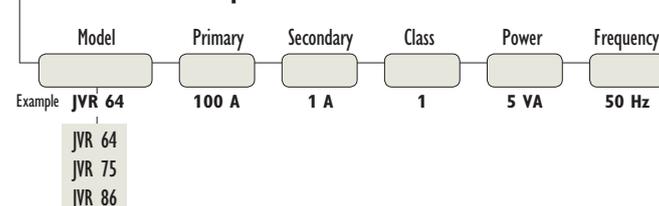
TO ORDER

Primary	Secondary 5 A
5 A	JVRA 8700
10 A	JVRA 8701
15 A	JVRA 8702
20 A	JVRA 8703
25 A	JVRA 8704
30 A	JVRA 8705
40 A	JVRA 8706
50 A	JVRA 8707
60 A	JVRA 8708
75 A	JVRA 8709
100 A	JVRA 8710
Sealable cover	ACCE 7668

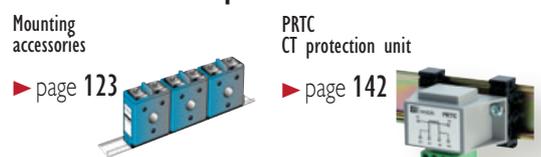
Primary	Secondary 5 A
5 A	JVRB 8725
10 A	JVRB 8726
15 A	JVRB 8727
20 A	JVRB 8728
25 A	JVRB 8729
30 A	JVRB 8730
40 A	JVRB 8731
50 A	JVRB 8732
60 A	JVRB 8733
75 A	JVRB 8734
100 A	JVRB 8735
125 A	JVRB 8736
150 A	JVRB 8737
200 A	JVRB 8738
Sealable cover	ACCE 7668

Primary	Secondary 5 A
5 A	JVRC 8742
10 A	JVRC 8743
15 A	JVRC 8744
20 A	JVRC 8745
25 A	JVRC 8746
30 A	JVRC 8747
40 A	JVRC 8748
50 A	JVRC 8749
60 A	JVRC 8750
75 A	JVRC 8751
100 A	JVRC 8752
125 A	JVRC 8753
150 A	JVRC 8754
200 A	JVRC 8755
Sealable cover	ACCE 7668

Customized product



Associated products

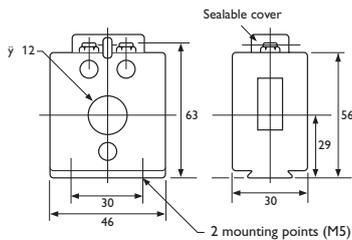


JVR-JVO-JVP Ranges

JVO – Cable primary

JVO 12-46

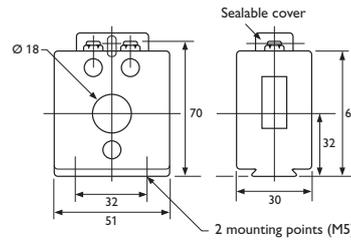
Cable Ø 12 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
40 A	-	-	1.5	0.20
50 A	-	-	2	0.20
60 A	-	-	2.5	0.20
75 A	-	-	3	0.20
100 A	-	-	4	0.20
125 A	-	-	5	0.20
150 A	-	-	5	0.20

JVO 18-51

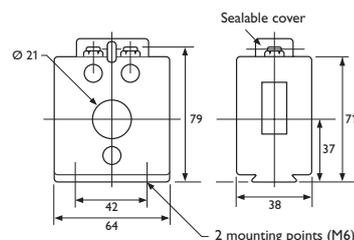
Cable Ø 18 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	2	0.25
125 A	-	2.5	3	0.25
150 A	-	3	4	0.25
200 A	-	4	6	0.25
250 A	-	5	7	0.25
300 A	-	5	8	0.25

JVO 21-64

Cable Ø 21 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	4	0.35
125 A	-	-	5	0.35
150 A	-	-	5	0.35
200 A	-	5	5	0.35
250 A	-	5	5	0.35
300 A	*	5	10	0.35
400 A	*	5	10	0.35
500 A	*	10	20	0.35
600 A	*	10	20	0.35

*On request

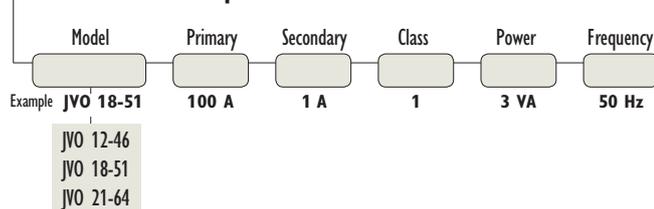
TO ORDER

Primary	Secondary 5 A
40 A	JVOA 8759
50 A	JVOA 8760
60 A	JVOA 8761
75 A	JVOA 8762
100 A	JVOA 8763
125 A	JVOA 8764
150 A	JVOA 8765
Central tube	ACCE 7660

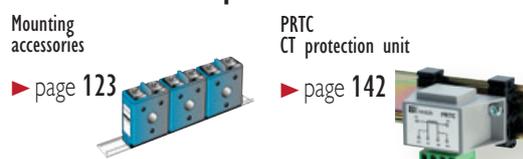
Primary	Secondary 5 A
100 A	JVOB 8769
125 A	JVOB 8770
150 A	JVOB 8771
200 A	JVOB 8772
250 A	JVOB 8773
300 A	JVOB 8774
Central tube	ACCE 7661

Primary	Secondary 5 A
100 A	JVOC 8778
125 A	JVOC 8779
150 A	JVOC 8780
200 A	JVOC 8781
250 A	JVOC 8782
300 A	JVOC 8783
400 A	JVOC 8784
500 A	JVOC 8785
600 A	JVOC 8786
Central tube	ACCE 7662
Sealable cover	ACCE 7668

Customized product



Associated products





JVR-JVO-JVP Ranges

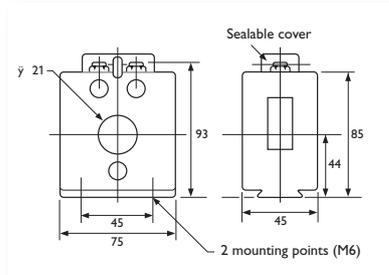
JVO – Cable primary

Current transformers (CTs)

Measurement and instrumentation

JVO 21-75

Cable Ø 21 mm

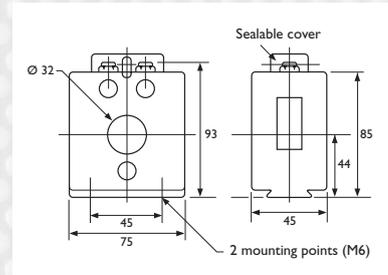


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
50 A	-	-	5	0.65
60 A	-	-	5	0.65
75 A	-	-	10	0.65
100 A	-	4	10	0.65
125 A	-	5	10	0.65
150 A	*	10	15	0.65
200 A	*	10	15	0.65
250 A	*	15	20	0.65
300 A	*	15	20	0.65
400 A	*	20	30	0.65
500 A	*	30	30	0.65
600 A	*	30	30	0.65

*On request

JVO 32-75

Cable Ø 32 mm

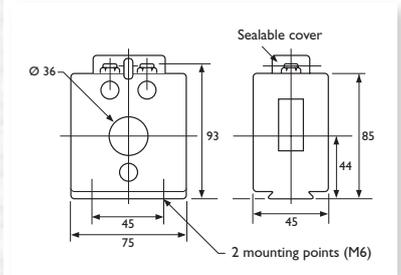


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	5	0.65
125 A	-	-	5	0.65
150 A	-	5	10	0.65
200 A	-	5	10	0.65
250 A	*	5	15	0.65
300 A	*	10	15	0.65
400 A	*	10	15	0.65
500 A	*	10	20	0.65
600 A	*	10	20	0.65

*On request

JVO 36-75

Cable Ø 36 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	5	0.45
125 A	-	-	5	0.45
150 A	-	-	10	0.45
200 A	-	5	10	0.45
250 A	*	5	15	0.45
300 A	*	5	15	0.45
400 A	*	5	15	0.45
500 A	*	10	20	0.45
600 A	*	20	20	0.45

*On request

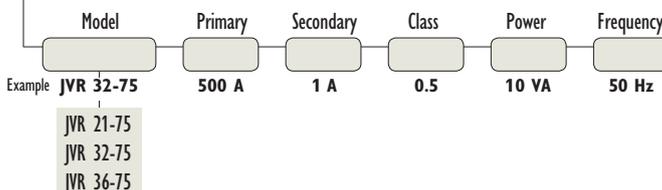
TO ORDER

Primary	Secondary 5 A
50 A	JVOE 8795
60 A	JVOE 8796
75 A	JVOE 8797
100 A	JVOE 8798
125 A	JVOE 8799
150 A	JVOE 8800
200 A	JVOE 8801
250 A	JVOE 8802
300 A	JVOE 8803
400 A	JVOE 8804
500 A	JVOE 8805
600 A	JVOE 8806
Central tube	ACCE 7663
Sealable cover	ACCE 7668

Primary	Secondary 5 A
100 A	JVOF 8814
125 A	JVOF 8815
150 A	JVOF 8816
200 A	JVOF 8817
250 A	JVOF 8818
300 A	JVOF 8819
400 A	JVOF 8820
500 A	JVOF 8821
600 A	JVOF 8822
Sealable cover	ACCE 7668

Primary	Secondary 5 A
100 A	JVOG 8829
125 A	JVOG 8830
150 A	JVOG 8831
200 A	JVOG 8832
250 A	JVOG 8833
300 A	JVOG 8834
400 A	JVOG 8835
500 A	JVOG 8836
600 A	JVOG 8837
Sealable cover	ACCE 7668

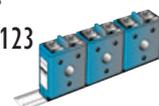
Customized product



Associated products

Mounting accessories

▶ page 123



PRTC CT protection unit

▶ page 142

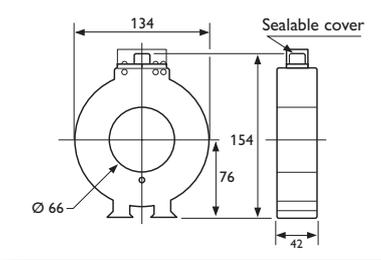


JVR-JVO-JVP Ranges

JVO – Cable primary

J3R 80 B

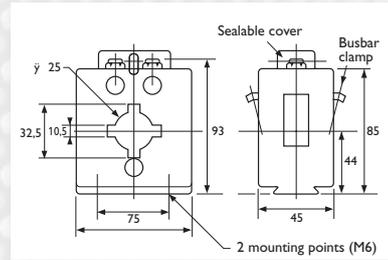
Cable Ø 66 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
200 A	-	5	10	1.6
250 A	-	5	10	1.6
300 A	5	10	15	1.6
400 A	10	20	25	1.6
500 A	15	20	25	1.6
600 A	15	20	25	1.6
750 A	15	20	25	1.6
800 A	15	20	25	1.6
1000 A	15	20	25	1.6
1250 A	15	20	25	1.6
1500 A	15	20	25	1.6

JVO 25 CR

Cable Ø 25 mm
Bar: 32 x 10 mm

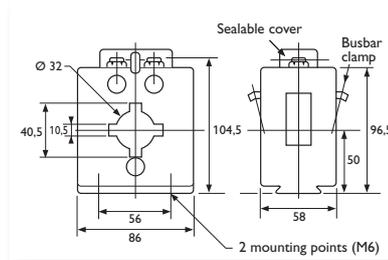


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	5	0.6
125 A	-	-	5	0.6
150 A	-	-	5	0.6
200 A	-	5	10	0.6
250 A	*	5	15	0.6
300 A	*	5	15	0.6
400 A	*	10	15	0.6
500 A	*	20	20	0.6
600 A	*	20	20	0.6

*On request

JVO 32 CR

Cable Ø 32 mm
Bar: 40 x 10 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	5	0.9
125 A	-	-	10	0.9
150 A	-	5	15	0.9
200 A	-	5	15	0.9
250 A	*	10	20	0.9
300 A	*	10	30	0.9
400 A	*	15	30	0.9
500 A	*	15	30	0.9
600 A	*	15	30	0.9

*On request

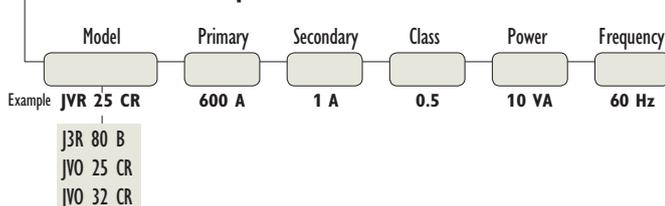
TO ORDER

Primary	Secondary 5 A
200 A	J3RC 7514
250 A	J3RC 7524
300 A	J3RC 7525
400 A	J3RC 7528
500 A	J3RC 7527
600 A	J3RC 7529
750 A	J3RC 7526
800 A	J3RC 7531
1000 A	J3RC 7530
1250 A	J3RC 7532
1500 A	J3RC 7533
Sealable cover	ACCE 7671

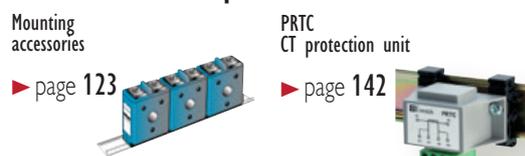
Primary	Secondary 5 A
100 A	JVOD 8850
125 A	JVOD 8851
150 A	JVOD 8852
200 A	JVOD 8853
250 A	JVOD 8854
300 A	JVOD 8855
400 A	JVOD 8856
500 A	JVOD 8857
600 A	JVOD 8858
Busbar clamp	ACCE 7665
Sealable cover	ACCE 7668

Primary	Secondary 5 A
100 A	JVOH 8866
125 A	JVOH 8867
150 A	JVOH 8868
200 A	JVOH 8869
250 A	JVOH 8870
300 A	JVOH 8871
400 A	JVOH 8872
500 A	JVOH 8873
600 A	JVOH 8874
Busbar clamp	ACCE 7666
Sealable cover	ACCE 7668

Customized product



Associated products





JVR-JVO-JVP Ranges

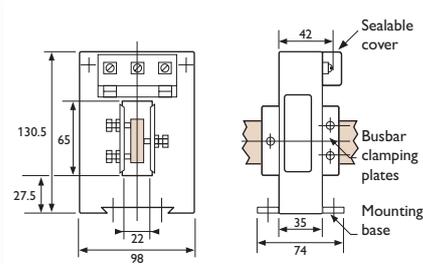
JVP – Busbar primary

Current transformers (CTs)

Measurement and instrumentation

JVP 624

Bar: 63 x 20 mm

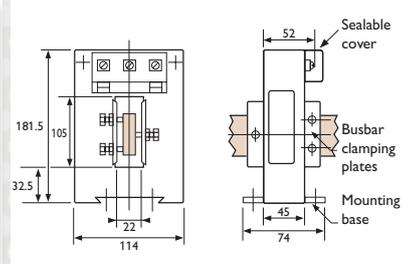


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
100 A	-	-	5	1.2
125 A	-	-	5	1.2
150 A	-	-	5	1.2
200 A	-	-	5	1.2
250 A	-	5	15	1.2
300 A	-	5	15	1.2
400 A	*	10	15	1.2
500 A	*	15	20	1.2
600 A	*	20	20	1.2
750 A	*	20	20	1.2
800 A	*	20	20	1.2
1000 A	*	20	20	1.2

*On request

JVP 1025

Bar: 100 x 20 mm

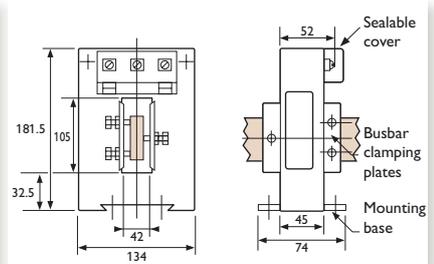


Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
200 A	-	-	5	2
250 A	-	-	5	2
300 A	-	10	20	2
400 A	*	5	30	2
500 A	*	15	15	2
600 A	*	15	15	2
750 A	*	20	20	2
800 A	*	20	30	2
1000 A	*	30	30	2
1250 A	*	30	30	2
1500 A	*	30	30	2
2000 A	*	30	30	2
2500 A	*	30	30	2
3000 A	*	30	30	2

*On request

JVP 1045

Bar: 100 x 40 mm



Primary	Power (VA) class			Weight (kg)
	0.5	1	3	
300 A	-	5	5	2.5
400 A	*	5	10	2.5
500 A	*	10	15	2.5
600 A	*	15	15	2.5
750 A	*	20	20	2.5
800 A	*	20	20	2.5
1000 A	*	30	30	2.5
1250 A	*	30	30	2.5
1500 A	*	30	30	2.5
2000 A	*	30	30	2.5
2500 A	*	30	30	2.5
3000 A	*	30	30	2.5

*On request

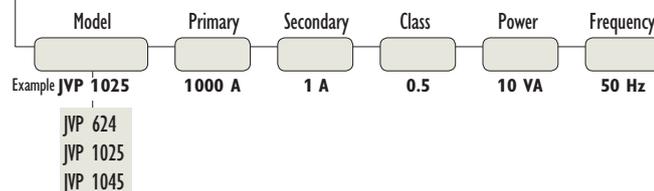
TO ORDER

Primary	Secondary 5 A
100 A	JVPR 8879
125 A	JVPR 8880
150 A	JVPR 8881
200 A	JVPR 8882
250 A	JVPR 8883
300 A	JVPR 8884
400 A	JVPR 8885
500 A	JVPR 8886
600 A	JVPR 8887
750 A	JVPR 8888
800 A	JVPR 8890
1000 A	JVPR 8889
Mounting base	ACCE 7669
Sealable cover	ACCE 7672

Primary	Secondary 5 A
200 A	JVPT 8890
250 A	JVPT 8891
300 A	JVPT 8892
400 A	JVPT 8893
500 A	JVPT 8896
600 A	JVPT 8897
750 A	JVPT 8898
800 A	JVPT 8895
1000 A	JVPT 8899
1250 A	JVPT 8900
1500 A	JVPT 8901
2000 A	JVPT 8902
2500 A	JVPT 8921
3000 A	JVPT 8922
Mounting base	ACCE 7669
Sealable cover	ACCE 7672

Primary	Secondary 5 A
300 A	JVPU 8906
400 A	JVPU 8918
500 A	JVPU 8907
600 A	JVPU 8908
750 A	JVPU 8909
800 A	JVPU 8919
1000 A	JVPU 8910
1250 A	JVPU 8911
1500 A	JVPU 8912
2000 A	JVPU 8913
2500 A	JVPU 8920
3000 A	JVPU 8914
Mounting base	ACCE 7669
Sealable cover	ACCE 7672

Customized product



Associated products

PRTC
CT protection unit

page 143



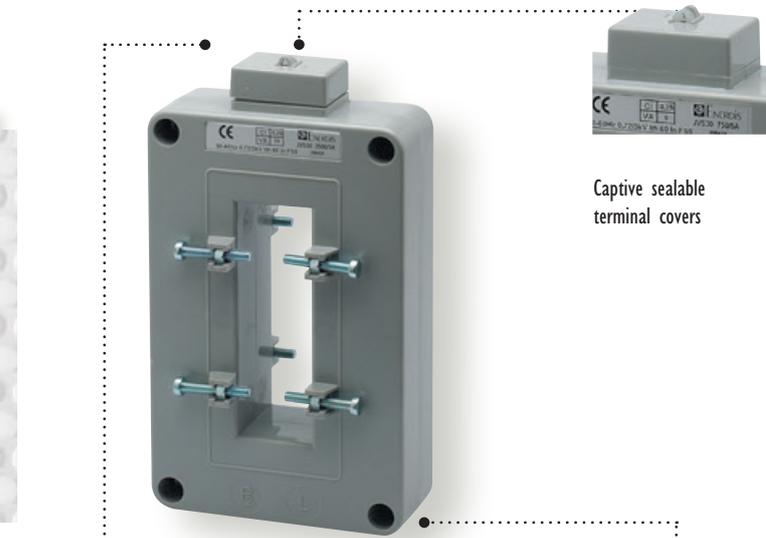
JVS Range

CTs designed to supply electronic measurement instruments, power monitors, digital transducers, etc.

PRODUCT ADVANTAGES

+ CHOICE OF PRIMARY
from 100 to 5,000 A

+ ACCURACY CLASS:
0.2 S for high-performance applications



Captive sealable terminal covers



Split output terminals enabling risk-free short-circuiting of the secondary current (M4 or cage for 4 mm² wire)



Cabinet base fitting (or directly on busbar primary)

► General specifications

Reference standard: EN 60044-1 (ex IEC 185)

Maximum network voltage: 720 Vac

Dielectric test voltage: 3 kV/50 Hz/1 min

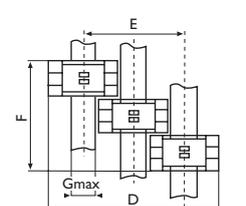
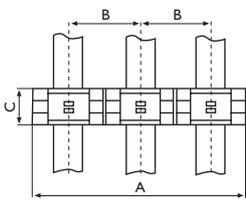
Frequency response: 50/60 Hz
Short-circuit thermal current (I_{th}): 60 I_n - 1 second

Dynamic current (I_{dyn}): 2.5 I_{th}

Safety factor: < 5

Operating conditions:
Temperature: -10°C to +50°C
Relative humidity: < 90%

Protection:
Protection rating: IP 50 (terminal covers supplied)
Dry winding with self-extinguishing ABS covering (UL 94 VO)



► 3CT Mounting

Model	Dimensions						
	A	B	C	D	E	F	G
JVS 25B	243.5	81.5	60.5	189	108.5	183.5	26
JVS 26B	243.5	81.5	60.5	191	110.5	183.5	28
JVS 30B	308	103	69	250	148	209	44
JVS 38B	392	131	69	325	195	209	63
JVS 40	287	96	40	215	120	122	23
JVS 50	347	116	44	264	149	134	32
JVS 60	374	125	44	310	186	134	60

► Mounting accessories

Model	Plate mounting fittings	Busbar clamp	Sealable terminal cover*
JVS 25B	•	•	1923 0022
JVS 26B	•	•	1923 0022
JVS 30B	•	•	1923 0022
JVS 38B	•	•	1923 0022
JVS 39B	•	•	1923 0022
JVS 40	•	•	•
JVS 50	•	•	•
JVS 60	•	•	•

• Standard accessories

* sold in pairs



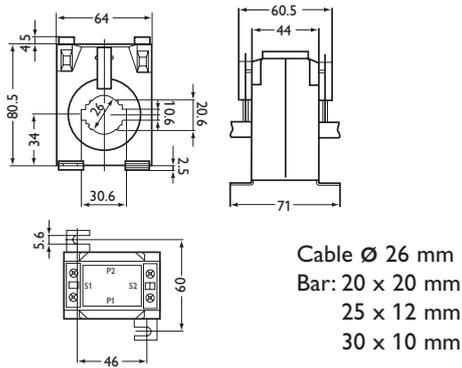
JVS Range

Cable/busbar primary

Current transformers (CTs)

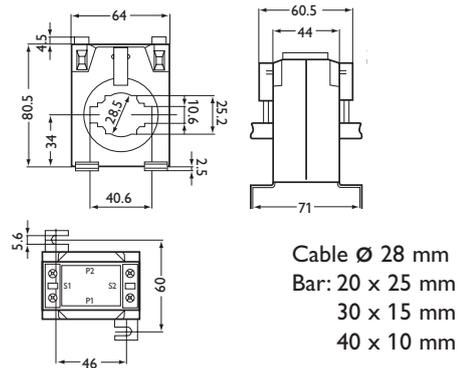
▶ Measurement and instrumentation

JVS 25B



Primary	Power (VA) in class 0.2 S	Weight (kg)
100 A	1	0.53
150 A	2.5	0.53
200 A	3.5	0.54
250 A	5	0.54
300 A	5	0.51
400 A	7.5	0.51

JVS 26B



Primary	Power (VA) in class 0.2 S	Weight (kg)
150 A	1	0.37
200 A	1.25	0.38
250 A	1.5	0.39
300 A	1.75	0.4
400 A	1	0.41
500 A	5	0.41
600 A	5	0.42
750 A	7.5	0.43
800 A	7.5	0.44

TO ORDER

Primary	Secondary 5 A
100 A	JVSB25 100/5
150 A	JVSB25 150/5
200 A	JVSB25 200/5
250 A	JVSB25 250/5
300 A	JVSB25 300/5
400 A	JVSB25 400/5

Primary	Secondary 5 A
150 A	JVSB26 100/5
200 A	JVSB26 200/5
250 A	JVSB26 250/5
300 A	JVSB26 300/5
400 A	JVSB26 400/5
500 A	JVSB26 500/5
600 A	JVSB26 600/5
750 A	JVSB26 750/5
800 A	JVSB26 800/5

▶ Associated products

Mounting accessories

▶ page 129



PRTC
CT protection unit

▶ page 142

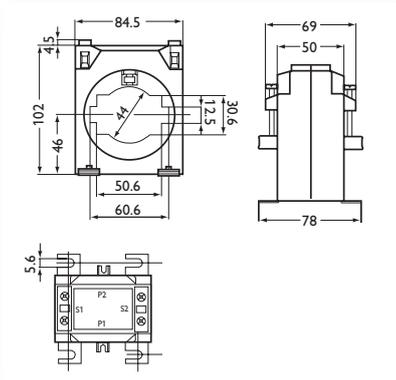


JVS Range

Cable/busbar primary

JVS 30B

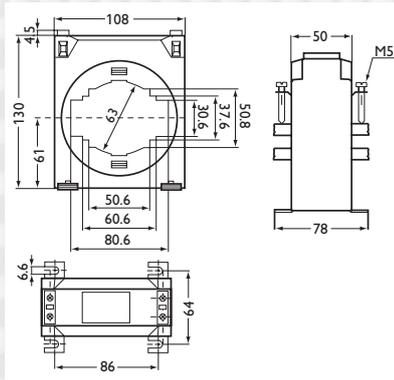
Cable \varnothing 44 mm
Bar: 50 x 30 mm
60 x 12 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
600 A	5	0.52
750 A	7.5	0.59
800 A	7.5	0.60
1000 A	10	0.61
1200 A	10	0.63
1500 A	10	0.65

JVS 38B

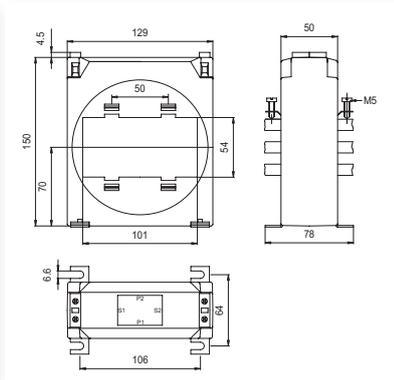
Cable \varnothing 63 mm
Bar: 50 x 50 mm
60 x 30 mm
80 x 30 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
1000 A	7.5	0.72
1200 A	10	0.68
1500 A	10	0.84
2000 A	10	0.82
2500 A	10	0.88
3000 A	10	0.88

JVS 39B

Bar: 3 x 100 x 10 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
1500 A	10	1.47
2000 A	10	1.55
2500 A	15	1.63
3000 A	20	1.71
4000 A	25	1.83

TO ORDER

Primary	Secondary 5 A
600 A	JVSB30 600/5
750 A	JVSB30 750/5
800 A	JVSB30 800/5
1000 A	JVSB30 1000/5
1200 A	JVSB30 1200/5
1500 A	JVSB30 1500/5

Primary	Secondary 5 A
1000 A	JVSB38 1000/5
1200 A	JVSB38 1200/5
1500 A	JVSB38 1500/5
2000 A	JVSB38 2000/5
2500 A	JVSB38 2500/5
3000 A	JVSB38 3000/5

Primary	Secondary 5 A
1500 A	JVSB39 1500/5
2000 A	JVSB39 2000/5
2500 A	JVSB39 2500/5
3000 A	JVSB39 3000/5
4000 A	JVSB39 4000/5

Associated products

Mounting accessories

► page 129



PRTC CT protection unit

► page 142





JVS Range

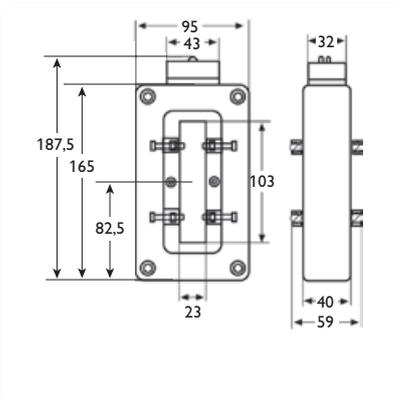
Busbar primary

Current transformers (CTs)

Measurement and instrumentation

JVS 40

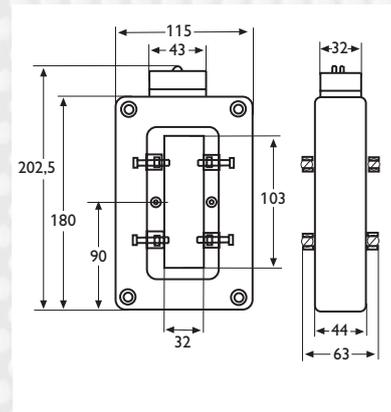
Bar: 100 x 20 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
1000 A	1.5	0.76
1200 A	4	0.76
1500 A	10	0.76
2000 A	10	0.76

JVS 50

Bar: 100 x 30 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
1500 A	10	0.76
2000 A	10	0.82
2500 A	10	0.78
3000 A	10	0.90
4000 A	10	0.90

TO ORDER

Primary	Secondary 5 A
1000 A	JVS40-1000/5
1200 A	JVS40-1200/5
1500 A	JVS40-1500/5
2000 A	JVS40-2000/5

Primary	Secondary 5 A
1500 A	JVSS0-1500/5
2000 A	JVSS0-2000/5
2500 A	JVSS0-2500/5
3000 A	JVSS0-3000/5
4000 A	JVSS0-4000/5

Associated products

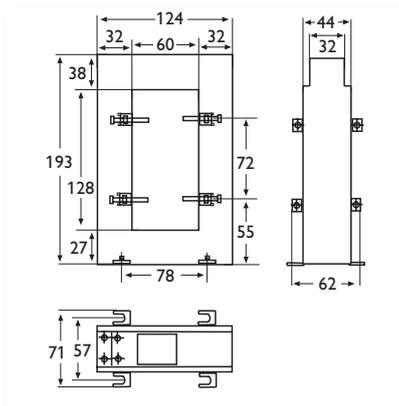
PRTC
CT protection unit

▶ page 142



JVS 60

Bar: 125 x 60 mm



Primary	Power (VA) Class 0.2 S	Weight (kg)
1000 A	1.5	0.75
1500 A	7.5	0.83
2000 A	10	0.92
2500 A	10	1.01
3000 A	10	1.09
4000 A	10	1.21
5000 A	10	1.44

TO ORDER

Primary	Secondary 5 A
1000 A	JVS60-1000/5
1500 A	JVS60-1500/5
2000 A	JVS60-2000/5
2500 A	JVS60-2500/5
3000 A	JVS60-3000/5
4000 A	JVS60-4000/5
5000 A	JVS60-5000/5

► Associated products

PRTC
CT protection unit

► page 142





Single-phase, single-rating: **JVP1045 B**

Transformers for tariff metering

Current transformers (CTs)

Measurement and instrumentation

JVP1045 B

Busbar primary

PRODUCT ADVANTAGES

- +** **DELIVERED WITH SEALABLE PROTECTIVE COVER** for the secondary. Simple M5 terminals
- +** **DIRECT MOUNTING** on primary busbar by means of plate and tightening screw or panel mounting with mounting plate



► General specifications

Reference standard:
EN 60044-1 (ex-IEC 185)
and NFC 42-502

Maximum network voltage:
720 Vac

Dielectric test voltage:
3 kV/50 Hz/1 min

Frequency response:
50/60 Hz

Thermal short-circuit current (I_{th}): 80 In

Dynamic current (I_{dyn}):
2.5 I_{th}

Safety factor:

10 in class 0.5
Except * SF = 6.4/10.5
and **SF = 4.7/8.2

Operating conditions:

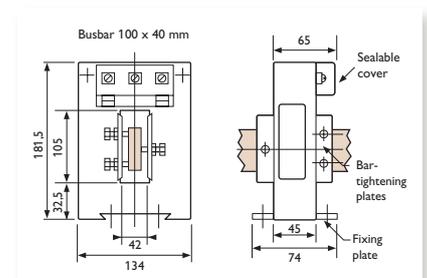
Temperature: -20°C to +60°C
Relative humidity: 93% to 40°C

Protection:

Protection rating: IP 50
Dry winding in self-extinguishing ABS envelope (UL 94 VO)

TO ORDER

	Power (VA) in class 0.5		Weight (kg)
	7.5	15	
Primary	Secondary 5 A		
500 A		JVPA 7569	2.50
1000 A		JVPA 7573	2.50
2000 A		JVPA 7576	2.50
500-1000 A*	JVPA 7589	JVPA 7585	2.50
1000-2000 A**	JVPA 7590	JVPA 7588	2.50



Single-phase, single-rating: **JVO 40-100**

Transformers for tariff metering

JVO 40-100

Cable primary

PRODUCT ADVANTAGES

- + DELIVERED WITH SEALABLE TERMINAL COVER** for the secondary. Simple M5 terminals with two grooves for double connection
- + MOUNTING ON SYMMETRICAL MOUNTING RAIL** or panel mounting



► General specifications

Reference standard:
EN 60044-1 (ex-IEC185) and NFC 42-502

Maximum network voltage:
720 Vac

Dielectric test voltage:
3 kV/50 Hz/1 min

Frequency response:
50/60 Hz

Thermal short-circuit current (I_{th}): 80 In

Dynamic current (I_{dyn}): 2.5 I_{th}

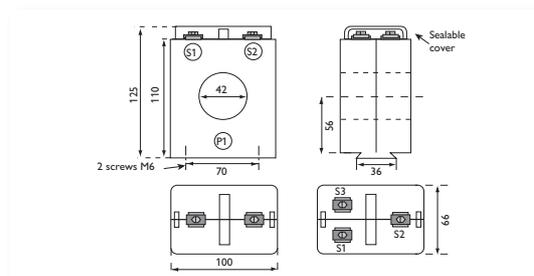
Safety factor:
10 in class 0.5
Except * SF = 6.4/10.5
and **SF = 4.7/8.2

Operating conditions:
Temperature: -5 °C to +50 °C
Relative humidity: 93 % to 40 °C

Protection:
Protection rating: IP 50
Dry winding in self-extinguishing ABS envelope (UL 94 VO)

TO ORDER

Primary	Secondary	Power (VA) in class 0.5			Weight (kg)
		15	7.5	15	
200 A	JVON 7103	2.5 A	5 A	JVON 7100	0.97
500 A				JVON 7101	0.97
200-500				JVON 7104	0.97
1-CT mounting rail				ACCE 7679	
2-CT mounting rail				ACCE 7680	
3-CT mounting rail				ACCE 7681	





Single-phase, multi-rating: **JVO 40-100 S**

Transformers for tariff metering – ERDF application

Current transformers (CTs)
Measurement and instrumentation

JVO 40-100 S

Cable primary Ø 40 mm



► General specifications

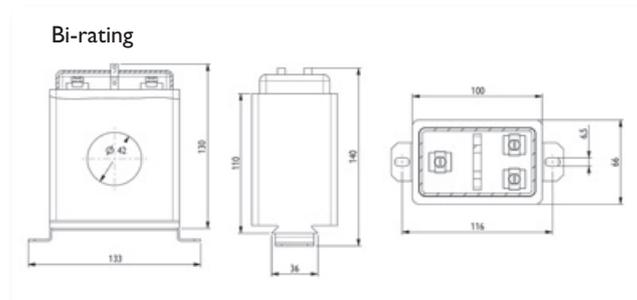
Cable primary: Ø 40 mm
Transformation ratio:
 200 - 500 / 5 A
Accuracy class: 0.2s
Precision power: 7.5 VA
Highest network voltage: 720 Vac
Rated frequency: 50/60 Hz
Rated short-circuit thermal current (I_{th}): 20 kA for 1 s
Rated dynamic current (I_{dyn}): 2.5 I_{th}
Safety factor:
 SF = 3 (200/5 A); SF = 6 (500/5 A)
Rated thermal current: 1.2 I_{pn}
Operating temperature:
 -25°C to +40°C

Type of casing:
 Self-extinguishing thermoplastic (UL94V0)
Protection: IP30
Mechanical shock resistance: IK7
Rated withstand voltage:
 3 kV (RMS value) at 50 Hz for 1 minute
Rated lightning impulse withstand voltage:
 8 kV (peak value) – Wave 1.2/50 µs
Insulation class:
 E (heating limit: 75 K)
Weight: 1.1 kg

TO ORDER

Model	Reference
JVO 40-100 S bi-rating	P01379512

► Dimensions



Single-phase, multi-rating: **JVO 90-160 S**

Transformers for tariff metering – ERDF application

JVO 90-160 S

Cable primary \varnothing 90 mm

PRODUCT ADVANTAGES

+ CLASS 0.2s
ACCORDING TO
IEC 60044-1
Particularly **SUITABLE**
FOR ERDF-QUALIFIED
TRI-RATING
ELECTRONIC METERS



► General specifications

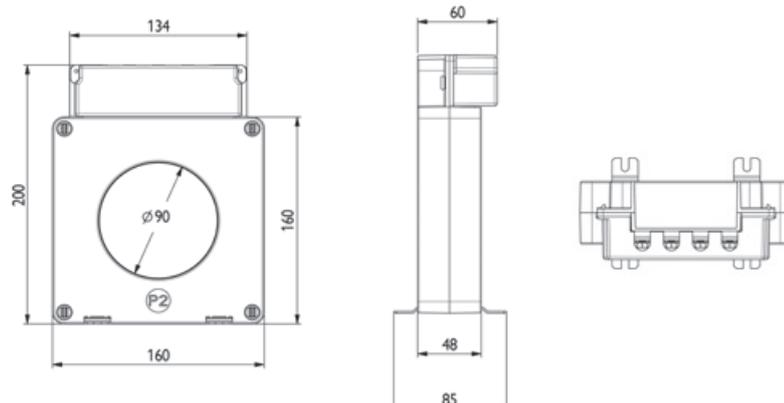
Cable primary: \varnothing 90 mm
Transformation ratio:
500-1,000-2,000/5 A
Accuracy class: 0.2s
Precision power: 7.5 VA
Highest network voltage: 720 Vac
Rated frequency: 50/60 Hz
Rated short-circuit thermal current (I_{th}): 30 kA for 1 s
Rated dynamic current (I_{dyn}): 2.5 I_{th}
Safety factor:
SF = 4 (500/5 A); SF = 6 (1 000/5 A) ;
SF = 9 (2 000/5 A)
Rated thermal current: 1.2 I_{pn}
Operating temperature:
-25°C to +40°C

Type of casing:
Self-extinguishing thermoplastic (UL94V0)
Protection: IP30
Mechanical shock resistance: IK7
Rated withstand voltage:
3 kV (RMS value) at 50 Hz for 1 minute
Rated lightning impulse withstand voltage:
8 kV (peak value) – Wave 1.2/50 μ s
Insulation class: E(heating limit: 75 K)
Weight: 1.9 kg

TO ORDER

Model	Reference
JVO 90-160 S tri-rating	P01379513

► Dimensions





Single-phase, multi-rating: **JVP 1145 S**

Transformers for tariff metering – ERDF application

Current transformers (CTs)

Measurement and instrumentation

JVP 1145 S

Cable/busbar primary

PRODUCT ADVANTAGES

+ CLASS 0.2s
ACCORDING TO
IEC 60044-1
Particularly **SUITABLE**
FOR ERDF-QUALIFIED
TRI-RATING
ELECTRONIC METERS



► General specifications

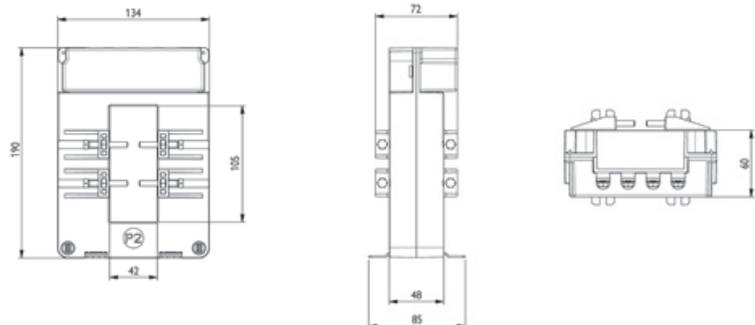
Cable primary:
Busbar: 63 x 12 mm or 100 x 12 mm
Cable: Ø 40 mm
Transformation ratio:
500 – 1,000 – 2,000 / 5 A
Accuracy class: 0.2s
Precision power: 7.5 VA
Highest network voltage: 720 Vac
Rated frequency: 50/60 Hz
Rated short-circuit thermal current (I_{th}): 30 kA for 1 s
Rated dynamic current (I_{dyn}): 2.5 I_{th}
Safety factor:
SF = 3 (500/5 A); SF = 4 (1000/5 A);
SF = 6 (2000/5 A)
Rated thermal current: 1.2 I_{pn}

Operating temperature:
-25°C to +40°C
Type of casing:
Self-extinguishing thermoplastic (UL94V0)
Protection: IP30
Mechanical shock resistance: IK7
Rated withstand voltage:
3 kV (RMS value) at 50 Hz for 1 minute
Rated lightning impulse withstand voltage:
8 kV (peak value) – Wave 1.2/50 µs
Insulation class: E (heating limit: 75 K)
Weight: 1.7 kg

TO ORDER

Model	Reference
JVP 1145 S tri-rating	P01379510

► Dimensions



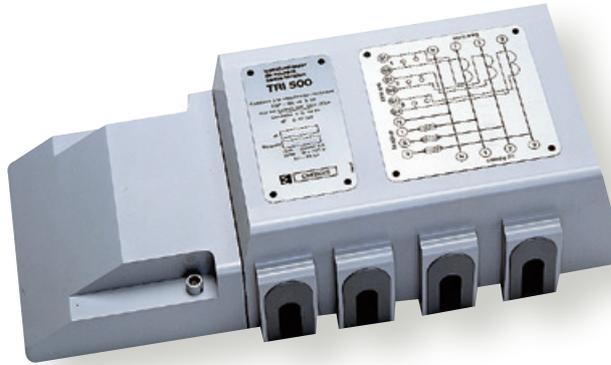
Single-phase, multi-rating: TRI 500

Transformers for tariff metering

TRI 500

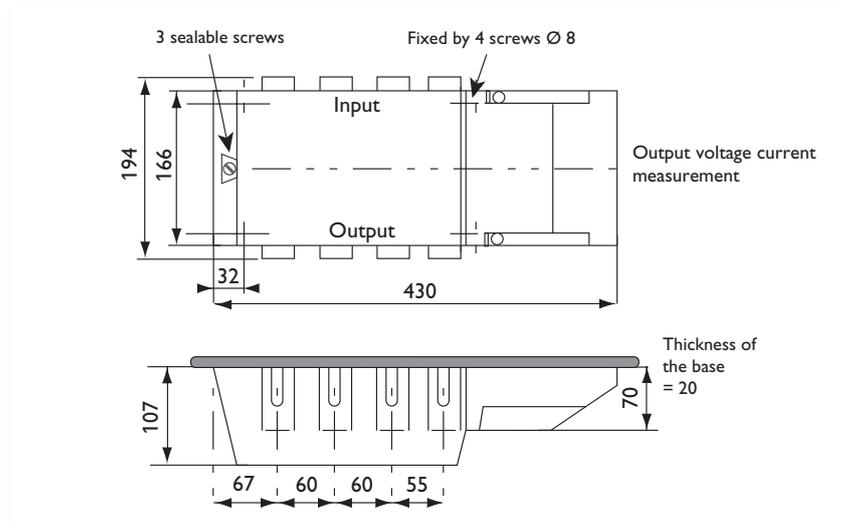
PRODUCT ADVANTAGES

- +** COMPLIANT with NF-C-42-502 standard
- +** DESIGNED FOR THREE-PHASE LV METERING



► General specifications

- Maximum network voltage:** 500 Vac
- Dielectric test voltage:** 2 kV - 50 Hz - 1 min
- Rated withstand voltage:** 8 kV
- Frequency response:** 50 Hz
- Primary via cable clamp:** conductors from 50 to 240 mm²



TO ORDER

Primary	Power (VA) Class 0.5	Weight (kg)
50 A	15	7.50
100 A	15	7.50
150 A	15	7.50
200 A	15	7.50
300 A	15	7.50
500 A	15	7.50

Primary	5 A Secondary
50 A	TRIS 7823
100 A	TRIS 7825
150 A	TRIS 7826
200 A	TRIS 7827
300 A	TRIS 7828
500 A	TRIS 7831



Three-phase, multi-rating: **TRI 700**

Transformers for tariff metering – ERDF application

Measurement and instrumentation **Current transformers (CTs)**

PRODUCT ADVANTAGES

- +** CLASS 0.2S ACCORDING TO IEC 60044-1
- +** CHOICE OF PRIMARY CONDUCTOR type: copper or aluminium
- +** Built-in short-circuiting switch



► General specifications

Primary via cable clamp:

Conductor cross-section from 50 mm² to 240 mm²

Transformation ratio:

TRI700S bi-rating model 50 A - 100 A / 5 A
 TRI700S bi-rating model 100 A - 200 A / 5 A
 TRI700S bi-rating model 200 A - 500 A / 5 A
 TRI700 tri-rating model 100 A - 200 A - 500 A / 5 A

Accuracy class:

Bi-rating model 0.2s; tri-rating model: 0.5

Precision power:

Bi-rating model: 7.5 VA; tri-rating model: 3.75 VA

Maximum network voltage:

Bi-rating / tri-rating model: 720 Vac

Rated frequency:

Bi-rating / tri-rating model: 50/60 Hz

Rated thermal short-circuit current (I_{th}):

Bi-rating / tri-rating model:
 80 I_{pn} with a maximum of 20 kA for 1 s

Rated dynamic current (I_{dyn}):

Bi-rating / tri-rating model: 2.5 I_{th}

Safety factor:

TRI700S 50 - 100 / 5 A:
 FS = 2.3 (50 A); FS = 4.2 (100 A)
 TRI700S 100-200/5 A:
 FS = 2.3 (100 A); FS = 4.2 (200 A)
 TRI700S 200 - 500 / 5 A:
 FS = 2,3 (200 A); FS = 5 (500 A)
 TRI700 100 - 200 - 500 / 5 A:
 FS = 4 (100 A); FS = 7 (200 A); FS = 10 (500 A)

Rated thermal current:

Bi-rating / tri-rating model: 1.2 I_{pn}

Operating temperature:

Bi-rating / tri-rating model: -25°C to +40°C

Type of casing:

Bi-rating / tri-rating model:
 Self-extinguishing thermoplastic (UL94V0)

Protection rating:

With additional cover: IP40

Mechanical shock resistance:

Bi-rating / tri-rating model: (IK7)

Rated withstand voltage:

Bi-rating / tri-rating model: 3 kV
 (RMS value) at 50 Hz for 1 minute

Lightning impulse withstand voltage:

Bi-rating / tri-rating model:
 (8 kV) (peak value) – Wave 1.2/50 μs

Insulation class:

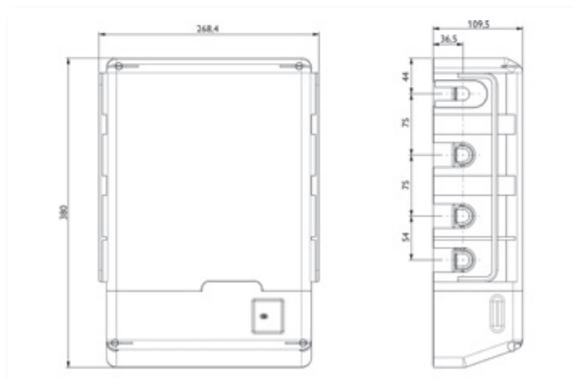
Bi-rating / tri-rating model:
 E (heating limit: 75 K)

Weight: Bi-rating / tri-rating model: 9 Kg

TO ORDER

Model	Reference
TRI 700 tri-rating	P01379514
TRI 700 S bi-rating 50 - 100 / 5 A	P01379515
TRI 700 S bi-rating 100 - 200 / 5 A	P01379516
TRI 700 S bi-rating 200 - 500 / 5 A	P01379517

► Dimensions



Current summation: JVM 15

CT designed for adding or subtracting instantaneous values from the secondaries of 2 or 3 current transformers. Used to supply measuring or metering instruments on installations with several feeder and feed points.

PRODUCT ADVANTAGES

- + COMPACT DESIGN
- + Mounting on plate or rail



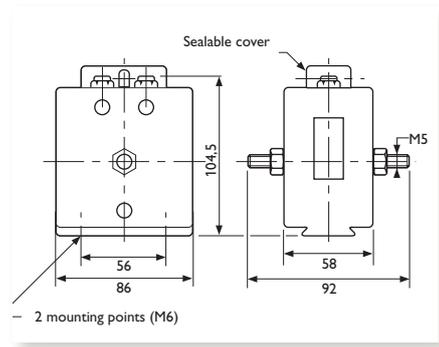
Sealable cover.
Terminal connections:
M5; 2 secondary slots
for double connections;
primary side connections.



Mounting on plate or
symmetrical rail

► General specifications

- Reference standard:** EN 60044-1 (Ex IEC 185)
- Maximum network voltage:** 720 Vac
- Dielectric test voltage:** 3 kV/50 Hz/1 min
- Frequency response:** 50/60 Hz
- Short-circuit thermal current (I_{th}):** 80 I_n - 1 second
- Dynamic current (I_{dyn}):** 2.5 I_{th}
- Safety factor:** < 5
- Internal power:** 4 VA
- Operating conditions:** Temperature: -5°C to +60°C
Relative humidity: 93% at 40°C
- Protection:** Protection rating: IP 40 (module casing) and IP 10 (terminals)
Dry winding with self-extinguishing ABS covering (UL 94 VO)



	Power (VA)	class		Weight (kg)
Primary	0.5	1	3	
5+5 A	15	20	30	1.20
5+5+5 A	15	20	30	1.20

TO ORDER

Primary	Secondary 5 A
5+5 A	JVMA 7523
5+5+5 A	JVMA 7524
Sealable cover	ACCE 7668

► Cabinet accessories

Model	1 CT slide rail mounting	2 CT slide rail mounting	3 CT slide rail mounting
JVM 15	ACCE 7652	ACCE 7653	ACCE 7655



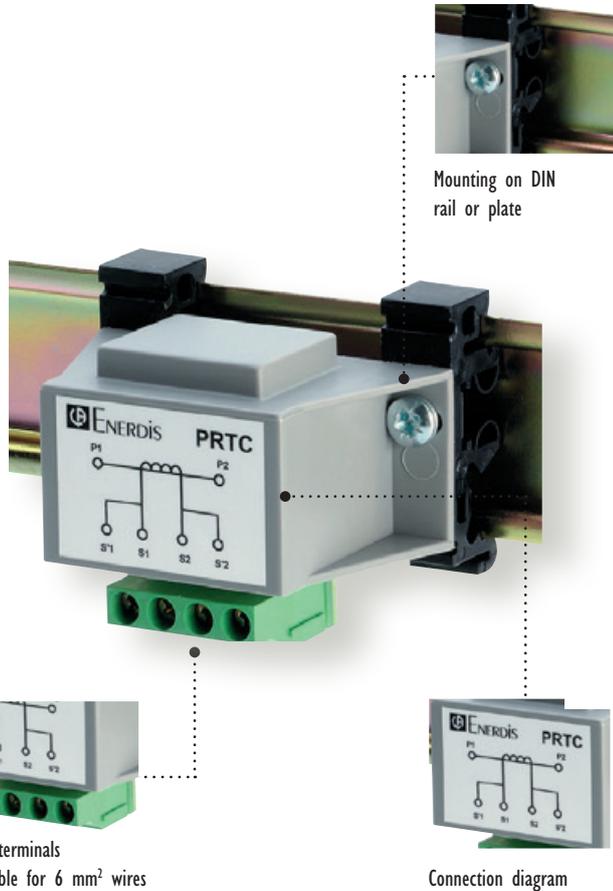
Transformer short-circuit switch

Protection against the dangers caused by opening the secondary circuit on low-voltage measurement CTs

Current transformers (CTs)
Measurement and instrumentation

PRODUCT ADVANTAGES

- PROTECTS USERS AND EQUIPMENT AGAINST OVERVOLTAGES**
caused by opening the CT 5 A or 1 A secondary
- AUTOMATIC SHORT-CIRCUITING**
of CT secondary to which it is permanently connected
- Equipment connected on CT secondary side can be operated by user without supply interruption



General specifications

Reference standards:

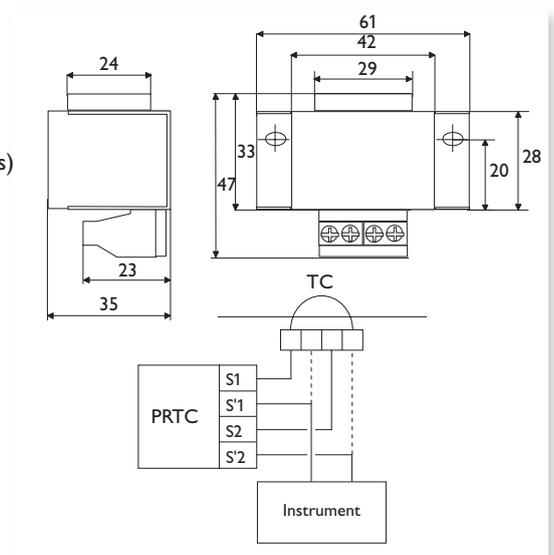
NFC 15100 art 411-1)
Connections: double terminals capable of receiving 6 mm² cables. DIN rail mounting (supplied with fittings) or plate mounting using clamp bolts.
Weight: 90 g

Operating conditions:

Temperature: -10°C to +50°C
Relative humidity: < 95%

Protection:

Protection rating: IP 20
Self-extinguishing polyamide casing (UL 94VO)
Measurement current: 5 A/50 Hz or 1 A/50 Hz
Maximum permitted current: 25 Aac
Peak voltage: 22 Vac



TO ORDER

Reference

PRTC 1001