



TRANSFORMERS



TRANSFORMERS

S.A. DE CONSTRUCCIONES INDUSTRIALES

RANGE OF PRODUCTS



• MEASURING TRANSFORMERS (PLASTIC CASING)

BUS-BAR

• NARROW PROFILE; PS, THREE-PHASE; PS-3

TU_PS, TU_PS-3



• THREE-PHASE DIN RAIL

TM3



• OTHER MODELS

TU_, TUC_, TL_



WOUND PRIMARY

TU3B_



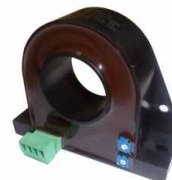
SPLIT CORE

TA_P



• HALL EFFECT CURRENT TRANSDUCER

TEH-132



RANGE OF PRODUCTS



- PROTECTION TRANSFORMERS (PLASTIC CASING)

BUS-BAR

TUC_, TL_



WOUND PRIMARY

TU3BC



- WITH BUILT-IN MEASURING TRANSDUCER

TC_, TC_CV



- MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN)

BUS-BAR

- NARROW PROFILE

TU_RS



- OTHER MODELS

TUP20RC, TUP_R



TPR_



RANGE OF PRODUCTS



- MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN)

WOUND PRIMARY

TU3aR, TU3bR, TU3R



SPLIT CORE

TA_R



- PROTECTION TRANSFORMERS (ENCAPSULATED IN RESIN)

BUS-BAR

TUP20RC, TUP_R



WOUND PRIMARY

TU3PR



- SUMMATION CURRENT TRANSFORMER (RESIN)

TRS



- VOLTAGE TRANSFORMERS (RESIN)

TE15R



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GENERAL

Measuring and protection transformers. Wound primary, bus-bar, split core and narrow profile transformers
For cable or bus-bar.

Plastic or resin encapsulated casing (depending on type).

With fixing support and/or bar enclosing screws depending on type.

Fixing to DIN rail (on request).

STANDARDS

IEC 185
UNE EN 61869
VDE 0414
IEC 801/1-3.4
DIN 57414
BS 3938
EN 50081
EN 50082
IEC 1010

GENERAL TECHNICAL SPECIFICATIONS

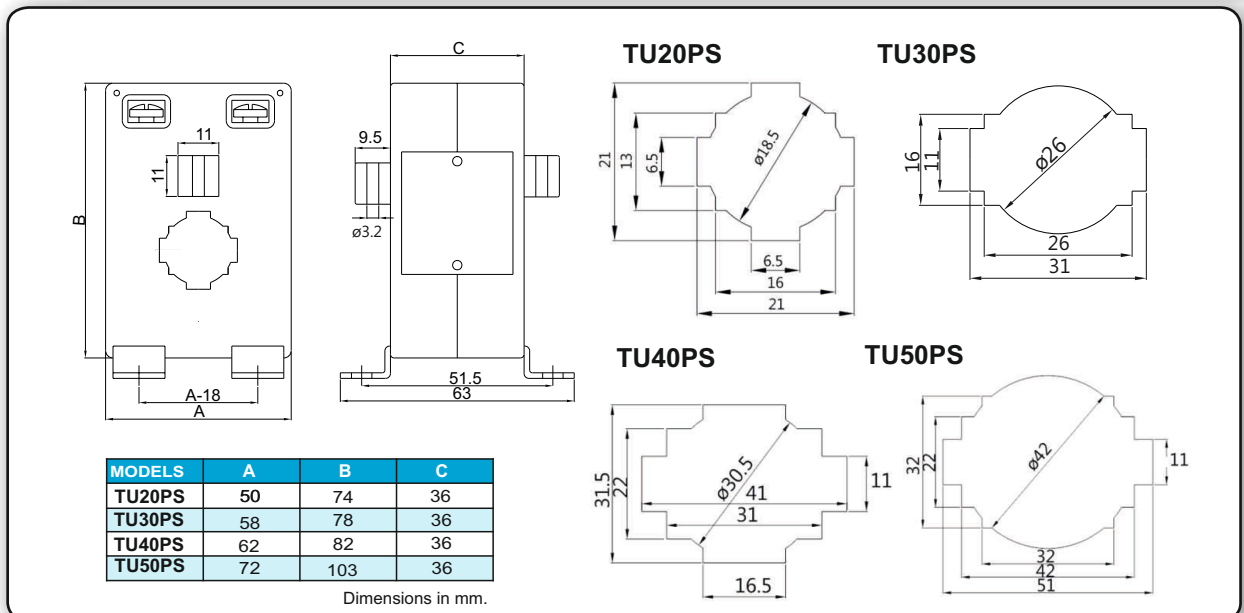
Security factor	$F_s < 5$
Rated voltage (maximum)	720 V
Test voltage	3 kV A.C. (1 min)
Frequency	50-60 Hz
Rated short-time thermal current	$I_{th} = 60 I_n$ for wound primary transformers. I_{th} limited by cable sizes or primary bus-bar for other cases.
Rated dynamic current	$I_{Dyn} = 2,5 \times I_{th}$
Continuous overload	$I_D = 1,2 \times I_N$
Operating temperature	-10...50 °C.
Accuracy	0,5 ; 1 and 3 (0,2S, 0,5S on request)
Rated secondary current	/5 or /1 A

NARROW PROFILE CURRENT TRANSFORMERS (PLASTIC CASING)

NEW



BUS-BAR TRANSFORMERS									
MODEL	TU20PS			TU30PS		TU40PS		TU50PS	
Bus-Bar	20x6			30x10		40x10		50x10	
Cable	Ø18			Ø25		Ø30		Ø40	
Accuracy Class	0,5	1	3	0,5	1	0,5	1	0,5	1
I _{pn} (A)	VA			VA		VA		VA	
30			0,5						
40			1						
50			1						
60		1	1,5						
75		1,5	1,5						
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	5	2,5	3,75	2,5	3,75		
250	5	7,5	7,5	3,75	5	2,5	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

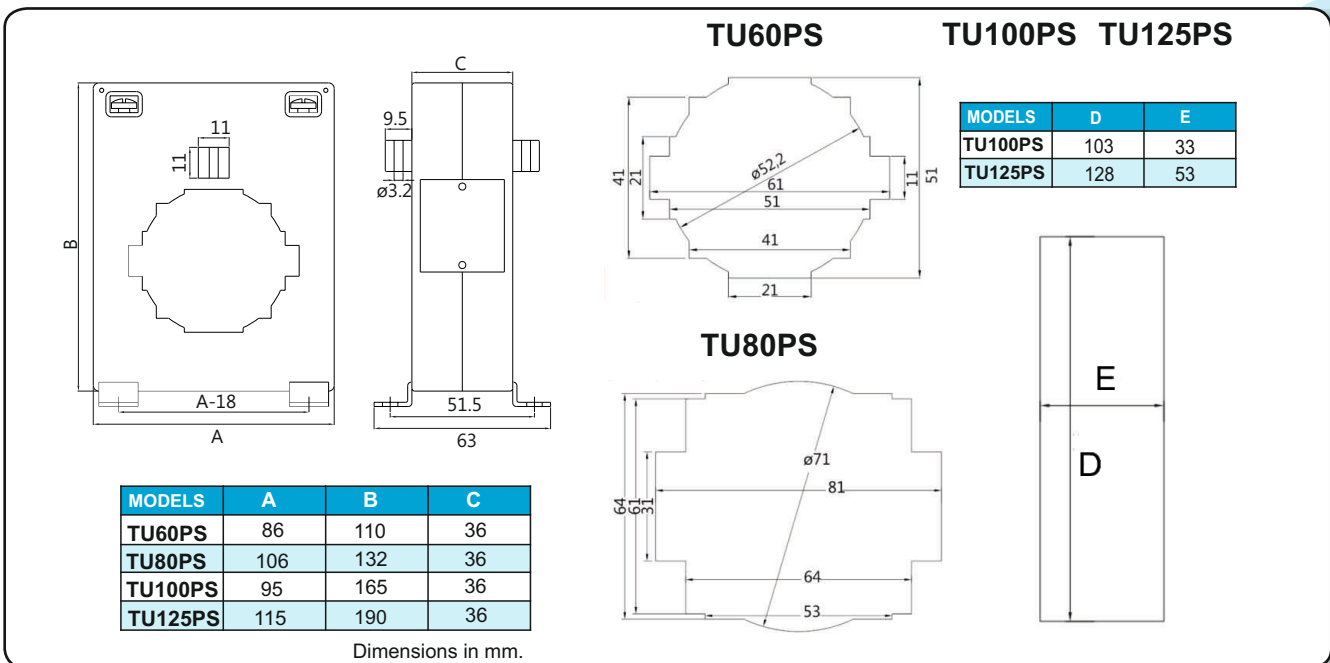


NARROW PROFILE CURRENT TRANSFORMERS (PLASTIC CASING)

NEW



BUS-BAR TRANSFORMERS								
MODEL	TU60PS		TU80PS		TU100PS		TU125PS	
Bus-Bar	60x10		80x30		100x30		125x50	
Cable	Ø50		Ø70		-		-	
Accuracy Class	0,5	1	0,5	1	0,5	1	0,5	1
I _{pn} (A)	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
4000							25	30



TRANSFORMERS

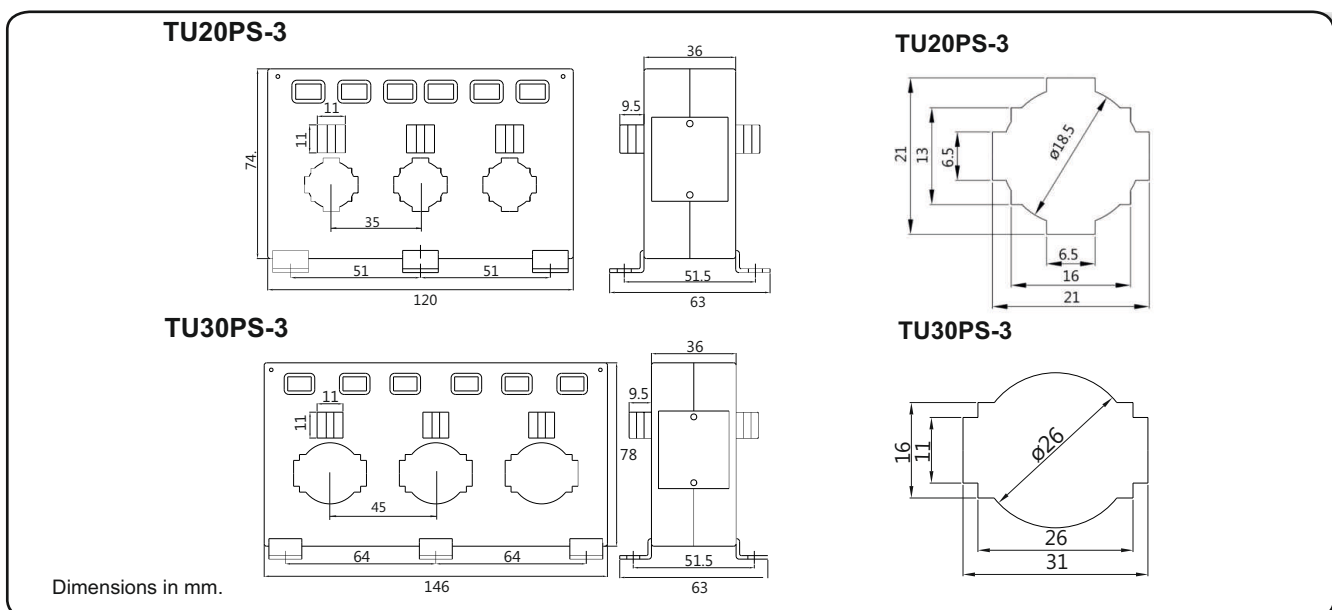
NARROW PROFILE CURRENT TRANSFORMERS (PLASTIC CASING) TRHHEE-PHASE

NEW



BUS-BAR TRANSFORMERS						
MODEL	TU20PS-3			TU30PS-3		
Bus-Bar	20x6			30x10		
Cable	Ø18			Ø25		
Accuracy Class	0,5	1	3	0,5	1	
I _{pn} (A)	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	2,5	
400				2,5	2,5	
500				3,75	3,75	
600				5	5	

DIMENSIONS

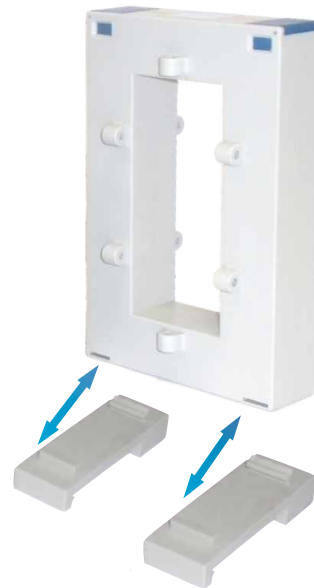
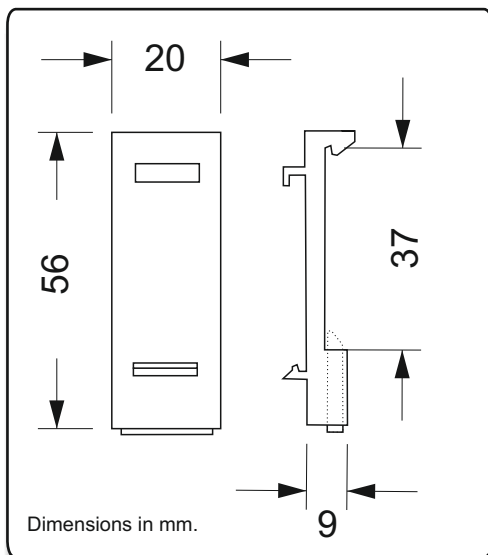


NARROW PROFILE CURRENT TRANSFORMERS (PLASTIC CASING) ACCESSORY DIN RAIL

Accessories for DIN Rail incorporation, optionally available for the new line of narrow profile transformers.



DIMENSIONS



Transformer

TRANSFORMERS

THREE PHASE DIN RAIL (PLASTIC CASING)

Three phase Bus-Bar Current Transformer, located inside a modular box of six modules and intended for use in Low Voltage Three Phase installation with currents between 60A and 150A.

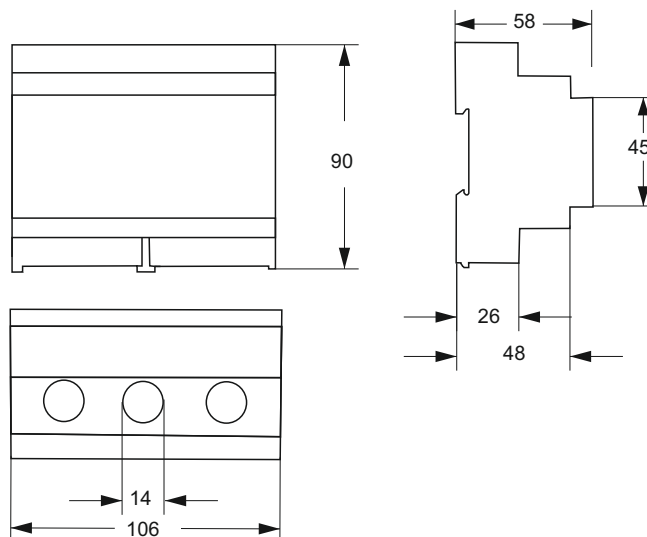
High quality current transformer, low cost, correctly produced and easy installation.



BUS-BAR TRANSFORMERS	
MODEL	TM3
Bus-Bar	-
Cable	Ø14
Accuracy Class	0,5 1
I _{pn} (A)	VA
60	1,5
75	1,5
80	1,5
100	1,5
125	1,5
150	1,5

DIMENSIONS

- Modular box composed of 6 modules 106x90x58 mm.



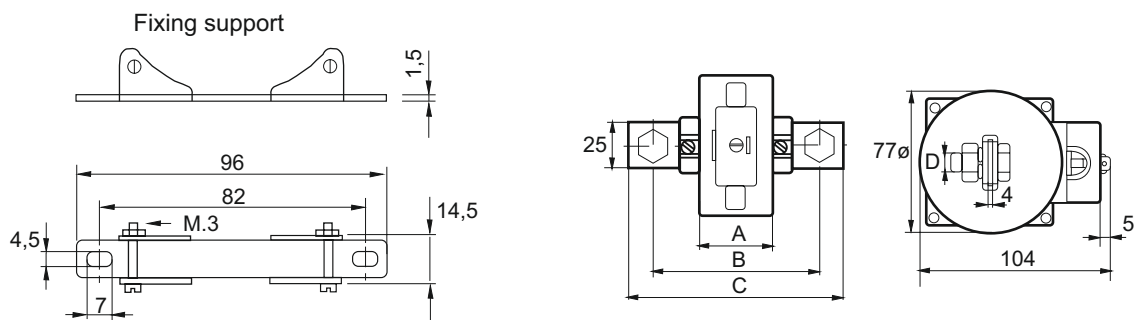
Dimensions in mm.

MEASURING TRANSFORMERS (PLASTIC CASING)



MODEL	WOUND PRIMARY							
	TU3ba		TU3B			TU3bc		
Accuracy Class	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	VA		VA			VA		
5	5	7,5	10	20	30	15	25	40
10	5	7,5	10	20	30	15	25	40
15	5	7,5	10	20	30	15	25	40
20	5	7,5	10	20	30	15	25	40
25	5	7,5	10	20	30	15	25	40
30	5	7,5	10	20	30	15	25	40
40	5	7,5	10	20	30	15	25	40
50	5	7,5	10	20	30	15	25	40
60	5	7,5	10	20	30	15	25	40
75	5	7,5	10	20	30	15	25	40
100			10	20	30	15	25	40
125			10	20	30	15	25	40
150			10	20	30	15	25	40

DIMENSIONS



MODEL	TU3ba		TU3B		TU3bc	
Sizes in mm.	5/5 a	30/5 a	5/5 a	30/5 a	5/5 a	30/5 a
	25/5	75/5	25/5	150/5	25/5	150/5
A	41		52		63	
B	81	90	92	101	103	112
C	101	115	112	126	123	137
D	M.6	M.10	M.6	M.10	M.6	M.10

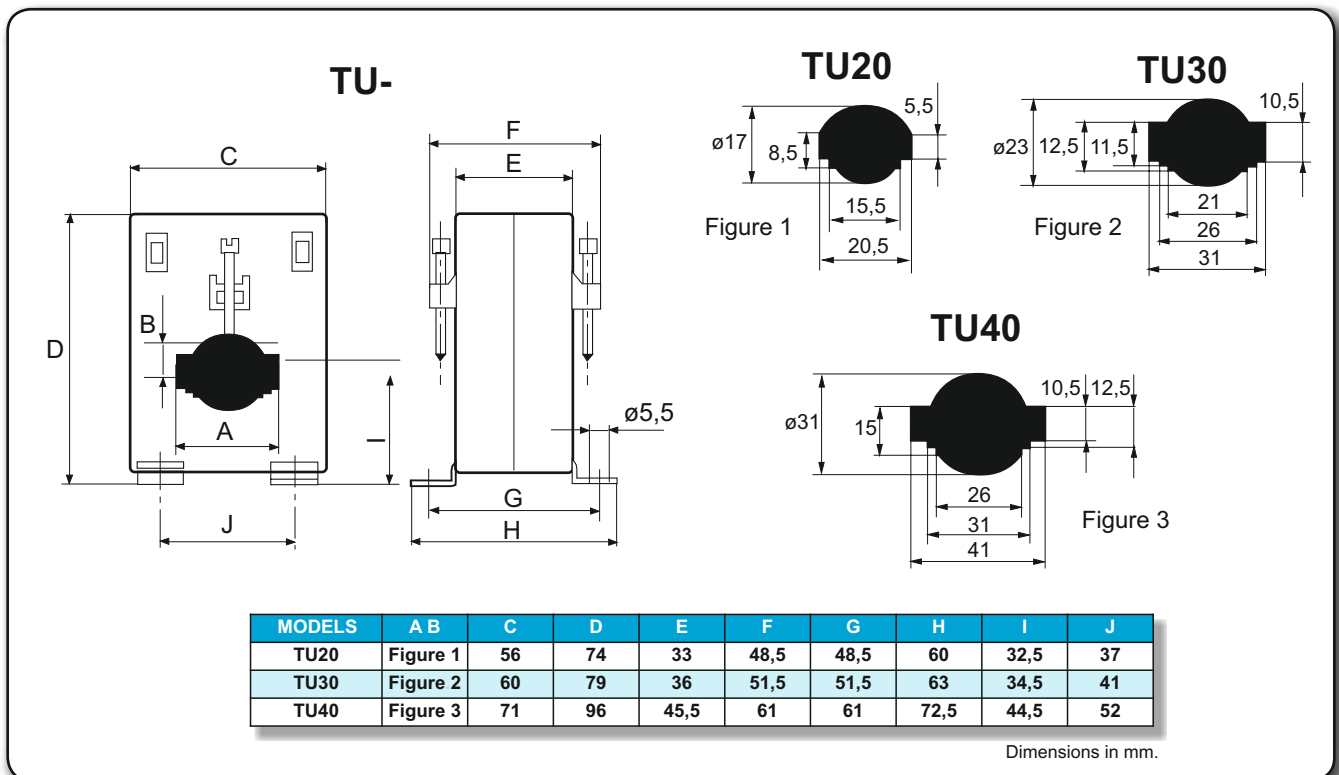
Dimensions in mm.

MEASURING TRANSFORMERS (PLASTIC CASING)



BUS-BAR TRANSFORMERS									
MODEL	TU20			TU30			TU40		
Bus-Bar	20x5			30x10			40x10		
Cable	Ø16			Ø22			Ø30		
Accuracy Class	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	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	1,5	2,5	3,75	3,75	5	7,5
200	5	7,5	10	2,5	3,75	5	3,75	5	7,5
250	7,5	10	15	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
500				5	7,5	10	10	15	20
600				5	7,5	10	10	15	20
750							10	15	20
800							15	20	30
1000							15	20	30

DIMENSIONS

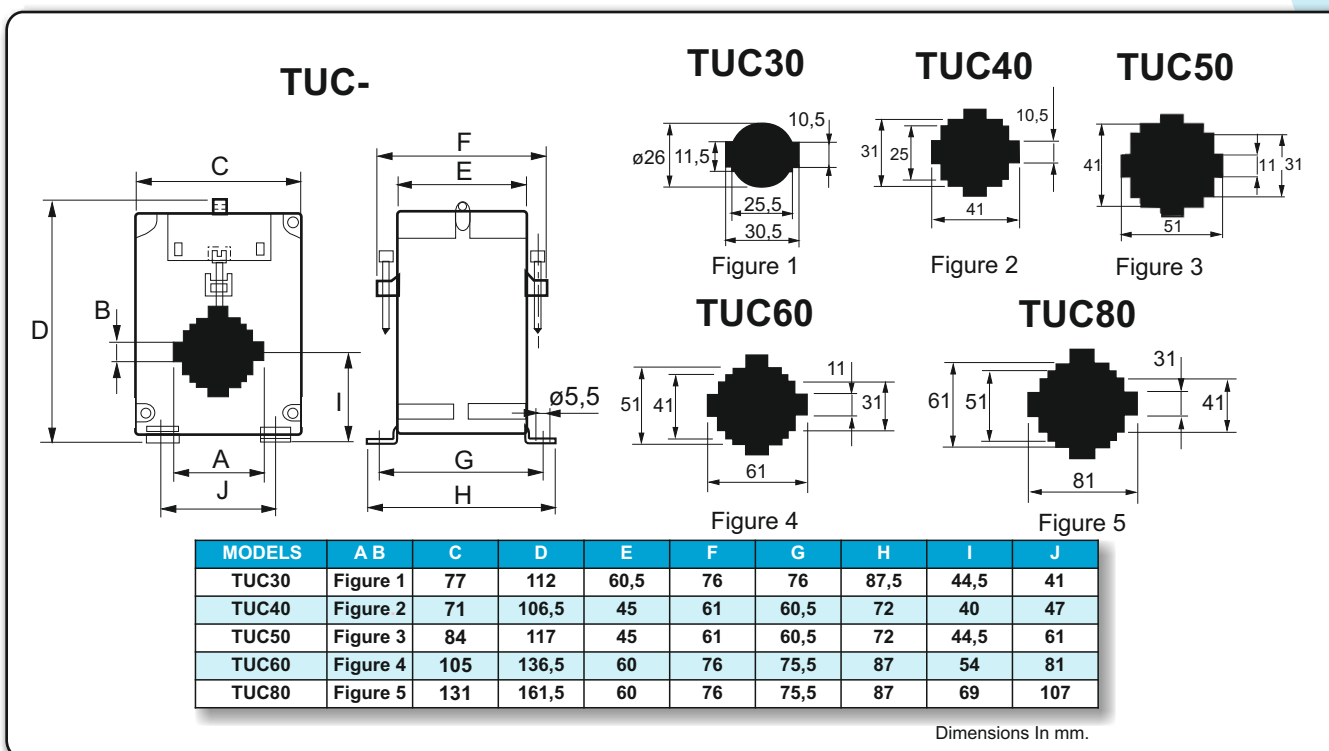


MEASURING TRANSFORMERS (PLASTIC CASING)



BUS-BAR TRANSFORMERS																
MODEL	TUC30			TUC40			TUC50			TUC60			TUC80			
Bus-Bar	30x10			40x10			50x10			60x10			80x30			
Cable	Ø25			Ø32			Ø40			Ø51			Ø65			
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			VA			VA			VA			VA			
50				0,75 1,5												
60				1,25 2												
75				2 3,75												
100				1 3 5												
125				2,5 3,75 5												
150				3,75 5 7,5												
200	15	20	30	3,75	5	7,5										
250	15	20	30	5	7,5	10										
300	15	20	30	7,5	10	15										
400	15	20	30	10	15	20	10	15	20	30	15	20	30	15	20	30
500	15	20	30	10	15	20	10	15	20	30	15	20	30	15	20	30
600	15	20	30	10	15	20	10	15	20	30	15	20	30	15	20	30
750				10	15	20	10	15	20	30	15	20	30	15	20	30
800				15	20	30	10	15	20	30	15	20	30	15	20	30
1000				15	20	30	10	15	20	30	15	20	30	15	20	30
1200							10	15	20	30	15	20	30	15	20	30
1500							10	15	20	30	15	20	30	15	20	30
2000							10	15	20	30	15	20	30	15	20	30
2500										15	20	30	15	20	30	

DIMENSIONS



MEASURING TRANSFORMERS (PLASTIC CASING)



BUS-BAR TRANSFORMERS									
MODEL	TL2			TL3			TL4		
Bus-Bar	100x20			100x30			100x60		
Cable	Ø20			Ø30			Ø60		
Accuracy Class	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	VA			VA			VA		
750	10	20	30						
800	15	20	30						
1000	20	30	45						
1200	20	30	45						
1500	30	45	60	10	20	30			
2000	30	60	90	15	25	40	10	20	30
2500				25	30	45	10	20	30
3000				30	45	60	20	30	45
4000							30	60	90
5000							30	60	90

DIMENSIONS

TL-

MODELS	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.

SPLIT-CORE TRANSFORMERS (PLASTIC CASING)



SPLIT-CORE TRANSFORMERS																		
MODEL	TA30P			TA60P			TA80P			TA100P			TA125P			TA160P		
Bus-Bar	30x20			60x30			80x50			100x80			125x80			160x80		
Cable	Ø20			Ø30			Ø50			Ø80			Ø80			Ø80		
Accuracy	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} (A)	VA			VA			VA			VA			VA			VA		
100			3															
150			3,75															
200		2,5	4															
250		3,75	5		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						
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
800				7,5	10	20	7,5	10	20	7,5	10	20		7,5	10	20	7,5	10
1000				10	15	20	10	15	20	10	15	20		10	20	30	10	20
1200										15	20	30		15	20	30	15	20
1500										15	20	30		20	30	45	20	30
2000										20	30	45		25	30	45	25	30
2500														25	30	45	25	30
3000														30	45	60	30	45
4000																	30	45
5000																	30	45

DIMENSIONS

MODELS	A	B	C	D
TA30P	32	22	106	90
TA60P	62	32	136	100
TA80P	82	52	156	120
TA100P	104	82	178	150
TA125P	127	82	201	150
TA160P	162	82	236	150

Dimensions in mm.

HALL EFFECT CURRENT TRANSDUCER - TEH-132



TECHNICAL DATA

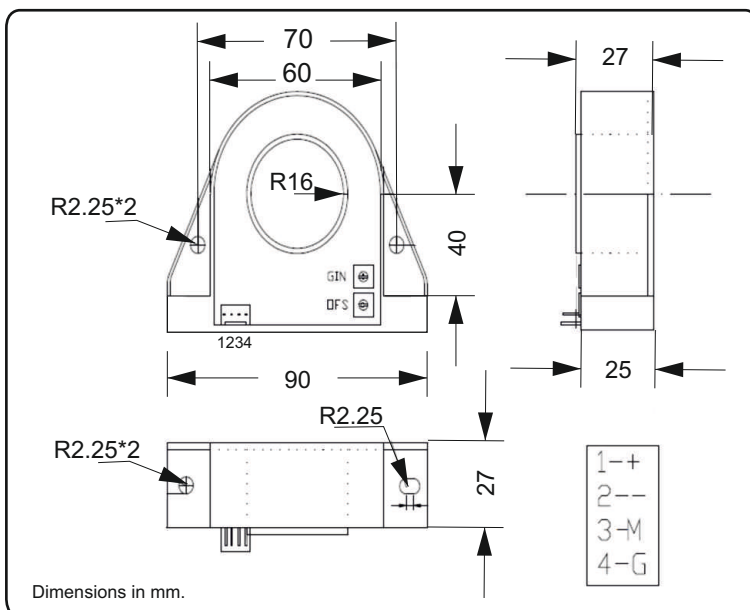
MODEL	TEH-132						
I _{pn} (A)	100	200	300	400	500	600	1000 A
Range	±300	±600	±900	±1100	±1200	±1300	±1500 A

Voltage Supply (V_c): ±12 V - 15V DC (±5%)
 Load resistor (R_L): >1 kΩ
 Output Voltage (analog) ±I_{pn}(V_{out}): ±4 V or 4-20 mA
 AC Accuracy: ± 1 %
 Linearity Error: ± 0.5 %
 Electric offset Voltage: <± 10 mV
 Thermal Drift of V_{oe}: <± 1mV / °C
 Thermal Drift of V_{out}: ± 0.05% / °C
 Response time: < 3 μs
 Accurately Followed di/dt: > 50 A/μs
 BW Band width: DC 50 kHz
 VIS Isolation voltage: 5 KV
 RIS Isolation resistor: > 500 MΩ
 I_c Current Consumption: < 20 mA

GENERAL DATA

TA Ambient Operating Temperature: -25 °C - +85 °C
 TS Ambient Storage Temperature: -25 °C - +85 °C
 M Mass: 200 gr

DIMENSIONS



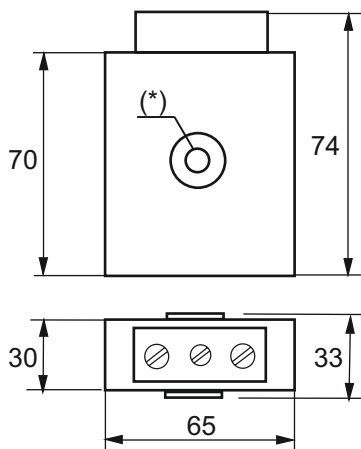
MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN)



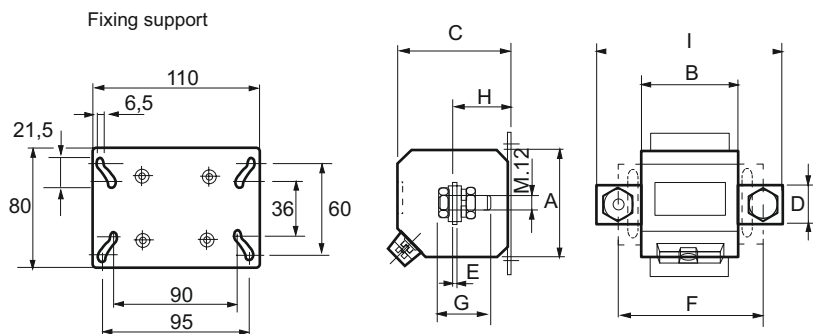
MODEL	WOUND PRIMARY							
	TU3aR		TU3bR		TU3R		TU50R	
	0,5	1	0,5	1	0,5	1	0,5	1
Accuracy Class	VA		VA		VA		VA	
I _{pn} (A)	VA		VA		VA		VA	
5	2,5	5	10	20				
10	2,5	5	10	20				
15	2,5	5	10	20				
20	2,5	5	10	20				
25	2,5	5	10	20				
30	2,5	5	10	20				
40	2,5	5	10	20				
50	2,5	5	10	20	15	25		
60	2,5	5	10	20	15	25		
75	2,5	5	10	20	15	25		
100	2,5	5	10	20	15	25		
125	2,5	5	10	20	15	25		
150	2,5	5	10	20	15	25		
200	2,5	5	10	20	15	25		
250	2,5	5			15	25		
300	2,5	5			15	25		
400					15	25	15	25
500					15	25	15	25
600					15	25	15	25
750							15	25
800							15	25

DIMENSIONS

TU3aR



TU3R - TU3bR - TU50R



(*) M.8 from 5/5 A to 125/5 A
 (*) Diámetros 8,5 from 150/5 A to 300/5 A

MODELS	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
TU50R	400/5-800/5	100	73,5	100	50	10	135	48	50	175
TU3bR	5/5-200/5	77	55	90	25	5	100	32	47	126

Dimensions in mm.

MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN)



BUS-BAR TRANSFORMERS								
MODEL	TUP20RC		TUP20R		TUP60R		TUP95R	
Bus-Bar	80x20		100x20		100x60		100x95	
Cable	Ø20		Ø20		Ø60		Ø95	
Accuracy Class	0,5	1	0,5	1	0,5	1	0,5	1
I _{pn} (A)	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

MODELS	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

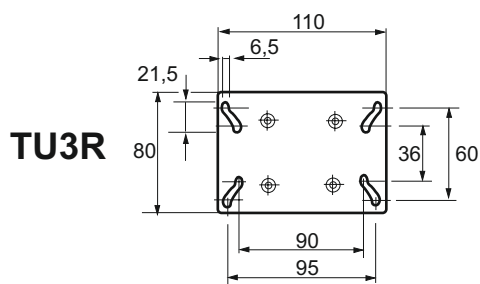
Dimensions in mm.

MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN) MEASURING EQUIPMENT / ENERGY METERS

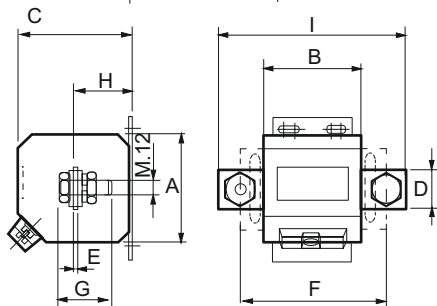


	WOUND PRIMARY	BUS-BAR
MODEL	TU3R	TUP20R
Bus-Bar	-	100x20
Cable	-	Ø20
Accuracy Class	0,5 S	0,5 S
I _{pn} (A)	VA	VA
50	10	
60	10	
75	10	
100	10	
125	10	
150	10	
200	10	
250	10	
300	10	
400	10	
500	10	
600	10	
750		10
800		10
1000		10
1200		10
1500		10
2000		10

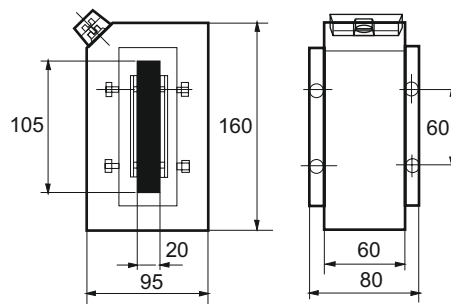
DIMENSIONS



TU3R



TUP20R



MODELS	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.

Transformer

TRANSFORMERS

SPLIT-CORE TRANSFORMERS (ENCAPSULATED IN RESIN)



SPLIT-CORE TRANSFORMERS																		
MODEL	TA30R			TA60R			TA80R			TA100R			TA125R			TA160R		
Bus-Bar	30x20			60x30			80x50			100x80			125x80			160x80		
Cable	Ø20			Ø30			Ø50			Ø80			Ø80			Ø80		
Accuracy	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
l _{pn} (A)	VA			VA			VA			VA			VA			VA		
100	3																	
150	3,75																	
200	2,5 4																	
250	3,75 5			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								
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										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		

DIMENSIONS

MODELS	A	B	C	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

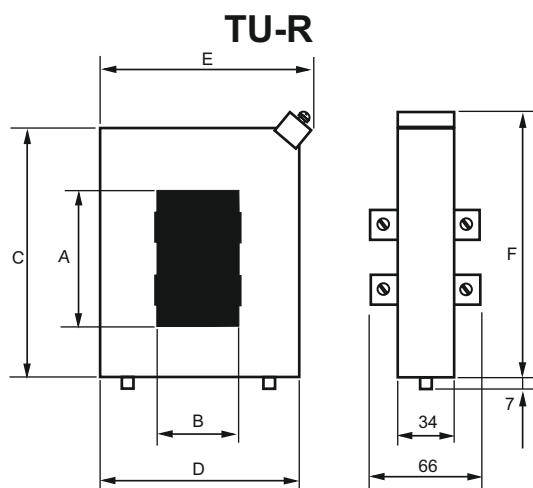
Dimensions in mm.

MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN) NARROW PROFILE



BUS-BAR TRANSFORMERS						
MODEL	TU30R	TU60R	TU80R	TU100R	TU125R	TU160R
Bus-Bar	30x20	60x30	80x50	100x80	125x80	160x80
Cable	Ø20	Ø30	Ø50	Ø80	Ø80	Ø80
Accuracy	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} (A)	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 30 30
3000					15 20 30	15 20 30
4000						15 20 30
5000						15 20 30

DIMENSIONS



MODELS	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.

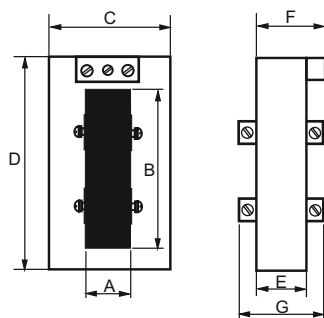
MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN) NARROW PROFILE - HORIZONTAL BUS-BAR



MODEL	BUS-BAR TRANSFORMERS												BUS-BAR TRANSFORMERS					
	TU60RS			TU80RS			TU100RS			TU125RS			TU100RT			TU125RT		
Bus-Bar	15x60			50x80			60x100			80x125			100x20			125x35		
Cable	Ø15			Ø50			Ø60			Ø80			Ø20			Ø35		
Accuracy	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} (A)	VA			VA			VA			VA			VA			VA		
400	5	7,5	10	5	7,5	10												
500	7,5	10	15	5	7,5	10												
600	10	15	20	10	15	20												
750	10	15	20	10	15	20	15	20	30				10	20	30			
800	10	15	20	10	15	20	15	20	30				15	20	30	7,5	10	15
1000	10	15	20	10	15	20	15	20	30				20	30	45	7,5	10	15
1200	10	15	20	10	15	20	15	20	30				20	30	45	7,5	10	15
1500	10	15	20	10	15	20	15	20	30				30	45	60	10	15	20
2000	10	15	20	10	15	20	15	20	30	15	20	30	30	60	90	15	20	30
2500				10	15	20	15	20	30	15	20	30				20	25	30
3000							15	20	30	15	20	30				25	30	45
4000										15	20	30						
5000										15	20	30						
6000										15	20	30						

DIMENSIONS

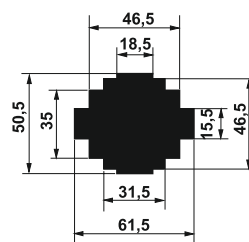
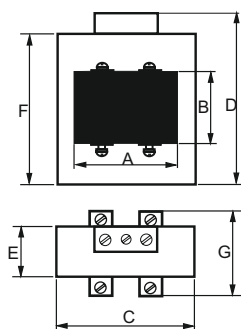
TU-RT



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

Dimensions in mm.

TU-RS



TU60RS
Figure 1

MODELS	A	B	C	D	E	F	G
TU60RS	Figure 1		90	115	40	103	66
TU80RS	82	57	110	135	40	120	66
TU100RS	102	62	140	153	34	130	66
TU125RS	127	82	165	189	42	166	66

Dimensions in mm.

MEASURING TRANSFORMERS (ENCAPSULATED IN RESIN) NARROW PROFILE - HORIZONTAL BUS-BAR



MODEL	BUS-BAR TRANSFORMERS											
	TU40RS			TU40RSD			TU100RTC			TU125RTC		
Bus-Bar	40x10			37x18			100x20			125x35		
Cable	Ø25			Ø36			Ø20			Ø35		
Accuracy	0,5	1	3	0,5	1	3	0,5	1	3	0,5	1	3
I _{pn} (A)	VA			VA			VA			VA		
200				5	7,5	10						
250				5	7,5	10						
300	10	15	20	10	15	20						
400	10	15	20	10	15	20						
500	10	15	20	10	15	20						
600	10	15	20	10	15	20						
750	10	15	20	10	15	20	10	20	30			
800	10	15	20	10	15	20	15	20	30	7,5	10	15
1000	10	15	20	10	15	20	20	30	45	7,5	10	15
1200							20	30	45	7,5	10	15
1500							30	45	60	10	15	20
2000							30	45	60	15	20	30
2500							30	45	60	20	25	30
3000							30	45	60	25	30	45

DIMENSIONS

TU40RS

Figure 1

TU40RSD

Figure 2

TU-RTC

MODELS	A	B	C	D	E	F	G
TU40RS	Figure 1		72	100	48	90	71
TU40RSD	Figure 2		72	100	48	90	71

Dimensions in mm.

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

Dimensions in mm.

PROTECTION TRANSFORMERS (PLASTIC CASING)



		BUS-BAR TRANSFORMERS											
MODEL	TUC30		TUC60		TUC80		TL2		TL3		TL4		
Bus-Bar	30x10		60x10		80x30		100x20		100x30		100x60		
Cable	Ø25		Ø51		Ø65		Ø20		Ø30		Ø60		
Accuracy	5P10	10P10	5P10	10P10	5P10	10P10	5P10	10P10	5P10	10P10	5P10	10P10	
Ipn (A)	VA		VA		VA		VA		VA		VA		
200	3,5	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	5	7,5					
2500							5	7,5	7,5	10			
3000									7,5	10	5	7,5	
4000											7,5	10	
5000											7,5	10	

DIMENSIONS

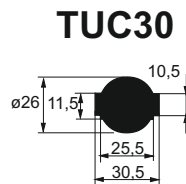
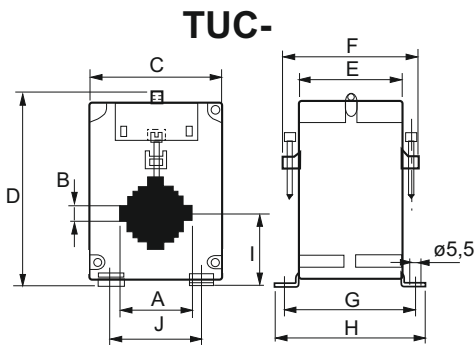


Figure 1

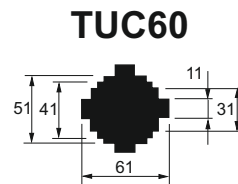


Figure 2

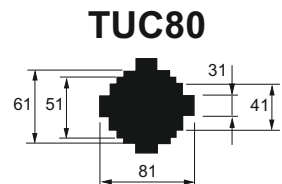
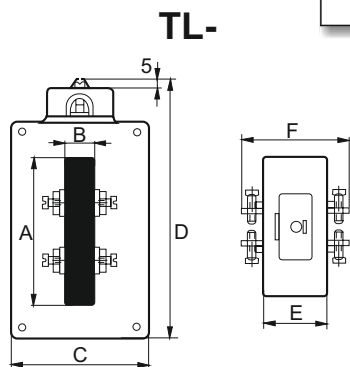


Figure 3

MODELS	A	B	C	D	E	F	G	H	I	J
TUC30	Figure 1	77	112	60,5	76	76	87,5	44,5	41	
TUC60	Figure 2	105	136,5	60	76	75,5	87	54	81	
TUC80	Figure 3	131	161,5	60	76	75,5	87	69	107	

Dimensions in mm.



MODELS	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.

PROTECTION TRANSFORMERS



MODEL	PRIMARY WOUND				BUS-BAR IN RESIN	
	IN PLASTIC		IN RESIN		IN RESIN	
	TU3bc		TU3PR		TU50R	
Accuracy Class	5P10	10P10	5P10	10P10	5P10	10P10
I _{pn} (A)	VA		VA		VA	
50	3,5	3,5	10	10		
60	3,5	3,5	10	10		
75	3,5	3,5	10	10		
100	3,5	3,5	10	10		
125	3,5	3,5	10	10		
150	3,5	3,5	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

TU3bc

TU-R

MODELS	Ratio	A	B	C	D	E	F	G	H	I
TU3PR	50-300/5	100	75	110	30	5	110	38	55	140
TU3PR	400-600/5	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.

PROTECTION TRANSFORMERS (ENCAPSULATED IN RESIN)



MODEL	BUS-BAR TRANSFORMERS							
	TUP20RC		TUP20R		TUP60R		TUP95R	
Bus-Bar	80x20		100x20		100x60		100x95	
Cable	Ø20		Ø20		Ø60		Ø95	
Accuracy Class	5P10	10P10	5P10	10P10	5P10	10P10	5P10	10P10
I _{pn} (A)	VA		VA		VA		VA	
500	3,5	5						
600	3,5	5						
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		
3000					20	30	15	20
4000							20	30
5000							20	30

DIMENSIONS

TUP20RC

TUP-R

MODELS	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.

PROTECTION TRANSFORMERS (ENCAPSULATED IN RESIN)



MODEL	BUS-BAR TRANSFORMERS							
	TPR60		TPR80		TPR100		TPR125	
Bus-Bar	-							
Cable	Ø60		Ø80		Ø100		Ø125	
Accuracy Class	5P10	5P20	5P10	5P20	5P10	5P20	5P10	5P20
I _{pn} (A)	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					65	35	40	20
3000					65	35	40	20
4000					80	45	50	25
5000					120	70	70	35

DIMENSIONS

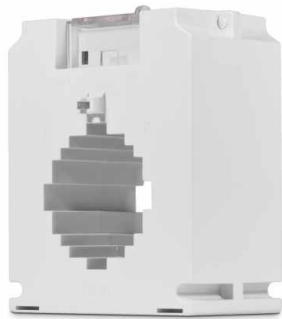
Fixing support

MODELS	A	B
TPR60	124	120
TPR80	136	100
TPR100	150	100
TPR125	166	100

MODELS	A	B	C	D	E	F	G
TPR60	62	211	80	185	124	110	93
TPR80	82	231	60	205	136	120	103
TPR100	102	251	60	225	150	130	113
TPR125	127	276	60	250	166	143	125

Dimensions in mm.

TRANSFORMERS WITH BUILT-IN MEASURING TRANSDUCER (PLASTIC CASING)

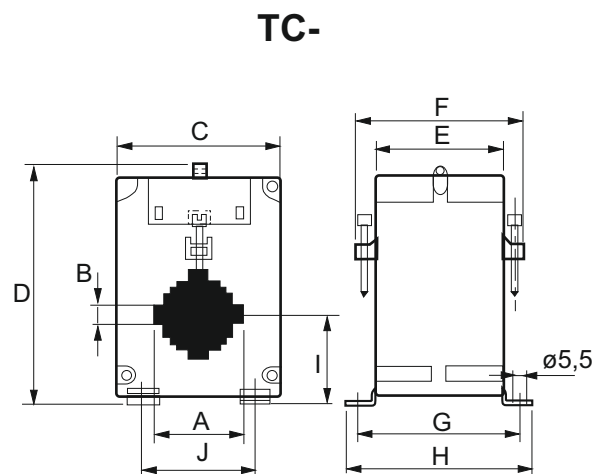
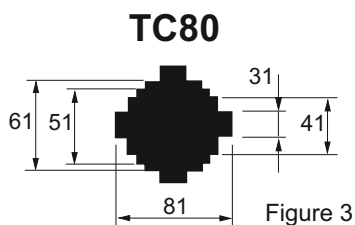
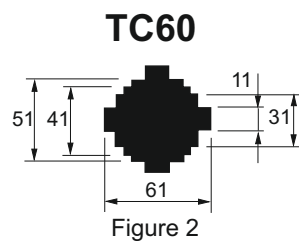
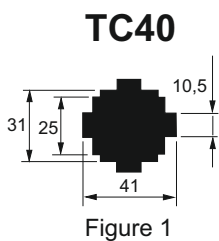


TECHNICAL SPECIFICATIONS:

Operating range: 10-120%
 Maximum load impedance: 600 Ω
 Frequency: 50-60 Hz
 Response time: <200 ms

BUS-BAR TRANSFORMERS			
MODEL	TC40	TC60	TC80
Bus-Bar	40x10	60x10	80x30
Cable	Ø32	Ø51	Ø65
Accuracy Class	1	1	1
I _{pn} (A)	Output (mA)	Output (mA)	Output (mA)
50	20		
60	20		
75	20		
100	20		
125	20		
150	20		
200	20		
250	20		
300	20		
400	20	20	20
500		20	20
600		20	20
750		20	20
800		20	20
1000		20	20
1200		20	20
1500		20	20
2000		20	20
2500		20	20

DIMENSIONS



MODELS	A B	C	D	E	F	G	H	I	J
TC40	Figure 1	71	106,5	45	61	60,5	72	40	47
TC60	Figure 2	105	136,5	60	76	75,5	87	54	81
TC80	Figure 3	131	161,5	60	76	75,5	87	69	107

Dimensions in mm.

TRANSFORMERS WITH BUILT-IN MEASURING TRANSDUCER (PLASTIC CASING)



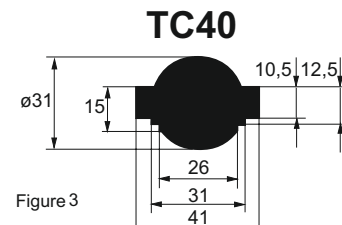
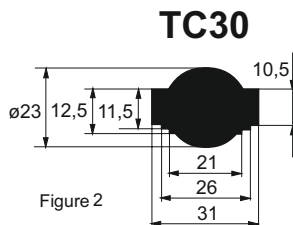
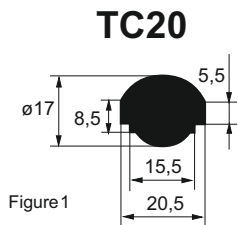
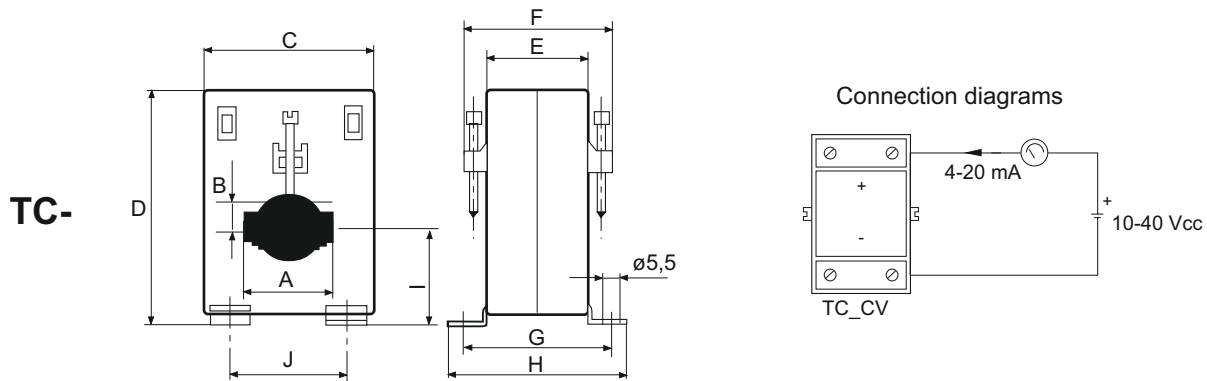
Selection of transformer ratio by switch

MODEL	BUS-BAR TRANSFORMERS		
	TC20CV	TC30CV	TC40CV
Bus-Bar	20x5	30x10	40x10
Cable	Ø16	Ø22	Ø30
Accuracy	1	1	1
I _{pn} (A)	Output (mA)	Output (mA)	Output (mA)
10; 12,5; 15 & 20	4-20		
20; 25; 30 & 40	4-20	4-20	
50; 60; 75 & 100	4-20	4-20	4-20
125; 150; 200 & 250	4-20	4-20	4-20
300; 400; 500 & 600		4-20	4-20

TECHNICAL SPECIFICATIONS:

- Operating range: 10-120%
- Maximum load impedance: 600 Ω
- Frequency: 50-60 Hz
- Response time: <200 ms

DIMENSIONS



MODELS	A	B	C	D	E	F	G	H	I	J
TC20CV	Figure 1	56	74	33	48,5	48,5	60	32,5	37	
TC30CV	Figure 2	60	79	36	51,5	51,5	63	34,5	41	
TC40CV	Figure 3	71	96	45,5	61	61	72,5	44,5	52	

Dimensions in mm.

SUMMATION CURRENT TRANSFORMERS (ENCAPSULATED IN RESIN)

TRS-



SUMMATION CURRENT TRANSFORMERS				
MODEL	TRS2	TRS3	TRS4	TRS5
Accuracy	0,5	0,5	0,5	0,5
VA	10	10	10	10
I _{pn}	5+5 / 5	5+5+5 / 5	5+5+5+5 / 5	5+5+5+5+5 / 5

In this transformers, the secondary current is the vectorial addition of primary currents.

DIMENSIONS

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

Dimensions In mm.

VOLTAGE TRANSFORMERS (ENCAPSULATED IN RESIN)

TE15R



MODEL		TE15R
Accuracy Class		1
Primary voltage	Secondary voltage	VA
440	230	25
440	110	25
440	100	25
400	230	25
400	110	25
400	100	25
230	110	25

Operating range: 80 – 120 % V_{pn}
 Load: 25 – 100 % (cos φ = 0,8)

DIMENSIONS

Dimensions in mm.

