

TRANSFORMERS



TRANSFORMERS

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General features

Measuring transformers

General

- Wound primary, window type and split-core transformers
- For cable or bus-bar
- Plastic or resin-encapsulated casing (depending on type)
- With fixing support and/or busbar fixing screws (depending on type)
- DIN rail mounting (on request)

General technical specifications

• Safety factor	$F_s < 5$
• Operating voltage (maximum)	720 V
• Test voltage	3 kV CA (1 min)
• Frequency	50 - 60 Hz
• Rated dynamic current	$I_{Dyn} = 2,5 \times I_{th}$
• Continuous overload	$I_D = 1,2 \times I_n$
• Operating temperature	- 5 °C / + 40 °C
• Accuracy	0,5 - 1 - 3 (0,2 - 0,2s - 0,5s on request)
• Rated secondary current	x/5A - x/1A
• Rated thermal short-circuit withstand current	$I_{th} = 60 I_n$ for wound primary transformers I_{th} limited by cable or primary busbar dimensions in other cases
• Insulation class	E class B class (130 °C available)

Standards

- IEC 60185
- IEC 61010
- UNE EN 618691 (IEC 618691)
- UNE EN 618692 (IEC 618692)
- UNE-EN 61000-6-3
- UNE-EN 61000-6-1
- UL94-V0
- VDE 0414
- DIN 57414
- BS 3938

General specifications. Check the specific features of each model.

General features

Protection transformers

General

- Wound primary and window type transformers
- For cable or bus-bar
- Plastic or resin-encapsulated casing (depending on type)
- With fixing support and/or busbar fixing screws (depending on type)
- DIN rail mounting (on request)

General technical specifications

• Protection factor	5P10; 5P20; 10P10; 10P20
• Operating voltage (maximum)	720 V
• Test voltage	3 kV CA (1 min)
• Frequency	50 - 60 Hz
• Rated thermal short-circuit withstand current	$I_{th} = 60 I_n$ for wound primary transformers I_{th} limited by cable or primary busbar dimensions in other cases
• Rated dynamic current	$I_{Dyn} = 2,5 \times I_{th}$
• Continuous overload	$I_D = 1,2 \times I_n$
• Operating temperature	- 5 °C / + 40 °C
• Model	TP and TPx under demand
• Accuracy	0,5 - 1 - 3 (0,2 - 0,2s - 0,5s on request)
• Rated secondary current	$x/5A - x/1A$
• Insulation class	E class B class (130 °C available)

Standards

- IEC 60185
- IEC 61010
- UNE EN 618691 (IEC 618691)
- UNE EN 618692 (IEC 618692)
- UNE-EN 61000-6-3
- UNE-EN 61000-6-1
- UL94-V0
- VDE 0414
- DIN 57414
- BS 3938

General specifications. Check the specific features of each model.

TU_ Wound primary

Measuring transformers



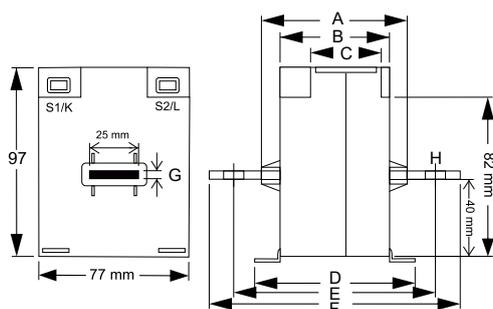
General features

Measuring transformer with horizontal busbar primary, suitable for direct connection via cable or terminal block for low-current applications.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 0,5s - 0,2s
- **Plastic casing**
- **Resin encapsulated option**

Wound primary										
Model	TU3BAP				TU3BCP				TU3BP	
Bus-bar	4 x 25 mm				4 x 25 mm				4 x 25 mm	
Accuracy class	0,5	1	0,5s	0,2s	0,5	1	0,5s	0,2s	0,5	1
I _{pn}	VA				VA				VA	
5	5	7,5			15	20	5		10	15
10	5	7,5			15	20			10	15
15	5	7,5			15	20			10	15
20	5	7,5			15	20			10	15
25	5	7,5			15	20		5	10	15
30	5	7,5			15	20			10	15
40	5	7,5			15	20		5	10	15
50	5	7,5			15	20		5	10	15
60	5	7,5			15	20		5	10	15
75	5	7,5			15	20		5	10	15
100	5	7,5	10	2,5	15	20			10	15
125	5	7,5	10	2,5	15	20			10	15
150	5	7,5	10	2,5	15	20			10	15
200	5	7,5	10	2,5	15	20			10	15
250	5	7,5	10	2,5	15	20			10	15
300	5	7,5	10	2,5	15	20			10	15
400			10	2,5	15	20			10	15
500			10	2,5					10	15
600									10	15

Dimensions



Model	Ratio	A	B	C	D	E	F	G	H
TU3BP	5 ~ 300	74	56	36	82	114	137	4	M12
TU3BP	400 ~ 600	74	56	36	82	114	137	10	M12
TU3BCP	5 ~ 300	86	67	36	93	114	137	4	M12
TU3BCP	400	86	67	36	93	114	137	10	M12
TU3BAP	5 ~ 400	63	45	36	71	92	117	4	M10

Dimensions in mm

TU_ Wound primary

Measuring transformers



General features

Measuring transformer with wound primary and horizontal screw terminal connection, suitable for low-current applications.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1
- **Plastic casing**
- **Resin encapsulated option**

Wound primary		
Model	TU40CP	
Bus-bar	-	
Accuracy class	0,5	1
I _{pn}	VA	
5	5	7,5
10	5	7,5
15	5	7,5
20	5	7,5
25	5	7,5
30	5	7,5
40	5	7,5
50	5	7,5
60	5	7,5
75	5	7,5
100	5	7,5
125	5	7,5
150	5	7,5
200	5	7,5
250	5	7,5
300	5	7,5
400	5	7,5
500	5	7,5
600	5	7,5

Wound primary		
Model	TU3AP	
Bus-bar	-	
Accuracy class	0,5	1
I _{pn}	VA	
5	2,5	5
10	2,5	5
15	2,5	5
20	2,5	5
25	2,5	5
30	2,5	5
40	2,5	5
50	2,5	5
60	2,5	5
75	2,5	5
100	2,5	5
125	2,5	5
150	2,5	5
200	2,5	5
250	2,5	5
300	2,5	5
400	2,5	5

Dimensions

Model	A	B	C	D	E	F	G	H
TU40CP	51	46	72	64	93,5	89	40	Ø12
TU3AP	33	30	65	48	90	86	37	Ø8

Dimensions in mm

TU_R Wound primary

Measuring transformers



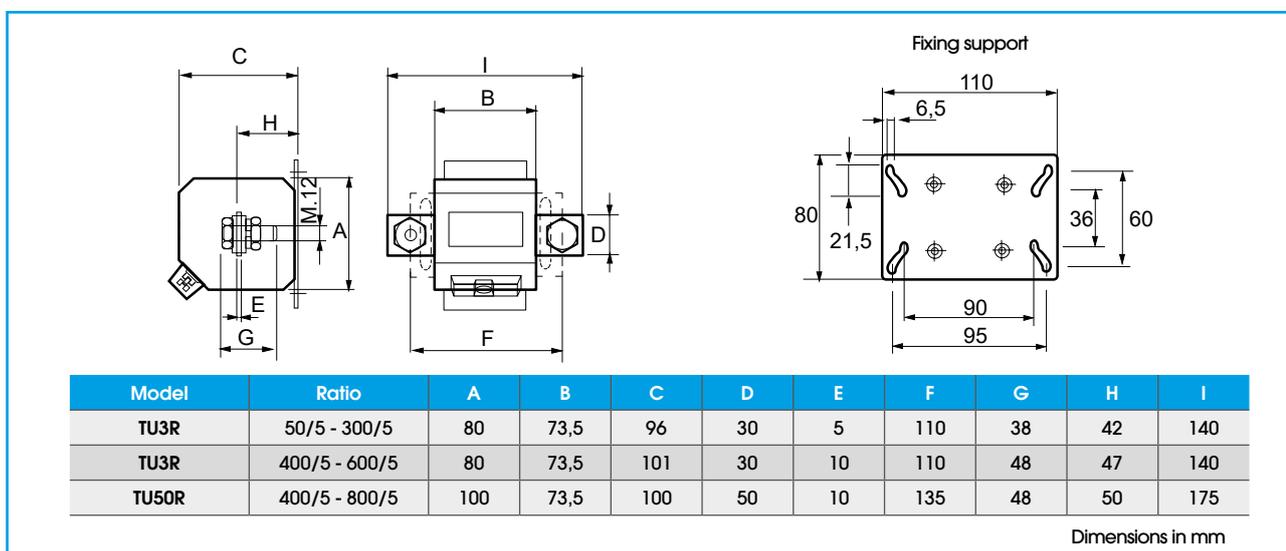
General features

Current transformers with primary wound and horizontal bar for connection to cable or terminal block. Their resin casing offers greater robustness.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1
- **Resin encapsulated**

Wound primary				
Model	TU3R		TU50R	
	0,5	1	0,5	1
Accuracy class	VA		VA	
I _{pn}	VA		VA	
20	15	25		
25	15	25		
30	15	25		
40	15	25		
50	15	25		
60	15	25		
75	15	25		
100	15	25		
125	15	25		
150	15	25		
200	15	25		
250	15	25		
300	15	25		
400	15	25	15	25
500	15	25	15	25
600	15	25	15	25
750	15	25	15	25
800	15	25	15	25

Dimensions



TRANSFORMERS

TU_R Wound primary or window-type

Measuring transformers - Class 0,5s



General features

Current transformers with primary wound or pass-through with a special accuracy of 0.5s.

- **Secondary:** .../5A
- **Extended range:** 150%
- **Accuracy:** 0,5s
- **Resin encapsulated**

	Wound primary		Passing cable / busbar	
Model	TU3R		TUP20R	
Bus-bar	-		100x20 mm	
Cable	-		Ø20 mm	
Accuracy class	0,5s		0,5s	
Ipn	VA		VA	
50	10	2,5		
60	10	2,5		
75	10	2,5		
100	10	2,5		
125	10	2,5		
150	10	2,5		
200	10	2,5		
250	10	2,5		
300	10	2,5		
400	10	2,5		
500	10	2,5		
600	10	2,5		
750			10	2,5
800			10	2,5
1000			10	2,5
1200			10	2,5
1500			10	2,5
2000			10	2,5

Dimensions

TU3R

TUP20R

Model	Ratio	A	B	C	D	E	F	G	H	I
TU3R	50/5 - 300/5	80	73,5	96	30	5	110	38	42	140
TU3R	400/5 - 600/5	80	73,5	101	30	10	110	48	47	140

Dimensions in mm

TRANSFORMERS

TU_PS Narrow profile. Window-type

Measuring transformers



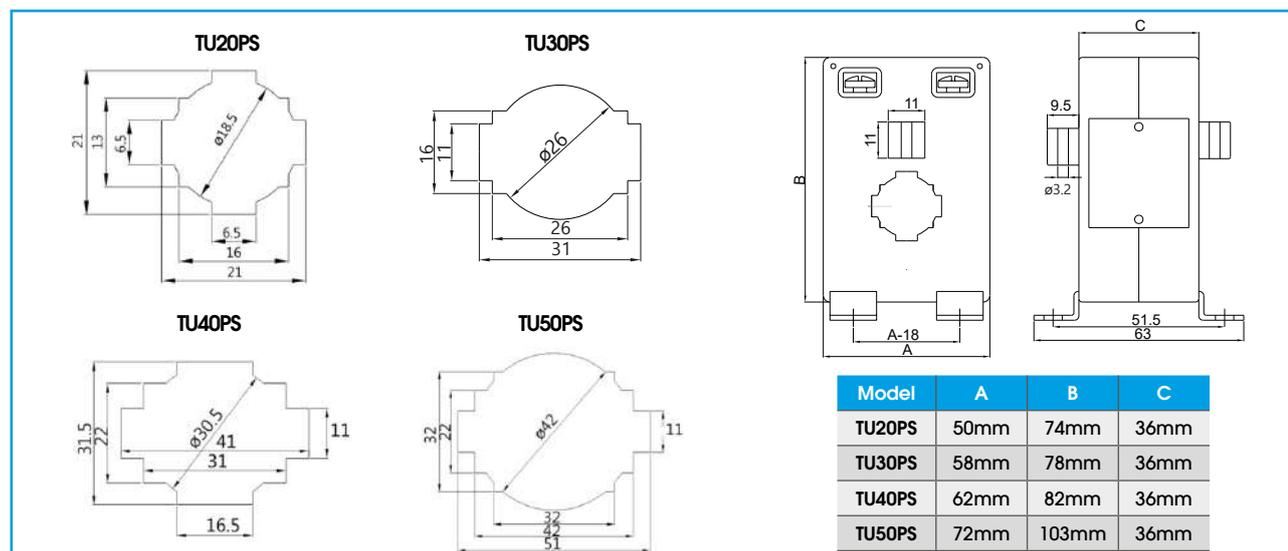
General features

Measuring transformer for cable or bus-bar. Its narrow profile design allows a better adaptation to the frame due to its reduced dimensions.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar									
Model	TU20PS			TU30PS		TU40PS		TU50PS	
Bus-bar	20 x 6 mm			30 x 10 mm		40 x 10 mm		50 x 10 mm	
Cable	Ø18 mm			Ø25 mm		Ø30 mm		Ø40 mm	
Accuracy class	0,5	1	3	0,5	1	0,5	1	0,5	1
l _{pn}	VA			VA		VA		VA	
30			0,5						
40			1						
50			1						
60		1	1,5						
75		1,5	1,5		1				
100		1,5	2,5		1,5				
125	1,5	2,5	3,75		1,5				
150	2,5	3,75	5	1,5	2,5		2		
200	3,75	5	7,5	2,5	3,75	2,5	3,75	2,5	
250	5	7,5		3,75	5	2,5	3,75	3,75	
300				3,75	5	5	5		
400				3,75	5	5	5	3,75	5
500				5	7,5	5	7,5	5	7,5
600				5	7,5	5	7,5	7,5	10
750						5	7,5	7,5	10
800						5	7,5	7,5	10
1000								10	15

Dimensions



TRANSFORMERS

TU_PS Narrow profile. Window-type

Measuring transformers



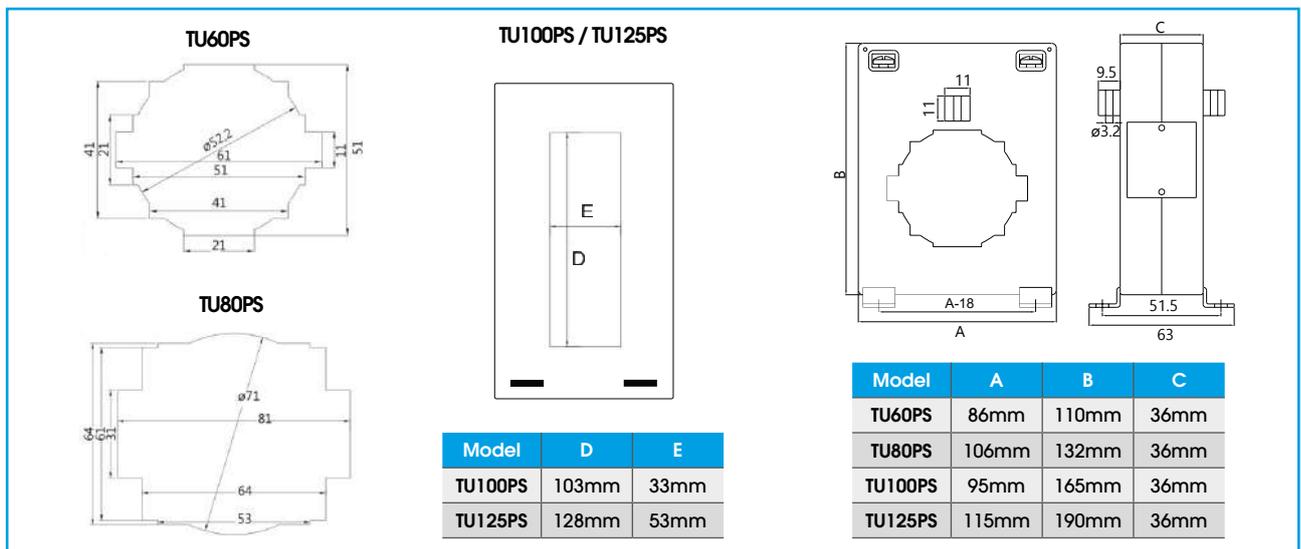
General features

Measuring transformer for cable or bus-bar. Its narrow profile design allows a better adaptation to the frame due to its reduced dimensions.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar									
Model	TU60PS		TU80PS		TU100PS		TU125PS		
Bus-bar	60 x 10 mm		80 x 30 mm		100 x 30 mm		125 x 50 mm		
Cable	Ø50 mm		Ø70 mm		-		-		
Accuracy class	0,5	1	0,5	1	0,5	1	0,5	1	
I _{pn}	VA		VA		VA		VA		
400	5	5	5	7,5					
500	5	7,5	5	7,5	5	7,5	5	7,5	
600	5	7,5	7,5	10	7,5	10	5	7,5	
750	5	7,5	7,5	10	7,5	10	7,5	10	
800	7,5	10	7,5	10	7,5	10	7,5	10	
1000	10	15	10	15	10	15	10	15	
1200	15	20	15	20	15	20	15	20	
1500	15	20	15	20	15	20	15	20	
1600	15	20	15	20	15	20	15	20	
2000			15	20	15	20	20	25	
2500					20	25	20	25	
3000					20	25	20	25	
3200							20	25	
4000							25	30	

Dimensions



TU_PS Narrow profile. Window-type

Measuring transformers - Class 0,5s - 0,2 - 0,2s



General features

Measuring transformer for cable or bus-bar. Its narrow profile design allows a better adaptation to the frame due to its reduced dimensions.

- **Secondary:** .../5A
- **Accuracy:** 0,5s - 0,2 - 0,2s
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar															
Model	TU20PS			TU60PS			TU80PS			TU100PS			TU125PS		
Bus-bar	20 x 6 mm			60 x 10 mm			80 x 30 mm			100 x 30 mm			125 X 50 mm		
Cable	Ø18 mm			Ø50 mm			Ø70 mm			-			-		
Accuracy class	0,5s	0,2	0,2s	0,5s	0,2	0,2s	0,5s	0,2	0,2s	0,5s	0,2	0,2s	0,5s	0,2	0,2s
Ip/n	VA			VA			VA			VA			VA		
150	2,5	2,5													
200	2,5	2,5													
250	5	5													
500				5	5	5	5	2,5							
600				5	5	5	5	5	5						
750				5	5	5	7,5	7,5		7,5	7,5				
800				5	5	5	5	7,5		7,5	7,5		7,5		
1000				7,5	5	5	10	10	5	10	10	7,5	10		
1200				7,5	10	5	10	10	5	10	10	10	5		
1500							15	15	5	10	15	15	10	10	5
1600						5	15	15	5	15	15	15	10	10	5
2000						15	15	15	10	15	15	15	15	15	5
2400										15	15	15	15	15	5
2500										20	20	15	15	15	15
3000										20	20	20	15	15	10
4000													15	15	15

Dimensions

Dimensions on the previous page

TRANSFORMERS

TU_PS-3 Narrow profile - triple. Window-type

Measuring transformers



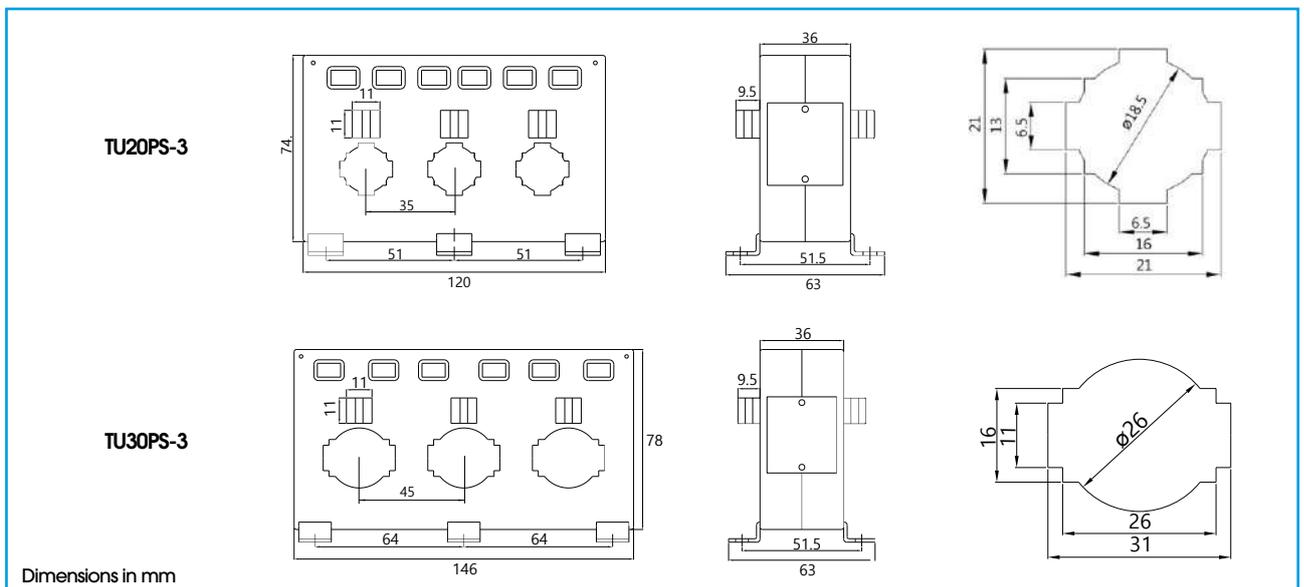
General features

Precision measuring current transformer for cable or busbar, featuring a triple design for easy integration into electrical panels.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar					
Model	TU20PS3			TU30PS3	
Bus-bar	20 x 6 mm			30 x 10 mm	
Cable	Ø18 mm			Ø25 mm	
Accuracy class	0,5	1	3	0,5	1
I _{pn}	VA			VA	
30			0,5		
40			1		
50			1		
60		1	1		
75		1	1,5		
100		1,25	1,5		
125	1	1,5	2,5		
150	1	1,5	2,5		1,5
200	1,5	2,5	3,75		2,5
250	2,5	3,75	5		2,5
300	2,5	3,75		2,5	2,5
400				2,5	2,5
500				3,75	3,75
600				5	5

Dimensions



TRANSFORMERS

TU100PSH Narrow profile window-type

Measuring transformers



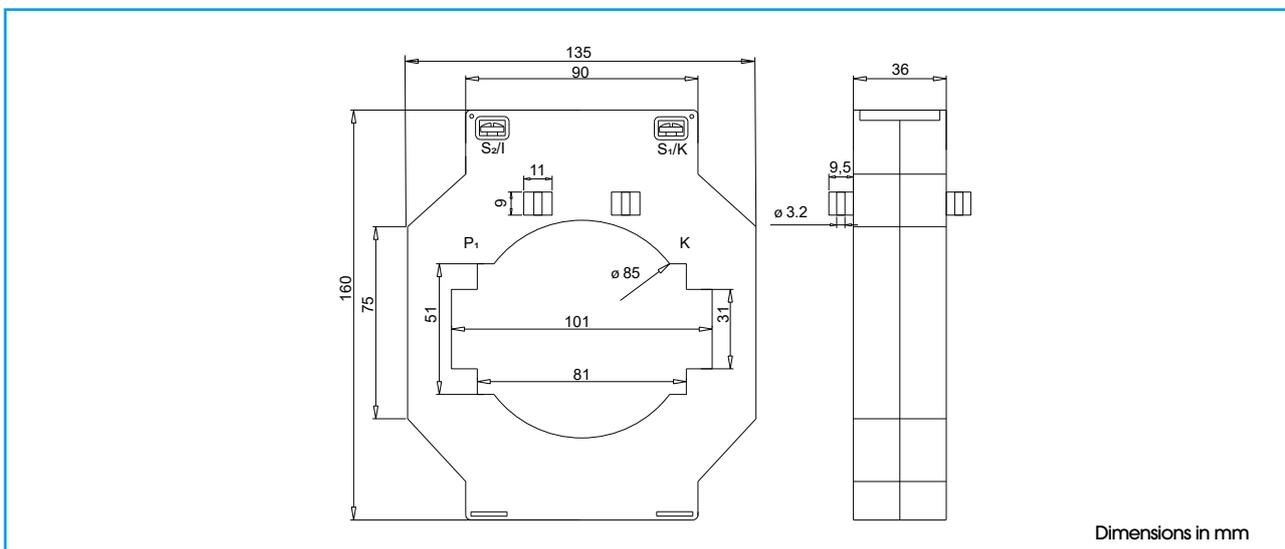
General features

Current transformer for measurement, suitable for cable or busbar, featuring a slim-profile design for installation in tight spaces between busbars.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar		
Bus-bar	100 x 30 / 80 x 50 mm	
Cable	Ø 85 mm	
Accuracy	0,5	1
I _{pn} (A)	VA	
400	5	7,5
500	7,5	10
600	7,5	10
750	7,5	10
800	7,5	10
1000	10	15
1200	15	20
1500	15	20
1600	10	15
2000	15	20
2500	20	25
3000	20	25
4000	25	30
5000	25	30

Dimensions



TU20PS-1 Narrow profile window-type

Measuring transformers



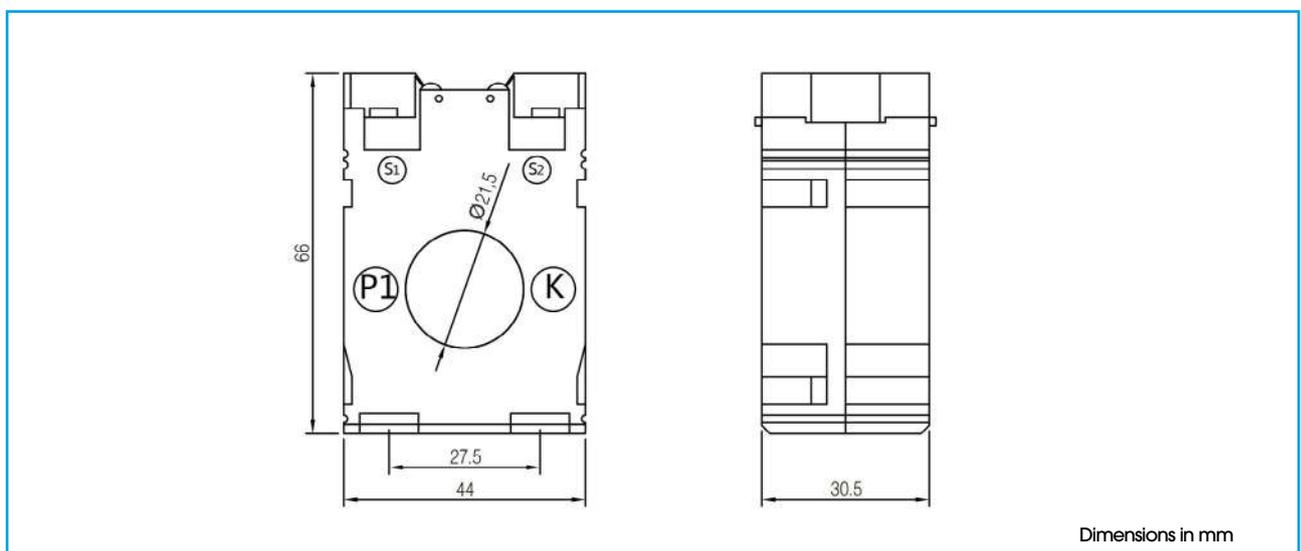
General features

Measuring transducers with DIN rail mounting option. Its slim profile design allows a better adaptation in the panel due to its reduced dimensions.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**

Passing cable/busbar			
Cable	Ø 20 mm		
Accuracy	0,5	1	3
I _{pn} (A)	VA		
30			1
40			1
50			1,5
60			1,5
80			1,5
100		1,5	
150	1,5	2,5	
200	2,5	2,5	
250	2,5		
300	2,5		
400	3,75		

Dimensions



TU_Window-type

Measuring transformers



General features

Measuring current transformer for cable or busbar applications, featuring a wider profile and a higher level of accuracy at low current levels.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3 - 0,5s - 0,2 - 0,2s
- **Plastic casing**
- **Resin encapsulated option**

Passing cable/busbar																
Modelo	TU20						TU30			TU40						
Bus-bar	20 x 5 mm						30 x 10 mm			40 x 10 mm						
Cable	Ø16 mm						Ø22 mm			Ø30 mm						
Accuracy class	0,5	1	3	0,5s	0,2	0,2s	0,5	1	3	0,5	1	3	0,5s	0,2	0,2s	
I _{pn}	VA						VA			VA						
30			1													
40			1													
50			1								0,75	1,5				
60		1	2								1,25	2				
75		1,5	2,5								2	3,75				
100		2,5	3,75					1,25	2,5	1	3	5				
125		3,75	5					1,25	2,5	2,5	3,75	5				
150	3,75	5	7,5	2,5	2,5	2,5	1,5	2,5	3,75	3,75	5	7,5				
200	5	7,5	10	3,75	3,75		2,5	3,75	5	3,75	5	7,5				
250	7,5	10	15	5	5		3,75	5	7,5	5	7,5	10				
300							3,75	5	7,5	7,5	10	15				
400							3,75	5	7,5	10	15	20	5	5	5	
500							5	7,5	10	10	15	20	5	5	5	
600							5	7,5	10	10	15	20	5	5	5	
750										10	15	20				
800										15	20	30	5	5	5	
1000										15	20	30	5	5	5	

Dimensions

TU20 - Figure 1

TU30 - Figure 2

TU40 - Figure 3

Model	A	B	C	D	E	F	G	H	I	J
TU20	Figure 1		56	74	33	48,5	48,5	60	32,5	37
TU30	Figure 2		60	79	36	51,5	51,5	63	34,5	41
TU40	Figure 3		71	96	45,5	61	61	72,5	44,5	52

Dimensions in mm

TL_ Window-type

Measuring transformers



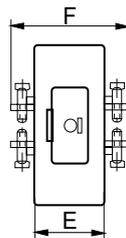
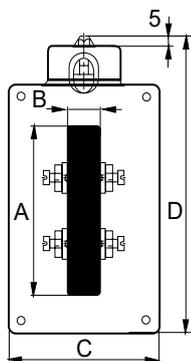
General features

Measuring current transformer for cable or busbar applications, featuring a wider profile and a higher level of accuracy at high current levels.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3 - 0,5s - 0,2 - 0,2s
- **Plastic casing**

Passing cable/busbar																			
Model	TL2						TL3						TL4						
Bus-bar	100 x 20 mm						100 x 30 mm						100 x 60 mm						
Cable	Ø20 mm						Ø30 mm						Ø60 mm						
Accuracy class	0,5	1	3	0,5s	0,2	0,2s	0,5	1	3	0,5s	0,2	0,2s	0,5	1	3	0,5s	0,2	0,2s	
I _{pn}	VA						VA						VA						
750	10	20	30	5	5														
800	15	20	30	5	5	5													
1000	20	30	45	10	7,5	5													
1200	20	30	45	10	7,5	5													
1500	30	45	60	10	10	5	10	20	30	10	10	5				10	10	5	
1600	30	45	60	10	10	5	10	20	30	10	10	5				10	10	5	
2000	30	60	90	15	15	5	15	25	40	15	15	5	10	20	30	15	15	5	
2400				15	15	5	15	25	40	15	15	5	10	20	30	15	15	5	
2500							25	30	45	15	15	10	10	20	30	15	15	10	
3000							30	45	60	15	15	10	20	30	45	15	15	10	
3500							30	45					20	30	45				
4000													30	60	90				
5000													30	60	90				
6000													30	60					

Dimensions



Model	A	B	C	D	E	F
TL2	102	20	94	178	38	66
TL3	103	32	114	210	45	71
TL4	104	62	156	224	50	78

Dimensions in mm

TUC_ Window-type

Measuring transformers



General features

Measuring current transformer for cable or busbar applications, featuring a wider profile and higher secondary burden capacity at low current levels.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3 - 0,5s - 0,2 - 0,2s
- **Plastic casing**
- **Resin encapsulated option**
- **Protection degree:** IP51

Passing cable/busbar															
Model	TUC30						TUC40						TUC40-1		
Bus-bar	30x10mm						40x10mm						40x10mm		
Cable	Ø25mm						Ø32mm						Ø32mm		
Accuracy class	0,5	1	3	0,5s	0,2	0,2s	0,5	1	3	0,5s	0,2	0,2s	0,5	0,5s	0,2s
I _{pn}	VA						VA						VA		
50								0,75	1,5				5	1,5	
60								1,25	2						
75								2	3,75						
100							1	3	5				5	5	1,25
125							2,5	3,75	5						
150	5	5	5	5	5	5	3,75	5	7,5	7,5	1	5	5	5	5
200	15	20	30	5	5	5	3,75	5	7,5	10	1	5	10	5	5
250	15	20	30	5	5	5	5	7,5	10	5	5		10	10	5
300	15	20	30	5	5	5	7,5	10	15	7,5	5	5			
400	15	20	30	5	5	5	10	15	20	10	7,5	5			
500	15	20	30	5	5	5	10	15	20	10	5	5	15	10	5
600	15	20	30	5	5	5	10	15	20	10	5	5			
750							10	15	20	5	10	5	15	15	5
800							15	20	30	5	10	5			
1000							15	20	30	5	5	5	20	15	5

Dimensions

TUC30 -Figure 1

TUC40 / TUC40-1

TUC_

Model	A	B	K	L
TUC30	Figura 1			
TUC40	41	10,5	25	31
TUC40-1	41	11	25	31

Model	C	D	E	F	G	H	I	J
TUC30	77	112	60,5	76	76	87,5	44,5	41
TUC40	71	106,5	45	61	60,5	72	40	47
TUC40-1	71	106,5	75	91	90,5	102	40	47

Dimensions in mm

TUC_ Window-type

Measuring transformers



General features

Current transformer for measurement, suitable for cable or busbar, with a wider profile and increased secondary burden capacity at low currents.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3 - 0,5s - 0,2 - 0,2s
- **Plastic casing**
- **Resin encapsulated option**
- **Protection degree:** IP51

Passing cable/busbar													
Model	TUC50	TUC60						TUC80					
Bus-bar	50x10mm	60x10mm						80x30mm					
Cable	Ø40mm	Ø51mm						Ø65mm					
Accuracy class	0,5s	0,5	1	3	0,5s	0,2	0,2s	0,5	1	3	0,5s	0,2	0,2s
I _{pn}	VA	VA						VA					
200			10						10				
250		10	15					3,75					
300		10	20					10					
400	10	15	20	30	5	5	5	15	20	30	10	7,5	
500	10	15	20	30	5	5	5	15	20	30	7,5	7,5	
600	10	15	20	30	5	5	5	15	20	30	7,5	7,5	
750	10	15	20	30	5	5	5	15	20	30	10	10	
800	10	15	20	30	5	5	5	15	20	30	10	10	5
1000	10	15	20	30	10	10	5	15	20	30	10	10	7,5
1200	10	15	20	30	10	10	5	15	20	30	15	15	7,5
1250	10	15	20	30	10	10	5	15	20	30	15	15	7,5
1500	10	15	20	30	10	10	5	15	20	30	15	15	7,5
2000	10	15	20	30	15	10	5	15	20	30	15	15	15
2500								15	20	30	15	15	15
3000											15	15	15

Dimensiones

TUC50

TUC60 - TUC80

TUC_

Model	A	B	K	L	M
TUC50	51	11	31	41	-
TUC60	61	11	31	41	51
TUC80	81	31	41	51	61

Model	C	D	E	F	G	H	I	J
TUC50	84	117	45	61	60,5	72	44,5	64
TUC60	105	136,5	60	76	75,5	87	54	81
TUC80	131	161,5	60	76	75,5	87	69	107

Dimensions in mm

TA_P Split core transformers

Measuring transformers



General features

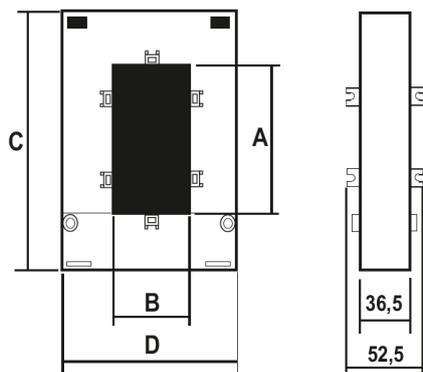
Split-core measuring current transformer, designed to facilitate installation in existing panels or lines.

- **Secondary:** .../5A
.../1A
.../250mA
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**
- **Resin encapsulated option**
- **With built-in cable option**

Passing cable/busbar															
Model	TA30P			TA40P			TA60P			TA80P			TA85P		
Bus-bar	30x20 mm			40x40 mm			60x30 mm			80x50 mm			85x85 mm		
Cable	Ø20 mm			Ø40 mm			Ø30 mm			Ø50 mm			Ø85 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	VA														
50	1		0,5												
100			3			3						2,5			
125						3									
150			3,75			3,75									
200		2,5	4		2,5	4									
250		3,75	5		2,5	3,75		2,5	3,75		2,5	3,75		2,5	3,75
300	2,5	4	6		3,75	5		3,75	5		3,75	5		3,75	5
400	3,75	5	10	2,5	3,75	7,5	2,5	3,75	7,5	2,5	3,75	7,5	2,5	3,75	7,5
500				3,75	5	15	3,75	5	15	3,75	5	15	3,75	5	15
600							5	7,5	20	5	7,5	20	5	7,5	20
750							7,5	10	20	7,5	10	20	7,5	10	20
800							7,5	10	20	7,5	10	20	7,5	10	20
1000							10	15	20	10	15	20	10	15	20

Other specialities on request, consult us.

Dimensions



Model	A	B	C	D
TA30P	32	22	106	90
TA40P	40	40	115	108
TA60P	62	32	136	100
TA80P	82	52	156	120
TA85P	85	85	159	153

Dimensions in mm

TA_P Split core transformers

Measuring transformers



General features

Split-core measuring current transformer, designed to facilitate installation in existing panels or lines.

- **Secondary:** .../5A
.../1A
.../250mA
- **Accuracy:** 0,5 - 1 - 3
- **Plastic casing**
- **Resin encapsulated option**
- **With built-in cable option**

Passing cable/busbar												
Model	TA100P			TA125P			TA135P			TA160P		
Bus-bar	100x80 mm			128x80 mm			135x135 mm			160x80 mm		
Cable	Ø80 mm			Ø80 mm			Ø135 mm			Ø80 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	VA			VA			VA			VA		
250		2,5	3,75									
300		3,75	5									
400	2,5	3,75	7,5									
500	3,75	5	15		5	7,5		5	7,5	2,5	3,75	7,5
600	5	7,5	20		5	15		5	15	3,75	5	10
750	7,5	10	20	5	10	20	5	10	20	5	10	20
800	7,5	10	20	7,5	10	20	7,5	10	20	7,5	10	20
1000	10	15	20	10	20	30	10	20	30	10	20	30
1200	15	20	30	15	20	30	15	20	30	15	20	30
1250	15	20	30	15	20	30	15	20	30	15	20	30
1500	15	20	30	20	30	45	20	30	45	20	30	45
2000	20	30	45	25	30	45	25	30	45	25	30	45
2500				25	30	45	25	30	45	25	30	45
3000				30	45	60	30	45	60	30	45	60
4000				30	45	60				30	45	60
5000										30	45	60

Other specialities on request, consult us.

Dimensions

Model	A	B	C	D
TA100P	104	82	178	150
TA125P	127	82	201	150
TA135P	135	135	209	203
TA160P	162	82	236	150

Dimensions in mm

TRANSFORMERS

TA_P(A) Mini split core transformers

Measuring transformers



General features

Split-core measuring transformer, designed for easy installation in existing panels or lines. Its compact size makes it easy to fit in places with limited space.

- **Secondary:** .../5A
.../1A
.../250mA
.../333mV
- **Precision:** 0,5 - 1 - 3
- **Plastic casing**



TA_P



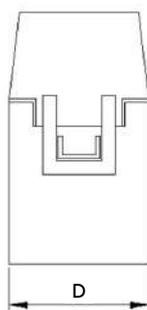
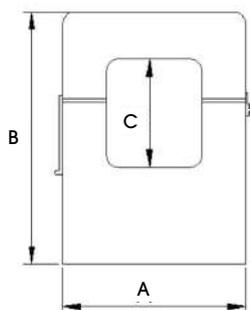
TA_PA

Passing cable/busbar											
Model	TA10P ³	TA16P ²	TA16PA		TA20PA ²		TA24P ⁴	TA36P ⁴		TA50P	
Cable	Ø10 mm	Ø16 mm	Ø16 mm		Ø20 mm		Ø24 mm	Ø36 mm		Ø52 mm	
Accuracy class	1	3	1 ¹	3 ²	1	3	1	0,5	1	0,5	1
I _{pn}	VA	VA	VA		VA		VA	VA		VA	
20	1	1		1							
30	1	1		1							
40	1,5	1		1	1	1					
50	1,5	1	1	1	1	1	1		1		
60		1	1	1	1	1					
75		1	1	1	1	1	1		1		
100		1	1	1	1	1	1		1		
150			1	1	1	1	1		1		
200			1	1	1	1	1	1	1		
250							1	1	1		
300							1,5	1	1,5		
400								2,5	5		
500								5	7,5	2,5	5
600								5	10	2,5	5
750										2,5	5
800										2,5	5
1000										2,5	5

(1) Accuracy and load available only for X/5A. (2) Accuracy and load available only for X/1A.

(3) TA10P available only with 250mA and 333mV secondary output. (4) They can be manufactured without cable and with terminals.

Dimensions



Model	A	B	C	D
TA10P	23	40	10	26
TA16P	32	46	16	31
TA16PA	50,5	65	16	44
TA20PA	42,5	58	20	34
TA24P	46	65,4	24	35
TA36P	57,5	85,2	36	41,4
TA50P	86,6	118,5	52	58,2

Dimensions in mm

TA_PV Split core transformers

Specialities. Measuring transformers



General features

Split-core current transformer for measurement instrumentation, featuring a pass-through primary for cable or busbar.

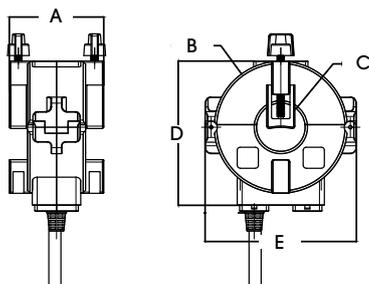
It has an integrated insulation-piercing screw contact that enables direct signal pickup from the conductor or busbar.

- **Secondary:** .../5A
- **Accuracy class:** 0,5s
- **Plastic casing**

Passing cable/busbar			
Model	TU40PV	TU60PV	TU80PV
Cable	Ø40 mm	Ø60 mm	Ø80 mm
Accuracy class	0,5s	0,5s	0,5s
I _{pn}	VA	VA	VA
100	2,5		
200	2,5		
250	2,5		
300	2,5	2,5	
400	2,5	2,5	
500	2,5	2,5	
600	5	5	5
750	5	5	5
800	5	5	5
1000		5	5
1500		5	5
2000			5
4000			5

For other ratios, please consult us.

Dimensions



Model	A	B	C	D	E
TA40PV	78	Ø 110	Ø 40	120	125
TA60PV	78	Ø 129,7	Ø 60	144	145
TA80PV	78	Ø 150	Ø 80	165	165

Dimensions in mm

TRANSFORMERS

TA_R Split core transformers

Measuring transformers



General features

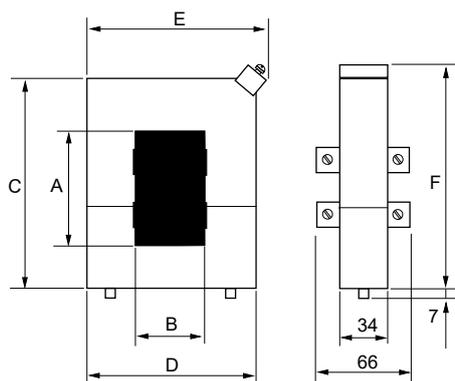
Split core measuring transformer, designed for easy installation in existing panels or lines. Made of resin for greater durability in harsh environments.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Resin encapsulated**

Passing cable/busbar																		
Model	TA30R			TA60R			TA80R*			TA100R			TA125R			TA160R		
Bus-bar	30 x 20 mm			60 x 30 mm			80 x 50 mm			100 x 80 mm			125 x 80 mm			160 x 80 mm		
Cable	Ø20 mm			Ø30 mm			Ø50 mm			Ø80 mm			Ø80 mm			Ø80 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn}	VA			VA			VA			VA			VA			VA		
100			3															
150			3,75															
200		2,5	4		1,5	2,5												
250		3,75	5		2,5	3,75	1	2,5	3,75		2,5	3,75						
300	2,5	4	6		3,75	5	2	3,75	5		3,75	5						
400	3,75	5	10	2,5	3,75	7,5	2,5	3,75	7,5	2,5	3,75	7,5						
500				3,75	5	15	3,75	5	15	3,75	5	15		5	7,5	2,5	3,75	7,5
600				5	7,5	20	5	7,5	20	5	7,5	20		5	15	3,75	5	10
750				7,5	10	20	7,5	10	20	7,5	10	20	5	10	20	5	10	20
800				7,5	10	20	7,5	10	20	7,5	10	20	7,5	10	20	7,5	10	20
1000				10	15	20	10	15	20	10	15	20	10	20	30	10	20	30
1200							10	15		15	20	30	15	20	30	15	20	30
1500										15	20	30	20	30	45	20	30	45
2000										20	30	45	25	30	45	25	30	45
2500													25	30	45	25	30	45
3000													30	45	60	30	45	60
4000																30	45	60
5000																30	45	60
6000																30	45	

(*) With built-in cable option

Dimensions



Model	C	A	B	D	E	F
TA30R	32	21	105	90	99	114
TA60R	62	32	130	100	109	139
TA80R	82	52	150	120	129	159
TA100R	104	82	172	150	159	181
TA125R	127	82	195	150	159	204
TA160R	162	82	230	150	159	239

Dimensions in mm

TUP_R Window-type

Measuring transformers



General features

Through-type primary transformer for busbars, resin-encapsulated, suitable for high currents and high secondary burden capacity.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1
- **Resin encapsulated**

Passing cable / busbar								
Model	TUP20RC		TUP20R		TUP60R		TUP95R	
Bus-bar	80 x 20 mm		100 x 20 mm		100 x 60 mm		100 x 95 mm	
Cable	Ø20 mm		Ø20 mm		Ø60 mm		Ø95 mm	
Accuracy class	0,5	1	0,5	1	0,5	1	0,5	1
I _{pn}	VA		VA		VA		VA	
500	10	15						
600	15	25						
750	15	25	15	25				
800	15	25	15	25				
1000	15	25	15	25				
1200	15	25	15	25				
1500	15	25	15	25				
2000			15	25	15	25		
2500					15	25		
3000					15	25	15	25
4000					15	25	15	25
5000							15	25

Dimensions

TUP20RC

TUP_R

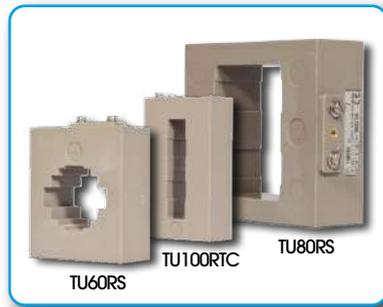
Model	A	B	C	D	E	F	G
TUP20R	105	20	95	160	60	80	60
TUP60R	105	60	150	193	60	80	60
TUP95R	105	95	200	200	60	80	60

Dimensions in mm

TRANSFORMERS

TU_R_ Narrow profile - Window-type

Current transformer - Horizontal bar



General features

Transformers featuring a dedicated design for horizontal mounting, with strategically located terminal blocks on each model to simplify installation and connection.

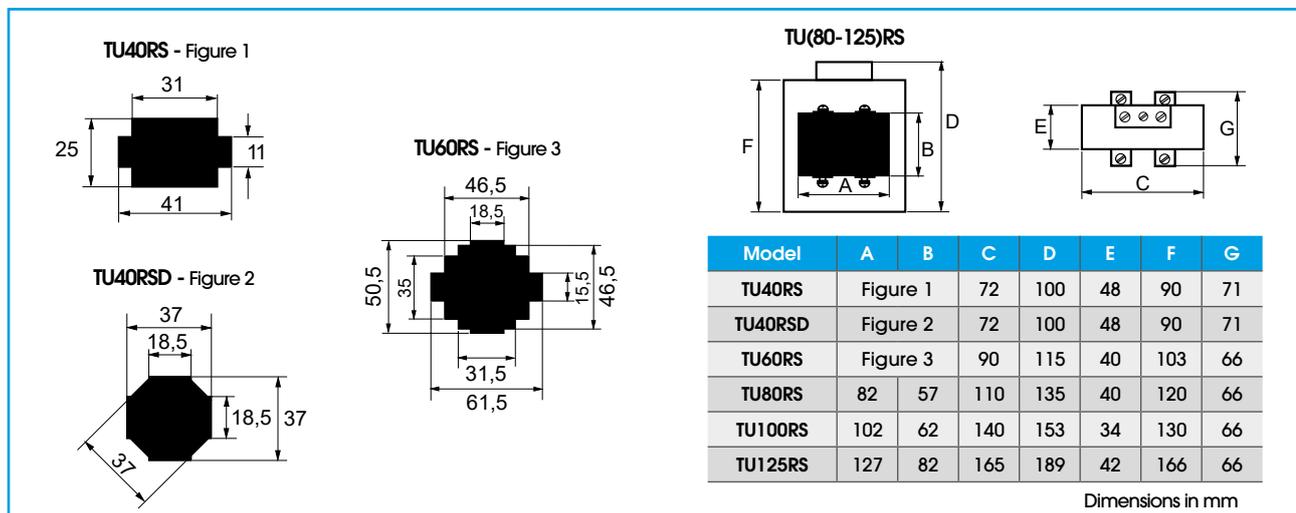
- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Resin encapsulated**

Passing cable/busbar

Model	TU40RS			TU40RSD*			TU60RS			TU80RS			TU100RS			TU125RS		
	Bus-bar			Cable			Accuracy class			I _{pn}			VA			VA		
Model	40 x 10 mm			37 x 18 mm			15 x 60 mm			50 x 80 mm			60 x 100 mm			80 x 125 mm		
Cable	Ø25 mm			Ø36 mm			Ø45 mm			Ø50 mm			Ø60 mm			Ø80 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn}	VA			VA			VA			VA			VA			VA		
200	5	5		5	7,5	10	5											
250	10	7,5		5	7,5	10	5											
300	10	15	20	10	15	20	5											
400	10	15	20	10	15	20	5	7,5	10	5	7,5	10						
500	10	15	20	10	15	20	7,5	10	15	5	7,5	10						
600	10	15	20	10	15	20	10	15	20	10	15	20						
750	10	15	20	10	15	20	10	15	20	10	15	20	15	20	30			
800	10	15	20	10	15	20	10	15	20	10	15	20	15	20	30			
1000	10	15	20	10	15	20	10	15	20	10	15	20	15	20	30			
1200							10	15	20	10	15	20	15	20	30			
1500							10	15	20	10	15	20	15	20	30			
2000							10	15	20	10	15	20	15	20	30	15	20	30
2500										10	15	20	15	20	30	15	20	30
3000													15	20	30	15	20	30
4000																15	20	30
5000																15	20	30
6000																15	20	30

(*) Optional with built-in cable

Dimensions



TRANSFORMERS

TU_R_ Narrow profile - Window-type

Measuring transformers - Horizontal bar



General features

Transformers featuring a dedicated design for horizontal mounting, with strategically located terminal blocks on each model to simplify installation and connection.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Resin encapsulated**

Passing cable/busbar												
Model	TU100RT			TU100RTC			TU125RT*			TU125RTC		
Bus-bar	100 x 20 mm			20 x 100 mm			125 x 35 mm			35 x 125 mm		
Cable	Ø20 mm			Ø20 mm			Ø35 mm			Ø35 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn}	VA			VA			VA			VA		
600				10	20							
750	10	20	30	10	20	30						
800	15	20	30	15	20	30	7,5	10	15	7,5	10	15
1000	20	30	45	20	30	45	7,5	10	15	7,5	10	15
1200	20	30	45	20	30	45	7,5	10	15	7,5	10	15
1500	30	45	60	30	45	60	10	15	20	10	15	20
2000	30	60	90	30	45	60	15	20	30	15	20	30
2500				30	45	60	20	25	30	20	25	30
3000				30	45	60	25	30	40	25	30	45
3200				30	45		25	30				

(*) Optional with built-in cable

Dimensions

Model	A	B	C	D	E	F	G
TU100RT	22	101	83	145	40	55	66
TU125RT	38	127	98	170	40	55	66
TU100RTC	22	101	83	145	40	15	66
TU125RTC	38	127	98	170	40	15	66

Dimensions in mm

TU_R - Narrow profile - Window-type

Measuring transformers



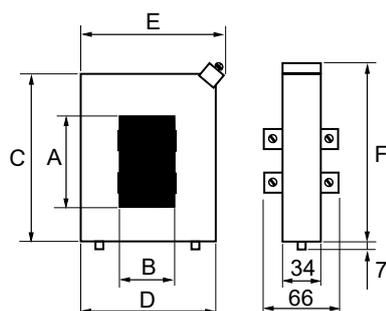
General features

Current transformer for measurement, suitable for cable or busbar, featuring a slim-profile design for better adaptation in electrical panels with limited space.

- **Secondary:** .../5A
.../1A
- **Accuracy:** 0,5 - 1 - 3
- **Resin encapsulated**

Passing cable/busbar																		
Model	TU30R			TU60R			TU80R			TU100R			TU125R			TU160R		
Bus-bar	30 x 20 mm			60 x 30 mm			80 x 50 mm			100 x 80 mm			125 x 80 mm			160 x 80 mm		
Cable	Ø20 mm			Ø30 mm			Ø50 mm			Ø80 mm			Ø80 mm			Ø80 mm		
Accuracy class	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn}	VA			VA			VA			VA			VA			VA		
100			3,75															
150			3,75			5												
200			5			7,5												
250	5	7,5	10	2,5	3,75	5	2,5	3,75	5	2,5	3,75	5						
300	5	7,5	10	3,75	5	7,5	3,75	5	7,5	3,75	5	7,5						
400	7,5	10	15	5	7,5	10	5	7,5	10	5	7,5	10						
500				7,5	10	15	7,5	10	15	7,5	10	15	10	15	20	10	15	20
600				10	15	20	10	15	20	10	15	20	15	20	30	15	20	30
750				15	20	30	15	20	30	15	20	30	15	20	30	15	20	30
800				15	20	30	15	20	30	15	20	30	15	20	30	15	20	30
1000				15	20	30	15	20	30	15	20	30	15	20	30	15	20	30
1200										15	20	30	15	20	30	15	20	30
1500										15	20	30	15	20	30	15	20	30
2000										15	20	30	15	20	30	15	20	30
2500													15	20	30	15	20	30
3000													15	20	30	15	20	30
4000													15	20	30	15	20	30
5000																15	20	30
6000																15	20	30

Dimensions

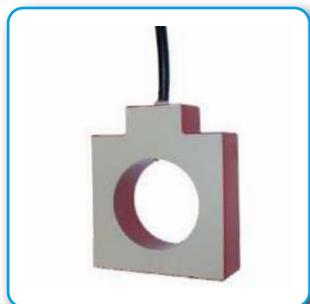


Model	A	B	C	D	E	F
TU30R	32	21	105	90	99	114
TU60R	62	32	130	100	109	139
TU80R	82	52	150	120	129	159
TU100R	104	82	172	150	159	181
TU125R	127	82	195	150	159	204
TU160R	162	82	230	150	159	239

Dimensions in mm

TU60PRI Window-type

Measuring transformers



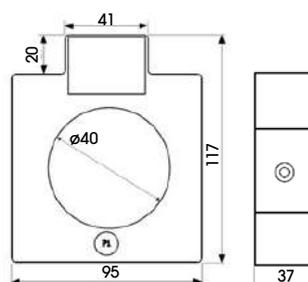
General features

Resin encapsulated transformer, 150% extended range with built-in cable:
 - 6 metres (2x1,5mm² or 2x2,5mm²)
 - 10 metres (2x2,5mm)

- **Secondary:** .../5A
- **Continuous overload:** 1,5x I_n
- **Rated dynamic current:** 2,5x I_{th}
- **Operating voltage:** 720 V AC
- **Insulation class:** A
- **Test voltage:** 3kV, 1 min.
- **Protection degree:** IP65
- **Rated short-circuit thermal withstand current:** 60 x I_n
- **Resin encapsulated**

Passing cable/busbar			
Model	TU60PRI		
Cable	Ø62 mm		
Accuracy class	0,5s	0,2	0,2s
I _{pn}	VA		
250		2,5	
400	5		
600			5

Dimensions



Dimensions in mm

TRANSFORMERS

TU40RGI Low voltage advanced monitoring

Measuring transformers



General features

Current transformer for advanced low voltage monitoring. Supplied with embedded cable with a length of 2, 3, 5 or 10 metres, with a 2-wire cable of 2.5mm² cross-section.

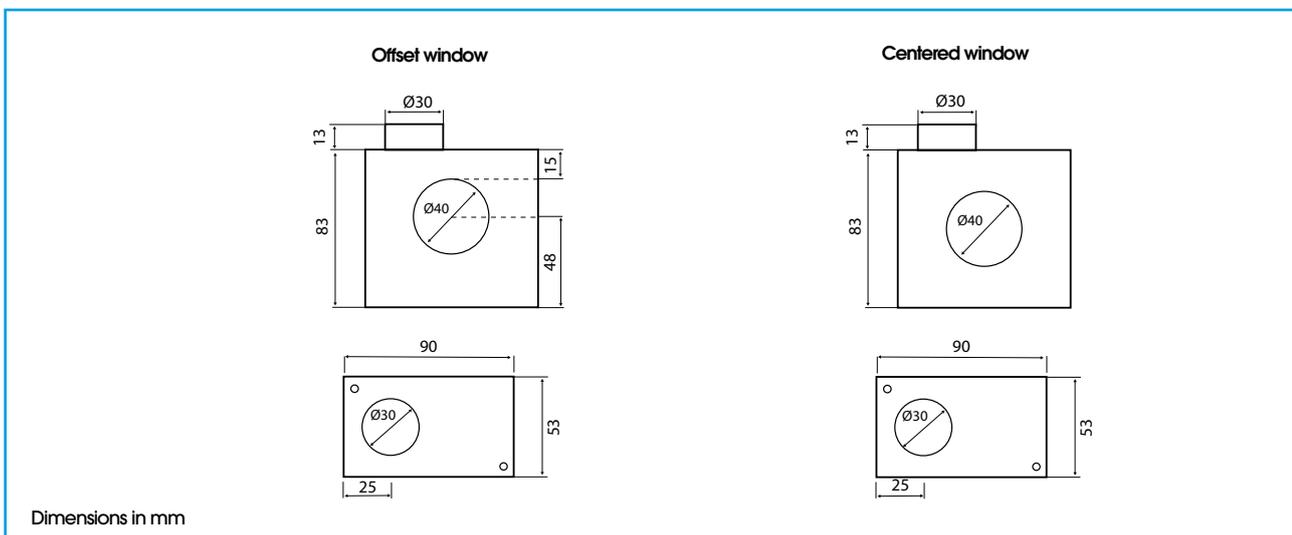
Measurement of neutral or protective earth current.

- **Secondary:** .../1A
- **Rated current:** 0,4%. Error less than 10%
- **Rated short-circuit thermal withstand current (I_{th}):** 15kA, 1 seg.
- **Rated dynamic current:** 2,5 x I_{th}
- **Resin-filled**

Passing cable/busbar				
Model	TU40RGI - Offset window			
Cable	Ø40 mm			
Accuracy class	0,5	1	0,2	0,5s
I _{pn}	VA			
50		0,25		
80	2			
100	2,5			
125	2,5			2,5
150	5			
200	5			5
250			2,5	
300	10			

Passing cable/busbar	
Model	TU40RGI - Centered window
Cable	Ø40 mm
Accuracy class	0,5
I _{pn}	VA
150	10
200	10
250	10
300	10
400	10
500	10
600	10

Dimensions



TRANSFORMERS

TU_RV Low power transformers

Measuring transformers - Class 0,5s



General features

Low power current transformers designed to be installed in low voltage or directly on insulated medium voltage cables.

- **Continuous overload:** 1,5x In
- **Short circuit current Ith:** 60 x In
- **Rated dynamic current:** 2,5x Ith
- **Operating voltage:** 720 V AC
- **Conection:** RJ45 connector
- **Permissible load:** $\geq 10 \text{ k}\Omega$
- **Test voltage:** 3kV, 1 min.
- **Insulation class:** E
- **Protection degree:** IP65
- **Resin-filled**

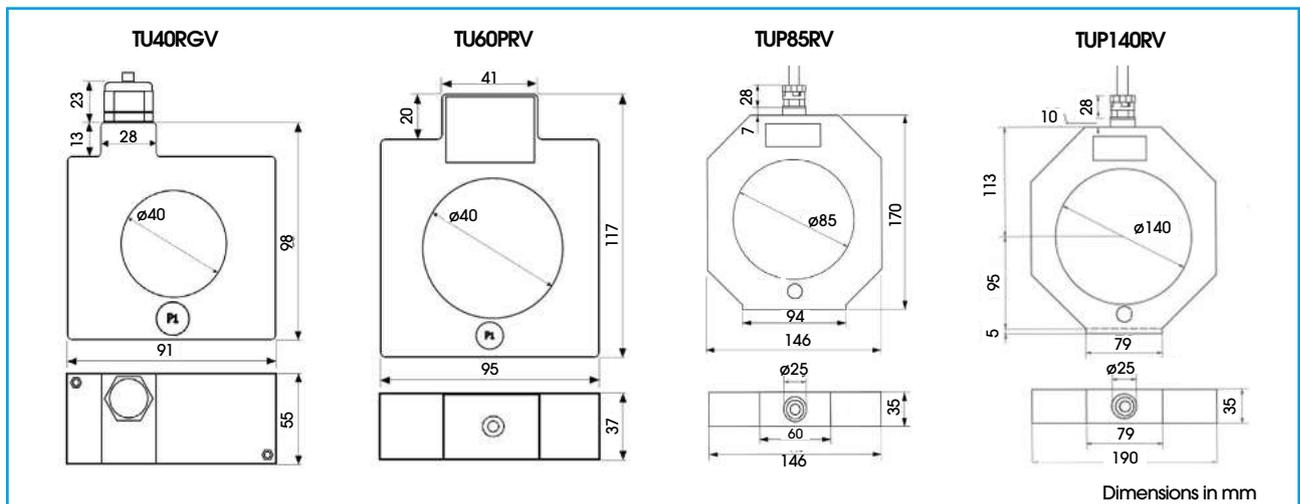
TU40RGV		Cable \varnothing 40 mm						
In / A	300	400	500	600	750	800	1000	
Salida /mV	225							

TU60PRV		Cable \varnothing 61 mm								
In / A	300	400	500	600	750	800	1000	1200	1500	1600
Salida /mV	225									

TUP85RV		Cable \varnothing 85 mm								
In / A	400	500	600	750	800	1000	1200	1500	2000	
Salida /mV	225									

TUP140RV		Cable \varnothing 140 mm								
In / A	500	600	750	800	1000	1200	1500	2000	2500	3000
Salida /mV	225									

Dimensions



TU40RGV Low power transformers

Measuring transformers - Class 0,2s



General features

Low power current transformers designed to be installed directly on low voltage cables for advanced monitoring. Built-in cable.

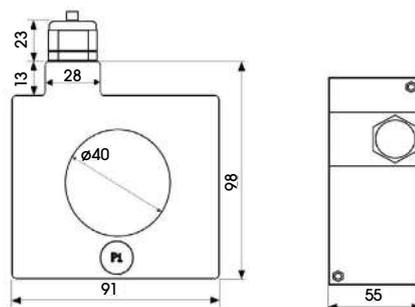
*Measurement of neutral current.

- **Continuous overload:** 1,5x I_n
- **Short circuit current I_{th}:** 60 x I_n
- **Rated dynamic current:** 2,5x I_{th}
- **Operating voltage:** 720 V AC
- **Connection:** RJ45 connector
- **Permissible load:** ≥10 kΩ
- **Test voltage:** 3kV, 1 min.
- **Insulation class:** B
- **Protection degree:** IP65
- **Resin-filled**

TU40RGV		Cable Ø 40 mm
In / A		50
Output /mV		225

For other ratios, please consult us.

Dimensions



Dimensions in mm

TUP80RV Low power transformers

Measuring transformers - Class 0,2s



General features

Low power current transformers designed for Smart Grid monitoring.

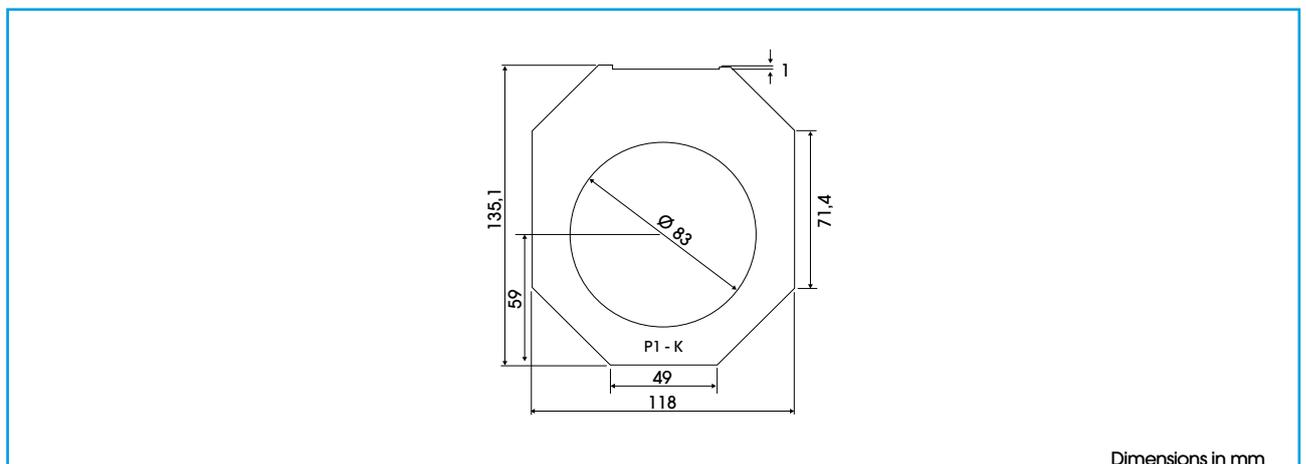
They are installed directly on the insulated medium voltage cables.

*Mounting on the cover bus-bar.

- **Continuous overload:** $1,5 \times I_n$
- **Short circuit current I_{th} :** $60 \times I_n$
- **Rated dynamic current:** $2,5 \times I_{th}$
- **Operating voltage:** 720 V AC
- **Connection:** Connector RJ45
- **Permissible load:** $\geq 10 \text{ k}\Omega$
- **Test current:** 3kV, 1 min.
- **Insulation class:** B
- **Protection degree:** IP65
- **Resin-filled**

TUP80RV		Cable \varnothing 83 mm	
	Built-in cable		RJ45 Terminal
In / A	500	1000	500
Output /mV	225		1000

Dimensions



TU_CP Wound primary

Protection transformers



General features

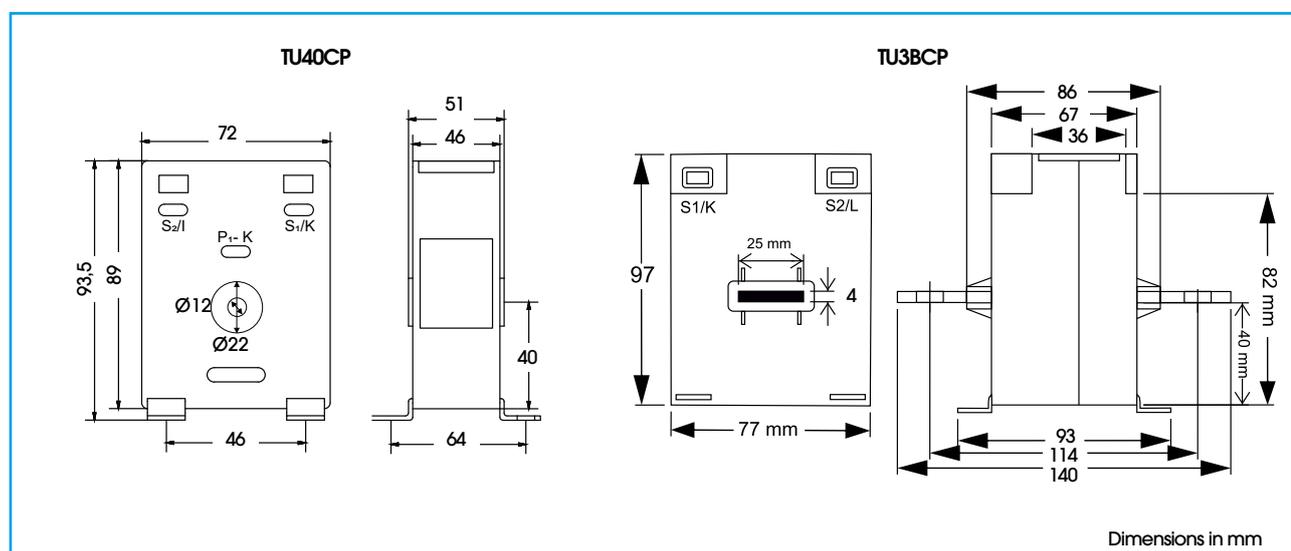
TU40CP wound-primary protection transformer featuring a screw terminal connection in horizontal configuration, suitable for low-current applications.

TU3BCP protection transformer featuring a horizontal bar primary, designed for direct cable or busbar connection in low-current applications.

- Secondary: .../5A
 .../1A
- Accuracy: 5P10 - 10P10
- Plastic casing
- Resin encapsulated option

Wound primary			
Model	TU3BCP		TU40CP
Bus-bar	4x25 mm		-
Accuracy class	5P10	10P10	5P15
I _{pn}	VA		VA
50	3,5	3,5	
60	3,5	3,5	
75	3,5	3,5	
100	3,5	3,5	0,5
125	3,5	3,5	0,5
150	3,5	3,5	0,5
200			0,5
250			0,5
300			0,5
400			0,5
500			0,5
600			0,5

Dimensions



TU_R Wound primary

Protection transformers



General features

Protection transformers featuring a wound primary and a horizontal bar for cable or busbar connection, with a resin enclosure for increased robustness.

- **Secondary:** .../5A
- **Accuracy:** 5P10 - 10P10
- **Resin encapsulated**

Wound primary				
Model	TU3PR		TU50R	
	5P10	10P10	5P10	10P10
Accuracy class	VA		VA	
l _{pn}				
50	10	10		
60	10	10		
75	10	10		
100	10	10		
125	10	10		
150	10	10		
200	10	10		
250	10	10		
300	10	10		
400	10	10		
500			7,5	7,5
600			7,5	7,5
750			10	12,5
800			10	12,5

Dimensions

Fixing support

Model	Ratio	A	B	C	D	E	F	G	H	I
TU3PR	50/5 - 300/5	100	75	110	30	5	110	38	55	140
TU3PR	400/5 - 600/5	100	75	110	30	10	110	48	60	140
TU50R	500 - 800/5	100	75	100	50	10	135	48	50	175

Dimensions in mm

TRANSFORMERS

TUC_Window-type

Protection transformers



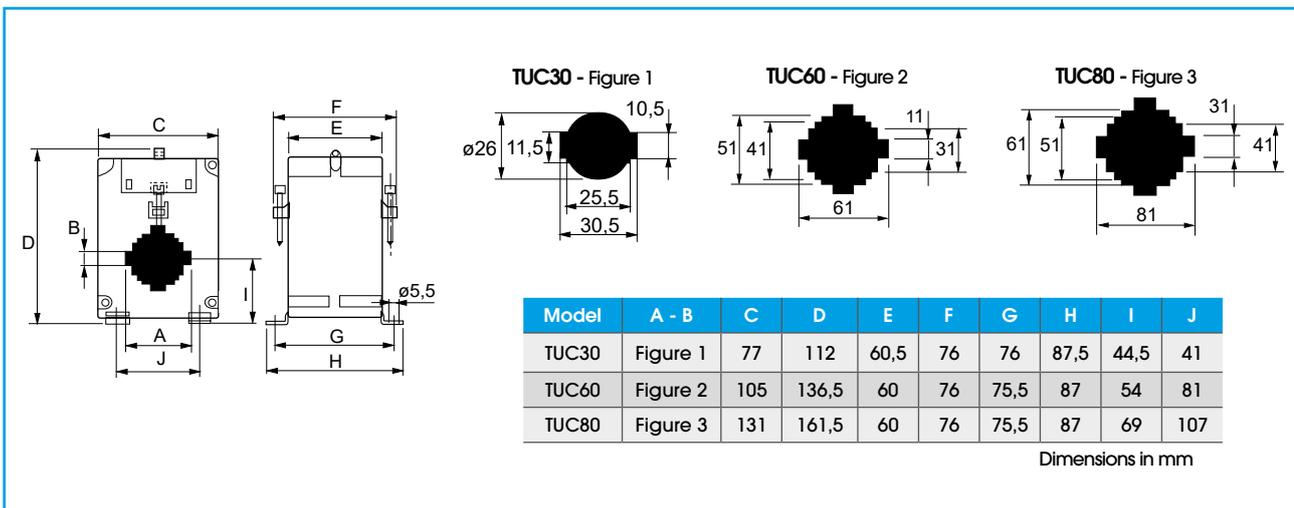
General features

Protection transformer suitable for cable or busbar, with a wider profile and increased secondary burden capacity at low currents.

- **Secondary:** .../5A
- **Accuracy :** 5P10 - 10P10
- **Plastic casing**

Passing cable/busbar						
Model	TUC30		TUC60		TUC80	
Bus-bar	30x10mm		60x10mm		80x30mm	
Cable	Ø25mm		Ø51mm		Ø65mm	
Accuracy class	5P10	10P10	5P10	10P10	5P10	10P10
l _{pn}	VA		VA		VA	
200	2,5	5	3,5	3,5	3,5	3,5
250	5	5	3,5	3,5	3,5	3,5
300	5	7,5	5	5	5	5
400			5	5	5	5
500			5	7,5	5	7,5
600			7,5	10	7,5	10
750			7,5	10	7,5	10
800			10	10	10	10
1000			10	10	10	10
1200			10	10	10	10
1500			10	12,5	10	12,5
2000			10	12,5	10	12,5
2500					10	12,5

Dimensions



TL_ Window-type

Protection transformers



General features

Protection transformer suitable for cable or busbar, with a wider profile and enhanced accuracy at high currents.

- **Secondary:** .../5A
- **Accuracy :** 5P10 - 10P10
- **Plastic casing**

Passing cable/busbar						
Model	TL2		TL3		TL4	
Bus-bar	100 x 20 mm		100 x 30 mm		100 x 60 mm	
Cable	Ø20 mm		Ø30 mm		Ø60 mm	
Accuracy class	5P10	10P10	5P10	10P10	5P10	10P10
I _{pn}	VA		VA		VA	
2000	5	7,5	7,5			
2500	5	7,5	7,5	10	2,5	
3000			7,5	10	5	7,5
4000					7,5	10
5000					7,5	10

Dimensions

Model	A	B	C	D	E	F
TL2	102	20	94	178	38	66
TL3	103	32	114	210	45	71
TL4	104	62	156	224	50	78

Dimensions in mm

TRANSFORMERS

TUP_R Window-type

Protection transformers



General features

Through-type primary transformer for busbars, resin-encapsulated, suitable for high currents and high secondary burden capacity.

- **Secondary:** .../5A
- **Accuracy:** 5P10, 5P10
- **Resin encapsulated**

Passing cable/busbar									
Model	TUP20RC		TUP20R		TUP60R		TUP95R		
Bus-bar	80 x 20 mm		100 x 20 mm		100 x 60 mm		100 x 95 mm		
Cable	Ø20 mm		Ø20 mm		Ø60 mm		Ø95 mm		
Accuracy class	5P10	10P10	5P10	10P10	5P10	10P10	5P10	10P10	
I _{pn}	VA		VA		VA		VA		
500	3,5	5							
600	3,5	5		10					
750	3,5	5	7,5	10					
800	3,5	5	7,5	10					
1000	5	5	12,5	15	12,5	15			
1200			15	15	15	15			
1500			15	20	15	20			
2000			15	20	15	20			
2500					15	20	15		
3000					20	30	15	20	
4000							20	30	
5000							20	30	

For other ratios, please consult us.

Dimensions

TUP20RC

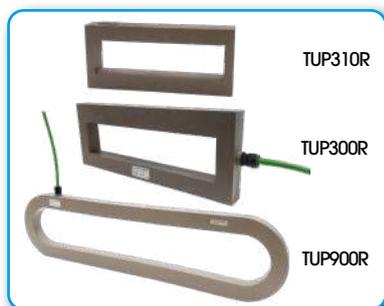
TUP_R

Model	A	B	C	D	E	F	G
TUP20R	105	20	95	160	60	80	60
TUP60R	105	60	150	193	60	80	60
TUP95R	105	95	200	200	60	80	60

Dimensions in mm

TUP_R Window-type. Specialities

Protection transformers / zero-sequence (homopolar) transformers



General features

Zero-sequence (homopolar) transformers feature a low transformation ratio and high sensitivity.

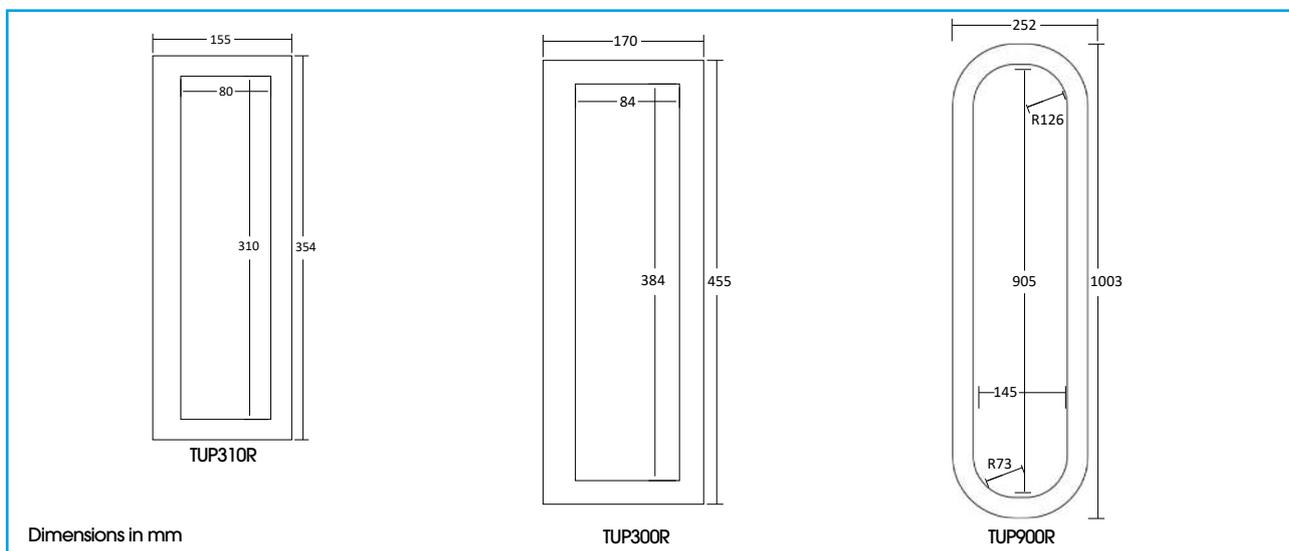
These characteristics, together with their large physical dimensions, allow all three phase conductors to pass through the transformer core in order to detect current imbalances (or earth leakage currents when the neutral conductor is also included).

- **Secondary:** .../5A
- **Accuracy:** 5P10
- **Resin encapsulated**

Passing cable/busbar			
Model	TUP300R	TUP310R	TUP900R
Bus-bar	308x 78 mm	380 x 82 mm	900 x 142 mm
Accuracy class	5P10	5P10	5P10
I _{pn}	VA	VA	VA
60	0,25	0,25	0,25

For other ratios, please consult us.

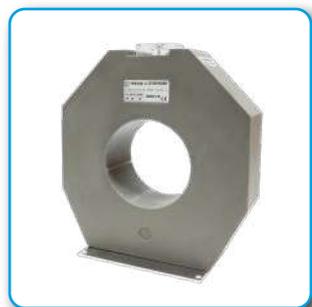
Dimensions



TRANSFORMERS

TPR_ Window-type

Protection transformers



General features

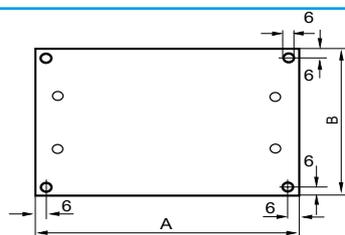
Transformer with a through-type busbar primary, suitable for cable or busbar installation.

Resin enclosure. Maintains accuracy at high power levels.

- **Secondary:** .../5A
- **Accuracy:** 5P10, 5P20
- **Resin encapsulated**
- **With built-in cable option**
- **TPR80-1/TPR125-1 customized Px models. Please consult us.**

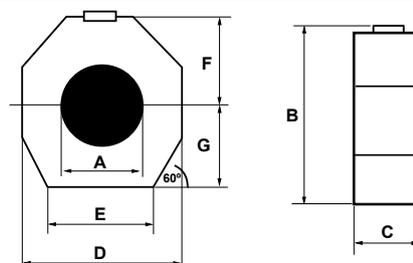
Passing cable									
Model	TPR60		TPR80		TPR100		TPR125		
Cable	Ø60 mm		Ø80 mm		Ø100 mm		Ø125 mm		
Accuracy class	5P10	5P20	5P10	5P20	5P10	5P20	5P10	5P20	
I _{pn}	VA		VA		VA		VA		
100	10	5							
150	15	7							
200	20	10							
250	25	12	12	5					
300	30	15	15	7					
400	40	20	22	10					
500	50	25	30	12	15	7			
600	60	30	35	15	15	8			
750	75	38	45	18	20	10			
800	80	40	48	20	25	12			
1000	100	50	48	20	30	15	20	10	
1200			48	22	30	17	30	15	
1500			73	28	40	20	30	15	
2000			97	35	60	30	30	15	
2500			35		65	35	40	20	
3000					65	35	40	20	
4000					80	45	50	25	
5000					120	70	70	35	

Dimensions



Fixing support

Model	A	B
TPR60	124	120
TPR80 / TPR80-1	136	100
TPR100	150	100
TPR125 / TPR125-1	166	100



Model	A	B	C	D	E	F	G
TPR60	60	211	80	185	124	110	93
TPR80	80	231	60	205	136	120	103
TPR80-1	80	276	95	250	166	143	125
TPR100	100	251	60	225	150	130	113
TPR125	125	276	60	250	166	143	125
TPR125-1	125	276	95	250	166	143	125

Dimensions in mm

TPR_B Window-type

Protection transformers



General features

Transformer with a through-type primary, specially designed for busbar applications due to its cross-shaped window.

Resin-encapsulated enclosure, designed to maintain accuracy at high power levels.

- **Secondary:** .../5A
- **Accuracy:** 5P10, 5P20
- **Resin encapsulated**
- **With built-in cable option**

Passing cable/busbar						
Model	TPR80B		TPR100B		TPR125B	
Busbar	50x50 mm		105x45 mm		122x52 mm	
Cable	Ø50 mm		Ø45 mm		Ø52 mm	
Accuracy class	5P10	5P20	5P10	5P20	5P10	5P20
I _{pn}	VA		VA		VA	
250	12	5				
300	15	7				
400	22	10				
500	30	12	15	7		
600	35	15	15	8		
750	45	18	20	10		
800	48	20	25	12		
1000	48	20	30	15	20	10
1200	48	22	30	17	30	15
1500	73	28	40	20	30	15
2000	97	35	60	30	30	15
2500	35		65	35	40	20
3000			65	35	40	20
4000			80	45	50	25
5000			120	70	70	35

Dimensions

Fixing support

Model	A	B
TPR80B	136	100
TPR100B	150	100
TPR125B	166	100

TPR80B

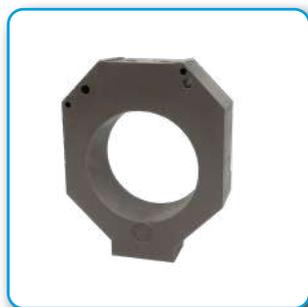
TPR100B - TPR125B

Model	H	A	B	C	D	E	F	G
TPR80B	50	50	231	60	205	136	120	103
TPR100B	45	105	251	60	225	150	130	113
TPR125B	52	122	276	60	250	166	143	125

Dimensions in mm

TUP80R Window-type. Specialities

Protection and measuring transformers



General features

Resin-encapsulated measuring current transformer with universal mounting holes for installation in enclosures.

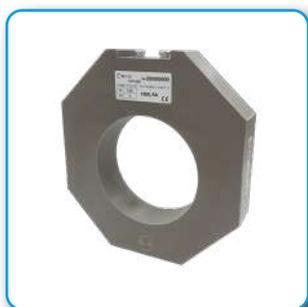
- **Secondary:** .../1A
- **Accuracy:** 0,2s - 0,5s - 5P10
- **Resin encapsulated**

Passing cable			
Model	TUP80R		TUP80R
Cable	Ø 78 mm		Ø 78 mm
Accuracy class	0,2s	0,5s	5P10
I _{pn}	VA		VA
200		0,5	0,5
500		0,5	0,5
1000	0,5		0,5

For other ratios, please consult us.

TUP105R Window-type. Specialities

Protection and measuring transformers

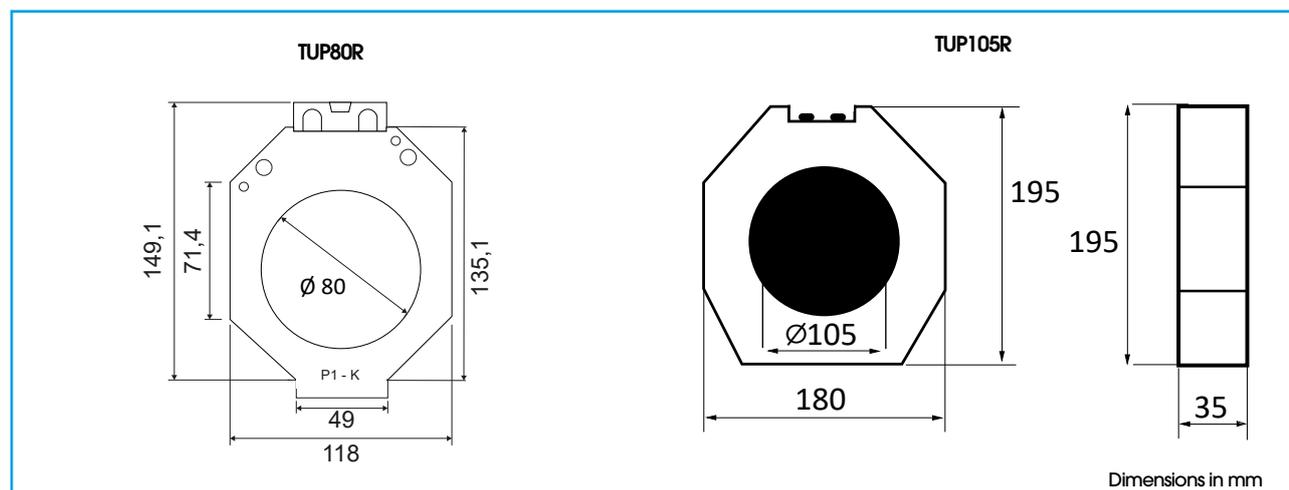


General features

Custom protection or measurement transformer offering multiple primary and secondary configurations and accuracy classes.

- **Primary:** 400-2500A
- **Secondary:** .../5A
.../1A
- **Accuracy class:** 0,5 - 0,2s - 5P20 - 5P10
- **Resin encapsulated**

Dimensions



TUP_R Window-type. Specialities

Protection and measuring transformers



General features

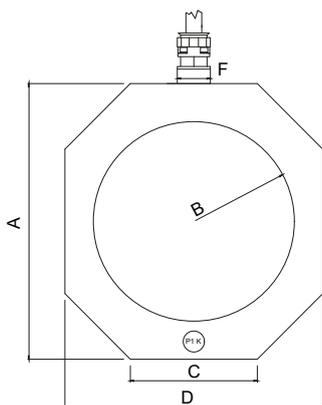
Protection transformer with an embedded two-core 2.5 mm² cable, available in lengths of 2, 3, 5, or 10 m.

- **Secondary:** .../1A
- **Accuracy:** 5P10
- **Resin encapsulated**

Passing cable				
Model	TUP85R		TUP140R	TUP150R
Cable	Ø85mm		Ø138 mm	Ø150 mm
Accuracy class	5P10	5P20	5P10	5P20
I _{pn}	VA		VA	VA
60			0,25	
100		0,5		
200		0,5		
250	5			
400		0,5		
500				0,5
600	5			

For other ratios, please consult us.

Dimensions



Model	A	C	D	E	F	G
TUP85R	170	Ø85	94	146	35	Ø25
TUP140R	213	Ø140	79	190	35	Ø25
TUP150R	210	Ø150	96	195	30	Ø25

Dimensions in mm

TRANSFORMERS

TC_Transformers with built-in measuring transducer



Window-type measuring transformers



General features

Current transformer featuring an integrated AC-to-DC current measurement converter.

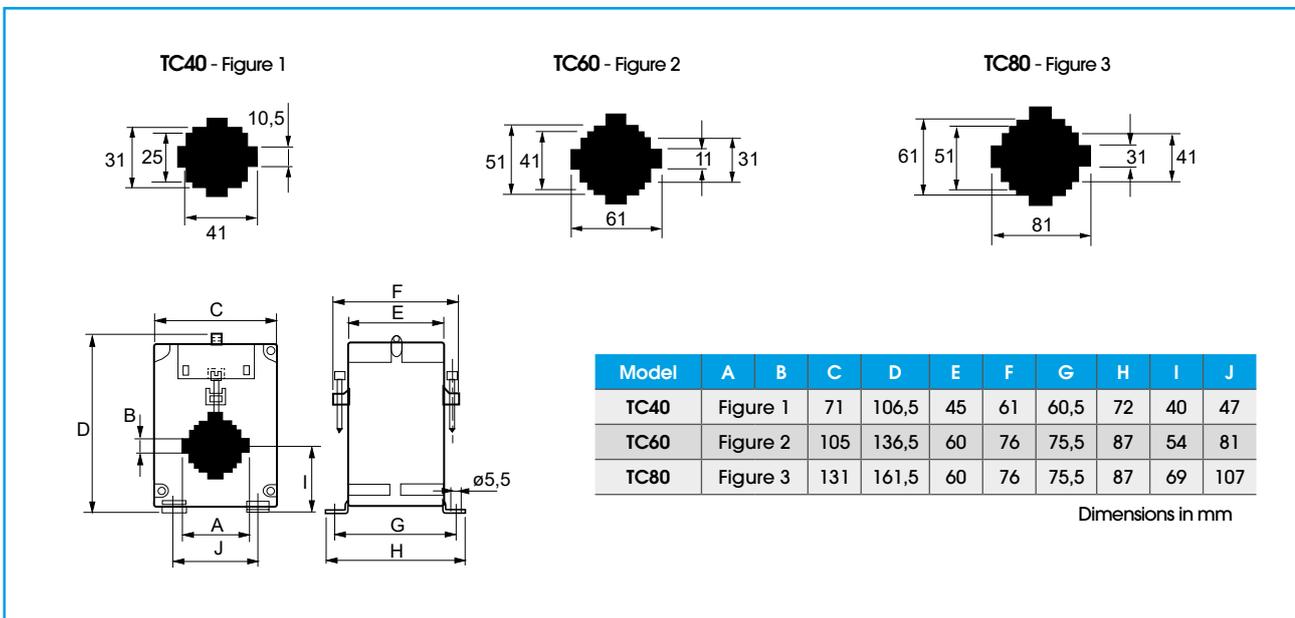
- **Output:** 20 mA DC
- **Class:** 0,5
- **Operating margin:** 10-120%
- **Plastic casing**
- **Frequency:** 50-60 Hz
- **Response time:** <200ms
- **Maximum load impedance:** 600 Ω

TC40		Bus-bar 40 x 10 mm or cable Ø 32 mm
In / A	50 - 60 - 75 - 100 - 125 - 200 - 250 - 300 - 400	
Output / mA	20 mA	

TC60		Bus-bar 60 x 10 mm or cable Ø 51 mm
In / A	400 - 500 - 600 - 750 - 800 - 1000 - 1200 - 1500 - 2000	
Output / mA	20 mA	

TC80		Bus-bar 80 x 30 mm or cable Ø 65 mm
In / A	400 - 500 - 600 - 750 - 800 - 1000 - 1200 - 1500 - 2000 - 2500	
Output / mA	20 mA	

Dimensions



TRANSFORMERS

TC_CV Transformers with built-in measuring transducer



Window-type measuring transformers



General features

Current transformer with integrated transducer and switch selectable transformer ratio.

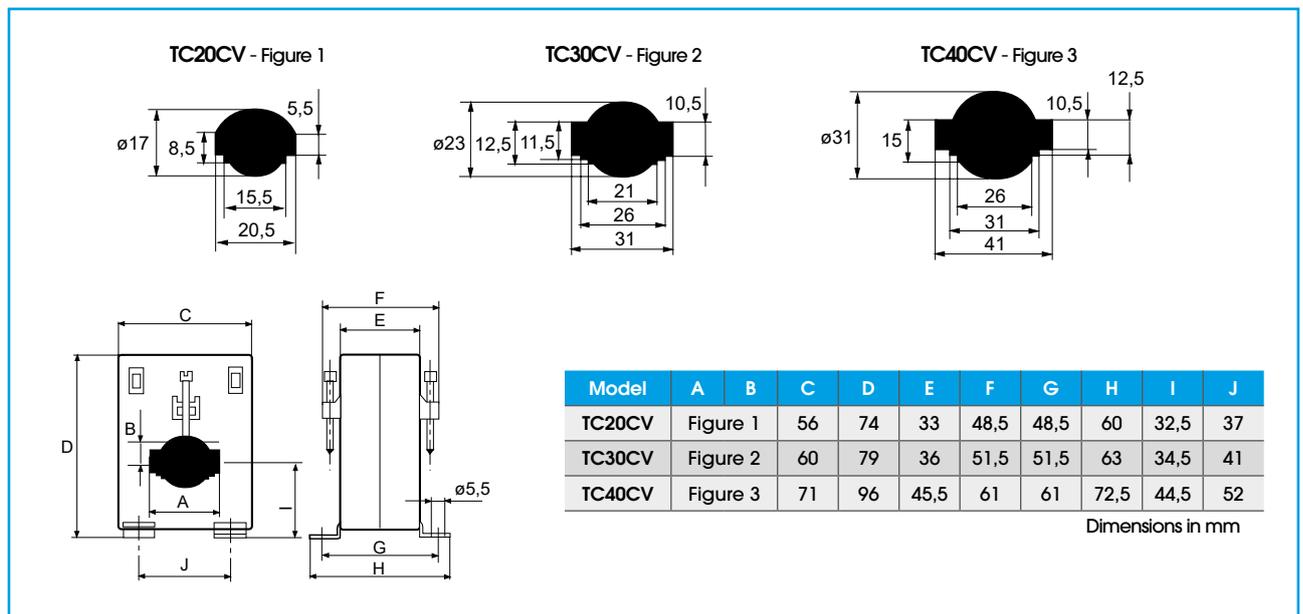
- **Output:** 4 - 20 mA DC
- **Class:** 1
- **Operating margin:** 10-120%
- **Plastic casing**
- **Frequency:** 50-60 Hz
- **Auxiliary voltage:** 10-40 V DC
- **Maximum load impedance:** 600 Ω

TC20CV		Bus-bar 20 x 5 mm or cable \varnothing 16 mm			
In / A	10 - 12,5 - 15 - 20	20 - 25 - 30 - 40	50 - 60 - 75 - 100	125 - 150 - 200 - 250	
Output / mA	4 - 20 mA				

TC30CV		Bus-bar 30 x 10 mm or cable \varnothing 22 mm			
In / A	20 - 25 - 30 - 40	50 - 60 - 75 - 100	125 - 150 - 200 - 250	300 - 400 - 500 - 600	
Output / mA	4 - 20 mA				

TC40CV		Bus-bar 40 x 10 mm or cable \varnothing 30 mm			
In / A	50 - 60 - 75 - 100	125 - 150 - 200 - 250	300 - 400 - 500 - 600		
Output / mA	4 - 20 mA				

Dimensions



TS_ Summation transformers

Measuring transformers



General features

Equipment designed to provide, at a single current output, the value of multiple load circuits. It facilitates measurement and monitoring of the installation when it is not possible to install measuring transformers at the main incoming point. Housed in a plastic enclosure.

- **Class:** 0,5 - 10VA
- **Plastic casing**

TS-		TS2	TS3	TS4	TS5
N° of sums		2	3	4	5
In/A		5 + 5 / 5	5 + 5 + 5 / 5	5 + 5 + 5 + 5 / 5	5 + 5 + 5 + 5 + 5 / 5
Class 0,5	VA	10	10	10	10

Other specialities on request, consult us.

TRS_ Summation transformers

Measuring transformers



General features

Equipment designed to provide, at a single current output, the value of multiple load circuits. It facilitates measurement and monitoring of the installation when it is not possible to install measuring transformers at the main incoming point. Housed in a resin enclosure.

- **Class:** 0,5 - 10VA
- **Resin encapsulated**

TRS-		TRS2	TRS3	TRS4	TRS5
N° of sums		2	3	4	5
In/A		5 + 5 / 5	5 + 5 + 5 / 5	5 + 5 + 5 + 5 / 5	5 + 5 + 5 + 5 + 5 / 5
Class 0,5	VA	10	10	10	10

Other specialities on request, consult us.

Dimensions

TS2 / TS3

TS4 / TS5

TRS_

Model	A	B	C
TRS2	100	119	135
TRS3	100	119	135
TRS4	150	169	185
TRS5	150	169	185

Dimensions in mm

TE108 Voltage transformers

Measuring transformers



General features

Transformer designed to operate with an insulation voltage of up to 6 kV. This model, classified in accuracy class 0.5, can withstand primary voltages of up to 1000 V and secondary voltages of 100, 110, 230 and 400 V.

- **High insulation voltage:** 6kV
- **Class:** 0.2 - 0.5
- **Primary voltage:** Up to 1000 V
- **Secondary voltage:** 100 / 110 / 230 / 400 V
- **Measuring range:** 80-120% V_{pn}
- **Load:** 25 - 100% (cosine φ = 0.8)

TE108		
V _p		From 600 to 1000 V
Class 0,5	VA	10

Other ratios on request.

TE15_ Voltage transformers

Measuring transformers



General features

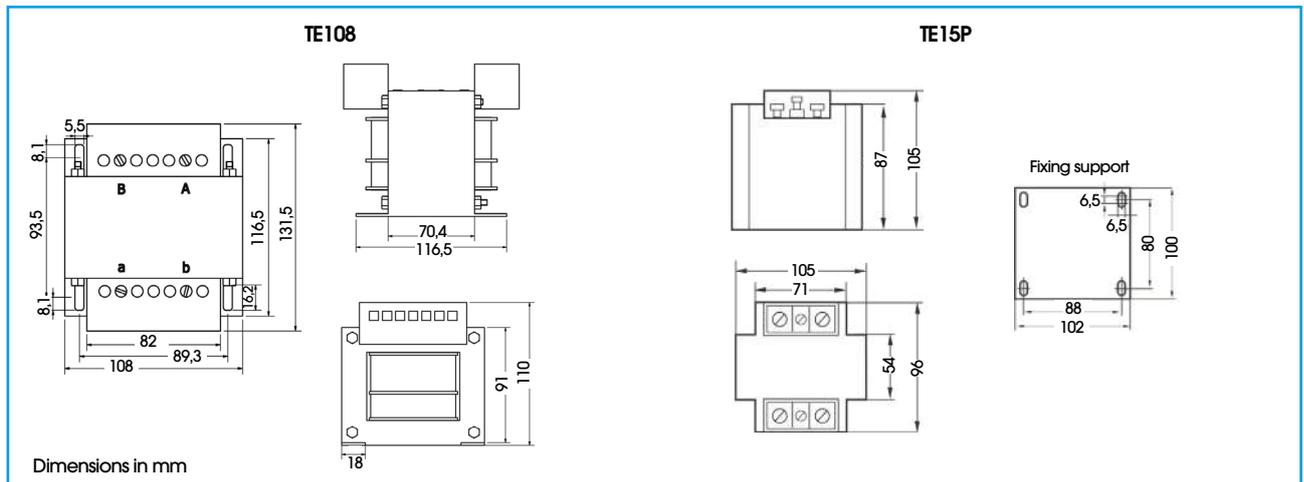
Resin-encapsulated voltage transformers with an insulation rating of up to 3 kV. They can withstand primary voltages of up to 720 V and secondary voltages of 100 V, 110 V, and 230 V.

- **Insulation voltage:** 3kV
- **Class:** 0.5 - 1
- **Primary voltage:** Up to 720V
- **Secondary voltage:** 100 / 110 / 230V
- **Measuring range:** 80-120% V_{pn}
- **Load:** 25 - 100% (cosine φ = 0.8)
- **Plastic housing**
- **Resin encapsulation option**

TE15P								
V _p /V _s		230 / 110	400 / 100	400 / 110	400 / 230	440 / 110	440 / 100	440 / 230
Class 0,5	VA	10	10	10	10	10	10	10
Class 1	VA	25	25	25	25	25	25	25

Other ratios on request.

Dimensions



TRANSFORMERS

TE150 Voltage transformers

Measuring transformers



General features

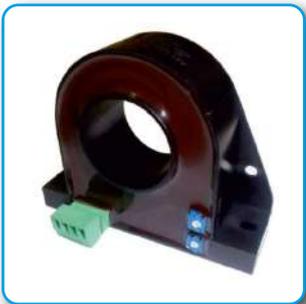
Dual-secondary voltage transformer engineered for metering and protection applications.

- **Insulation voltage:** Up to 6kV
- **Accuracy class:** 0,2 - 0,5
- **Frequency:** 50 - 60 Hz
- **Measuring range:** 80-120% V_{pn}
- **Load:** 25 - 100% (coseno φ = 0,8)
- **Weight:** 11,6 kg

TE150	Primary voltage	Secondary voltage	Power	Accuracy class
Secondary I	800 √3 V	100 √3 V	7,5 VA	Cl 0,2
Secondary II	800 √3 V	100 √3 V	5 VA	Cl 0,5

TEH-132 Window-type

Hall effect sensor



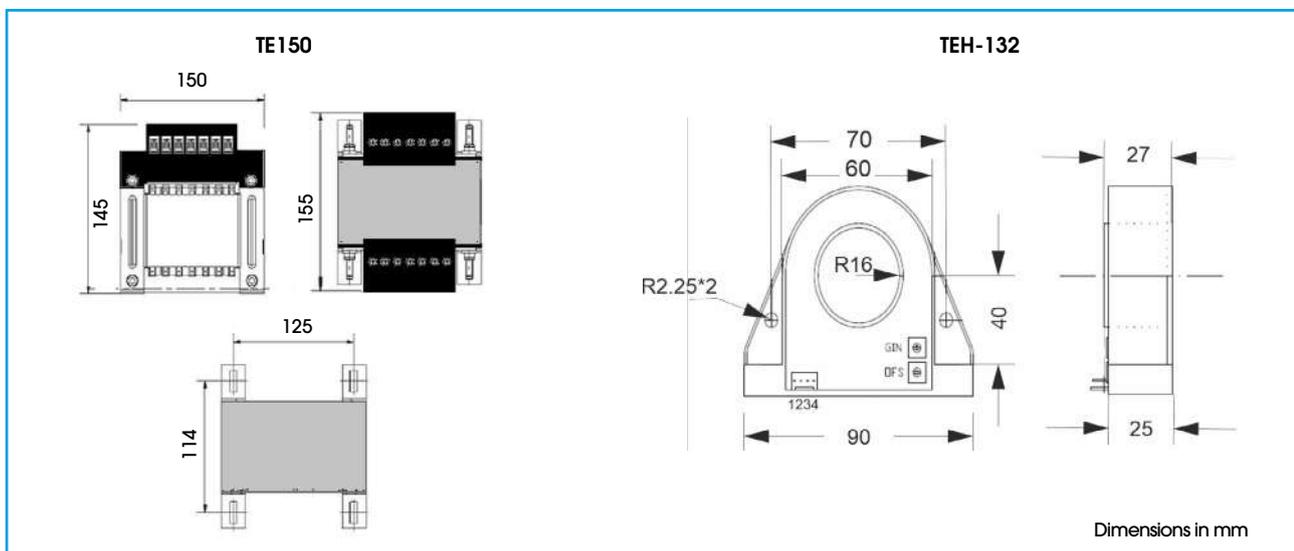
General features

Enables non-contact current measurement, providing galvanic isolation and the capability to measure direct current (DC).

- **Power supply voltage:** ±12V ÷ ±15V DC (±5%)
- **Load resistance:** >1 kΩ
- **Output voltage (analogue):** ± 4 V
- **Accuracy:** ± 0.5 % CC // ± 1 % AC
- **Linearity error:** ± 0.5 %
- **Offset voltage:** <± 10 mV
- **V_{oe} thermal shunt:** <± 1mV / °C
- **V_{out} thermal derivative** ± 0.05% / °C
- **Response time:** < 3 μs
- **Insulation voltage:** 5 kV
- **Isolation resistance:** >500 MΩ
- **Current consumption:** < 20 mA

TEH - 132	Cable Ø 32 mm						
I _{pn} (A)	100	200	300	400	500	600	1000
Range	±300	±600	±900	±1100	±1200	±1300	±1500

Dimensions



RC Rogowski Coil

Measuring transformers



General features

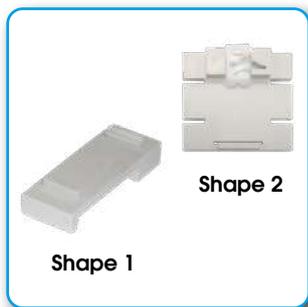
Passive current coil compatible with SACI AHM1 and AHM3 devices. Magnetic closure.

- **Output voltage:** 100uV/A
- **Frequency range:** 50 / 60 Hz
- **Accuracy class:** 0,5
- **Sensor Cable Diameter:** \varnothing 8mm
- **Output cable length:** 2m
- **Linearity:** \pm 0.2%
- **Max. temperature coefficient:** \pm 0.05%
- **Position sensitivity (cable joint):** \pm 3%
- **External fields:** \pm 2%
- **Conector:** RJ12

Passing cable/busbar			
Model	RC-70	RC-120	RC-200
Diameter \varnothing (mm)	70	120	200

DIN rail bracket

Accessories for transformers



General features

Accessories for mounting transformers on DIN rails. The ranges of transformers specified have the capacity to incorporate the support.

For other models please contact us.

Shape 1

- TU_PS Window-type, narrow profile
- TA_P split core transformers

Shape 2

- TU_ Window-type
- TUC_ Window-type
- TC_ Transformers with built-in measuring transducer
- TC_CV Transformers with built-in measuring transducer

Dimensions

Shape 2	A	B	C
TU20	56	56	36
TU30	56	60,5	36
TU40	56	60,5	36
TUC30	64	66,5	35
TUC40	56	60,5	36
TUC60	64	95	38
TUC80	64	120	38
TC40	56	60,5	36
TC60	64	95	38
TC80	64	120	38
TC20CV	56	56	36
TC30CV	56	60,5	36
TC40V	56	60,5	36