



INSTRUMENT TRANSFORMERS FOR MEDIUM VOLTAGE

Instrument transformers are used to reduce the high voltage and current levels of the medium voltage network to low, non-hazardous and proportional levels that can be handled by the measuring equipment.

Rymel medium voltage instrument transformers are manufactured according to the technical standards, NTC 5933, NTC 2205, NTC 2207, IEC 61869 and IEEE C57.13; and provide an efficient way to safely monitor the electrical variables that appear in the network.



For more information, please contact a Rymel Consultant

rymel@rymel.com.co



CURRENT TRANSFORMERS FOR INDOOR METERING TYPE CURRENT TRANSFORMERS

TYPE	kV	Interior	
MODEL	-	TCIM	
RESIN	-	Epoxy for interior use	
I _p /I _s CURRENT RATIO	A	From 2.5-5/5 to 250-500/5	From 2.5 /5 to 500/5
MEASUREMENT CLASS	-	0.5S, 0.2S,0.5,0.2	
NOMINAL BURDEN	VA	2.5, 5, 10, 15	
SHORT-TIME THERMAL CURRENT I _{th}	kA	8kA,16kA,4kV	
NOMINAL DYNAMIC CURRENT	kA	2.5 I _{th}	
FREQUENCY	Hz	50 - 60	
INSULATION CLASS	-	F	
INSULATION LEVEL	kV	17.5 / 38 / 95	
BIL, WAVE 1.2/50 μS PRIMARY	kV	95	
WINDING MATERIAL	-	Copper	
APPROXIMATE OVERALL DIMENSIONS	-	-	
A. WIDTH	mm	273	
B. LENGTH	mm	304	
C. HEIGHT	mm	283	
TOTAL WEIGHT	Kg	16	
MANUFACTURING AND TESTING STANDARDS	-	IEC61869-2 / NTC5933 / NTC2205	



ACCESSORIES:

- Fixing base plate with hardware and ground terminal (all in stainless steel).
- Transparent plastic terminal cover that allows monitoring the status of the connections without having to be removed.
- High and low voltage connections in stainless steel.

CURRENT TRANSFORMERS FOR EXTERNAL METERING

TYPE	-	Exterior	
MODEL	-	TCEM	
RESIN	-	Cycloaliphatic epoxy for exterior use	
MAXIMUM INSULATION LEVEL	kV	17.5	
CURRENT RATIO Ip/Is	A	From 2.5-5/5 to 400 - 800/5	From 2.5-5/5 to 800/5
MEASUREMENT CLASS	-	0.5S, 0.2S, 0.5, 0.2	
NOMINAL BURDEN	VA	2.5, 5, 10, 15	
SHORT-TIME THERMAL CURRENT LTH	kA	8kA, 16kA, 4kV	
RATED DYNAMIC CURRENT	kA	2.5 lth	
FREQUENCY	Hz	50 -60	
INSULATION CLASS	-	F	
INSULATION LEVEL	kV	17.5 / 38 / 95	
BIL, WAVE 1.2/50 μ S PRIMARY	kV	95	
WINDING MATERIAL	-	Copper	
APPROXIMATE DIMENSIONS	-	-	
A. WIDTH	mm	273	
B. LENGTH	mm	304	
C. HEIGHT	mm	283	
TOTAL WEIGHT	Kg	17	
MANUFACTURING AND TESTING STANDARDS	-	IEC61869-2 / NTC5933 / NTC2205	



ACCESSORIES:

- Fixing base plate with hardware and ground terminal (all in stainless steel).
- Stainless steel terminal cover with sealable screws.
- High and low voltage connections in stainless steel.

POTENTIAL TRANSFORMERS OF THE INTERNAL MEASUREMENT TYPE

NUMBER OF POLES	-	2	1
MODEL	-	TPIM2	TPIM1
RESIN	kV	Epoxy for interior use	Epoxy for interior use
MAXIMUM INSULATION LEVEL	kV	17.5	17.5
RATED PRIMARY VOLTAGE	V	From 4.16 to 14.4 kV	From 4.16√3 to 14.4√3kV
RATED SECONDARY VOLTAGE	%	120, 115, 110	120/√3, 115/√3, 110/√3
MEASUREMENT CLASS	VA	0.5, 0.2	0.5, 0.2
RATED BURDEN	-	50, 25, 15, 10, 5, 1	50, 25, 15, 10, 5, 1
VOLTAGE FACTOR	VA	1.2 One continuous	1.2 One continuous 1.9 30s
FREQUENCY	Hz	50 - 60	50 - 60
INSULATION CLASS	-	F	F
INSULATION LEVEL	kV	17.5 / 38 / 95	17.5 / 38 / 95
BIL, WAVE 1.2/50 μS PRIMARY	kV	95	95
WINDING MATERIAL	-	Copper	Copper
APPROXIMATE DIMENSIONS:	-	-	-
A. WIDTH	mm	270	270
B. LENGTH	mm	266	266
C. HEIGHT	mm	246	246
APPROXIMATE TOTAL WEIGHT	Kg	22	22
MANUFACTURING AND TESTING STANDARDS	-	IEC61869-3 / NTC5933 / NTC2207	IEC61869-3 / NTC5933 / NTC2207



ACCESSORIES:

- Fixing base plate with hardware and ground terminal (all in stainless steel).
- Transparent plastic terminal cover that allows monitoring the status of the connections without having to be removed.
- High and low voltage connections in stainless steel.
- Note: IT CAN BE manufactured according to IEEE standard upon request.

EXTERNAL MEASURING TYPE POTENTIAL TRANSFORMERS

NUMBER OF POLES	-	2	1
MODEL	-	TPEM2	TPIM1
RESIN	-	Cycloaliphatic epoxy/ exterior	Cycloaliphatic epoxy/ exterior
MAXIMUM INSULATION LEVEL	kV	17.5	17.5
RATED PRIMARY VOLTAGE	kV	From 4.16 to 14.4 kV	From 4.16√3 to 14.4√3kV
RATED SECONDARY VOLTAGE	V	120, 115, 110	120/√3, 115/√3, 110/√3
MEASUREMENT CLASS	%	0.5, 0.2	0.5, 0.2
RATED BURDEN	VA	50, 25, 15, 10, 5, 1	50, 25, 15, 10, 5, 1
VOLTAGE FACTOR	-	1.2 One continuous	1.2 One continuous 1.9 30s
FREQUENCY	Hz	50 -60	50 -60
INSULATION CLASS	-	F	F
INSULATION LEVEL	kV	17.5 / 38 / 95	17.5 / 38 / 95
BIL, WAVE 1.2/50 μS PRIMARIO	kV	95	95
WINDING MATERIAL	-	Copper	Copper
APPROXIMATE DIMENSIONS	-	-	-
A. WIDTH	mm	270	270
B. LENGTH	mm	266	266
C. HEIGHT	mm	403	403
TOTAL WEIGHT	Kg	24	23
MANUFACTURING AND TESTING STANDARDS	-	IEC61869-3 / NTC5933 / NTC2207	IEC61869-3 / NTC5933 / NTC2207



ACCESSORIES:

- Fixing base plate with hardware and ground terminal (all in stainless steel).
- Stainless steel terminal cover with sealable screws.
- High and low voltage connections in stainless steel.
- Note: IT CAN BE manufactured according to IEEE standard upon request.