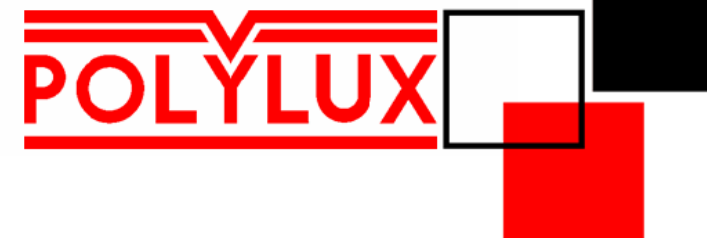


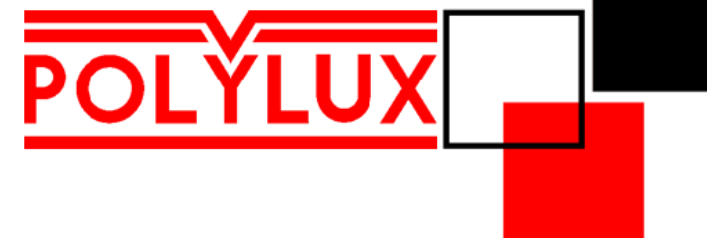
# WEB CATALOGUE



JULY 2012

# WEB CATALOGUE

CONTROL & SAFETY  
TRANSFORMERS



# P - SINGLE PHASE SAFETY, ISOLATING AND CONTROL TRANSFORMER

Serie: P



- The ultimate transformer design
- Available with different output voltages: 12-24V, 24-48V and 115-230V (see below table)
- The only transformer that can be set to Class I and Class II
- Signal LED
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94
- Parts with risk of electrical contact are not accessible by the user



## Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94, up to 2500 VA Metal enclosure, epoxy polyester painted, as from 3150 VA
Frequency	50-60 Hz
Protection degree	IP-20
Includes	LED indicator
Mounting	By screws (for all ratings) DIN Rail mounting (for ratings up to 250 VA)
Standards	IEC/EN/UNE-EN 61558 CE
Protection	Class I and Class II (selectable) up to 2500 VA Class I as from 3150 VA
Voltage selection	By metal bridges, included
Test voltage	4,6 kV (1 min, 50 Hz) between primary and secondary 3,2 kV (1 min, 50 Hz) between primary and earth 2,5 kV (1 min, 50 Hz) between secondary and earth

## Products and dimensions

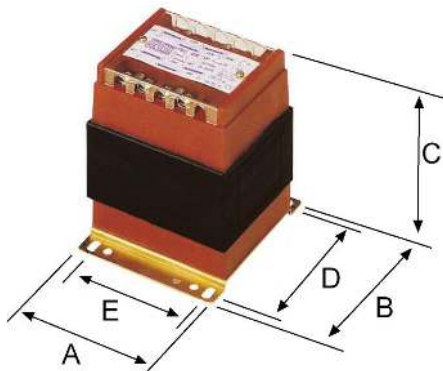
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PB25	25 VA	230/400 V	12/24 V	69	92	80	79	45	5	1	0.64
PB40	40 VA	230/400 V	12/24 V	69	92	80	79	45	5	1	0.79
PB63	63 VA	230/400 V	12/24 V	84	101	98	88	55	5	1	1.1
PB100	100 VA	230/400 V	12/24 V	84	101	98	88	55	5	1	1.6
PB160	160 VA	230/400/460 V	12/24 V	106	123	118	110	74	5	1	2.3
PB200	200 VA	230/400/460 V	12/24 V	106	123	118	110	74	5	1	2.7
PB250	250 VA	230/400/460 V	12/24 V	106	123	118	110	74	5	1	3.3
PB315	315 VA	230/400/460 V	12/24 V	118	138	131	121	88	6	1	4.1
PB400	400 VA	230/400/460 V	12/24 V	118	138	131	121	88	6	1	4.9
PB500	500 VA	230/400/460 V	12/24 V	136	162	156	145	104	6	1	5.8
PC25	25 VA	230/400 V	24/48 V	69	92	80	79	45	5	1	0.64
PC40	40 VA	230/400 V	24/48 V	69	92	80	79	45	5	1	0.79
PC63	63 VA	230/400 V	24/48 V	84	101	98	88	55	5	1	1.1
PC100	100 VA	230/400 V	24/48 V	84	101	98	88	55	5	1	1.6
PC160	160 VA	230/400/460 V	24/48 V	106	123	118	110	74	5	1	2.3
PC200	200 VA	230/400/460 V	24/48 V	106	123	118	110	74	5	1	2.7
PC250	250 VA	230/400/460 V	24/48 V	106	123	118	110	74	5	1	3.3
PC315	315 VA	230/400/460 V	24/48 V	118	138	131	121	88	6	1	4.1
PC400	400 VA	230/400/460 V	24/48 V	118	138	131	121	88	6	1	4.9
PC500	500 VA	230/400/460 V	24/48 V	136	162	156	145	104	6	1	5.8
PC630	630 VA	230/400/460 V	24/48 V	136	162	156	145	104	6	1	6.8
PC800	800 VA	230/400/460 V	24/48 V	136	162	156	145	104	6	1	8.6
PC1000	1000 VA	230/400/460 V	24/48 V	136	162	180	145	104	6	1	10
PC1250	1250 VA	230/400/460 V	24/48 V	199	220	242	188	175	7	2	19.3
PC1600	1600 VA	230/400/460 V	24/48 V	199	220	242	188	175	7	2	23.6
PC2000	2000 VA	230/400/460 V	24/48 V	199	220	282	188	175	7	2	30.3
PC2500	2500 VA	230/400/460 V	24/48 V	247	260	349	233	223	7	2	39.9
PD25	25 VA	230/400 V	115/230 V	69	92	80	79	45	5	1	0.64
PD40	40 VA	230/400 V	115/230 V	69	92	80	79	45	5	1	0.79
PD63	63 VA	230/400 V	115/230 V	84	101	98	88	55	5	1	1.1
PD100	100 VA	230/400 V	115/230 V	84	101	98	88	55	5	1	1.6
PD160	160 VA	230/400/460 V	115/230 V	106	123	118	110	74	5	1	2.3
PD200	200 VA	230/400/460 V	115/230 V	106	123	118	110	74	5	1	2.7
PD250	250 VA	230/400/460 V	115/230 V	106	123	118	110	74	5	1	3.3
PD315	315 VA	230/400/460 V	115/230 V	118	138	131	121	88	6	1	4.1
PD400	400 VA	230/400/460 V	115/230 V	118	138	131	121	88	6	1	4.9
PD500	500 VA	230/400/460 V	115/230 V	136	162	156	145	104	6	1	5.8
PD630	630 VA	230/400/460 V	115/230 V	136	162	156	145	104	6	1	6.8
PD800	800 VA	230/400/460 V	115/230 V	136	162	156	145	104	6	1	8.6
PD1000	1000 VA	230/400/460 V	115/230 V	136	162	180	145	104	6	1	10
PD1250	1250 VA	230/400/460 V	115/230 V	199	220	242	188	175	7	2	19.3
PD1600	1600 VA	230/400/460 V	115/230 V	199	220	242	188	175	7	2	23.6
PD2000	2000 VA	230/400/460 V	115/230 V	199	220	282	188	175	7	2	30.3
PD2500	2500 VA	230/400/460 V	115/230 V	199	220	282	188	175	7	2	33
PD3150	3150 VA	230/400/460 V	115/230 V	247	260	349	233	223	7	3	39.9
PD4000	4000 VA	230/400/460 V	115/230 V	247	260	349	233	223	7	3	50
PD5000	5000 VA	230/400/460 V	115/230 V	247	260	349	233	223	7	3	60.1

# N - SINGLE PHASE CAST RESIN CONTROL, ISOLATION AND SAFETY TRANSFORMER

Serie: N



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



## Technical characteristics

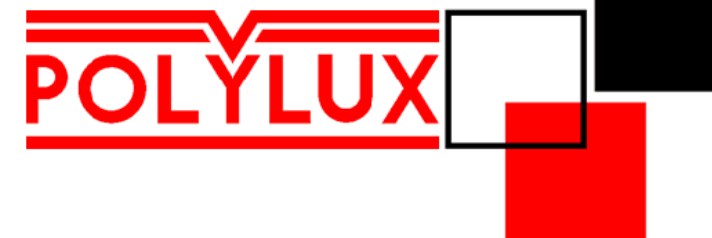
Insulation	Class B - 130° C
Windings	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Mounting	By screws (all ratings) DIN rail (for ratings up to 100 VA)
Standards	IEC/EN/UNE-EN 61558 CE
Voltage selection	By metal bridges, included
Test voltage	4,6 kV (1 min, 50 Hz) between primary and secondary 3,2 kV (1 min, 50 Hz) between primary and earth 2,5 kV (1 min, 50 Hz) between secondary and earth

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			Ø
NB25	25 VA	230/400 V	12/24 V	50	97	74	80	34	6		0.7
NB40	40 VA	230/400 V	12/24 V	50	97	84	80	34	6		0.9
NB63	63 VA	230/400 V	12/24 V	75	97	84	80	56	6		1.3
NB100	100 VA	230/400 V	12/24 V	75	97	100	80	56	6		1.8
NB160	160 VA	230/400 V	12/24 V	84	102	114	86	65	6		2.7
NB200	200 VA	230/400/460 V	12/24 V	96	112	110	96	76	6		3.1
NB250	250 VA	230/400/460 V	12/24 V	96	112	120	96	76	6		3.6
NB315	315 VA	230/400/460 V	12/24 V	108	124	124	106	89	6		4.7
NB400	400 VA	230/400/460 V	12/24 V	108	124	148	106	89	6		5.7
NB500	500 VA	230/400/460 V	12/24 V	126	148	150	125	102	7		7.2
NC25	25 VA	230/400 V	24/48 V	50	97	74	80	34	6		0.76
NC40	40 VA	230/400 V	24/48 V	50	97	84	80	34	6		0.95
NC63	63 VA	230/400 V	24/48 V	75	96	85	80	56	6		1.3
NC100	100 VA	230/400 V	24/48 V	75	96	100	80	56	6		1.8
NC160	160 VA	230/400 V	24/48 V	84	102	110	86	65	6		2.7
NC200	200 VA	230/400/460 V	24/48 V	96	112	106	86	65	6		2.7
NC250	250 VA	230/400/460 V	24/48 V	96	112	120	96	76	6		3.6
NC315	315 VA	230/400/460 V	24/48 V	108	124	124	106	89	6		4.5
NC400	400 VA	230/400/460 V	24/48 V	108	124	135	106	89	6		5.3
NC500	500 VA	230/400/460 V	24/48 V	126	148	148	125	102	7		7.1
NC630	630 VA	230/400/460 V	24/48 V	126	148	166	125	102	7		9.1
NC800	800 VA	230/400/460 V	24/48 V	126	148	177	125	102	7		9.9
NC1000	1000 VA	230/400/460 V	24/48 V	150	165	180	145	125	7		13.6
NC1250	1250 VA	230/400/460 V	24/48 V	150	165	190	145	125	7		14.9
NC1600	1600 VA	230/400/460 V	24/48 V	150	165	210	145	125	7		16.9
NC2000	2000 VA	230/400/460 V	24/48 V	195	198	228	178	173	7		25.3
NC2500	2500 VA	230/400/460 V	24/48 V	195	198	248	178	173	7		30.5
ND25	25 VA	230/400 V	115/230 V	50	97	74	80	34	6		0.76
ND40	40 VA	230/400 V	115/230 V	50	97	84	80	34	6		0.95
ND63	63 VA	230/400 V	115/230 V	75	96	85	80	56	6		1.3
ND100	100 VA	230/400 V	115/230 V	75	96	100	80	56	6		1.8
ND160	160 VA	230/400 V	115/230 V	84	102	110	86	65	6		2.7
ND200	200 VA	230/400/460 V	115/230 V	96	112	106	86	65	6		2.7
ND250	250 VA	230/400/460 V	115/230 V	96	112	120	96	76	6		3.6
ND315	315 VA	230/400/460 V	115/230 V	108	124	124	106	89	6		4.5
ND400	400 VA	230/400/460 V	115/230 V	108	124	135	106	89	6		5.3
ND500	500 VA	230/400/460 V	115/230 V	126	148	148	125	102	7		7.1
ND630	630 VA	230/400/460 V	115/230 V	126	148	166	125	102	7		9.1
ND800	800 VA	230/400/460 V	115/230 V	126	148	177	125	102	7		9.9
ND1000	1000 VA	230/400/460 V	115/230 V	150	165	180	145	125	7		13.6
ND1250	1250 VA	230/400/460 V	115/230 V	150	165	190	145	125	7		14.9
ND1600	1600 VA	230/400/460 V	115/230 V	150	165	210	145	125	7		16.9
ND2000	2000 VA	230/400/460 V	115/230 V	195	198	228	178	173	7		25.3
ND2500	2500 VA	230/400/460 V	115/230 V	195	198	248	178	173	7		30.5
ND3150	3150 VA	230/400/460 V	115/230 V	195	198	268	178	173	7		35.8
ND4000	4000 VA	230/400/460 V	115/230 V	240	235	280	212	220	7		47.7
ND5000	5000 VA	230/400/460 V	115/230 V	240	235	300	212	220	7		55

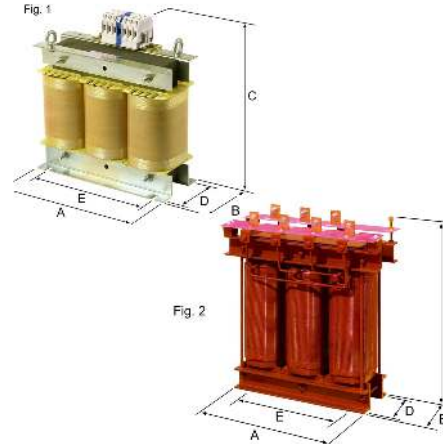
# WEB CATALOGUE

## ISOLATING TRANSFORMERS



# TTX - THREE PHASE ISOLATING TRANSFORMER IP-00

Serie: TTX



## Technical characteristics

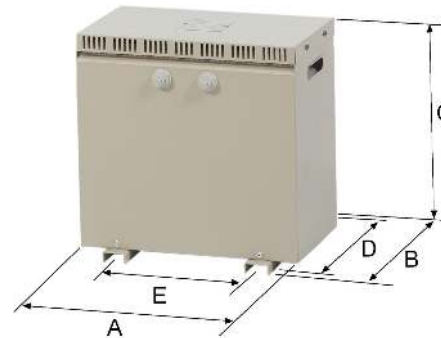
Isolation	Class F - 155°C up to 50 kVA Class H - 180°C as from 63 kVA
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	Yyn0
Includes	Lifting eyebolts as from 6,3 kVA
Standards	IEC/EN/UNE-EN 61558/60076, CE
Cooling	AN
Ambient temperature	40°C
Test voltage	4,5 kV (1 min, 50 Hz) between windings up to 5 kVA 3 kV (1 min, 50 Hz) between windings as from 6,3 kVA 3 kV (1 min, 50 Hz) between windings and earth

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			∅
TTX0.63	0,63 kVA	400 V	400 V + N	150	94	178	66	125	6	1	5.9
TTX1	1 kVA	400 V	400 V + N	180	94	203	66	150	6	1	9.5
TTX2	2 kVA	400 V	400 V + N	240	118	253	90	200	9	1	20
TTX2.5	2,5 kVA	400 V	400 V + N	300	124	303	96	250	9	1	23.9
TTX3.15	3,15 kVA	400 V	400 V + N	300	134	303	106	250	9	1	27.4
TTX4	4 kVA	400 V	400 V + N	300	154	303	126	250	9	1	36
TTX5	5 kVA	400 V	400 V + N	300	164	303	136	250	9	1	40.4
TTX6,3	6,3 kVA	400 V	400 V + N	360	144	353	116	300	11	1	55
TTX8	8 kVA	400 V	400 V + N	360	164	353	136	300	11	1	67
TTX10	10 kVA	400 V	400 V + N	420	170	419	142	350	11	1	78
TTX12.5	12,5 kVA	400 V	400 V + N	420	190	419	162	350	11	1	94
TTX16	16 kVA	400 V	400 V + N	480	250	480	144	400	11	1	105
TTX20	20 kVA	400 V	400 V + N	480	270	480	164	400	11	1	125
TTX25	25 kVA	400 V	400 V + N	480	290	480	184	400	11	1	145
TTX31.5	31,5 kVA	400 V	400 V + N	480	310	480	204	400	11	1	162
TTX40	40 kVA	400 V	400 V + N	670	290	580	150	599	13	1	192
TTX50	50 kVA	400 V	400 V + N	670	330	580	190	599	13	1	255
TTX63	63 kVA	400 V	400 V + N	725	550	880	460	472	17	2	329
TTX80	80 kVA	400 V	400 V + N	725	550	880	460	472	17	2	383
TTX100	100 kVA	400 V	400 V + N	725	550	880	460	472	17	2	406
TTX125	125 kVA	400 V	400 V + N	725	550	880	460	472	17	2	462
TTX160	160 kVA	400 V	400 V + N	725	550	880	460	472	17	2	560
TTX200	200 kVA	400 V	400 V + N	1016	550	1080	460	677	17	2	706
TTX250	250 kVA	400 V	400 V + N	1016	550	1080	460	677	17	2	808
TTX315	315 kVA	400 V	400 V + N	1070	550	1220	460	690	17	2	1000
TTX400	400 kVA	400 V	400 V + N	1070	550	1220	460	690	17	2	1092
TTX500	500 kVA	400 V	400 V + N	1300	550	1350	460	800	17	2	1870
TTX630	630 kVA	400 V	400 V + N	1300	550	1350	460	800	17	2	2247

## TTW - THREE PHASE ISOLATING TRANSFORMER IP-23

Serie: TTW



- IP-23 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C2 (higher category is optional)

### Technical characteristics

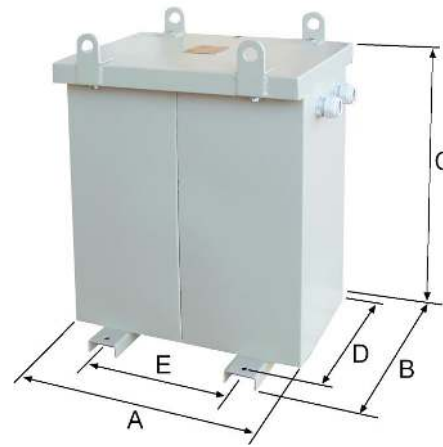
Isolation	Class F - 155°C up to 50 kVA Class H - 180°C as from 63 kVA
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-23
Connection group	Yyn0
Includes	Lifting eyebolts as from 40 kVA
Standards	IEC/EN/UNE-EN 61558/60076, CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	4,5 kV (1 min, 50 Hz) between windings up to 5 kVA 3 kV (1 min, 50 Hz) between windings as from 6,3 kVA 3 kV (1 min, 50 Hz) between windings and earth
Set of wheels (optional)	RUE060 wheels from TTW16 to TTW50 RUE125 wheels from TTW63 to TTW400 <a href="#">Link to wheels prices</a>

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTW0.63	0,63 kVA	400 V	400 V + N	189	175	215	165	100	6		7.6
TTW1	1 kVA	400 V	400 V + N	244	190	252	180	150	6		13.2
TTW2	2 kVA	400 V	400 V + N	314	230	315	205	200	6		24.8
TTW2.5	2,5 kVA	400 V	400 V + N	384	260	383	245	250	6		28.8
TTW3.15	3,15 kVA	400 V	400 V + N	384	260	383	245	250	6		32.8
TTW4	4 kVA	400 V	400 V + N	384	260	383	245	250	6		40.8
TTW5	5 kVA	400 V	400 V + N	384	260	383	245	250	6		45.2
TTW6.3	6,3 kVA	400 V	400 V + N	454	340	575	300	300	12		61
TTW8	8 kVA	400 V	400 V + N	454	340	575	300	300	12		73
TTW10	10 kVA	400 V	400 V + N	525	395	640	355	350	12		89
TTW12.5	12,5 kVA	400 V	400 V + N	525	395	640	355	350	12		106
TTW16	16 kVA	400 V	400 V + N	595	395	708	355	350	12		117
TTW20	20 kVA	400 V	400 V + N	595	395	708	355	350	12		137
TTW25	25 kVA	400 V	400 V + N	595	395	708	355	350	12		157
TTW31.5	31,5 kVA	400 V	400 V + N	595	395	708	355	350	12		174
TTW40	40 kVA	400 V	400 V + N	789	490	965	450	426	13		217
TTW50	50 kVA	400 V	400 V + N	789	490	965	450	426	13		280
TTW63	63 kVA	400 V	400 V + N	964	684	1252	604	472	18		381
TTW80	80 kVA	400 V	400 V + N	964	684	1252	604	472	18		435
TTW100	100 kVA	400 V	400 V + N	964	684	1252	604	472	18		458
TTW125	125 kVA	400 V	400 V + N	964	684	1252	604	472	18		514
TTW160	160 kVA	400 V	400 V + N	964	684	1252	604	472	18		612
TTW200	200 kVA	400 V	400 V + N	1192	744	1430	664	677	18		753
TTW250	250 kVA	400 V	400 V + N	1192	744	1430	664	677	18		855
TTW315	315 kVA	400 V	400 V + N	1195	784	1579	704	690	18		1093
TTW400	400 kVA	400 V	400 V + N	1195	784	1579	704	690	18		1185
TTW500	500 kVA	400 V	400 V + N	1554	864	1794	784	800	18		1990
TTW630	630 kVA	400 V	400 V + N	1554	864	1794	784	800	18		2367

# TTZ - THREE PHASE ISOLATING TRANSFORMER IP-54/IP-65

Serie: TTZ



- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts

## Technical characteristics

Isolation	Class F - 155°C up to 40 kVA Class H - 180°C as from 50 kVA
Winding	Class HC - 200°C
Cover	In metal enclosure, resin polyester painted
Frequency	50-60 Hz
Protection degree	IP-54/IP-65
	- Corrosion protective paint system in accordance with ISO 12994-2 category C4 - For locations <500m from the coast, category C5 to be used (price to be consulted)
Connection group	Yyn0
	Lifting eyebolts as from 8 kVA
Includes	Cable glands Silent-Blocks (between transformer and enclosure)
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	4,5 kV (1 min, 50 Hz) between windings up to 5 kVA 3 kV (1 min, 50 Hz) between windings as from 6,3 kVA 3 kV (1 min, 50 Hz) between windings and earth

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTZ0.63	0,63 kVA	400 V	400 V + N	356	286	486	230	200	11		19.5
TTZ1	1 kVA	400 V	400 V + N	356	286	486	230	200	11		24
TTZ2	2 kVA	400 V	400 V + N	356	286	486	230	200	11		37
TTZ2.5	2,5 kVA	400 V	400 V + N	356	286	486	230	200	11		40
TTZ3.15	3,15 kVA	400 V	400 V + N	556	366	696	320	250	11		57
TTZ4	4 kVA	400 V	400 V + N	556	366	696	320	250	11		61
TTZ5	5 kVA	400 V	400 V + N	556	366	696	320	250	11		76
TTZ6.3	6,3 kVA	400 V	400 V + N	556	366	696	320	250	11		87.5
TTZ8	8 kVA	400 V	400 V + N	738	417	824	370	350	11		118
TTZ10	10 kVA	400 V	400 V + N	738	417	824	370	350	11		134
TTZ12.5	12,5 kVA	400 V	400 V + N	738	417	824	370	350	11		145
TTZ16	16 kVA	400 V	400 V + N	738	417	824	370	350	11		165
TTZ20	20 kVA	400 V	400 V + N	738	417	824	370	350	11		185
TTZ25	25 kVA	400 V	400 V + N	738	417	824	370	350	11		202
TTZ31.5	31,5 kVA	400 V	400 V + N	939	568	1149	520	426	13		257
TTZ40	40 kVA	400 V	400 V + N	939	568	1149	520	426	13		320
TTZ50	50 kVA	400 V	400 V + N	1022	740	1477	660	472	17		450
TTZ63	63 kVA	400 V	400 V + N	1022	740	1477	660	472	17		512
TTZ80	80 kVA	400 V	400 V + N	1022	740	1477	660	472	17		535
TTZ100	100 kVA	400 V	400 V + N	1022	740	1477	660	472	17		591
TTZ125	125 kVA	400 V	400 V + N	1022	740	1477	660	472	17		694
TTZ160	160 kVA	400 V	400 V + N	1352	810	1617	730	677	17		892
TTZ200	200 kVA	400 V	400 V + N	1352	810	1617	730	677	17		994
TTZ250	250 kVA	400 V	400 V + N	1442	870	1757	810	690	17		1186
TTZ315	315 kVA	400 V	400 V + N	1442	870	1757	810	690	17		1278
TTZ400	400 kVA	400 V	400 V + N	1642	870	1757	810	800	17		2070
TTZ500	500 kVA	400 V	400 V + N	1642	870	1757	810	800	17		2447
TTZ630	630 kVA	400 V	400 V + N	1642	870	1757	810	800	17		2550



# TTE - THREE PHASE CAST RESIN ISOLATING TRANSFORMER

Serie: TTE



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations

## Technical characteristics

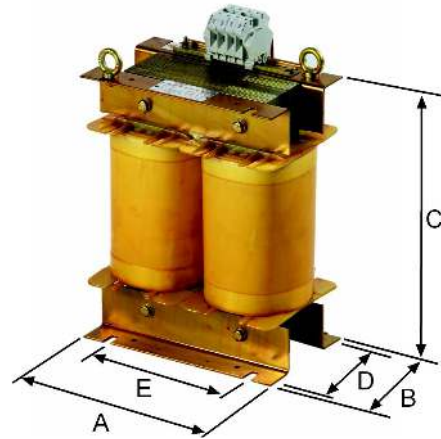
Isolation	Class F - 155°C up to 12,5 kVA Class H - 180°C as from 16 kVA
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20 up to 50kVA IP-00 as from 63kVA
Connection group	Yyn0
Includes	Lifting eyebolts as from 6,3 kVA Thermal protection against over temperatures LED indicator
Standards	IEC/EN/UNE-EN 61558/60076, CE
Cooling	AN
Ambient temperature	30°C
Test voltage	4,5 kV (1 min, 50 Hz) between windings up to 5 kVA 3 kV (1 min, 50 Hz) between windings as from 6,3 kVA 3 kV (1 min, 50 Hz) between windings and earth

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTE0.40	0,40 kVA	400 V	400 V + N	210	198	185	178	173	7	1	14
TTE0.63	0,63 kVA	400 V	400 V + N	210	198	185	178	173	7	1	9.2
TTE1	1 kVA	400 V	400 V + N	280	158	205	180	250	9	2	15.4
TTE1.6	1,6 kVA	400 V	400 V + N	280	158	220	80	250	9	2	24
TTE2	2 kVA	400 V	400 V + N	280	158	220	90	250	9	2	26.6
TTE2.5	2,5 kVA	400 V	400 V + N	340	190	255	96	310	9	2	32.7
TTE3.15	3,15 kVA	400 V	400 V + N	340	210	255	106	310	9	2	35.8
TTE4	4 kVA	400 V	400 V + N	340	200	255	126	310	9	2	47.3
TTE5	5 kVA	400 V	400 V + N	340	205	255	136	310	9	2	51
TTE6.3	6,3 kVA	400 V	400 V + N	410	195	305	116	380	11	2	69
TTE8	8 kVA	400 V	400 V + N	410	240	305	136	380	11	2	85
TTE10	10 kVA	400 V	400 V + N	490	300	355	142	460	11	2	111
TTE12.5	12,5 kVA	400 V	400 V + N	490	340	355	162	460	11	2	129
TTE16	16 kVA	400 V	400 V + N	540	350	405	144	510	11	3	146
TTE20	20 kVA	400 V	400 V + N	540	360	405	164	510	11	3	167
TTE25	25 kVA	400 V	400 V + N	540	380	405	184	510	11	3	189
TTE31.5	31,5 kVA	400 V	400 V + N	540	380	405	204	510	11	3	208
TTE40	40 kVA	400 V	400 V + N	670	384	505	150	599	11	3	254
TTE50	50 kVA	400 V	400 V + N	670	384	505	190	599	11	3	318
TTE63	63 kVA	400 V	400 V + N	725	550	850	460	472	17	3	468
TTE80	80 kVA	400 V	400 V + N	725	550	850	460	472	17	3	478
TTE100	100 kVA	400 V	400 V + N	725	550	850	460	472	17	3	546
TTE125	125 kVA	400 V	400 V + N	725	550	850	460	472	17	3	603
TTE160	160 kVA	400 V	400 V + N	725	550	850	460	472	17	3	720
TTE200	200 kVA	400 V	400 V + N	1016	550	1000	460	677	17	3	1093
TTE250	250 kVA	400 V	400 V + N	1016	570	1000	460	677	17	3	1225
TTE315	315 kVA	400 V	400 V + N	1070	580	1150	460	690	17	3	1429
TTE400	400 kVA	400 V	400 V + N	1070	590	1150	460	690	17	3	1619

## TKX - SINGLE PHASE ISOLATING TRANSFORMER IP-00

Serie: TKX



### Technical characteristics

Isolating	Class F - 155°C
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Includes	Lifting eyebolts as from 10 kVA
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	AN
Ambient temperature	40°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

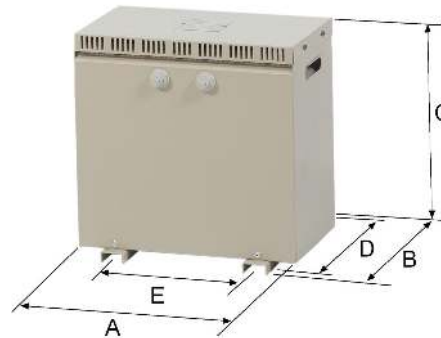
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TKX6.3	6,3 kVA	230 V	230 V	280	180	419	142	210	11		52
TKX8	8 kVA	230 V	230 V	280	200	419	162	210	11		63
TKX10	10 kVA	230 V	230 V	320	250	480	142	240	11		70
TKX12.5	12,5 kVA	230 V	230 V	320	250	480	142	240	11		75
TKX16	16 kVA	230 V	230 V	320	270	480	162	240	11		84
TKX20	20 kVA	230 V	230 V	320	310	480	202	240	11		104
TKX25	25 kVA	230 V	230 V	400	290	620	150	300	13		120
TKX31.5	31,5 kVA	230 V	230 V	400	310	620	170	300	13		144
TKX40	40 kVA	230 V	230 V	400	330	620	190	300	13		171
TKX50	50 kVA	230 V	230 V	440	550	880	460	250	17		228

## TKW - SINGLE PHASE ISOLATING TRANSFORMER IP-23

Serie: TKW



- IP-23 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C2 (higher category is optional)



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Cover	In metal enclosure
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 25 kVA
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)
Set of wheels (optional)	RUE060 wheels from TKW10 to TKW50 <a href="#">Link to wheels prices</a>

### Products and dimensions

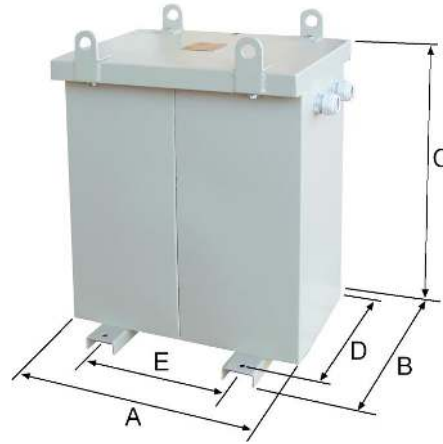
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TKW6.3	6,3 kVA	230 V	230 V	525	395	640	355	350	12		64
TKW8	8 kVA	230 V	230 V	525	395	640	355	350	12		75
TKW10	10 kVA	230 V	230 V	595	395	708	355	350	12		82
TKW12.5	12,5 kVA	230 V	230 V	595	395	708	355	350	12		87
TKW16	16 kVA	230 V	230 V	595	395	708	355	350	12		96
TKW20	20 kVA	230 V	230 V	595	395	708	355	350	12		116
TKW25	25 kVA	230 V	230 V	789	490	965	450	426	13		145
TKW31.5	31,5 kVA	230 V	230 V	789	490	965	450	426	13		169
TKW40	40 kVA	230 V	230 V	789	490	965	450	426	13		196
TKW50	50 kVA	230 V	230 V	964	684	1252	604	472	18		280

# TKZ - SINGLE PHASE ISOLATING TRANSFORMER IP-54/IP-65

Serie: TKZ



- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts



## Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-54/IP-65
	- Corrosion protective paint system in accordance with ISO 12994-2 category C4
	- For locations <500m from the coast, category C5 to be used (price to be consulted)
Includes	Lifting eyebolts Cable glands Silent-Blocks (between transformer and enclosure)
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

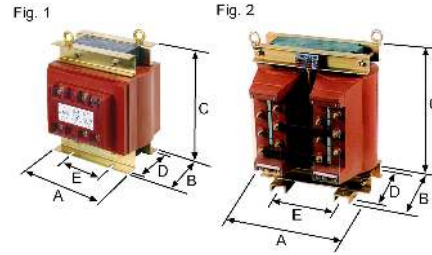
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TKZ6.3	6,3 kVA	230 V	230 V	738	417	824	370	350	11		103
TKZ8	8 kVA	230 V	230 V	738	417	824	370	350	11		110
TKZ10	10 kVA	230 V	230 V	738	417	824	370	350	11		115
TKZ12.5	12,5 kVA	230 V	230 V	738	417	824	370	350	11		124
TKZ16	16 kVA	230 V	230 V	738	417	824	370	350	11		144
TKZ20	20 kVA	230 V	230 V	939	568	1149	520	426	13		185
TKZ25	25 kVA	230 V	230 V	939	568	1149	520	426	13		209
TKZ31.5	31,5 kVA	230 V	230 V	939	568	1149	520	426	13		236
TKZ40	40 kVA	230 V	230 V	1022	740	1477	660	472	17		357
TKZ50	50 kVA	230 V	230 V	1022	740	1477	660	472	17		370

# TKE - SINGLE PHASE CAST RESIN ISOLATING TRANSFORMER

Serie: TKE



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



## Technical characteristics

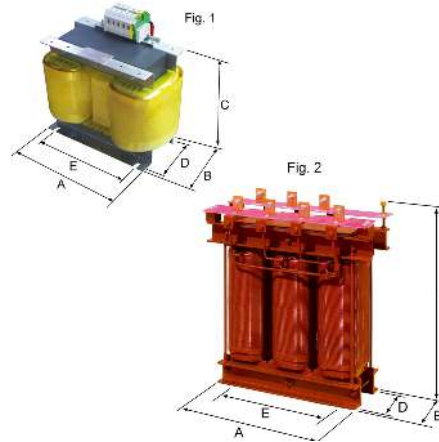
Isolation	Class F - 155°C up to 8 kVA Class H - 180°C as from 10 kVA
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20 up to 8 kVA / IP-00 as from 10 kVA
Includes	Thermal protection against over temperature (up to 8 kVA) LED indicator (up to 8 kVA) Lifting eyebolts
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	AN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TKE6.3	6,3 kVA	230 V	230 V	340	320	355	142	310	11	1	74
TKE8	8 kVA	230 V	230 V	340	320	355	162	310	11	1	89
TKE10	10 kVA	230 V	230 V	390	360	405	150	360	11	2	93
TKE12.5	12,5 kVA	230 V	230 V	390	360	405	150	360	11	2	101
TKE16	16 kVA	230 V	230 V	390	360	405	170	360	11	2	112
TKE20	20 kVA	230 V	230 V	390	360	405	190	360	11	2	134
TKE25	25 kVA	230 V	230 V	580	385	505	160	300	11	2	161
TKE31.5	31,5 kVA	230 V	230 V	580	385	505	180	300	11	2	185
TKE40	40 kVA	230 V	230 V	580	385	505	200	300	11	2	213
TKE50	50 kVA	230 V	230 V	500	550	850	460	440	17	2	260

# TTKX - THREE PHASE TO SINGLE PHASE ISOLATING TRANSFORMER IP-00

Serie: TTKX



- Transformer with three phase input and single phase output
- Very suitable for high rating single phase loads; voltage unbalance is reduced (compared to three phase transformers)

## Technical characteristics

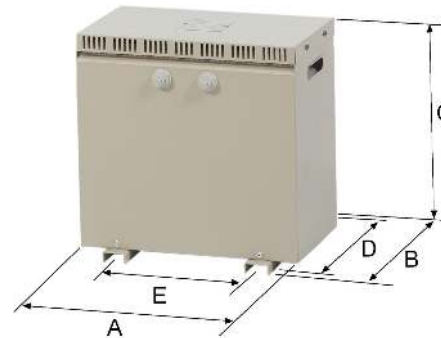
Isolation	Class F - 155°C up to 40 kVA Class H - 180°C as from 50 kVA
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	V / inverted V
Includes	Lifting eyebolts as from 5kVA
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	AN
Ambient temperature	40°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I. voltage	O. voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTKX1	1 kVA	400 V	230 V	260	118	253	90	200	9	1	14.1
TTKX1.6	1,6 kVA	400 V	230 V	260	143	253	115	200	9	1	20.4
TTKX2	2 kVA	400 V	230 V	330	124	303	96	250	9	1	23.3
TTKX2.5	2,5 kVA	400 V	230 V	330	134	303	106	250	9	1	27.8
TTKX3.15	3,15 kVA	400 V	230 V	330	154	303	126	250	9	1	35.2
TTKX4	4 kVA	400 V	230 V	330	164	303	136	250	9	1	40
TTKX5	5 kVA	400 V	230 V	400	144	353	116	300	11	1	48
TTKX6.3	6,3 kVA	400 V	230 V	400	164	353	136	300	11	1	58
TTKX8	8 kVA	400 V	230 V	470	170	419	142	350	11	1	72
TTKX10	10 kVA	400 V	230 V	470	190	419	162	350	11	1	88
TTKX12.5	12,5 kVA	400 V	230 V	530	260	480	154	400	11	1	112
TTKX16	16 kVA	400 V	230 V	530	290	480	184	400	11	1	139
TTKX20	20 kVA	400 V	230 V	530	310	480	204	400	11	1	164
TTKX25	25 kVA	400 V	230 V	740	290	580	150	599	13	1	191
TTKX31.5	31,5 kVA	400 V	230 V	740	310	580	170	599	13	1	234
TTKX40	40 kVA	400 V	230 V	740	330	580	190	599	13	1	277
TTKX50	50 kVA	400 V	230 V	780	550	880	460	472	17	2	340
TTKX63	63 kVA	400 V	230 V	780	550	880	460	472	17	2	394
TTKX80	80 kVA	400 V	230 V	780	550	880	460	472	17	2	436
TTKX100	100 kVA	400 V	230 V	780	550	880	460	472	17	2	507

# TTKW - THREE PHASE TO SINGLE PHASE ISOLATING TRANSFORMER IP-23

Serie: TTKW



- IP-23 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C2 (higher category is optional)

## Technical characteristics

Isolation	Class F - 155°C up to 40 kVA Class H - 180°C as from 50 kVA
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-23
Connection group	V / inverted V
Includes	Lifting eyebolts as from 25 kVA
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)
Set of wheels (optional)	RUE060 wheels from TTKW12.5 to TTKW40 RUE125 wheels from TTKW50 to TTKW100

[Link to wheels prices](#)

## Products and dimensions

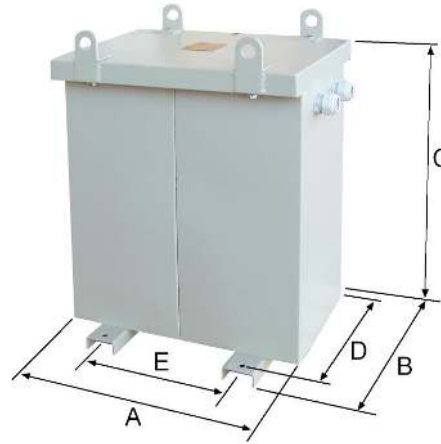
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTKW1	1 kVA	400 V	230 V	314	230	315	205	200	6		18.4
TTKW1.6	1,6 kVA	400 V	230 V	314	230	315	205	200	6		24.7
TTKW2	2 kVA	400 V	230 V	384	260	383	245	250	6		28.1
TTKW2.5	2,5 kVA	400 V	230 V	384	260	383	245	250	6		32.6
TTKW3.15	3,15 kVA	400 V	230 V	384	260	383	245	250	6		40
TTKW4	4 kVA	400 V	230 V	384	260	383	245	250	6		44.8
TTKW5	5 kVA	400 V	230 V	454	340	575	300	300	12		54
TTKW6.3	6,3 kVA	400 V	230 V	454	340	575	300	300	12		64
TTKW8	8 kVA	400 V	230 V	525	395	640	355	350	12		84
TTKW10	10 kVA	400 V	230 V	525	395	640	355	350	12		100
TTKW12.5	12,5 kVA	400 V	230 V	595	395	708	355	350	12		124
TTKW16	16 kVA	400 V	230 V	595	395	708	355	350	12		151
TTKW20	20 kVA	400 V	230 V	595	395	708	355	350	12		176
TTKW25	25 kVA	400 V	230 V	789	490	965	450	426	13		216
TTKW31.5	31,5 kVA	400 V	230 V	789	490	965	450	426	13		259
TTKW40	40 kVA	400 V	230 V	789	490	965	450	426	13		302
TTKW50	50 kVA	400 V	230 V	964	684	1252	604	472	18		392
TTKW63	63 kVA	400 V	230 V	964	684	1252	604	472	18		446
TTKW80	80 kVA	400 V	230 V	964	684	1252	604	472	18		488
TTKW100	100 kVA	400 V	230 V	964	684	1252	604	472	18		559

# TTKZ - THREE PHASE TO SINGLE PHASE ISOLATING TRANSFORMER IP-54/IP-65

Serie: TTKZ



- Transformer with three phase input and single phase output
- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts



## Technical characteristics

Isolation	Class F - 155°C up to 31,5 kVA Class H - 180°C as from 40 kVA
Winding	Class HC - 200°C
Cover	In metal enclosure, resin polyester painted
Frequency	50-60 Hz
Protection degree	IP-54/IP-65 - Corrosion protective paint system in accordance with ISO 12994-2 category C4 - For locations <500m from the coast, category C5 to be used (price to be consulted)
Connection group	V / inverted V
Includes	Lifting eyebolts as from 6.3kVA
Standards	IEC/EN/UNE-EN 60076, CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTKZ1	1 kVA	400 V	230 V	356	286	486	230	200	11		33.4
TTKZ1.6	1,6 kVA	400 V	230 V	556	366	696	320	250	11		44.3
TTKZ2	2 kVA	400 V	230 V	556	366	696	320	250	11		48.8
TTKZ2.5	2,5 kVA	400 V	230 V	556	366	696	320	250	11		56
TTKZ3.15	3,15 kVA	400 V	230 V	556	366	696	320	250	11		61
TTKZ4	4 kVA	400 V	230 V	556	366	696	320	250	11		69
TTKZ5	5 kVA	400 V	230 V	556	366	696	320	250	11		79
TTKZ6.3	6.3 kVA	400 V	230 V	738	417	824	370	350	11		112
TTKZ8	8 kVA	400 V	230 V	738	417	824	370	350	11		128
TTKZ10	10 kVA	400 V	230 V	738	417	824	370	350	11		152
TTKZ12.5	12,5 kVA	400 V	230 V	738	417	824	370	350	11		179
TTKZ16	16 kVA	400 V	230 V	738	417	824	370	350	11		204
TTKZ20	20 kVA	400 V	230 V	939	568	1149	520	426	13		256
TTKZ25	25 kVA	400 V	230 V	939	568	1149	520	426	13		299
TTKZ31.5	31,5 kVA	400 V	230 V	939	568	1149	520	426	13		342
TTKZ40	40 kVA	400 V	230 V	1022	740	1477	660	472	17		469
TTKZ50	50 kVA	400 V	230 V	1022	740	1477	660	472	17		523
TTKZ63	63 kVA	400 V	230 V	1022	740	1477	660	472	17		565
TTKZ80	80 kVA	400 V	230 V	1022	740	1477	660	472	17		636
TTKZ100	100 kVA	400 V	230 V	1022	740	1477	660	472	17		657



# PTU - SINGLE PHASE ULTRA-ISOLATING TRANSFORMER IP-20

Serie: PTU

- Transformer with high level of galvanic isolation and attenuation of perturbations
- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94
- Parts with risk of electrical contact are not accessible by the user



## Technical characteristics

Isolation	Class B - 130° C
Attenuation at 10 kHz	Series PTU1P: 65 dB Series PTU3P: 80 dB
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94, up to 2500 VA (PTU1P) Metal enclosure, epoxy polyester painted, as from 3150 VA (PTU1P)
Frequency	50-60 Hz
Protection degree	IP-20
Includes	PTU1P: with 1 electrostatic screen and LED indicator PTU3P: with 3 electrostatic screens and LED indicator
Normas	IEC/EN/UNE-EN 61558, CE
Protection	Class I and Class II (selectable) up to 2500 VA (PTU1P) Class I as from 3150 VA (PTU1P)
Test voltage	4 kV (1 min, 50 Hz)

## Products and dimensions

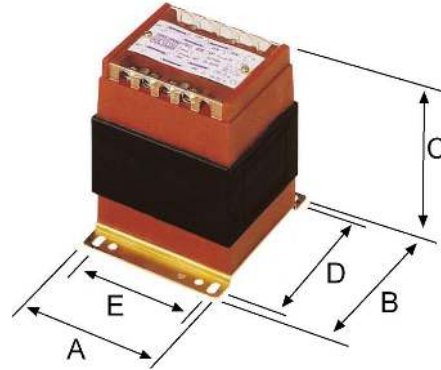
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			Ø
PTU1P25	25 VA	230 V	230 V	69	92	80	79	45	5	1	0.64
PTU1P40	40 VA	230 V	230 V	69	92	80	79	45	5	1	0.79
PTU1P63	63 VA	230 V	230 V	84	101	98	88	55	5	1	1.1
PTU1P100	100 VA	230 V	230 V	84	101	98	88	55	5	1	1.6
PTU1P160	160 VA	230 V	230 V	106	123	118	110	74	5	1	2.3
PTU1P200	200 VA	230 V	230 V	106	123	118	110	74	5	1	2.7
PTU1P250	250 VA	230 V	230 V	106	123	118	110	74	5	1	3.3
PTU1P315	315 VA	230 V	230 V	118	138	131	121	88	6	1	4.1
PTU1P400	400 VA	230 V	230 V	118	138	131	121	88	6	1	4.9
PTU1P500	500 VA	230 V	230 V	136	162	156	145	104	6	1	5.8
PTU1P630	630 VA	230 V	230 V	136	162	156	145	104	6	1	6.8
PTU1P800	800 VA	230 V	230 V	136	162	156	145	104	6	1	8.6
PTU1P1000	1000 VA	230 V	230 V	136	162	180	145	104	6	1	10
PTU1P1250	1250 VA	230 V	230 V	199	220	242	188	175	7	2	19.3
PTU1P1600	1600 VA	230 V	230 V	199	220	242	188	175	7	2	23.6
PTU1P2000	2000 VA	230 V	230 V	199	220	282	188	175	7	2	30.3
PTU1P2500	2500 VA	230 V	230 V	199	220	282	188	175	7	2	33
PTU1P3150	3150 VA	230 V	230 V	247	260	349	233	223	7	3	39.9
PTU1P4000	4000 VA	230 V	230 V	247	260	349	233	223	7	3	50
PTU3P25	25 VA	230 V	230 V	69	92	80	79	45	5	1	0.79
PTU3P40	40 VA	230 V	230 V	84	101	98	88	55	5	1	1.1
PTU3P63	63 VA	230 V	230 V	84	101	98	88	55	5	1	1.6
PTU3P100	100 VA	230 V	230 V	106	123	118	110	74	5	1	2.3
PTU3P160	160 VA	230 V	230 V	106	123	118	110	74	5	1	2.7
PTU3P200	200 VA	230 V	230 V	106	123	118	110	74	5	1	3.3
PTU3P250	250 VA	230 V	230 V	118	138	131	121	88	6	1	4.1
PTU3P315	315 VA	230 V	230 V	118	138	131	121	88	6	1	4.9
PTU3P400	400 VA	230 V	230 V	136	162	156	145	104	6	1	5.8
PTU3P500	500 VA	230 V	230 V	136	162	156	145	104	6	1	6.8
PTU3P630	630 VA	230 V	230 V	136	162	156	145	104	6	1	8.6
PTU3P800	800 VA	230 V	230 V	136	162	180	145	104	6	1	10
PTU3P1000	1000 VA	230 V	230 V	199	220	242	188	175	7	2	19.3
PTU3P1250	1250 VA	230 V	230 V	199	220	242	188	175	7	2	23.6
PTU3P1600	1600 VA	230 V	230 V	199	220	282	188	175	7	2	30.3
PTU3P2000	2000 VA	230 V	230 V	199	220	282	188	175	7	2	33
PTU3P2500	2500 VA	230 V	230 V	247	260	349	233	223	7	3	39.9
PTU3P3150	3150 VA	230 V	230 V	247	260	349	233	223	7	3	50
PTU3P4000	4000 VA	230 V	230 V	247	260	349	233	223	7	3	60.1

# TU - SINGLE PHASE CAST RESIN ULTRA-ISOLATING TRANSFORMER

Serie: TU



- Transformer with high level of galvanic isolation and attenuation of perturbations
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



## Technical characteristics

Isolation	Class B - 130° C
Attenuation at 10 kHz	Series TU1P: 65 dB Series TU3P: 80 dB
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Includes	TU1P: with 1 electrostatic screen TU3P: with 3 electrostatic screen
Standards	IEC/EN/UNE-EN 61558, CE
Test voltage	4 kV (1 min, 50 Hz)

## Products and dimensions

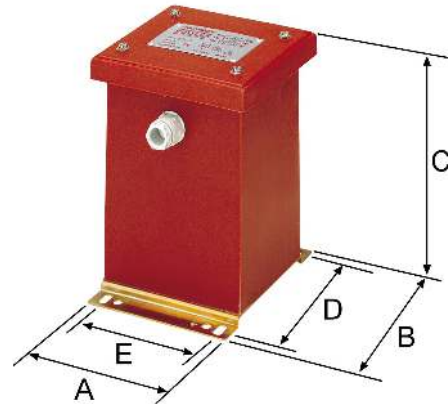
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TU1P200	200 VA	230 V	230 V	96	112	106	96	77	6		3.2
TU1P315	315 VA	230 V	230 V	108	122	125	106	89	6		4.7
TU1P500	500 VA	230 V	230 V	126	145	147	125	102	7		7.1
TU1P630	630 VA	230 V	230 V	126	148	167	125	102	7		9.1
TU1P1000	1000 VA	230 V	230 V	150	165	180	145	125	7		13.3
TU1P1600	1600 VA	230 V	230 V	150	165	210	145	125	7		16.9
TU1P2000	2000 VA	230 V	230 V	195	198	228	178	173	7		25.3
TU1P2500	2500 VA	230 V	230 V	195	198	148	178	173	7		30.5
TU1P3150	3150 VA	230 V	230 V	195	198	268	178	173	7		35.8
TU1P4000	4000 VA	230 V	230 V	240	235	285	212	218	7		47.7
TU3P200	200 VA	230 V	230 V	96	112	116	96	77	6		3.7
TU3P315	315 VA	230 V	230 V	108	122	135	106	89	6		5.4
TU3P500	500 VA	230 V	230 V	126	145	167	125	102	7		9.1
TU3P630	630 VA	230 V	230 V	126	145	177	125	102	7		10.3
TU3P1000	1000 VA	230 V	230 V	150	165	190	145	125	7		14.8
TU3P1600	1600 VA	230 V	230 V	195	198	228	178	173	7		25.3
TU3P2000	2000 VA	230 V	230 V	195	198	248	178	173	7		30.5
TU3P2500	2500 VA	230 V	230 V	195	198	268	178	173	7		35.8
TU3P3150	3150 VA	230 V	230 V	240	235	280	212	218	7		47.7
TU3P4000	4000 VA	230 V	230 V	240	235	300	212	218	7		55

## IP - SINGLE PHASE CAST RESIN TRANSFORMER IP-54

Serie: IP



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



### Technical characteristics

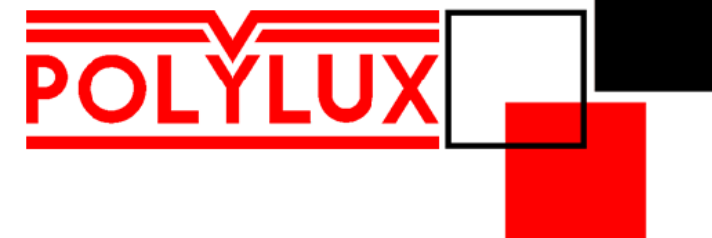
Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Completely cast resin
Frequency	50-60 Hz
Protection degree	IP-54
Standards	IEC/EN/UNE-EN 61558 CE
Voltage selection	By metal bridges, included
Test voltage	4,6 kV (1 min, 50 Hz) between primary and secondary 3,2 kV (1 min, 50 Hz) between primary and earth 2,5 kV (1 min, 50 Hz) between secondary and earth

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
IPB100	100 VA	230/400 V	12/24 V	126	145	170	125	102	7		5.6
IPB200	200 VA	230/400/460 V	12/24 V	150	165	190	145	125	7		7.3
IPB315	315 VA	230/400/460 V	12/24 V	150	165	210	145	125	7		9.2
IPB500	500 VA	230/400/460 V	12/24 V	195	198	220	178	173	7		11.9
IPB630	630 VA	230/400/460 V	12/24 V	195	198	260	178	173	7		19.1
IPB1000	1000 VA	230/400/460 V	12/24 V	240	235	260	212	218	7		30.3
IPB1600	1600 VA	230/400/460 V	12/24 V	260	272	310	250	238	7		47.3
IPB2000	2000 VA	230/400/460 V	12/24 V	260	272	330	250	238	7		53
IPD100	100 VA	230/400 V	115/230 V	126	145	170	125	102	7		5.6
IPD200	200 VA	230/400/460 V	115/230 V	150	165	190	145	125	7		7.3
IPD315	315 VA	230/400/460 V	115/230 V	150	165	210	145	125	7		9.2
IPD500	500 VA	230/400/460 V	115/230 V	195	198	220	178	173	7		11.9
IPD630	630 VA	230/400/460 V	115/230 V	195	198	260	178	173	7		19.1
IPD1000	1000 VA	230/400/460 V	115/230 V	240	235	260	212	218	7		30.3
IPD1600	1600 VA	230/400/460 V	115/230 V	260	272	310	250	238	7		41.9
IPD2000	2000 VA	230/400/460 V	115/230 V	260	272	330	250	238	7		49.2

# WEB CATALOGUE

ISOLATING ECO  
TRANSFORMERS

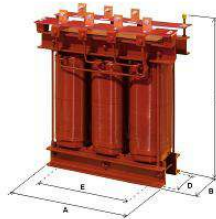


# TTGX - THREE PHASE ISOLATING ECO TRANSFORMER IP-00

Serie: TTGX



- The ECO transformer features high efficiency resulting in much lower losses than a standard transformer, resulting in an important reduction of the exploitation costs
- The ECO transformer additionally offers important technical advantages:
  - Lower heat generation, reducing necessary cooling provisions in the area of installation
  - Longer lifetime thanks to reduction of thermal load on the isolation materials
  - Lower voltage drop, avoiding fluctuation in the output voltage
  - Suitable for higher ambient temperatures
  - Lower inrush current, avoiding tripping of devices at the moment of connection
  - Lower noise levels



## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTGX10	10 kVA	400 V	400 V+ N	360	164	353	136	300	11		73
TTGX12.5	12.5 kVA	400 V	400 V+ N	420	170	419	142	350	11		90
TTGX16	16 kVA	400 V	400 V+ N	420	190	419	162	350	11		113
TTGX20	20 kVA	400 V	400 V+ N	480	250	480	144	400	11		152
TTGX25	25 kVA	400 V	400 V+ N	480	270	480	164	400	11		166
TTGX31.5	31.5 kVA	400 V	400 V+ N	480	290	480	184	400	11		198
TTGX40	40 kVA	400 V	400 V+ N	480	310	480	204	400	11		212
TTGX50	50 kVA	400 V	400 V+ N	670	290	580	150	599	13		258
TTGX63	63 kVA	400 V	400 V+ N	670	330	580	190	599	13		330
TTGX80	80 kVA	400 V	400 V+ N	725	550	880	460	472	17		403
TTGX125	125 kVA	400 V	400 V+ N	725	550	880	460	472	17		498
TTGX160	160 kVA	400 V	400 V+ N	725	550	880	460	472	17		534
TTGX200	200 kVA	400 V	400 V+ N	1016	550	1080	460	677	17		745
TTGX250	250 kVA	400 V	400 V+ N	1016	550	1080	460	677	17		859
TTGX315	315 kVA	400 V	400 V+ N	1070	550	1220	460	690	17		1001
TTGX400	400 kVA	400 V	400 V+ N	1070	550	1220	460	690	17		1096

## Technical characteristics

Isolation	Class F - 155°C up to 63 kVA Class H - 180°C as from 80 kVA
Winding	Class HC - 200°C
Temperature class	B
Inrush current	< 8 I <sub>n</sub>
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	Yyn0
Includes	Lifting eyebolts
Temperature rise	< 65 °C
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Voltage drop <2%
Cooling	AN
Ambient temperature	45°C
Test voltage	3 kV (1 min, 50 Hz)

# TTGW - THREE PHASE ISOLATING ECO TRANSFORMER IP-23

Serie: TTGW



- The ECO transformer features high efficiency resulting in much lower losses than a standard transformer, resulting in an important reduction of the exploitation costs
- The ECO transformer additionally offers important technical advantages:
  - Lower heat generation, reducing necessary cooling provisions in the area of installation
  - Longer lifetime thanks to reduction of thermal load on the isolation materials
  - Lower voltage drop, avoiding fluctuation in the output voltage
  - Suitable for higher ambient temperatures
  - Lower inrush current, avoiding tripping of devices at the moment of connection
  - Lower noise levels



## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTGW10	10 kVA	400 V	400 V+ N	454	340	575	300	300	12		79
TTGW12.5	12.5 kVA	400 V	400 V+ N	525	395	640	355	350	12		102
TTGW16	16 kVA	400 V	400 V+ N	525	395	640	355	350	12		125
TTGW20	20 kVA	400 V	400 V+ N	595	395	708	355	350	12		164
TTGW25	25 kVA	400 V	400 V+ N	595	395	708	355	350	12		178
TTGW31.5	31.5 kVA	400 V	400 V+ N	595	395	708	355	350	12		210
TTGW40	40 kVA	400 V	400 V+ N	595	395	708	355	350	12		224
TTGW50	50 kVA	400 V	400 V+ N	789	490	1021	450	426	13		283
TTGW63	63 kVA	400 V	400 V+ N	789	490	1021	450	426	13		355
TTGW80	80 kVA	400 V	400 V+ N	964	684	1252	604	472	18		455
TTGW100	100 kVA	400 V	400 V+ N	964	684	1252	604	472	18		496
TTGW125	125 kVA	400 V	400 V+ N	964	684	1252	604	472	18		550
TTGW160	160 kVA	400 V	400 V+ N	964	684	1252	604	472	18		586
TTGW200	200 kVA	400 V	400 V+ N	1192	744	1430	664	677	18		810
TTGW250	250 kVA	400 V	400 V+ N	1192	744	1430	664	677	18		924
TTGW315	315 kVA	400 V	400 V+ N	1195	784	1579	704	690	18		1094
TTGW400	400 kVA	400 V	400 V+ N	1195	784	1579	704	690	18		1189

## Technical characteristics

Isolation	Class F - 155°C up to 63 kVA Class H - 180°C as from 80 kVA
Winding	Class HC - 200°C
Temperature class	B
Inrush current	< 8 În
Enclosure	Metal, epoxy polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-23
Connection group	Yyn0
Includes	Lifting eyebolts as from 50 kVA
Temperature rise	< 65 °C
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Voltage drop <2%
Cooling	ANAN
Ambient temperature	45°C
Test voltage	3 kV (1 min, 50 Hz)

RUE060 wheels from TTGW20 to TTGW63  
 Set of wheels (optional) RUE125 wheels from TTGW80 to TTGW400  
[Link to wheels prices](#)

## TTGZ - THREE PHASE ISOLATING ECO TRANSFORMER IP-54/IP-65

Serie: TTGZ



- The ECO transformer features high efficiency resulting in much lower losses than a standard transformer, resulting in an important reduction of the exploitation costs
- The ECO transformer additionally offers important technical advantages:
  - Lower heat generation, reducing necessary cooling provisions in the area of installation
  - Longer lifetime thanks to reduction of thermal load on the isolation materials
  - Lower voltage drop, avoiding fluctuation in the output voltage
  - Suitable for higher ambient temperatures
  - Lower inrush current, avoiding tripping of devices at the moment of connection
  - Lower noise levels



### Technical characteristics

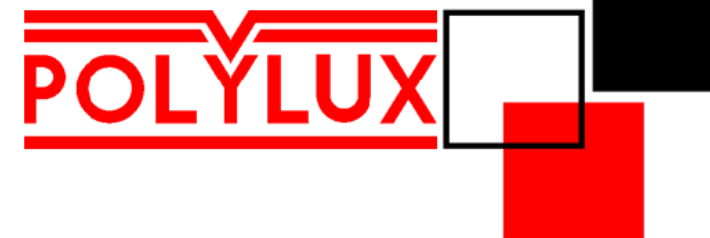
Isolation	Class F - 155°C up to 50 kVA Class H - 180°C as from 63 kVA
Winding	Class HC - 200°C
Temperature class	B
Inrush current	< 8 I <sub>n</sub>
Enclosure	Metal, resin polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-54/IP-65
	- Corrosion protective paint system in accordance with ISO 12994-2 category C4 - For locations <500m from the coast, category C5 to be used (price to be consulted)
Connection group	Yyn0
Includes	Lifting eyebolts
Temperature rise	< 65 °C
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Voltage drop <2%
Cooling	ANAN
Ambient temperature	45°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTGZ10	10 kVA	400 V	400 V+ N	738	417	824	370	350	11		130
TTGZ12.5	12.5 kVA	400 V	400 V+ N	738	417	824	370	350	11		153
TTGZ16	16 kVA	400 V	400 V+ N	738	417	824	370	350	11		192
TTGZ20	20 kVA	400 V	400 V+ N	738	417	824	370	350	11		206
TTGZ25	25 kVA	400 V	400 V+ N	738	417	824	370	350	11		238
TTGZ31.5	31.5 kVA	400 V	400 V+ N	738	417	824	370	350	11		252
TTGZ40	40 kVA	400 V	400 V+ N	939	568	1149	520	426	13		323
TTGZ50	50 kVA	400 V	400 V+ N	939	568	1149	520	426	13		395
TTGZ63	63 kVA	400 V	400 V + N	1022	740	1477	660	472	17		532
TTGZ80	80 kVA	400 V	400 V + N	1022	740	1477	660	472	17		573
TTGZ100	100 kVA	400 V	400 V + N	1022	740	1477	660	472	17		627
TTGZ125	125 kVA	400 V	400 V + N	1022	740	1477	660	472	17		663
TTGZ160	160 kVA	400 V	400 V + N	1352	810	1617	730	677	17		913
TTGZ200	200 kVA	400 V	400 V + N	1352	810	1617	730	677	17		1027
TTGZ250	250 kVA	400 V	400 V + N	1442	870	1757	810	690	17		1187
TTGZ315	315 kVA	400 V	400 V + N	1442	870	1757	810	690	17		1282

# WEB CATALOGUE

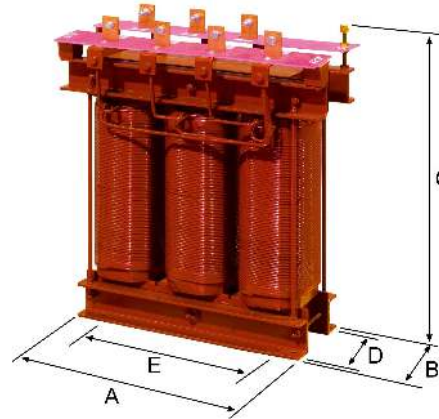
ISOLATING K FACTOR  
TRANSFORMERS





# TTFKX - THREE PHASE ISOLATING TRANSFORMER FOR NETWORKS WITH HARMONIC DISTORTION IP-00

Serie: TTFKX



- Three phase k 13 / k 20 transformer
- For installations with an elevated level of harmonics

## Technical characteristics

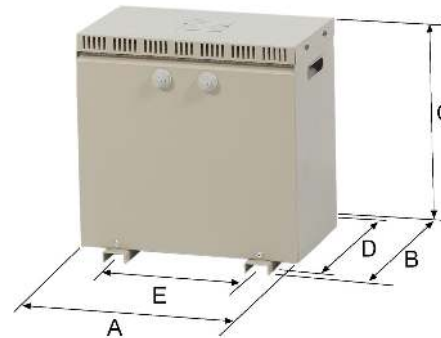
Isolation	Class H - 180°C
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	Dyn11
Includes	Lifting eyebolts
Maximum admissible THD-I	60 %
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Neutral sized for 2 x In
Cooling	AN
Ambient temperature	40°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTFKX10	10 kVA	400 V	400 V + N	420	190	419	162	350	11		88
TTFKX12.5	12,5 kVA	400 V	400 V + N	480	250	480	144	400	11		96
TTFKX16	16 kVA	400 V	400 V + N	480	260	480	154	400	11		109
TTFKX20	20 kVA	400 V	400 V + N	480	270	480	164	400	11		120
TTFKX25	25 kVA	400 V	400 V + N	480	310	480	204	400	11		159
TTFKX31.5	31,5 kVA	400 V	400 V + N	670	290	580	150	599	13		182
TTFKX40	40 kVA	400 V	400 V + N	670	310	580	170	599	13		221
TTFKX50	50 kVA	400 V	400 V + N	670	330	580	190	599	13		254
TTFKX63	63 kVA	400 V	400 V + N	725	550	880	460	472	17		347
TTFKX80	80 kVA	400 V	400 V + N	725	550	880	460	472	17		405
TTFKX100	100 kVA	400 V	400 V + N	725	550	880	460	472	17		441
TTFKX125	125 kVA	400 V	400 V + N	725	550	880	460	472	17		544
TTFKX160	160 kVA	400 V	400 V + N	1016	550	1080	460	677	17		688
TTFKX200	200 kVA	400 V	400 V + N	1016	550	1080	460	677	17		758
TTFKX250	250 kVA	400 V	400 V + N	1070	550	1220	460	690	17		966
TTFKX 315	315 kVA	400 V	400 V	1070	550	1220	460	690	17		1176
TTFKX400	400 kVA	400 V	400 V	1300	550	1350	460	800	17		1801
TTFKX500	500 kVA	400 V	400 V	1300	550	1350	460	800	17		2198
TTFK2X10	10 kVA	400 V	400 V	480	250	480	144	400	11		96
TTFK2X12.5	12.5 kVA	400 V	400 V	480	260	480	154	400	11		109
TTFK2X16	16 kVA	400 V	400 V	480	270	480	164	400	11		120
TTFK2X20	20 kVA	400 V	400 V	480	310	480	204	400	11		159
TTFK2X25	25 kVA	400 V	400 V	670	290	580	150	599	13		182
TTFK2X31.5	31.5 kVA	400 V	400 V	670	310	580	170	599	13		221
TTFK2X40	40 kVA	400 V	400 V	670	330	580	190	599	13		254
TTFK2X50	50 kVA	400 V	400 V	725	550	880	460	472	17		347
TTFK2X63	63 kVA	400 V	400 V	725	550	880	460	472	17		405
TTFK2X80	80 kVA	400 V	400 V	725	550	880	460	472	17		441
TTFK2X100	100 kVA	400 V	400 V	725	550	880	460	472	17		544
TTFK2X125	125 kVA	400 V	400 V	1016	550	1080	460	677	17		688
TTFK2X160	160 kVA	400 V	400 V	1016	550	1080	460	677	17		758
TTFK2X200	200 kVA	400 V	400 V	1070	550	1220	460	690	17		966
TTFK2X250	250 kVA	400 V	400 V	1070	550	1220	460	690	17		1176
TTFK2X315	315 kVA	400 V	400 V	1300	550	1350	460	800	17		1801
TTFK2X400	400 kVA	400 V	400 V	1300	550	1350	460	800	17		2198

## TTFKW - THREE PHASE ISOLATING TRANSFORMER FOR NETWORKS WITH HARMONIC DISTORTION IP-23

Serie: TTFKW



- Three phase k 13 / k 20 transformer
- For installations with an elevated level of harmonics

### Technical characteristics

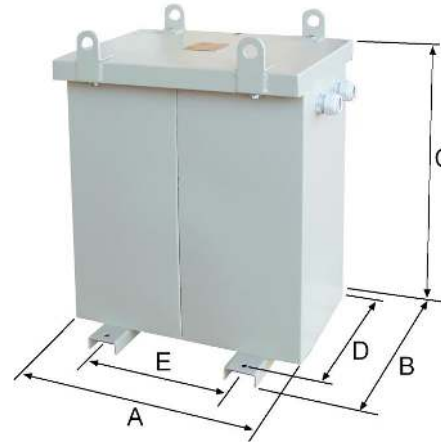
Isolation	Class H - 180°C
Winding	Class HC - 200°C
Enclosure	Metal, epoxy polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-23
Connection group	Dyn11
Includes	Lifting eyebolts as from 31.5 kVA
Maximum admissible THD-I	60 %
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Neutral sized for 2 x In
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)
Set of wheels (optional)	RUE060 wheels from TTFKW12.5 to TTKW50 or from TTFK2W10 to TTFK2W40 RUE125 wheels from TTFKW63 to TTKW315 or from TTFK2W50 to TTFK2W250 <a href="#">Link to wheels prices</a>

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
TTFKW10	10 kVA	400 V	400 V + N	525	395	640	355	350	12	100
TTFKW12.5	12,5 kVA	400 V	400 V + N	595	395	708	355	350	12	108
TTFKW16	16 kVA	400 V	400 V + N	595	395	708	355	350	12	121
TTFKW20	20 kVA	400 V	400 V + N	595	395	708	355	350	12	132
TTFKW25	25 kVA	400 V	400 V + N	595	395	708	355	350	12	171
TTFKW31.5	31,5 kVA	400 V	400 V + N	789	490	965	450	426	13	207
TTFKW40	40 kVA	400 V	400 V + N	789	490	965	450	426	13	246
TTFKW50	50 kVA	400 V	400 V + N	789	490	965	450	426	13	279
TTFKW63	63 kVA	400 V	400 V + N	964	684	1252	604	472	18	399
TTFKW80	80 kVA	400 V	400 V + N	964	684	1252	604	472	18	457
TTFKW100	100 kVA	400 V	400 V + N	964	684	1252	604	472	18	493
TTFKW125	125 kVA	400 V	400 V + N	964	684	1252	604	472	18	596
TTFKW160	160 kVA	400 V	400 V + N	1192	744	1430	664	677	18	753
TTFKW200	200 kVA	400 V	400 V + N	1192	744	1430	664	677	18	823
TTFKW250	250 kVA	400 V	400 V + N	1195	784	1579	704	690	18	1059
TTFKW315	315 kVA	400 V	400 V	1195	784	1579	704	690	18	1269
TTFKW400	400 kVA	400 V	400 V	1554	864	1794	784	800	18	1921
TTFKW500	500 kVA	400 V	400 V	1554	864	1794	784	800	18	2318
TTFK2W10	10 kVA	400 V	400 V	595	395	708	355	350	12	108
TTFK2W12.5	12.5 kVA	400 V	400 V	595	395	708	355	350	12	121
TTFK2W16	16 kVA	400 V	400 V	595	395	708	355	350	12	132
TTFK2W20	20 kVA	400 V	400 V	595	395	708	355	350	12	171
TTFK2W25	25 kVA	400 V	400 V	789	490	965	450	426	13	207
TTFK2W31.5	31.5 kVA	400 V	400 V	789	490	965	450	426	13	246
TTFK2W40	40 kVA	400 V	400 V	789	490	965	450	426	13	279
TTFK2W50	50 kVA	400 V	400 V	964	684	1252	604	472	18	399
TTFK2W63	63 kVA	400 V	400 V	964	684	1252	604	472	18	457
TTFK2W80	80 kVA	400 V	400 V	964	684	1252	604	472	18	493
TTFK2W100	100 kVA	400 V	400 V	964	684	1252	604	472	18	596
TTFK2W125	125 kVA	400 V	400 V	1192	744	1430	664	677	18	753
TTFK2W160	160 kVA	400 V	400 V	1192	744	1430	664	677	18	823
TTFK2W200	200 kVA	400 V	400 V	1195	784	1579	704	690	18	1059
TTFK2W250	250 kVA	400 V	400 V	1195	784	1579	704	690	18	1269
TTFK2W315	315 kVA	400 V	400 V	1554	864	1794	784	800	18	1921
TTFK2W400	400 kVA	400 V	400 V	1554	864	1794	784	800	18	2318

# TTFKZ - THREE PHASE ISOLATING TRANSFORMER FOR NETWORKS WITH HARMONIC DISTORTION IP-54/IP-65

Serie: TTFKZ



- For installations with an elevated level of harmonics
- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts

## Technical characteristics

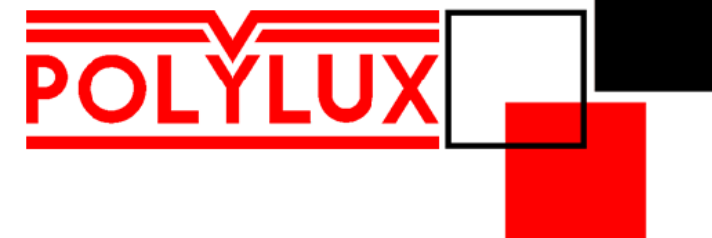
Isolation	Class H - 180°C
Winding	Class HC - 200°C
Enclosure	Metal, resin polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-54/IP-65
	- Corrosion protective paint system in accordance with ISO 12994-2 category C4
	- For locations <500m from the coast, category C5 to be used (price to be consulted)
Connection group	Dyn11
Includes	Lifting eyebolts, cable glands and silent-blocks
Maximum admissible THD-I	60 %
Standards	IEC/EN/UNE-EN 60076 CE
Remarks	Neutral sized for 2 x In
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
TTFKZ10	10 kVA	400 V	400 V + N	738	417	824	370	350	11	136
TTFKZ12.5	12,5 kVA	400 V	400 V + N	738	417	824	370	350	11	149
TTFKZ16	16 kVA	400 V	400 V + N	738	417	824	370	350	11	160
TTFKZ20	20 kVA	400 V	400 V	738	417	824	370	350	11	199
TTFKZ20	20 kVA	400 V	400 V	738	417	824	370	350	11	199
TTFKZ25	25 kVA	400 V	400 V	939	568	1149	520	426	13	247
TTFKZ31.5	31,5 kVA	400 V	400 V	939	568	1149	520	426	13	286
TTFKZ40	40 kVA	400 V	400 V	939	568	1149	520	426	13	319
TTFKZ50	50 kVA	400 V	400 V	1022	740	1477	660	472	17	476
TTFKZ63	63 kVA	400 V	400 V	1022	740	1477	660	472	17	534
TTFKZ80	80 kVA	400 V	400 V	1022	740	1477	660	472	17	570
TTFKZ100	100 kVA	400 V	400 V + N	1022	740	1477	660	472	17	673
TTFKZ125	125 kVA	400 V	400 V	1352	810	1617	730	677	17	856
TTFKZ160	160 kVA	400 V	400 V	1352	810	1617	730	677	17	926
TTFKZ200	200 kVA	400 V	400 V	1442	870	1757	810	690	17	1152
TTFKZ250	250 kVA	400 V	400 V	1442	870	1757	810	690	17	1362
TTFKZ315	315 kVA	400 V	400 V	1642	870	1757	810	800	17	2001
TTFKZ400	400 kVA	400 V	400 V	1642	870	1757	810	800	17	2398
TTFKZ2Z10	10 kVA	400 V	400 V	738	417	824	370	350	11	149
TTFKZ2Z12.5	12.5 kVA	400 V	400 V	738	417	824	370	350	11	160
TTFKZ2Z16	16 kVA	400 V	400 V	738	417	824	370	350	11	199
TTFKZ2Z20	20 kVA	400 V	400 V	939	568	1149	520	426	13	247
TTFKZ2Z25	25 kVA	400 V	400 V	939	568	1149	520	426	13	286
TTFKZ2Z31.5	31.5 kVA	400 V	400 V	939	568	1149	520	426	13	319
TTFKZ2Z40	40 kVA	400 V	400 V	1022	740	1477	660	472	17	476
TTFKZ2Z50	50 kVA	400 V	400 V	1022	740	1477	660	472	17	534
TTFKZ2Z63	63 kVA	400 V	400 V	1022	740	1477	660	472	17	570
TTFKZ2Z80	80 kVA	400 V	400 V	1022	740	1477	660	472	17	673
TTFKZ2Z100	100 kVA	400 V	400 V	1352	810	1617	730	677	17	856
TTFKZ2Z125	125 kVA	400 V	400 V	1352	810	1617	730	677	17	926
TTFKZ2Z160	160 kVA	400 V	400 V	1442	870	1757	810	690	17	1152
TTFKZ2Z200	200 kVA	400 V	400 V	1442	870	1757	810	690	17	1362
TTFKZ2Z250	250 kVA	400 V	400 V	1642	870	1757	810	800	17	2001
TTFKZ2Z315	315 kVA	400 V	400 V	1642	870	1757	810	800	17	2398

# WEB CATALOGUE

## MEDICAL ISOLATING TRANSFORMERS

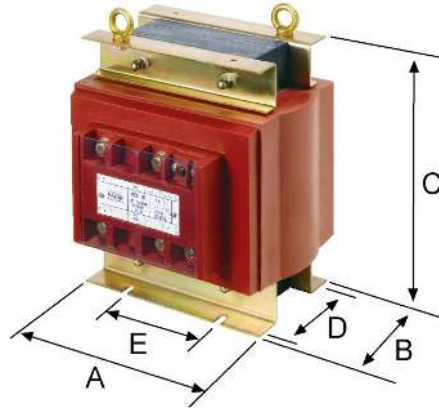


## TH - SINGLE PHASE CAST RESIN MEDICAL ISOLATION TRANSFORMER (EN 61558-2-15)

Serie: TH



- [Link to accessories for medical isolating transformers](#)
- With certificate according to the Standards IEC/EN 61558-2-15
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA cover-earth
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection LED indicator
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Test voltage	3,5 kV (1 min, 50 Hz)

### Products and dimensions

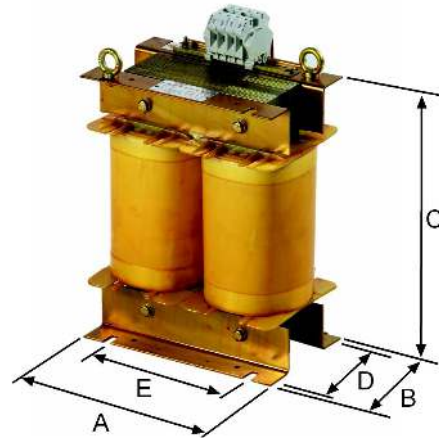
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TH1000	1000 VA	230 V	230 V	190	180	205	115	160	9		21.7
TH2000	2000 VA	230 V	230 V	240	180	255	106	210	9		31.8
TH3150	3150 VA	230 V	230 V	240	230	255	126	210	9		40.2
TH4000	4000 VA	230 V	230 V	240	235	255	136	210	9		43.6
TH5000	5000 VA	230 V	230 V	290	230	305	116	260	11		56
TH6300	6300 VA	230 V	230 V	290	240	305	136	260	11		65
TH8000	8000 VA	230 V	230 V	340	290	355	142	310	11		85
TH10000	10000 VA	230 V	230 V	340	310	355	162	310	11		99

## THX - SINGLE PHASE MEDICAL ISOLATION TRANSFORMER (EN 61558-2-15) IP-00

Serie: THX



- [Link to accessories for medical isolating transformers](#)
- Low inrush current
- Low leakage current
- Manufactured according to our ECO standards, meaning high efficiency/low losses



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA secondary-enclosure
Frequency	50-60 Hz
Protection	IP-00
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Cooling	AN
Test voltage	3,5 kV (1 min, 50 Hz)

### Products and dimensions

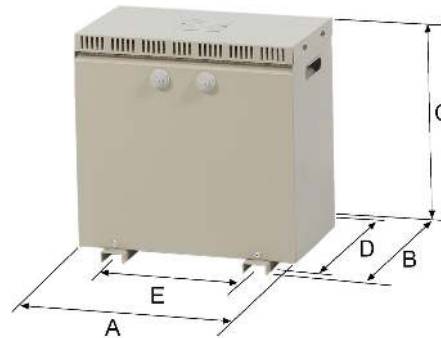
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
THX1000	1000 VA	230 V	230 V	160	128	253	100	140	9		13.9
THX2000	2000 VA	230 V	230 V	200	134	303	106	170	9		24.5
THX3150	3150 VA	230 V	230 V	200	154	303	126	170	9		30
THX4000	4000 VA	230 V	230 V	200	164	303	136	170	9		34
THX5000	5000 VA	230 V	230 V	240	164	353	136	200	11		38.7
THX6300	6300 VA	230 V	230 V	240	194	353	166	200	11		51
THX8000	8000 VA	230 V	230 V	280	190	419	162	240	11		61
THX10000	10000 VA	230 V	230 V	280	190	419	162	240	11		69

# THW - SINGLE PHASE MEDICAL ISOLATION TRANSFORMER (EN 61558-2-15) IP-23

Serie: THW



- [Link to accessories for medical isolating transformers](#)
- Low inrush current
- Low leakage current
- Manufactured according to our ECO standards, meaning high efficiency/low losses



## Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA secondary-enclosure
Enclosure	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Cooling	ANAN
Test voltage	3,5 kV (1 min, 50 Hz)

## Products and dimensions

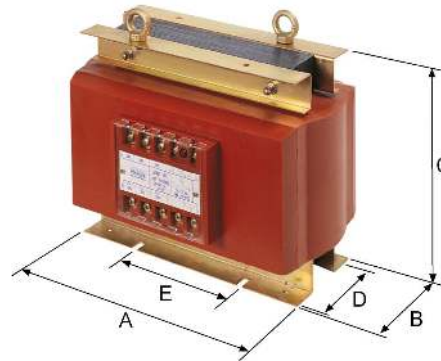
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
THW1000	1000 VA	230 V	230 V (115-0-115V)	314	230	315	205	200	6		17.9
THW2000	2000 VA	230 V	230 V (115-0-115V)	384	260	383	245	350	6		28.5
THW3150	3150 VA	230 V	230 V (115-0-115V)	384	260	383	245	350	6		34.7
THW4000	4000 VA	230 V	230 V (115-0-115V)	384	260	383	245	350	6		38.3
THW5000	5000 VA	230 V	230 V (115-0-115V)	400	430	535	390	180	12		44.6
THW6300	6300 VA	230 V	230 V (115-0-115V)	400	430	535	390	180	12		55
THW8000	8000 VA	230 V	230 V (115-0-115V)	400	430	535	390	180	12		65
THW10000	10000 VA	230 V	230 V (115-0-115V)	400	430	535	390	180	12		74

## TTH - THREE PHASE CAST RESIN MEDICAL ISOLATION TRANSFORMER (IEC/EN 61558-2-15)

Serie: TTH



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA cover-earth
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Connection group	YNyn0
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection LED indicator
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Test voltage	4,5 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
TTH1	1 kVA	400 V + N	230 V + N	280	138	205	80	250	9	24.4
TTH2	2 kVA	400 V + N	230 V + N	280	158	205	100	250	9	31.1
TTH3.15	31,5 kVA	400 V + N	230 V + N	340	150	255	96	310	9	42.3
TTH4	4 kVA	400 V + N	230 V + N	340	160	255	106	310	9	46.8
TTH5	5 kVA	400 V + N	230 V + N	340	200	255	126	310	9	59
TTH6.3	6,3 kVA	400 V + N	230 V + N	340	205	255	136	310	9	65
TTH8	8 kVA	400 V + N	230 V + N	410	195	305	116	380	11	81
TTH10	10 kVA	400 V + N	230 V + N	410	240	305	136	380	11	99

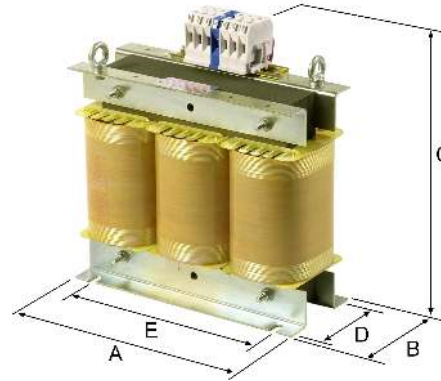


# TTHX - THREE PHASE MEDICAL ISOLATION TRANSFORMER (IEC/EN 61558-2-15) IP-00

Serie: TTHX



- [Link to accessories for medical isolating transformers](#)
- Low inrush current
- Low leakage current
- Manufactured according to our ECO standards, meaning high efficiency/low losses



## Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA cover-earth
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	YNyn0
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Test voltage	4,5 kV (1 min, 50 Hz)

## Products and dimensions

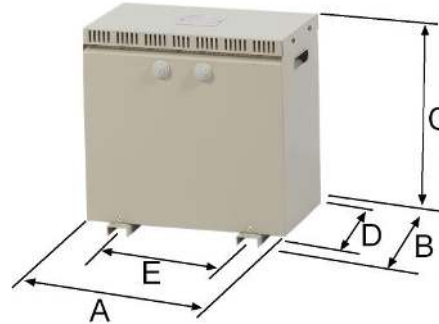
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTHX1	1 kVA	400 V + N	230 V + N	240	108	253	80	200	9		16
TTHX2	2 kVA	400 V + N	230 V + N	240	128	253	100	200	9		22
TTHX3.15	3.15 kVA	400 V + N	230 V + N	300	124	303	96	250	9		27.5
TTHX4	4 kVA	400 V + N	230 V + N	300	134	303	106	250	9		29.5
TTHX5	5 kVA	400 V + N	230 V + N	300	154	303	126	250	9		47.9
TTHX6.3	6.3 kVA	400 V + N	230 V + N	300	164	303	136	250	9		52
TTHX8	8 kVA	400 V + N	230 V + N	360	144	353	116	300	11		64
TTHX10	10 kVA	400 V + N	230 V + N	360	164	353	136	300	11		78

## TTHW - THREE PHASE MEDICAL ISOLATION TRANSFORMER (IEC/EN 61558-2-15) IP-23

Serie: TTHW



- [Link to accessories for medical isolating transformers](#)
- Low inrush current
- Low leakage current
- Manufactured according to our ECO standards, meaning high efficiency/low losses



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Inrush current	< 8·In
Leakage current	< 0,5 mA secondary-earth < 3,5 mA cover-earth
Cover	In metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-23
Connection group	YNyn0
Includes	Electrostatic screen between primary and secondary Bimetal thermal protection
Standards	IEC/EN 61558-1 / 61558-2-15 CE
Safety class	Class I
Test voltage	4,5 kV (1 min, 50 Hz)

### Products and dimensions

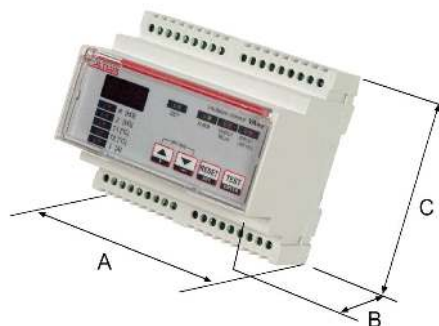
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TTHW1	1 kVA	400 V + N	230 V + N	314	230	315	205	200	6		20.3
TTHW2	2 kVA	400 V + N	230 V + N	314	230	315	205	200	6		28.2
TTHW3.15	3.15 kVA	400 V + N	230 V + N	384	260	383	245	250	6		34.5
TTHW4	4 kVA	400 V + N	230 V + N	384	260	383	245	250	6		36.5
TTHW5	5 kVA	400 V + N	230 V + N	384	260	383	245	250	6		53
TTHW6.3	6.3 kVA	400 V + N	230 V + N	384	260	383	245	250	6		59
TTHW8	8 kVA	400 V + N	230 V + N	454	340	575	300	300	12		71
TTHW10	10 kVA	400 V + N	230 V + N	454	340	575	300	300	12		88

## INSULATION MONITORING RELAY

**Serie:** Insulation Monitoring Relay



- [Link to accessories for medical isolating transformers](#)
- Measuring and insulation level control between secondary, earth and electrostatic screen
- Overload measuring and control
- Overtemperature measuring and control



### Technical characteristics

Power supply	115 to 230 Vac $\pm$ 20 % 50-60 Hz
Energy consumption	5 VA
Net control	24 to 230 Vac 50-60 Hz
Current measuring	< 1 mA
Protection degree	IP-50 Front, IP-20 Rear
Working temperature	From -10°C to 60°C
Humidity	95% Max
Connections	By screws. Max section of 2.5 mm
Display	3 digits. For reading and configuration
Temperature control	Double input for PTC, PT100 and bimetalic contact probes
Mounting	On Din rail 35 mm. Equivalent dimensions to 6 DIN 17,5 mm modules
Optional	RS485 MODBUS-RTU data transmission

### Products and dimensions

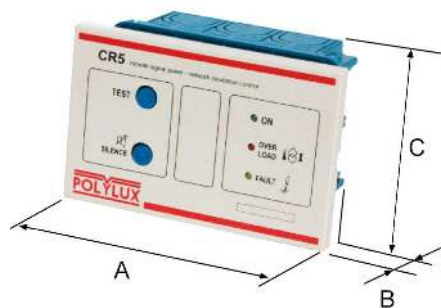
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			Ø
VA40	Insulation Monitoring Relay			105	74	90	0	0	0		0.45

## REPEATER PANEL

**Serie:** Repeater Panel



- Insulation fault monitoring
- Overload fault monitoring
- Overtemperature fault monitoring
- VA40 + TI1 + CR5 set testing
- Any type alarms silenced



### Technical characteristics

Power supply	12-24 Vdc (from the monitoring relay or outside)
Energy consumption	1.5 VA
Protection degree	IP-40 Front / IP-20 Rear
Working temperatures	-10 a 60 °C
Humidity	95% Max
Connections	By screws. Max sections 2.5 mm
Acoustic alarm	2400Hz signal. 2Hz intermittent
Mounting	In flush mounting plastic standard box E503

### Products and dimensions

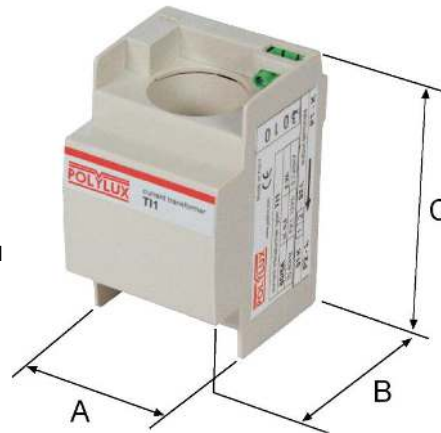
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
CR5	Repeater Panel			123	58	79	0	0	0		0.12

## CURRENT TRANSFORMER

**Serie:** Current Transformer



- Insulation, overload or overtemperature faults monitoring
- POLYLUX offers a set of devices for the single phase and three phase medical locations that need isolated power supplies according to IEC 61558-2-15 standard



### Technical characteristics

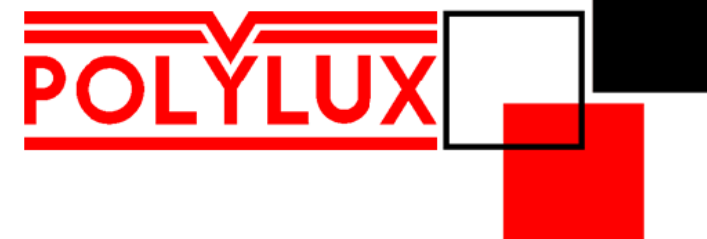
Energy consumption	5 VA
Current measuring	Max input 60 A / Max output 5 A
Permanent overload	1.2 In
Thermal current	40 In, 15 ms
Current rate	60 / 5 A
Protection degree	IP-20
Working temperatures	-25 to 50 °C
Humidity	95 % max
Connections	By screws. Max section 2.5 mm
Mounting	DIN rail 35 mm. Equivalent dimensions to 3 DIN 17.5 mm modules

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TI1	Current Transformer			52	65	85	0	0	0		0.21

# WEB CATALOGUE

PORTABLE SAFETY  
TRANSFORMERS



# TP - SINGLE PHASE CAST RESIN PORTABLE SAFETY TRANSFORMER

Serie: TP



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations
- 160 VA: Portable transformer with 1 output socket
- 250 VA: Portable transformer with 2 output sockets
- 400 and 630 VA: Portable transformer with 4 output sockets



## Technical characteristics

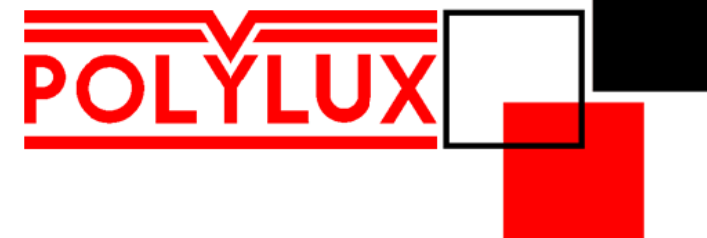
Insulation	Class B - 130° C
Windings	Class HC - 200°C
Class	II - against electrical shocks
Cover	Completely cast resin
Frequency	50-60 Hz
Protection degree	IP-54
Includes	LED indicator, supply cable, output plugs Short circuit protection by temporised primary fuse
Standards	IEC/EN/UNE-EN 61558 CE
Ambient temperature	25°C
Test voltage	3,5 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TPA160	160 VA	230 V	12 V	210	170	160	0	0	0		6.8
TPA250	250 VA	230 V	12 V	215	200	180	0	0	0		10
TPA400	400 VA	230 V	12 V	245	265	235	0	0	0		16.1
TPA630	630 VA	230 V	12 V	245	265	235	0	0	0		20.5
TPB160	160 VA	230 V	24 V	210	170	160	0	0	0		6.8
TPB250	250 VA	230 V	24 V	215	200	180	0	0	0		10
TPB400	400 VA	230 V	24 V	245	265	235	0	0	0		16.1
TPB630	630 VA	230 V	24 V	245	265	235	0	0	0		20.5

# WEB CATALOGUE

SWIMMING POOL  
TRANSFORMERS



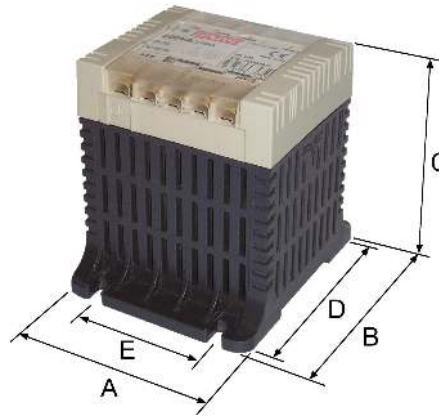


## PIP - SINGLE PHASE SWIMMING POOL TRANSFORMER

Serie: PIP



- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94
- The only transformer that can be set from Class I to Class II
- Power 'ON' indication by LED
- Parts with risk of electrical contact are not accesible by the user
- Output voltage according to distance for 10m, 25m, 40m



### Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Electrostatic screen and taps on primary according to distance between transformer and spotlight
Standards	IEC/EN/UNE-EN 61558 CE
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

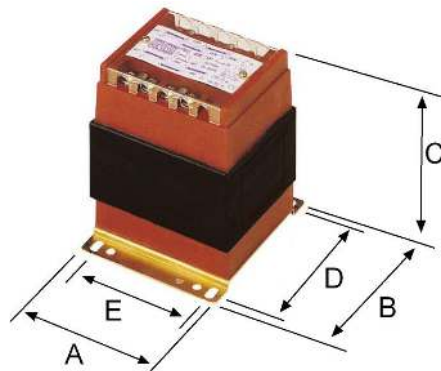
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PIP100	100 VA	230 V	12,5 - 13 - 13,5 V	84	101	98	88	55	5		1.6
PIP300	300 VA	230 V	12,5 - 13 - 13,5 V	106	123	118	110	74	5		3.7
PIP600	600 VA	230 V	12,5 - 13 - 13,5 V	136	162	156	145	104	6		6.8

## PIN - SINGLE PHASE CAST RESIN SWIMMING POOL TRANSFORMER

Serie: PIN



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations
- Output voltage according to distance for 10m, 25m, 40m



### Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Portection degree	IP-20
Includes	Electrostatic screen and taps on primary according to distance between transformer and spotlight
Standards	IEC/EN/UNE-EN 61558 CE
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PIN100	100 VA	230 V	12,5 - 13 - 13,5 V	75	96	100	80	56	6		1.8
PIN300	300 VA	230 V	12,5 - 13 - 13,5 V	108	122	125	108	89	6		4.5
PIN600	600 VA	230 V	12,5 - 13 - 13,5 V	126	145	167	125	102	7		9

# PIPZ - SINGLE PHASE SWIMMING POOL TRANSFORMER IP-54

Serie: PIPZ



- Resin filled. Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations

## Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Metal enclosure, epoxy polyester painted. Resin filled
Frequency	50-60 Hz
Protection degree	IP-54
Includes	Electrostatic screen and taps on secondary according to distance between transformer and spotlight
Standards	IEC/EN/UNE-EN 61558 CE
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PIPZ100	100 VA	230 V	12,5 - 13 - 13,5 V	140	95	165	123	120	6		3.9
PIPZ300	300 VA	230 V	12,5 - 13 - 13,5 V	140	95	165	123	120	6		3.9
PIPZ600	600 VA	230 V	12,5 - 13 - 13,5 V	190	120	215	174	160	6		11.9

## TL - SINGLE PHASE TRANSFORMER FOR HALOGEN LAMPS

Serie: TL



- Resin filled. Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



Fig. 1



Fig. 2

### Technical characteristics

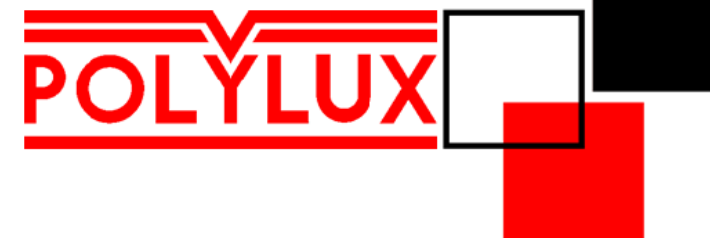
Isolation	Class B - 130° C
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Standards	IEC/EN/UNE-EN 61558 CE
Ambient temperature	25°C
Test voltage	3,5 kV (1 min, 50 Hz) between primary and secondary 2,5 Kv (1 min, 50 Hz) between primary and earth 2,5 kV (1 min, 50 Hz) between secondary and earth

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
TL50	50 VA	230 V	12 V	55	55	80				1	0.81
TL100	100 VA	230 V	12 V	75	74	75	60	63	7	2	1.6
TL160	160 VA	230 V	12 V	84	102	78	72	70	7	2	2.4
TL200	200 VA	230 V	12 V	96	91	86	64	80	7	2	2.8
TL250	250 VA	230 V	12 V	96	101	86	74	80	7	2	3.2
TL300	300 VA	230 V	12 V	108	105	96	74	90	7	2	4
TL400	400 VA	230 V	12 V	108	115	96	84	90	7	2	4.8
TL500	500 VA	230 V	12 V	126	110	122	80	105	7	2	5.4

# WEB CATALOGUE

MEASURING / POTENTIAL  
TRANSFORMERS

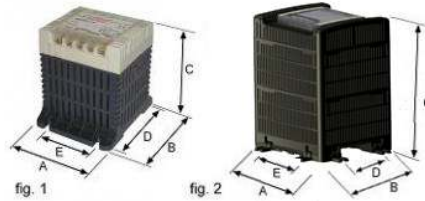


# PTM - SINGLE PHASE MEASURING (POTENTIAL) TRANSFORMER

Serie: PTM



- Single input 100V up to 500V or 100 V /  $\sqrt{3}$  up to 500 V /  $\sqrt{3}$
- Single output 100V or 110V or 100 V /  $\sqrt{3}$  or 110 V /  $\sqrt{3}$
- Rating for Class 0,5 / Class 1
- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94



## Technical characteristics

Insulation	Class B - 130° C
Windings	Class HC - 200°C
Accuracy class	0,5 and 1, according to rating
Cover	Polymer of latest technology, non-flammable V-0 according to UL94
Frequency	50-60 Hz
Protection degree	IP-20
Mounting	By screws (for all ratings) Din Rail mounting (for ratings up to 7,5 VA)
Standards	UNE 21088, IEC/EN/UNE-EN 60044-2 CE
Remarks	Grain oriented core M6-35 (0,7 W/kg)
Options	Input voltage up to 6 kV (please consult) Protection transformer class 3P or 6P (please consult)
Thermal rating	6 times nominal rating
Continuous over voltage	1,2 times nominal voltage
Ambient temperature	50°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

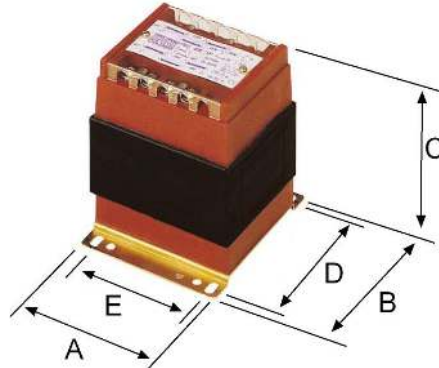
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PTM50	5/7,5 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	106	123	118	110	74	5	1	2.3
PTM51	10/15 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	118	138	131	121	88	6	1	4.1
PTM52	15/25 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	118	138	131	121	88	6	1	4.1
PTM53	30/50 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	136	162	156	145	104	6	1	5.8
PTM55	50/75 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	136	162	156	145	104	6	1	6.8
PTM57	75/100 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	136	162	156	145	104	6	1	8.6
PTM510	100/150 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	136	162	180	145	104	6	1	10
PTM515	150/200 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	199	220	242	188	175	7	2	22
PTM520	200/300 VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	199	220	282	188	175	7	2	27.6

# TM - SINGLE PHASE CAST RESIN MEASURING (POTENTIAL) TRANSFORMER

Serie: TM



- Single input 100V up to 500V or 100 V / root3 up to 500 V / root3
- Single output 100V or 110V or 100 V / root3 or 110 V / root3
- Rating for Class 0,5 / Class 1
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



## Technical characteristics

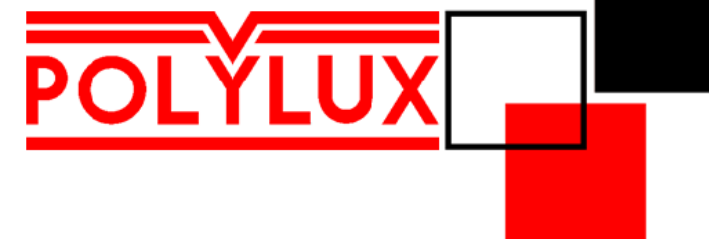
Insulation	Class B - 130° C
Windings	Class HC - 200°C
Accuracy class	0,5 and 1 according to rating
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Standards	UNE 21088, IEC/EN/UNE-EN 60044-2 CE
Remarks	Grain oriented core M6-35 (0,7 W/kg)
Options	Input voltage up to 6 kV (please consult) Protection transformer class 3P or 6P (please consult)
Thermal rating	6 times nominal rating
Continuous over voltage	1,2 times nominal voltage
Ambient temperature	50°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig. Weight kg
				A	B	C	D	E	Ø	
TM50	5/7,5VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	96	112	116	96	77	6	3.7
TM51	10/15VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	108	122	125	106	89	6	4.7
TM52	15/25VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	108	122	135	106	89	6	5.4
TM53	30/50VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	126	145	147	125	102	7	7.1
TM55	50/75VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	126	145	167	125	102	7	9.1
TM57	75/100VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	126	145	177	125	102	7	10.3
TM510	100/150VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	150	165	180	145	125	7	13.3
TM515	150/200VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	150	165	190	145	125	7	14.8
TM520	200/300VA (Cl 0,5/Cl 1)	100 .. 500V *	100 or 110V **	150	165	210	145	125	7	16.9

# WEB CATALOGUE

## REVERSIBLE AUTOTRANSFORMERS





# PAU - SINGLE PHASE REVERSIBLE AUTOTRANSFORMER IP-20

Serie: PAU



- Reversible for voltage adaptation 400 V / 230 V
- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94



## Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94 up to 6300VA Metal enclosure, epoxy polyester painted as from 8000VA
Frequency	50-60 Hz
Portection degree	IP-20
Mounting	By DIN railN (for ratings up to 630 VA) By screws (all ratings)
Standards	IEC/EN/UNE-EN 61558/60076 CE
Safety class	Class I, convertible to class II up to 6300 VA
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

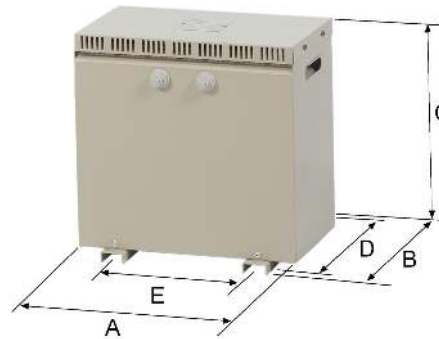
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PAU100	100 VA	400 V	230 V	69	92	80	79	45	5	1	0.79
PAU200	200 VA	400 V	230 V	84	101	98	88	55	5	1	1.1
PAU315	315 VA	400 V	230 V	106	123	118	110	74	5	1	2.3
PAU400	400 VA	400 V	230 V	106	123	118	110	74	5	1	2.3
PAU500	500 VA	400 V	230 V	106	123	118	110	74	5	1	2.7
PAU630	630 VA	400 V	230 V	106	123	118	110	74	5	1	3.3
PAU1000	1000 VA	400 V	230 V	118	138	131	121	88	6	1	4.9
PAU2000	2000 VA	400 V	230 V	136	162	156	145	104	6	1	8.6
PAU2500	2500 VA	400 V	230 V	136	162	156	145	104	6	1	10
PAU3150	3150 VA	400 V	230 V	214	183	269	0	0	10	2	17.4
PAU4000	4000 VA	400 V	230 V	214	183	269	0	0	10	2	21.7
PAU5000	5000 VA	400 V	230 V	214	183	269	0	0	10	2	28
PAU6300	6300 VA	400 V	230 V	214	183	269	0	0	10	2	30.6
PAU8000	8000 VA	400 V	230 V	247	260	349	233	223	7	3	39.9
PAU10000	10000 VA	400 V	230 V	247	260	349	233	223	7	3	50
PAU12500	12500 VA	400 V	230 V	247	260	349	233	223	7	3	60.1

# AUKW - SINGLE PHASE REVERSIBLE AUTOTRANSFORMER IP-23

Serie: AUKW



- Reversible for voltage adaptation 400 V / 230 V
- IP-23 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C2 (higher category is optional)



## Technical characteristics

Isolation	Class F - 155°C up to 20 kVA Class H - 180°C as from 25 kVA
Winding	Class HC - 200°C
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 31,5 kVA. Wheels are optional
Standards	IEC/EN/UNE-EN 60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

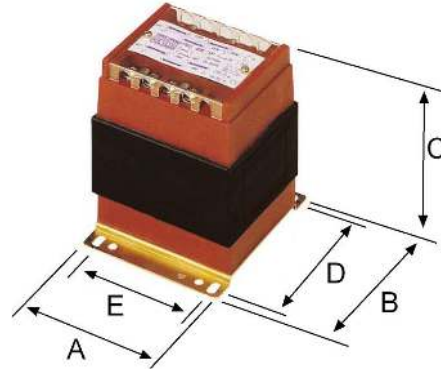
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUKW16	16 kVA	400 V	230 V	525	395	640	355	350	12		62
AUKW20	20 kVA	400 V	230 V	525	395	640	355	350	12		74
AUKW25	25 kVA	400 V	230 V	595	395	708	355	350	12		79
AUKW31.5	31,5 kVA	400 V	230 V	595	395	708	355	350	12		92
AUKW40	40 kVA	400 V	230 V	595	395	708	355	350	12		98
AUKW50	50 kVA	400 V	230 V	595	395	708	355	350	12		123
AUKW63	63 kVA	400 V	230 V	789	490	965	450	426	13		142
AUKW80	80 kVA	400 V	230 V	789	490	965	450	426	13		183
AUKW100	100 kVA	400 V	230 V	789	490	965	450	426	13		210

## AUN - SINGLE PHASE CAST RESIN REVERSIBLE AUTOTRANSFORMER IP-20

Serie: AUN



- Reversible for voltage adaptation 400 V / 230 V
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



### Technical characteristics

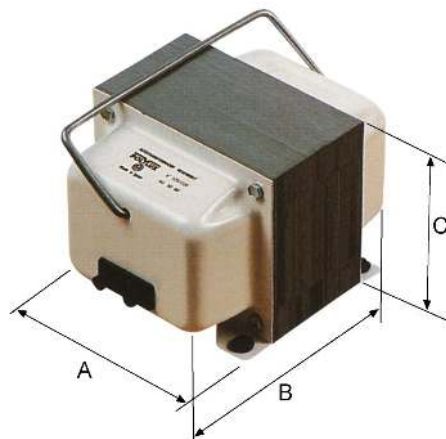
Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Mounting	By DIN tail (for ratings 100 VA and 200 VA) By screws (all ratings)
Standards	IEC/EN/UNE-EN 61558/60076 CE
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUN100	100 VA	400 V	230 V	50	97	84	80	34	6		0.95
AUN200	200 VA	400 V	230 V	75	96	85	80	56	6		1.3
AUN315	315 VA	400 V	230 V	84	102	110	86	65	6		2.7
AUN400	400 VA	400 V	230 V	84	102	110	86	65	6		2.7
AUN500	500 VA	400 V	230 V	96	112	106	96	77	6		3.2
AUN630	630 VA	400 V	230 V	96	112	116	96	77	6		3.7
AUN1000	1000 VA	400 V	230 V	108	122	135	106	89	6		5.4
AUN2000	2000 VA	400 V	230 V	126	145	177	125	102	7		10.1
AUN2500	2500 VA	400 V	230 V	150	165	180	145	125	7		13.3
AUN3150	3150 VA	400 V	230 V	150	165	190	145	125	7		14.4
AUN4000	4000 VA	400 V	230 V	150	165	210	145	125	7		16.9
AUN5000	5000 VA	400 V	230 V	195	198	228	178	173	7		25.3
AUN6300	6300 VA	400 V	230 V	195	198	248	178	173	7		30.5
AUN8000	8000 VA	400 V	230 V	195	198	268	178	173	7		35.8
AUN10000	10000 VA	400 V	230 V	240	235	280	212	218	7		47.7
AUN12500	12500 VA	400 V	230 V	240	235	300	212	218	7		55

# AUR - SINGLE PHASE REVERSIBLE AUTOTRANSFORMER IP-20

Serie: AUR



- Inlet and outlet sockets up to 1000 VA
- Connection terminals as from 1500 VA

## Technical characteristics

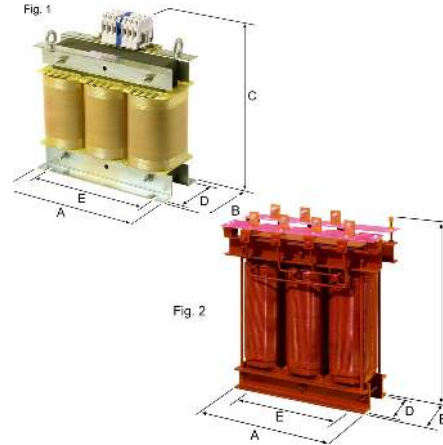
Isolation	Class B - 130° C
Cover	Metal covers
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Connection cable with plugs up to 1000 VA Handgrip up to 2500 VA
Standards	IEC/EN/UNE-EN 60076 CE
Ambient temperature	25°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUR100	100 VA	220 V	125 V	66	90	56	0	0	0		0.6
AUR200	200 VA	220 V	125 V	66	105	56	0	0	0		0.9
AUR500	500 VA	220 V	125 V	96	122	80	0	0	0		2.5
AUR1000	1000 VA	220 V	125 V	108	92	143					4.5
AUR1500	1500 VA	220 V	125 V	126	155	105	0	0	0		5.3
AUR2500	2500 VA	220 V	125 V	150	185	125	0	0	0		6.5
AUR4000	4000 VA	220 V	125 V	150	205	125	0	0	0		11.7

# AUTX - THREE PHASE REVERSIBLE AUTOTRANSFORMER IP-00

Serie: AUTX



- Reversible for voltage adaptation 400 V / 230 V

## Technical characteristics

Isolation	Class F - 155°C up to 125 kVA Class H - 180°C as from 160 kVA
Winding	Class HC - 200°C
Connection	YN0
Frequency	50-60 Hz
Protection degree	IP-00
Includes	Lifting eyebolts as from 16 kVA
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	AN
Ambient temperature	40°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

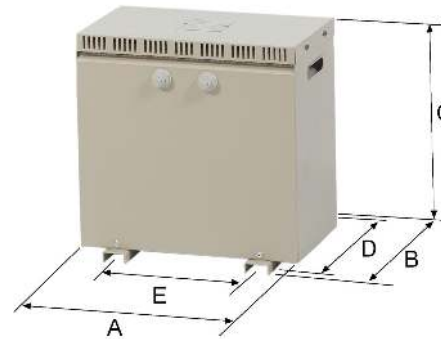
Reference	Rating	I. voltage	O. voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			Ø
AUTX1	1 kVA	400 V	230 V + N	150	79	178	51	125	6	1	3.4
AUTX2	2 kVA	400 V	230 V + N	180	84	203	56	150	6	1	6.6
AUTX3.15	3,15 kVA	400 V	230 V + N	180	109	203	81	150	6	1	11
AUTX5	5 kVA	400 V	230 V + N	240	143	253	115	200	9	1	21
AUTX8	8 kVA	400 V	230 V + N	300	134	303	106	250	9	1	27
AUTX10	10 kVA	400 V	230 V + N	300	154	303	126	250	9	1	35
AUTX12.5	12,5 kVA	400 V	230 V + N	300	164	303	136	250	9	1	40
AUTX16	16 kVA	400 V	230 V + N	360	144	353	116	300	11	1	47
AUTX20	20 kVA	400 V	230 V + N	360	164	353	136	300	11	1	59
AUTX25	25 kVA	400 V	230 V + N	420	170	419	142	350	11	1	71
AUTX31.5	31,5 kVA	400 V	230 V + N	420	190	419	162	350	11	1	88
AUTX40	40 kVA	400 V	230 V + N	480	250	480	144	400	11	2	99
AUTX50	50 kVA	400 V	230 V + N	480	270	480	164	400	11	2	118
AUTX63	63 kVA	400 V	230 V + N	480	290	480	184	400	11	2	140
AUTX80	80 kVA	400 V	230 V + N	670	290	580	150	599	13	2	180
AUTX100	100 kVA	400 V	230 V + N	670	310	580	170	599	13	2	215
AUTX125	125 kVA	400 V	230 V + N	670	330	580	190	599	13	2	254
AUTX160	160 kVA	400 V	230 V + N	725	550	880	460	472	17	2	322
AUTX200	200 kVA	400 V	230 V + N	725	550	880	460	472	17	2	376
AUTX250	250 kVA	400 V	230 V + N	725	550	880	460	472	17	2	424
AUTX315	315 kVA	400 V	230 V + N	725	550	880	460	472	17	2	522
AUTX400	400 kVA	400 V	230 V + N	1016	550	1080	460	677	17	2	738

# AUTW - THREE PHASE REVERSIBLE AUTOTRANSFORMER IP-23

Serie: AUTW



- IP-23 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C2 (higher category is optional)



## Technical characteristics

Isolation	Class F - 155°C up to 125 kVA Class H - 180°C as from 160 kVA
Winding	Class HC - 200°C
Cover	Metal enclosure, epoxy polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-23
Connection	YN0
Includes	Lifting eyebolts as from 50 kVA
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

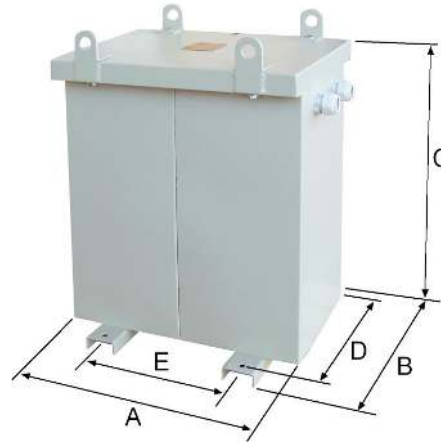
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTW1	1 kVA	400 V	230 V + N	189	175	215	165	100	6		5.2
AUTW2	2 kVA	400 V	230 V + N	244	190	252	180	150	6		10.3
AUTW3.15	3,15 kVA	400 V	230 V + N	244	190	252	180	150	6		14.7
AUTW5	5 kVA	400 V	230 V + N	314	230	315	205	200	6		25.3
AUTW8	8 kVA	400 V	230 V + N	384	260	383	245	250	6		31.8
AUTW10	10 kVA	400 V	230 V + N	384	260	383	245	250	6		39.8
AUTW12.5	12,5 kVA	400 V	230 V + N	384	260	383	245	250	6		44.8
AUTW16	16 kVA	400 V	230 V + N	454	340	575	300	300	12		53
AUTW20	20 kVA	400 V	230 V + N	454	340	575	300	300	12		65
AUTW25	25 kVA	400 V	230 V + N	525	395	640	355	350	12		83
AUTW31.5	31,5 kVA	400 V	230 V + N	525	395	640	355	350	12		100
AUTW40	40 kVA	400 V	230 V + N	595	395	708	355	350	12		111
AUTW50	50 kVA	400 V	230 V + N	595	395	708	355	350	12		130
AUTW63	63 kVA	400 V	230 V + N	595	395	708	355	350	12		152
AUTW80	80 kVA	400 V	230 V + N	789	490	965	450	426	13		205
AUTW100	100 kVA	400 V	230 V + N	789	490	965	450	426	13		240
AUTW125	125 kVA	400 V	230 V + N	789	490	965	450	426	13		279
AUTW160	160 kVA	400 V	230 V + N	964	684	1252	604	472	18		374
AUTW200	200 kVA	400 V	230 V + N	964	684	1252	604	472	18		428
AUTW250	250 kVA	400 V	230 V + N	964	684	1252	604	472	18		476
AUTW315	315 kVA	400 V	230 V + N	964	684	1252	604	472	18		574
AUTW400	400 kVA	400 V	230 V + N	1192	744	1430	664	677	18		803

# AUTZ - THREE PHASE REVERSIBLE AUTOTRANSFORMER IP-54/IP-65

Serie: AUTZ



- Reversible for voltage adaptation 400 V / 230 V
- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts



## Technical characteristics

Isolation	Class F - 155°C up to 100 kVA Class H - 180°C as from 125 kVA
Winding	Class HC - 200°C
Connection	YN0
Cover	Metal enclosure, resin polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-54/IP-65
	- Corrosion protective paint system in accordance with ISO 12994-2 category C4 - For locations <500m from the coast, category C5 to be used (price to be consulted)
Includes	Lifting eyebolts as from 20 kVA Cable inlets Silent-Blocks (between transformer and enclosure)
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTZ1	1 kVA	400 V	230 V	356	286	486	230	200	11		19.6
AUTZ2	2 kVA	400 V	230 V	356	286	486	230	200	11		22
AUTZ3.15	3,15 kVA	400 V	230 V	356	286	486	230	200	11		30
AUTZ5	5 kVA	400 V	230 V	556	366	696	320	250	11		43
AUTZ8	8 kVA	400 V	230 V	556	366	696	320	250	11		56
AUTZ10	10 kVA	400 V	230 V	556	366	696	320	250	11		61
AUTZ12.5	12,5 kVA	400 V	230 V	556	366	696	320	250	11		68
AUTZ16	16 kVA	400 V	230 V	556	366	696	320	250	11		80
AUTZ20	20 kVA	400 V	230 V	738	417	824	370	350	11		111
AUTZ25	25 kVA	400 V	230 V	738	417	824	370	350	11		128
AUTZ31.5	31,5 kVA	400 V	230 V	738	417	824	370	350	11		139
AUTZ40	40 kVA	400 V	230 V	738	417	824	370	350	11		158
AUTZ50	50 kVA	400 V	230 V	738	417	824	370	350	11		180
AUTZ63	63 kVA	400 V	230 V	939	568	1149	520	426	13		245
AUTZ80	80 kVA	400 V	230 V	939	568	1149	520	426	13		280
AUTZ100	100 kVA	400 V	230 V	939	568	1149	520	426	13		319
AUTZ125	125 kVA	400 V	230 V	1022	740	1477	660	472	17		451
AUTZ160	160 kVA	400 V	230 V	1022	740	1477	660	472	17		505
AUTZ200	200 kVA	400 V	230 V	1022	740	1477	660	472	17		553
AUTZ250	250 kVA	400 V	230 V	1022	740	1477	660	472	17		651
AUTZ315	315 kVA	400 V	230 V	1352	810	1617	730	677	17		906
AUTZ400	400 kVA	400 V	230 V	1352	810	1617	730	677	17		1023

# AUTP - THREE PHASE REVERSIBLE AUTOTRANSFORMER IP-20

Serie: AUTP



- Reversible for voltage adaptation 400 V / 230 V
- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94



## Technical characteristics

Isolation	Class B - 130°C
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94
Frequency	50-60 Hz
Protection degree	IP-20
Connection	YN0
Standards	IEC/EN/UNE-EN 61558 CE
Safety class	Class I, convertible to class II
Test voltage	3 kV (1 min, 50 Hz)

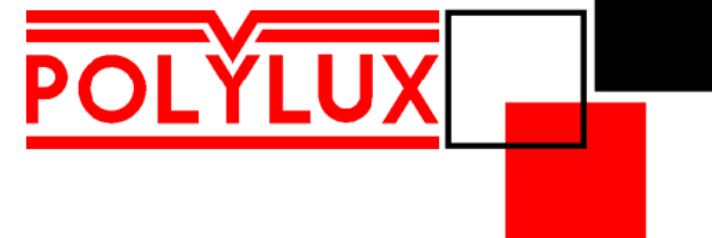
## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTP1	1000 VA	400 V	230 V	214	183	175	109	125	10		4.6
AUTP2	2000 VA	400 V	230 V	214	183	175	109	125	10		7.8
AUTP3.15	3150 VA	400 V	230 V	214	183	175	109	125	10		12.2



# WEB CATALOGUE

AUTOTRANSFORMERS  
FOR ARTIFICIAL NEUTRAL



## AUTNX - THREE PHASE REVERSIBLE AUTOTRANSFORMER WITH ARTIFICIAL NEUTRAL IP-00

Serie: AUTNX



- Autotransformer to create artificial neutral in applications without neutral
- Zig-zag connection group very suitable for unbalanced loads

### Technical characteristics

Isolation	Class F - 155°C up to 50 kVA Class H - 180°C as from 63 kVA
Winding	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Connection group	ZN0
Includes	Lifting eyebolts
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	AN
Ambient temperature	40°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

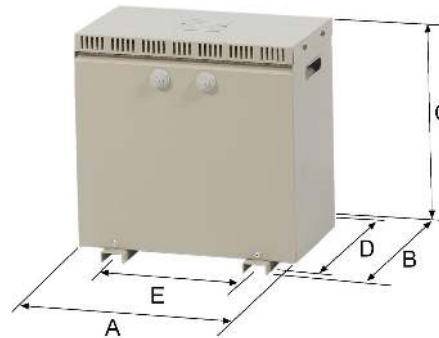
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTNX1	1 kVA	400 V	400 V + N	180	84	203	56	150	6	1	5
AUTNX2	2 kVA	400 V	400 V + N	240	108	253	80	200	9	1	11
AUTNX3.15	3,15 kVA	400 V	400 V + N	240	128	253	100	200	9	1	17
AUTNX5	5 kVA	400 V	400 V + N	300	134	303	106	250	9	1	26
AUTNX8	8 kVA	400 V	400 V + N	300	164	303	136	250	9	1	39
AUTNX10	10 kVA	400 V	400 V + N	360	144	353	116	300	11	1	46
AUTNX12.5	12,5 kVA	400 V	400 V + N	360	164	353	136	300	11	1	56
AUTNX16	16 kVA	400 V	400 V + N	420	170	419	142	350	11	1	70
AUTNX20	20 kVA	400 V	400 V + N	420	190	419	162	350	11	1	84
AUTNX25	25 kVA	400 V	400 V + N	480	250	480	144	400	11	2	92
AUTNX31.5	31,5 kVA	400 V	400 V + N	480	260	480	154	400	11	2	104
AUTNX40	40 kVA	400 V	400 V + N	480	270	480	164	400	11	2	115
AUTNX50	50 kVA	400 V	400 V + N	480	290	480	184	400	11	2	137
AUTNX63	63 kVA	400 V	400 V + N	670	290	580	150	599	13	2	185
AUTNX80	80 kVA	400 V	400 V + N	670	310	580	170	599	13	2	225
AUTNX100	100 kVA	400 V	400 V + N	670	330	580	190	599	13	2	253
AUTNX125	125 kVA	400 V	400 V + N	725	550	880	460	472	17	2	293
AUTNX160	160 kVA	400 V	400 V + N	725	550	880	460	472	17	2	345
AUTNX200	200 kVA	400 V	400 V + N	725	550	880	460	472	17	2	406
AUTNX250	250 kVA	400 V	400 V + N	725	550	880	460	472	17	2	529
AUTNX315	315 kVA	400 V	400 V + N	1016	550	1080	460	677	17	2	596
AUTNX400	400 kVA	400 V	400 V + N	1016	550	1080	460	677	17	2	676

## AUTNW - THREE PHASE REVERSIBLE AUTOTRANSFORMER WITH ARTIFICIAL NEUTRAL IP-23

Serie: AUTNW



- Autotransformer to create artificial neutral in applications without neutral
- Zig-zag connection group very suitable for unbalanced loads



### Technical characteristics

Isolation	Class F - 155°C up to 50 kVA Class H - 180°C as from 63 kVA
Winding	Class HC - 200°C
Cover	Metal enclosure, epoxy polyester painted RAL 7032
Frequency	50-60 Hz
protection degree	IP-23
Connection group	ZN0
Includes	lifting eyebolts as from 63 kVA
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

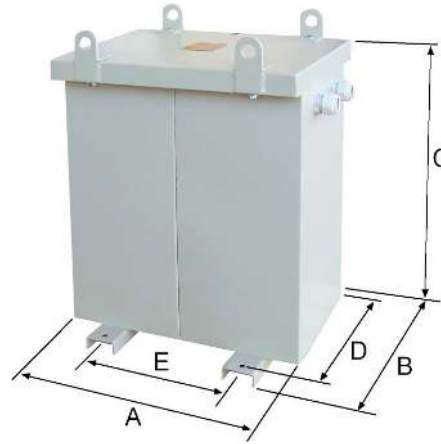
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTNW1	1 kVA	400 V	400 V + N	244	190	252	180	150	6		8.7
AUTNW2	2 kVA	400 V	400 V + N	314	230	315	205	200	6		15.3
AUTNW3.15	3,15 kVA	400 V	400 V + N	314	230	315	205	200	6		21.3
AUTNW5	5 kVA	400 V	400 V + N	384	260	383	245	250	6		30.8
AUTNW8	8 kVA	400 V	400 V + N	384	260	383	245	250	6		43.8
AUTNW10	10 kVA	400 V	400 V + N	454	340	575	300	300	12		52
AUTNW12.5	12,5 kVA	400 V	400 V + N	454	340	575	300	300	12		62
AUTNW16	16 kVA	400 V	400 V + N	525	395	640	355	350	12		82
AUTNW20	20 kVA	400 V	400 V + N	525	395	640	355	350	12		96
AUTNW25	25 kVA	400 V	400 V + N	595	395	708	355	350	12		104
AUTNW31.5	31,5 kVA	400 V	400 V + N	595	395	708	355	350	12		116
AUTNW40	40 kVA	400 V	400 V + N	595	395	708	355	350	12		127
AUTNW50	50 kVA	400 V	400 V + N	595	395	708	355	350	12		149
AUTNW63	63 kVA	400 V	400 V + N	789	490	965	450	426	13		210
AUTNW80	80 kVA	400 V	400 V + N	789	490	965	450	426	13		250
AUTNW100	100 kVA	400 V	400 V + N	789	490	965	450	426	13		278
AUTNW125	125 kVA	400 V	400 V + N	964	684	1252	604	472	18		345
AUTNW160	160 kVA	400 V	400 V + N	964	684	1252	604	472	18		397
AUTNW200	200 kVA	400 V	400 V + N	964	684	1252	604	472	18		458
AUTNW250	250 kVA	400 V	400 V + N	964	684	1252	604	472	18		581
AUTNW315	315 kVA	400 V	400 V + N	1192	744	1430	664	677	18		661
AUTNW400	400 kVA	400 V	400 V + N	1192	744	1430	664	677	18		741

# AUTNZ - THREE PHASE REVERSIBLE AUTOTRANSFORMER WITH ARTIFICIAL NEUTRAL IP-54/IP-65

Serie: AUTNZ



- Autotransformer to create artificial neutral in applications without neutral
- Zig-zag connection group very suitable for unbalanced loads
- IP-54/65 Enclosure:
  - IP protection degree certified by external agencies
  - Corrosive paint protection system in accordance with ISO 12994-2 category C4 (category C5 optional)
  - A4 stainless steel joints and bolts



## Technical characteristics

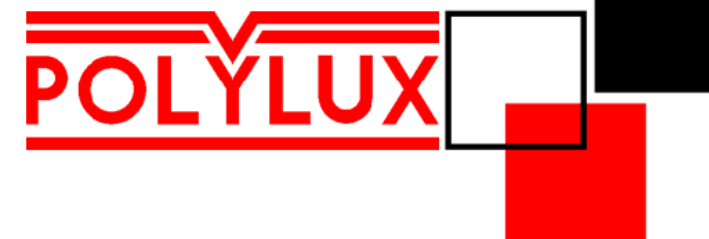
Isolation	Class F - 155°C up to 40 kVA Class H - 180°C as from 50 kVA
Winding	Class HC - 200°C
Cover	Metal enclosure, resin polyester painted RAL 7032
Frequency	50-60 Hz
Protection degree	IP-54/IP-65 - Corrosion protective paint system in accordance with ISO 12994-2 category C4 - For locations <500m from the coast, category C5 to be used (price to be consulted)
Connection group	ZN0
Includes	Lifting eyebolts as from 12.5kVA
Standards	IEC/EN/UNE-EN 61558/60076 CE
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
AUTNZ1	1 kVA	400 V	400 V + N	356	286	486	230	200	11		24
AUTNZ2	2 kVA	400 V	400 V + N	356	286	486	230	200	11		30
AUTNZ3.15	3,15 kVA	400 V	400 V + N	556	366	696	320	250	11		47
AUTNZ5	5 kVA	400 V	400 V + N	556	366	696	320	250	11		60
AUTNZ8	8 kVA	400 V	400 V + N	556	366	696	320	250	11		67
AUTNZ10	10 kVA	400 V	400 V + N	556	366	696	320	250	11		77
AUTNZ12.5	12,5 kVA	400 V	400 V + N	738	417	824	370	350	11		110
AUTNZ16	16 kVA	400 V	400 V + N	738	417	824	370	350	11		124
AUTNZ20	20 kVA	400 V	400 V + N	738	417	824	370	350	11		132
AUTNZ25	25 kVA	400 V	400 V + N	738	417	824	370	350	11		144
AUTNZ31.5	31,5 kVA	400 V	400 V + N	738	417	824	370	350	11		155
AUTNZ40	40 kVA	400 V	400 V + N	738	417	824	370	350	11		177
AUTNZ50	50 kVA	400 V	400 V + N	939	568	1149	520	426	13		250
AUTNZ63	63 kVA	400 V	400 V + N	939	568	1149	520	426	13		290
AUTNZ80	80 kVA	400 V	400 V + N	939	568	1149	520	426	13		318
AUTNZ100	100 kVA	400 V	400 V + N	1022	740	1477	660	472	17		422
AUTNZ125	125 kVA	400 V	400 V + N	1022	740	1477	660	472	17		474
AUTNZ160	160 kVA	400 V	400 V + N	1022	740	1477	660	472	17		535
AUTNZ200	200 kVA	400 V	400 V + N	1022	740	1477	660	472	17		658
AUTNZ250	250 kVA	400 V	400 V + N	1352	810	1617	730	677	17		764
AUTNZ315	315 kVA	400 V	400 V + N	1352	810	1617	730	677	17		844
AUTNZ400	400 kVA	400 V	400 V + N	1352	810	1617	730	677	17		994

# WEB CATALOGUE

## TOROIDAL VOLTAGE REGULATING AUTOTRANSFORMERS



# EA - SINGLE PHASE TOROIDAL VOLTAGE REGULATING AUTOTRANSFORMER

Serie: EA



- Versions available:
  - Manual regulation
  - Motorised regulation

## Technical characteristics

Insulation	Class B - 130° C
Windings	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Includes	Knob and front plate
Standards	IEC/EN/UNE-EN 60989 CE
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
EA600	600 VA	230 V	0..250 V	115	127	95	0	0	0	3.2
EA800	800 VA	230 V	0..250 V	115	127	110	0	0	0	4.1
EA1250	1250 VA	230 V	0..250 V	146	160	108	0	0	0	4.9
EA1600	1600 VA	230 V	0..250 V	146	160	120	0	0	0	6
EA2500	2500 VA	230 V	0..250 V	192	205	122	0	0	0	9.3
EA3000	3000 VA	230 V	0..250 V	220	235	125	0	0	0	11.5
EA4000	4000 VA	230 V	0..250 V	262	282	135	0	0	0	16.5
EA5000	5000 VA	230 V	0..250 V	340	340	160	0	0	0	19.6
EA8000	8000 VA	230 V	0..250 V	262	282	332	0	0	0	39
EA11000	11000 VA	230 V	0..250 V	340	340	387	0	0	0	48
EAM600	600 VA	230 V	0..250 V	115	127	208	0	0	0	3.2
EAM800	800 VA	230 V	0..250 V	115	127	228	0	0	0	5.5
EAM1250	1250 VA	230 V	0..250 V	146	160	238	0	0	0	6.8
EAM1600	1600 VA	230 V	0..250 V	146	160	245	0	0	0	8
EAM2500	2500 VA	230 V	0..250 V	192	205	242	0	0	0	11.4
EAM3000	3000 VA	230 V	0..250 V	220	235	242	0	0	0	13.8
EAM4000	4000 VA	230 V	0..250 V	262	282	277	0	0	0	20.5
EAM5000	5000 VA	230 V	0..250 V	340	340	296	0	0	0	23.8
EAM8000	8000 VA	230 V	0..250 V	262	282	430	0	0	0	43
EAM11000	11000 VA	230 V	0..250 V	340	340	470	0	0	0	52

# EAT - THREE PHASE TOROIDAL VOLTAGE REGULATING AUTOTRANSFORMER

Serie: EAT



- Versions available:
  - Manual regulation
  - Motorised regulation

## Technical characteristics

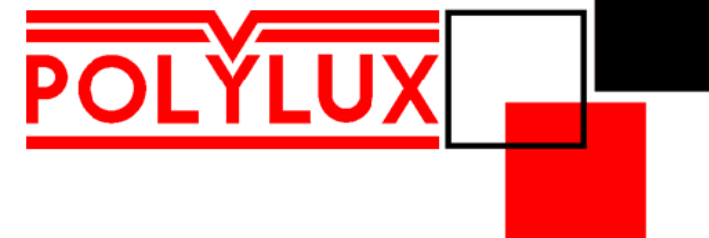
Insulation	Class B - 130° C
Windings	Class HC - 200°C
Frequency	50-60 Hz
Protection degree	IP-00
Includes	Knob and front plate
Standards	IEC/EN/UNE-EN 60989 CE
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
EAT1.6	1.6 kVA	400 V	0..440 V	115	127	327	0	0	0	10.5
EAT2.5	2.5 kVA	400 V	0..440 V	115	127	382	0	0	0	12
EAT3.5	3.5 kVA	400 V	0..440 V	146	160	390	0	0	0	17
EAT5	5 kVA	400 V	0..440 V	146	160	426	0	0	0	23
EAT7.5	7.5 kVA	400 V	0..440 V	192	205	406	0	0	0	30
EAT9	9 kVA	400 V	0..440 V	220	235	436	0	0	0	38
EAT12	12 kVA	400 V	0..440 V	262	282	470	0	0	0	54
EAT16.5	16.5 kVA	400 V	0..440 V	340	320	550	0	0	0	66
EAT25	25 kVA	400 V	0..440 V	634	282	650	0	0	0	114
EAT31.5	31.5 kVA	400 V	0..440 V	735	320	780	0	0	0	140
EAT40	40 kVA	400 V	0..400 V	460	320	975	0	0	0	115
EAT50	50 kVA	400 V	0..400 V	460	570	950	0	0	0	212
EAT60	60 kVA	400 V	0..400 V	460	570	950	0	0	0	222
EAT80	80 kVA	400 V	0..400 V	460	570	950	0	0	0	242
EAT100	100 kVA	400 V	0..400 V	920	570	1000	0	0	0	444
EAT120	120 kVA	400 V	0..400 V	920	570	1000	0	0	0	464
EATM1.6	1.6 kVA	400 V	0..440 V	115	127	387	0	0	0	11.6
EATM2.5	2.5 kVA	400 V	0..440 V	115	127	442	0	0	0	14.4
EATM3.5	3.5 kVA	400 V	0..440 V	146	160	455	0	0	0	19.9
EATM5	5 kVA	400 V	0..440 V	146	160	491	0	0	0	24.5
EATM7.5	7.5 kVA	400 V	0..440 V	192	205	475	0	0	0	32.1
EATM9	9 kVA	400 V	0..440 V	220	235	500	0	0	0	38.8
EATM12	12 kVA	400 V	0..440 V	262	282	560	0	0	0	57
EATM16.5	16.5 kVA	400 V	0..440 V	340	340	640	0	0	0	68.2
EATM25	25 kVA	400 V	0..440 V	634	282	700	0	0	0	119
EATM31.5	31.5 kVA	400 V	0..440 V	780	320	825	0	0	0	145
EATM40	40 kVA	400 V	0..400 V	460	320	980	0	0	0	121
EATM50	50 kVA	400 V	0..400 V	460	570	850	0	0	0	218
EATM60	60 kVA	400 V	0..400 V	460	570	850	0	0	0	228
EATM80	80 kVA	400 V	0..400 V	460	570	950	0	0	0	248
EATM100	100 kVA	400 V	0..400 V	920	570	910	0	0	0	450
EATM120	120 kVA	400 V	0..400 V	920	570	910	0	0	0	470

# WEB CATALOGUE

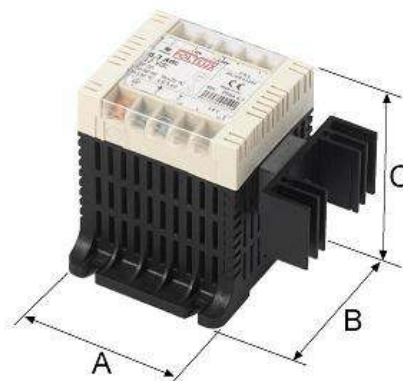
TRANSFORMER RECTIFIER UNITS  
& POWER SUPPLIES





## PTR - SINGLE PHASE TRANSFORMER RECTIFIER UNIT

Serie: PTR



- Non stabilised DC power supply
- Without capacitor filter
- The ultimate transformer design
- Transformer housing of Polymer of latest technology, non-flammable V-0 according to UL94

### Technical characteristics

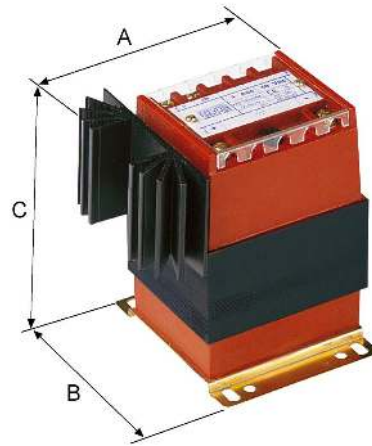
Isolation	Class B - 130° C
Winding	Class HC - 200° C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94 up to PTR40, PTRB25 and PTRC10 Metal enclosure, epoxy polyester painted for higher ratings
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Fuse in primary as from 300 W signal LED
Mounting	By screws (all ratings) By DIN rail for following ratings: PTR4 up to 16 A, PTRB up to 6,3 A y PTRC up to 4 A
Standards	IEC/EN/UNE-EN 61204 CE
Output ripple	48 %
Ambient temperature	25° C
Test voltage	3 kV (1 min, 50 Hz) between input and output 3 kV (1 min, 50 Hz) between input and earth 0,5 kV (1 min, 50 Hz) between output and earth

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
PTRA1.6	1,6 A (DC)	230 V	12 V (DC)	95	101	98	0	0	6	0.74
PTRA2.5	2,5 A (DC)	230 V	12 V (DC)	95	101	98	0	0	6	0.9
PTRA4	4 A (DC)	230 V	12 V (DC)	142	123	118	0	0	6	1.3
PTRA6.3	6,3 A (DC)	230 V	12 V (DC)	143	123	118	0	0	6	1.8
PTRA10	10 A (DC)	230 V	12 V (DC)	159	138	131	0	0	6	2.5
PTRA16	16 A (DC)	230 V	12 V (DC)	177	162	156	0	0	6	3.7
PTRA25	25 A (DC)	230 V	12 V (DC)	267	220	242	0	0	7	7.4
PTRA40	40 A (DC)	230 V	12 V (DC)	329	250	242	0	0	7	9.3
PTRA63	63 A (DC)	230 V	12 V (DC)	339	257	242	0	0	7	12.6
PTRB1.6	1,6 A (DC)	230 V	24 V (DC)	117	123	118	0	0	6	1.3
PTRB2.5	2,5 A (DC)	230 V	24 V (DC)	117	123	118	0	0	6	1.8
PTRB4	4 A (DC)	230 V	24 V (DC)	154	138	131	0	0	6	2.5
PTRB6.3	6,3 A (DC)	230 V	24 V (DC)	173	162	156	0	0	6	3.1
PTRB10	10 A (DC)	230 V	24 V (DC)	240	220	242	0	0	7	6.6
PTRB16	16 A (DC)	230 V	24 V (DC)	240	220	242	0	0	7	8.2
PTRB25	25 A (DC)	230 V	24 V (DC)	267	220	242	0	0	7	11.2
PTRB40	40 A (DC)	230 V	24 V (DC)	329	250	242	0	0	7	14.3
PTRB63	63 A (DC)	230 V	24 V (DC)	387	260	299	0	0	7	22.1
PTRC1.6	1,6 A (DC)	230 V	48 V (DC)	117	123	118	0	0	6	1.8
PTRC2.5	2,5 A (DC)	230 V	48 V (DC)	129	138	131	0	0	6	2.5
PTRC4	4 A (DC)	230 V	48 V (DC)	172	162	156	0	0	6	3.7
PTRC6.3	6,3 A (DC)	230 V	48 V (DC)	236	220	242	0	0	7	7.4
PTRC10	10 A (DC)	230 V	48 V (DC)	240	220	242	0	0	7	9.3
PTRC16	16 A (DC)	230 V	48 V (DC)	240	220	242	0	0	7	15.5
PTRC25	25 A (DC)	230 V	48 V (DC)	267	220	282	0	0	7	16.9
PTRC40	40 A (DC)	230 V	48 V (DC)	377	260	299	0	0	7	27.7

# TR - SINGLE PHASE CAST RESIN TRANSFORMER RECTIFIER UNIT

Serie: TR



- Non stabilised DC power supply
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations

## Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Fuse in primary as from 300 W DIN rail mounting (TR 1,6, TR 2,5 and TRA4)
Standards	IEC/EN/UNE-EN 61204 CE
Output ripple	48%
Ambient temperature	25°C
Test voltage	3 kV (1 min, 50 Hz) between input and output 3 kV (1 min, 50 Hz) between input and earth 0,5 kV (1 min, 50 Hz) between output and earth

## Products and dimensions

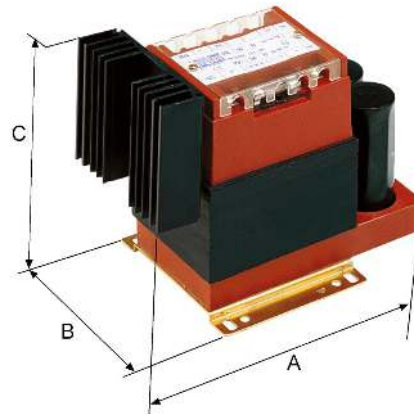
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E Ø			
TRA1.6	1,6 A DC	230 V	12 V DC	80	97	74	0	0	6	1	0.76
TRA2.5	2,5 A DC	230 V	12 V DC	80	97	84	0	0	6	1	0.95
TRA4	4 A DC	230 V	12 V DC	111	100	99	0	0	6	1	1.4
TRA6.3	6,3 A DC	230 V	12 V DC	112	100	122	0	0	6	1	1.9
TRA10	10 A DC	230 V	12 V DC	125	102	142	0	0	7	1	2.9
TRA16	16 A DC	230 V	12 V DC	137	112	160	0	0	7	1	4
TRA25	25 A DC	230 V	12 V DC	149	122	195	0	0	7	1	6.3
TRA40	40 A DC	230 V	12 V DC	167	145	227	0	0	7	1	10
TRA63	63 A DC	230 V	12 V DC	191	165	240	0	0	7	1	15
TRB1.6	1,6 A DC	230 V	24 V DC	95	96	85	0	0	6	1	1.3
TRB2.5	2,5 A DC	230 V	24 V DC	95	96	100	0	0	6	1	1.8
TRB4	4 A DC	230 V	24 V DC	120	102	124	0	0	6	1	2.8
TRB6.3	6,3 A DC	230 V	24 V DC	133	112	128	0	0	6	1	3.3
TRB10	10 A DC	230 V	24 V DC	149	122	157	0	0	7	1	4.9
TRB16	16 A DC	230 V	24 V DC	167	145	191	0	0	7	1	7.4
TRB25	25 A DC	230 V	24 V DC	167	145	237	0	0	7	1	11.3
TRB40	40 A DC	230 V	24 V DC	191	165	250	0	0	7	1	15.8
TRB63	63 A DC	230 V	24 V DC	236	198	288	0	0	7	1	27
TRC1.6	1,6 A DC	230 V	48 V DC	95	96	100	0	0	6	1	1.8
TRC2.5	2,5 A DC	230 V	48 V DC	104	102	110	0	0	6	1	2.7
TRC4	4 A DC	230 V	48 V DC	132	112	130	0	0	6	1	3.8
TRC6.3	6,3 A DC	230 V	48 V DC	145	122	157	0	0	7	1	5.5
TRC10	10 A DC	230 V	48 V DC	167	145	199	0	0	7	1	9.3
TRC16	16 A DC	230 V	48 V DC	191	165	224	0	0	7	1	13.6
TRC25	25 A DC	230 V	48 V DC	191	165	270	0	0	7	1	17.8
TRC40	40 A DC	230 V	48 V DC	236	198	308	0	0	7	1	31.4
TRC63	63 A DC	230 V	48 V DC	281	235	340	0	0	7	1	49.4

## TRF - SINGLE PHASE CAST RESIN TRANSFORMER RECTIFIER UNIT WITH FILTER

Serie: TRF



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations



### Technical characteristics

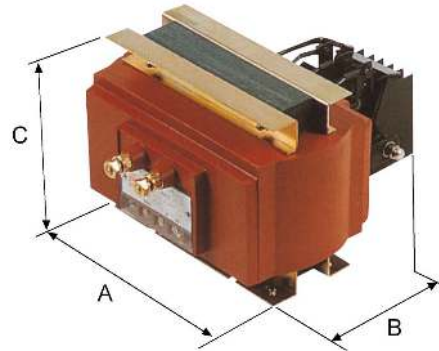
Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Fuse in primary as from 300 W DIN rail mounting for the references TRFA1,6, TRFA2,5, TRFB1,6 and TRFB2,5
Standards	IEC/EN/UNE-EN 61204 CE
Output ripple	5%
Ambient temperature	25°C
Test voltage	3 kV (1 min, 50 Hz) between input and output 3 kV (1 min, 50 Hz) between input and earth 0,5 kV (1 min, 50 Hz) between output and earth

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
TRFA1.6	1,6 A DC	230 V	12 V DC	133	97	84	0	0	6	1.1
TRFA2.5	2,5 A DC	230 V	12 V DC	148	96	99	0	0	6	1.5
TRFA4	4 A DC	230 V	12 V DC	164	96	122	0	0	6	2
TRFA6.3	6,3 A DC	230 V	12 V DC	174	102	142	0	0	6	3
TRFA10	10 A DC	230 V	12 V DC	190	112	150	0	0	6	3.7
TRFA16	16 A DC	230 V	12 V DC	202	122	185	0	0	6	5.4
TRFA25	25 A DC	230 V	12 V DC	250	250	205	0	0	7	8.6
TRFB1.6	1,6 A DC	230 V	24 V DC	148	96	85	0	0	6	1.5
TRFB2.5	2,5 A DC	230 V	24 V DC	148	96	100	0	0	6	2
TRFB4	4 A DC	230 V	24 V DC	173	102	124	0	0	6	3
TRFB6.3	6,3 A DC	230 V	24 V DC	186	112	138	0	0	6	4.1
TRFB10	10 A DC	230 V	24 V DC	202	122	167	0	0	6	6
TRFB16	16 A DC	230 V	24 V DC	220	145	211	0	0	7	9.9
TRFB25	25 A DC	230 V	24 V DC	270	280	225	0	0	7	15
TRFC1.6	1,6 A DC	230 V	48 V DC	157	102	110	0	0	6	2.9
TRFC2.5	2,5 A DC	230 V	48 V DC	169	112	106	0	0	6	3.5
TRFC4	4 A DC	230 V	48 V DC	197	122	149	0	0	6	5.8
TRFC6.3	6,3 A DC	230 V	48 V DC	216	145	169	0	0	7	7.7
TRFC10	10 A DC	230 V	48 V DC	220	145	209	0	0	7	11.2
TRFC16	16 A DC	230 V	48 V DC	244	165	234	0	0	7	16.1
TRFC25	25 A DC	230 V	48 V DC	290	310	265	0	0	7	27.7

# TRT - THREE PHASE CAST RESIN TRANSFORMER RECTIFIER UNIT

Serie: TRT



- Non stabilised DC power supply
- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations

## Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20 (up to 16 A), IP-00 (as from 25 A)
Includes	Bimetal thermal protection Signal LED
Standards	IEC/EN/UNE-EN 61204 CE
Output ripple	4 %
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz) between input and output 3 kV (1 min, 50 Hz) between input and earth 0,5 kV (1 min, 50 Hz) between output and earth

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
TRTA10	10 A DC	400 V	12 V DC	180	211	203	0	0	9	3.8
TRTA16	16 A DC	400 V	12 V DC	180	211	203	0	0	9	3.8
TRTA25	25 A DC	400 V	12 V DC	180	305	203	0	0	9	5.9
TRTA40	40 A DC	400 V	12 V DC	240	352	253	0	0	9	9.5
TRTA63	63 A DC	400 V	12 V DC	240	318	253	0	0	9	15
TRTA100	100 A DC	400 V	12 V DC	300	294	303	0	0	11	23.9
TRTA160	160 A DC	400 V	12 V DC	300	405	303	0	0	11	31.4
TRTA250	250 A DC	400 V	12 V DC	360	405	353	0	0	11	47.3
TRTA400	400 A DC	400 V	12 V DC	420	591	419	0	0	11	73
TRTA500	500 A DC	400 V	12 V DC	420	636	469	0	0	11	84
TRTA630	630 A DC	400 V	12 V DC	480	785	480	0	0	11	104
TRTA800	800 A DC	400 V	12 V DC	480	675	480	0	0	11	124
TRTA1000	1000 A DC	400 V	12 V DC	630	640	780	0	0	11	133
TRTB10	10 A DC	400 V	24 V DC	180	211	203	0	0	9	3.8
TRTB16	16 A DC	400 V	24 V DC	180	206	203	0	0	9	5.9
TRTB25	25 A DC	400 V	24 V DC	180	363	203	0	0	9	6.4
TRTB40	40 A DC	400 V	24 V DC	240	318	253	0	0	9	12
TRTB63	63 A DC	400 V	24 V DC	300	294	303	0	0	11	23.9
TRTB100	100 A DC	400 V	24 V DC	300	330	303	0	0	11	31.4
TRTB160	160 A DC	400 V	24 V DC	360	405	353	0	0	11	47.3
TRTB250	250 A DC	400 V	24 V DC	420	436	419	0	0	11	73
TRTB400	400 A DC	400 V	24 V DC	480	710	480	0	0	11	104
TRTB500	500 A DC	400 V	24 V DC	480	755	480	0	0	11	124
TRTB630	630 A DC	400 V	24 V DC	630	795	780	0	0	11	133
TRTB800	800 A DC	400 V	24 V DC	630	648	780	0	0	11	161
TRTB1000	1000 A DC	400 V	24 V DC	710	598	880	0	0	11	189
TRTC10	10 A DC	400 V	48 V DC	180	206	203	0	0	9	5.9
TRTC16	16 A DC	400 V	48 V DC	240	253	253	0	0	9	9.5
TRTC25	25 A DC	400 V	48 V DC	240	318	253	0	0	9	12
TRTC40	40 A DC	400 V	48 V DC	300	289	303	0	0	11	27.4
TRTC63	63 A DC	400 V	48 V DC	300	330	303	0	0	11	39.5
TRTC100	100 A DC	400 V	48 V DC	360	345	353	0	0	11	54
TRTC160	160 A DC	400 V	48 V DC	420	481	469	0	0	11	84
TRTC250	250 A DC	400 V	48 V DC	480	600	480	0	0	11	124
TRTC400	400 A DC	400 V	48 V DC	630	728	780	0	0	11	161
TRTC500	500 A DC	400 V	48 V DC	710	678	880	0	0	11	189
TRTC630	630 A DC	400 V	48 V DC	710	855	880	0	0	11	229
TRTC800	800 A DC	400 V	48 V DC	710	744	880	0	0	11	326
TRTC1000	1000 A DC	400 V	48 V DC	839	817	1115	0	0	11	463

## FCP - SWITCH MODE POWER SUPPLY

Serie: FCP

- Ultra-isolating transformer (TU1P or PTU1P) can be installed in order to isolate from the perturbation of the mains
- Protected against:
  - Over voltage
  - Overload
  - Short circuit



### Technical characteristics

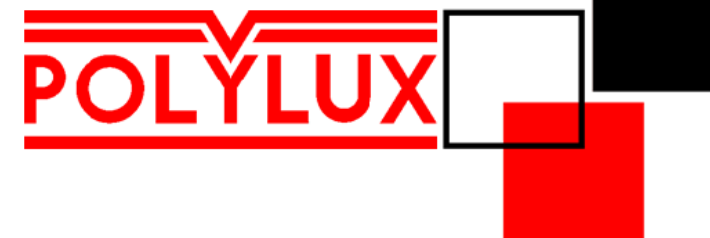
Frequency	47-63 Hz
Protection degree	IP-20
Includes	Signal LED
Mounting	DIN rail mounting (all ratings)
Standards	EN 55011, EN 55022, EN 61000 EN 60950, UL 60950
Remarks	Voltage deviation: 5% (load change 50% to 100%) Recovery time: 500 us (load change 50% to 100%)
Output protection	Against over voltage Against short circuit
Ambient temperature	50°C

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
FCP1	1 A (DC)	100~240 V	24 V (DC)	45	74	97	0	0	0	1	0.15
FCP3	3 A (DC)	100~240 V	24 V (DC)	56	121	110	0	0	0	2	0.51
FCP5	5 A (DC)	100~240 V	24 V (DC)	75	121	110	0	0	0	2	0.58
FCP10	10 A (DC)	100~240 V	24 V (DC)	100	121	110	0	0	0	3	1.1
FCP15	15 A (DC)	100~240 V	24 V (DC)	100	121	110	0	0	0	3	1.44
FCPB2	2 A (DC)	100~240 V	12 V (DC)	45	75	97	0	0	0	1	0.16
FCPB6	6 A (DC)	100~240 V	12 V (DC)	56	121	110	0	0	0	2	0.52
FCPB10	10 A (DC)	100~240 V	12 V (DC)	75	121	110	0	0	0	2	0.59
FCPB20	20 A (DC)	100~240 V	12 V (DC)	100	121	110	0	0	0	3	1.12

# WEB CATALOGUE

AUTOMATIC VOLTAGE  
STABILISERS



## VK - SINGLE PHASE AUTOMATIC VOLTAGE STABILISER WITHOUT ISOLATING TRANSFORMER

Serie: VK



- Operation principle: electro-mechanic
- Without isolating transformer

### Technical characteristics

Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Output voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
VK5	5000 VA	230 V	230 V	380	480	515	0	0	0		33.4
VK6.3	6300 VA	230 V	230 V	380	480	515	0	0	0		35.9
VK8	8000 VA	230 V	230 V	380	480	515	0	0	0		41.4
VK10	10000 VA	230 V	230 V	380	480	515	0	0	0		54
VK16	16000 VA	230 V	230 V	380	610	670	0	0	0		103
VK20	20000 VA	230 V	230 V	380	610	670	0	0	0		132
VK25	25000 VA	230 V	230 V	380	610	670	0	0	0		139
VK31.5	31500 VA	230 V	230 V	670	810	986	0	0	0		214
VK40	40000 VA	230 V	230 V	670	810	986	0	0	0		247

## VCTK - SINGLE PHASE AUTOMATIC VOLTAGE STABILISER WITH ISOLATING TRANSFORMER

Serie: VCTK



- Operation principle: electro-mechanic
- Isolating transformer included

### Technical characteristics

Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Output voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
VCTK5	5000 VA	230 V	230 V	380	610	670	0	0	0	125
VCTK6.3	6300 VA	230 V	230 V	380	610	670	0	0	0	125
VCTK8	8000 VA	230 V	230 V	380	610	670	0	0	0	147
VCTK10	10000 VA	230 V	230 V	670	810	986	0	0	0	229
VCTK16	16000 VA	230 V	230 V	670	810	986	0	0	0	298
VCTK20	20000 VA	230 V	230 V	670	810	986	0	0	0	347
VCTK25	25000 VA	230 V	230 V	670	810	986	0	0	0	381
VCTK31.5	31500 VA	230 V	230 V	820	1210	1360	0	0	0	458
VCTK40	40000 VA	230 V	230 V	820	1210	1360	0	0	0	524



# VT - THREE PHASE AUTOMATIC VOLTAGE STABILISER WITH THREE PHASE CONTROL AND WITHOUT ISOLATING TRANSFORMER

Serie: VT



- Three phase control
- Mesurement: between L1 - L2

## Technical characteristics

Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequencys	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Ouput voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
VT5	5 kVA	400 V	400 V + N	380	480	515	0	0	0	35
VT8	8 kVA	400 V	400 V + N	380	480	515	0	0	0	44.3
VT10	10 kVA	400 V	400 V + N	380	480	515	0	0	0	48.1
VT16	16 kVA	400 V	400 V + N	380	480	515	0	0	0	66
VT20	20 kVA	400 V	400 V + N	380	480	515	0	0	0	70
VT25	25 kVA	400 V	400 V + N	380	610	670	0	0	0	117
VT31.5	31,5 kVA	400 V	400 V + N	670	810	986	0	0	0	211
VT40	40 kVA	400 V	400 V + N	670	810	986	0	0	0	218
VT50	50 kVA	400 V	400 V + N	670	810	986	0	0	0	241
VT63	63 kVA	400 V	400 V + N	670	810	986	0	0	0	324
VT80	80 kVA	400 V	400 V + N	670	810	986	0	0	0	364
VT100	100 kVA	400 V	400 V + N	820	1210	1360	0	0	0	496

# VTCT - THREE PHASE AUTOMATIC VOLTAGE STABILISER WITH THREE PHASE CONTROL AND ISOLATING TRANSFORMER

Serie: VTCT



- Isolating transformer included
- Three phase control
- Measurement: between L1 - L2

## Technical characteristics

Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Output voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
VTCT5	5 kVA	400 V	400 V + N	380	480	515	0	0	0	82
VTCT8	8 kVA	400 V	400 V + N	380	610	670	0	0	0	143
VTCT10	10 kVA	400 V	400 V + N	380	610	670	0	0	0	158
VTCT16	16 kVA	400 V	400 V + N	380	610	670	0	0	0	216
VTCT20	20 kVA	400 V	400 V + N	670	810	986	0	0	0	286
VTCT25	25 kVA	400 V	400 V + N	670	810	986	0	0	0	336
VTCT31.5	31,5 kVA	400 V	400 V + N	670	810	986	0	0	0	400
VTCT40	40 kVA	400 V	400 V + N	820	1210	1360	0	0	0	483
VTCT50	50 kVA	400 V	400 V + N	820	1210	1360	0	0	0	570
VTCT63	63 kVA	400 V	400 V + N	820	1210	1360	0	0	0	714
VTCT80	80 kVA	400 V	400 V + N	820	1210	1360	0	0	0	852
VTCT100	100 kVA	400 V	400 V + N	820	1210	1360	0	0	0	1024

# VTF - THREE PHASE AUTOMATIC VOLTAGE STABILISER WITH SINGLE PHASE CONTROL AND WITHOUT ISOLATING TRANSFORMER

Serie: VTF



- With individual phase control
- Measurement: between L1 - L2, L2 - L3, L3 - L1

## Technical characteristics

Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Output voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

## Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
VTF5	5 kVA	400 V	400 V + N	380	480	515	0	0	0	39.6
VTF8	8 kVA	400 V	400 V + N	380	480	515	0	0	0	53
VTF10	10 kVA	400 V	400 V + N	380	610	670	0	0	0	85
VTF16	16 kVA	400 V	400 V + N	670	810	986	0	0	0	163
VTF20	20 kVA	400 V	400 V + N	670	810	986	0	0	0	174
VTF25	25 kVA	400 V	400 V + N	670	810	986	0	0	0	185
VTF31.5	31,5 kVA	400 V	400 V + N	670	810	986	0	0	0	250
VTF40	40 kVA	400 V	400 V + N	670	810	986	0	0	0	265
VTF50	50 kVA	400 V	400 V + N	820	1210	1360	0	0	0	328
VTF63	63 kVA	400 V	400 V + N	820	1210	1360	0	0	0	448
VTF80	80 kVA	400 V	400 V + N	820	1210	1360	0	0	0	499
VTF100	100 kVA	400 V	400 V + N	820	1210	1360	0	0	0	608

## VTFCT - THREE PHASE AUTOMATIC VOLTAGE STABILISER WITH SINGLE PHASE CONTROL AND ISOLATING TRANSFORMER

Serie: VTFCT



- Isolating transformer included
- With individual phase control
- Measurement: between L1 - L2, L2 - L3, L3 - L1

### Technical characteristics

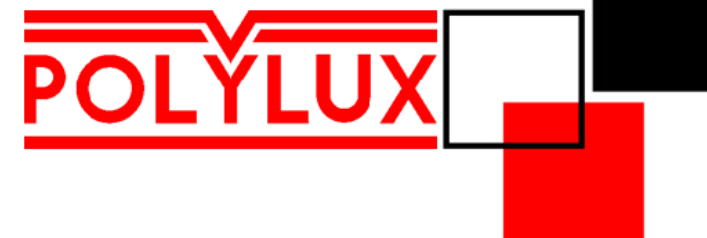
Output voltage adjustment	+/- 4% by potentiometer
Cover	Metal enclosure, epoxy polyester painted
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Signal light Output voltmeter MCB
Input voltage margin	+15% -15%
Standards	IEC/EN/UNE-EN 60439 CE
Options	Digital voltmeter Voltage out of range protection Overload protection
Output voltage accuracy	+/-1%
Protections	MCB in input
Efficiency	>96%
Operation principle	Electro mechanic, by electronically controlled regulating autotransformer
Response time	10 V/s

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E Ø		
VTFCT5	5 kVA	400 V	400 V + N	380	610	670	0	0	0	157
VTFCT8	8 kVA	400 V	400 V + N	670	810	986	0	0	0	244
VTFCT10	10 kVA	400 V	400 V + N	670	810	986	0	0	0	286
VTFCT16	16 kVA	400 V	400 V + N	670	810	986	0	0	0	325
VTFCT20	20 kVA	400 V	400 V + N	820	1210	1360	0	0	0	400
VTFCT31.5	31,5 kVA	400 V	400 V + N	820	1210	1360	0	0	0	564
VTFCT40	40 kVA	400 V	400 V + N	820	1210	1360	0	0	0	618
VTFCT50	50 kVA	400 V	400 V + N	820	1210	1360	0	0	0	740
VTFCT63	63 kVA	400 V	400 V + N	820	1210	1360	0	0	0	919
VTFCT80	80 kVA	400 V	400 V + N	820	1210	1360	0	0	0	1054
VTFCT100	100 kVA	400 V	400 V + N	820	1210	1360	0	0	0	1221

# WEB CATALOGUE

## REACTORS FOR CAPACITOR BANKS

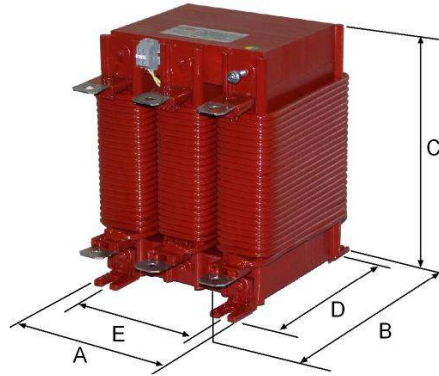


## RTFX - THREE PHASE FILTERING INDUCTORS FOR CAPACITOR BANKS, 7%

Serie: RTFX



- Inductances for capacitors protection
- Low temperature rise
- Avoids resonance between the inductance of the supply transformer and the capacity of the capacitor bank
- Eliminates over voltage and over current in the transformer and the capacitor bank
- Protects capacitors against harmonics, avoiding premature breakdown of the capacitor bank
- Limits the connection spikes of the capacitor bank, extending its lifetime and reducing microcuts in the voltage



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Harmonic currents	I3 = 8 %, I5 = 31 %, I7 = 13 %
Thermal over load factor	5 %
Resonance frequency	189 Hz (P = 7 %)
Frequency	50 Hz
Protection degree	IP-00
Includes	Bimetal thermal protection against over temperature
Temperature rise	< 85 °C
Standards	IEC/EN/UNE-EN 60289, CE
Over current In	6 %
Ambient temperature	45°C
Capacitor voltage	440 V
Line voltage	400 V
Test voltage	3 kV (1 min, 50 Hz)
Inductance tolerance	+/- 3 %

### Products and dimensions

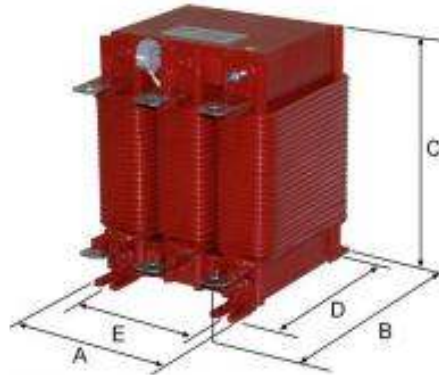
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
RTFX5	5 kvar / 440V	4,4 kvar	6,8 A	150	111	180	85	100	9	5.6
RTFX10	10 kvar / 440V	8,9 kvar	13,6 A	150	126	180	100	100	9	7.6
RTFX12.5	12,5 kvar / 440V	11,1 kvar	17,0 A	150	141	180	115	100	9	9.5
RTFX15	15 kvar / 440V	13,3 kvar	20,4 A	180	126	215	100	120	9	11.1
RTFX20	20 kvar / 440V	17,8 kvar	27,2 A	180	131	215	105	120	9	12.1
RTFX25	25 kvar / 440V	22,2 kvar	34,0 A	180	141	215	115	120	9	14
RTFX30	30 kvar / 440V	26,7 kvar	40,8 A	180	156	215	130	120	9	16.8
RTFX40	40 kvar / 440V	35,5 kvar	54,4 A	180	176	215	150	120	9	20.9
RTFX50	50 kvar / 440V	44,4 kvar	68 A	180	186	215	160	120	9	22.9
RTFX60	60 kvar / 440V	53,3 kvar	82 A	180	201	215	175	120	9	25.8
RTFX80	80 kvar / 440V	71,1 kvar	109 A	240	161	285	135	160	9	33.2
RTFX100	100 kvar / 440V	88,8 kvar	136 A	240	186	285	160	160	9	40.8

## RTF5X - THREE PHASE FILTERING INDUCTORS FOR CAPACITOR BANK, 5,67%

Serie: RTF5X



- Inductances for capacitors protection
- Low temperature rise
- Avoids resonance between the inductance of the supply transformer and the capacity of the capacitor bank
- Eliminates over voltage and over current in the transformer and the capacitor bank
- Protects capacitors against harmonics, avoiding premature breakdown of the capacitor bank
- Limits the connection spikes of the capacitor bank, extending its lifetime and reducing microcuts in the voltage



### Technical characteristics

Isolation	Class F - 155°C
Windings	Class HC - 200°C
Harmonic currents	I3 = 6 %, I5 = 56 %, I7 = 19 %
Thermal overload factor	5 %
Resonance frequency	210 Hz (P = 5,67 %)
Frequency	50 Hz
Protection degree	IP-00
Includes	Bimetal thermal protection against over temperature
Temperature rise	< 85 °C
Standards	IEC/EN/UNE-EN 60289 CE
Overcurrent In	6 %
Ambient temperature	45°C
Capacitor voltage	440 V
Line voltage	400 V
Test voltage	3 kV (1 min, 50 Hz)
Inductance tolerance	+/- 3 %

### Products and dimensions

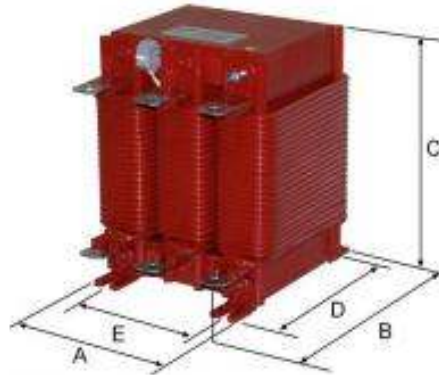
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg	
				A	B	C	D	E			Ø
RTF5X5	5 kvar / 440V	4,4 kvar	6,3 A	150	140	183	79	100	9		5.6
RTF5X10	10 kvar / 440V	8,7 kvar	12,6	150	155	183	94	100	9		7.6
RTF5X12.5	12,5 kvar / 440V	10,9 kvar	15,8	150	170	183	109	100	9		9.5
RTF5X15	15 kvar / 440V	13,1 kvar	18,9	180	155	219	94	120	9		11.1
RTF5X20	20 kvar / 440V	17,5 kvar	25,2	180	160	219	99	120	9		12.1
RTF5X25	25 kvar / 440V	21,8 kvar	31,5	180	170	219	109	120	9		14
RTF5X30	30 kvar / 440V	26,2 kvar	37,8	180	185	219	124	120	9		16.8
RTF5X40	40 kvar / 440V	34,9 kvar	50,4	180	205	220	144	120	9		20.9
RTF5X50	50 kvar / 440V	43,7 kvar	63,0	180	215	221	154	120	9		22.9
RTF5X60	60 kvar / 440V	52,4 kvar	75,6	180	230	221	169	120	9		25.8
RTF5X80	80 kvar / 440V	69,9 kvar	100,8	240	190	292	129	160	9		33.2
RTF5X100	100 kvar / 440V	87,3 kvar	126,1	240	215	293	154	160	9		40.8

## RTF14X - THREE PHASE FILTERING INDUCTORS FOR CAPACITOR BANK, 14%

Serie: RTF14X



- Inductances for capacitors protection
- Low temperature rise
- Avoids resonance between the inductance of the supply transformer and the capacity of the capacitor bank
- Eliminates over voltage and over current in the transformer and the capacitor bank
- Protects capacitors against harmonics, avoiding premature breakdown of the capacitor bank
- Limits the connection spikes of the capacitor bank, extending its lifetime and reducing microcuts in the voltage



### Technical characteristics

Isolation	Class F - 155°C
Windings	Class HC - 200°C
Harmonic currents	I3 = 10 %, I5 = 9 %, I7 = 5 %
Thermal overload factor	5 %
Resonance frequency	134 Hz (P = 14 %)
Frequency	50 Hz
Protection degree	IP-00
Includes	Bimetal thermal protection againsts over temperature
Temperature rise	< 85 °C
Standards	IEC/EN/UNE-EN 60289 CE
Overcurrent In	6 %
Ambient temperature	45°C
Capacitor voltage	460 V
Line voltage	400 V
Test voltage	3 kV (1 min, 50 Hz)
Inductance tolerance	+/- 3 %

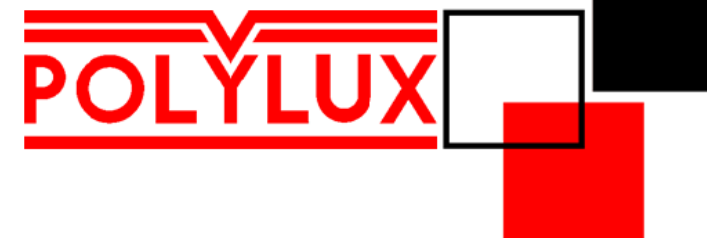
### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
RTF14X5	5 kvar / 460V	4,3 kvar	6,2	150	150	183	89	100	9		7.2
RTF14X10	10 kvar / 460V	8,6 kvar	12,4	180	155	219	94	120	9		11.7
RTF14X12.5	12,5 kvar / 460V	10,8 kvar	15,6	180	160	220	99	120	9		12.7
RTF14X15	15 kvar / 460V	12,9 kvar	18,7	180	195	219	134	120	9		18.8
RTF14X20	20 kvar / 460V	17,2 kvar	24,9	180	205	219	144	120	9		20.8
RTF14X25	25 kvar / 460V	21,6 kvar	24,9	180	230	219	169	120	9		25.6
RTF14X30	30 kvar / 460V	25,9 kvar	31,1	240	180	291	119	160	9		29.2
RTF14X40	40 kvar / 460V	34,5 kvar	49,8	240	195	292	134	160	9		34.5
RTF14X50	50 kvar / 460V	43,1 kvar	62,2	240	215	292	154	160	9		41.4
RTF14X60	60 kvar / 460V	51,7 kvar	74,7	240	225	293	164	160	9		45.2
RTF14X80	80 kvar / 460V	69,0 kvar	99,5	300	200	365	139	200	9		59
RTF14X100	100 kvar / 460V	86,2 kvar	124,4	300	225	365	164	200	9		72



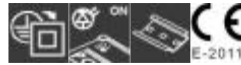
# WEB CATALOGUE

LINE REACTORS  
& OUTPUT FILTERS

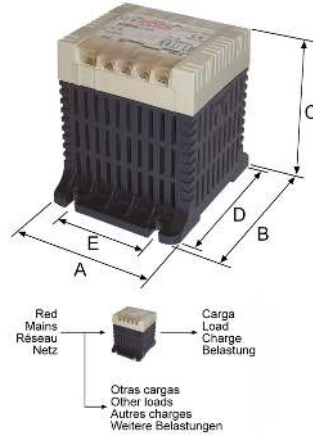


## PR - SINGLE PHASE LINE INDUCTOR

Serie: PR



- Line inductor for harmonic filtering
- For different values of current and inductance or other applications, please consult
- The ultimate inductor design
- Inductor housing of Polymer of latest technology, non-flammable V-0 according to UL94
- Voltage drop: 3%
- Reduction of current harmonics generated by load, resulting in energy consumption reduction and power factor improvement
- Reduction of the crest factor of the current wave, extending the lifetime of the equipment and avoiding breakdowns
- Attenuation of microcuts in the supply voltage generated by power converters, causing malfunctioning of computers, PLC's and other sensitive equipment



### Technical characteristics

Isolation	Class B - 130° C
Winding	Class HC - 200°C
Cover	Polymer of latest technology, non-flammable V-0 according to UL94
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Thermal protection against over temperature
Mounting	Din Rail mounting (for all ratings) By screws (for all ratings)
Standards	IEC/EN/UNE-EN 60289, CE
Line voltage	220 - 260 V
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

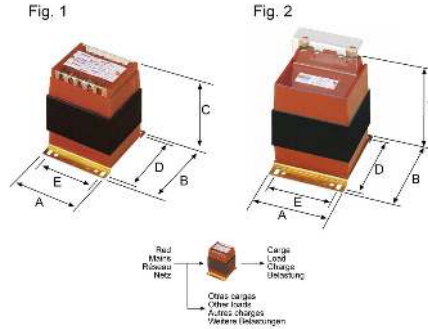
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
PR2.5	2,5 A	0,23 kW / 0,31 CV	8,785	84	101	98	88	55	5	0.74	
PR4	4 A	0,38 kW / 0,5 CV	5,491	84	101	98	88	55	5	0.74	
PR5	5 A	0,46 kW / 0,6 CV	4,393	84	101	98	88	55	5	0.9	
PR6.3	6,3 A	0,55 kW / 0,75 CV	3,486	106	123	118	110	74	5	1.3	
PR8	8 A	0,75 kW / 1 CV	2,745	106	123	118	110	74	5	1.3	
PR10	10 A	1,1 kW / 1,5 CV	2,196	106	123	118	110	74	5	1.3	
PR12.5	12,5 A	1,5 kW / 2 CV	1,757	106	123	118	110	74	5	1.3	
PR16	16 A	1,85 kW / 2,5 CV	1,373	106	123	118	110	74	5	1.8	
PR20	20 A	2,2 kW / 3 CV	1,098	118	138	131	121	88	6	3.1	
PR25	25 A	3 kW / 4 CV	0,879	118	138	131	121	88	6	3.1	
PR31.5	31,5 A	4 kW / 5,5 CV	0,697	136	162	156	145	104	6	3.1	

## R - SINGLE PHASE CAST RESIN LINE INDUCTOR

Serie: R



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations
- Voltage drop: 3%
- Reduction of current harmonics generated by the load, resulting in energy consumption reduction and power factor improvement
- Reduction of the crest factor of the current wave, extending the lifetime of the equipment and avoiding breakdowns
- Attenuation of microcuts in the supply voltage generated by power converters, causing malfunctioning of computers, PLC's and other sensitive equipment



### Technical characteristics

Isolation	Class B - 130° C
Winding	Clase HC - 200°C
Cover	Cast resin
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Thermal protection against over temperature
Standards	IEC/EN/UNE-EN 60289, CE
Ambient temperature	40°C
Line voltage	220 - 260 V
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
R2.5	2,5 A	0,23 kW / 0,31 CV	8,785	50	97	84	80	34	6	1	0.76
R4	4 A	0,38 kW / 0,5 CV	5,491	50	97	84	80	34	6	1	0.78
R5	5 A	0,46 kW / 0,6 CV	4,393	50	97	94	80	34	6	1	0.94
R6.3	6,3 A	0,55 kW / 0,75 CV	3,486	75	96	95	80	56	6	1	1.3
R8	8 A	0,75 kW / 1 CV	2,745	75	96	95	80	56	6	1	1.3
R10	10 A	1,1 kW / 1,5 CV	2,196	75	96	95	80	56	6	1	1.3
R12.5	12,5 A	1,5 kW / 2 CV	1,757	75	96	95	80	56	6	1	1.3
R16	16 A	1,85 kW / 2,5 CV	1,373	75	96	110	80	56	6	1	1.8
R20	20 A	2,2 kW / 3 CV	1,098	84	102	120	86	65	6	1	2.7
R25	25 A	3 kW / 4 CV	0,879	96	112	126	96	77	6	1	2.8
R31.5	31,5 A	4 kW / 5,5 CV	0,697	96	112	126	96	77	6	1	2.9
R40	40 A	5,5 kW / 7,5 CV	0,549	108	122	155	106	89	6	1	5
R50	50 A	6,5 kW / 8,7 CV	0,439	126	145	167	125	102	6	2	5.6
R63	63 A	7,5 kW / 10 CV	0,349	126	145	187	125	102	7	2	8.1
R80	80 A	11 kW / 15 CV	0,275	126	145	187	125	102	7	2	8.3
R100	100 A	14 kW / 18,7 CV	0,220	150	165	200	145	125	7	2	10.6

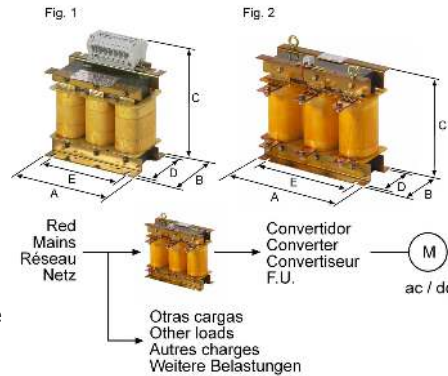
## RTLX - THREE PHASE LINE INDUCTOR

Serie: RTLX



E-2011

- Line inductor for harmonic filtering
- Voltage drop: 4%
- Reduction of current harmonics generated by the load, resulting in energy consumption reduction and power factor improvement
- Reduction of the crest factor of the current wave, extending the lifetime of the equipment and avoiding breakdowns
- Attenuation of microcuts in the supply voltage generated by power converters, causing malfunctioning of computers, PLC's and other sensitive equipment



### Technical characteristics

Isolation	Class F - 155°C
Winding	Class HC - 200°C
Thermal class	F
Thermal over load factor	5 %
Frequency	50-60 Hz
Protection degree	IP-00
Includes	Thermal protection against over temperature
Temperature rise	< 90 °C
Standards	IEC/EN/UNE-EN 60289, CE
Ambient temperature	40°C
Line voltage	380 - 460 V
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

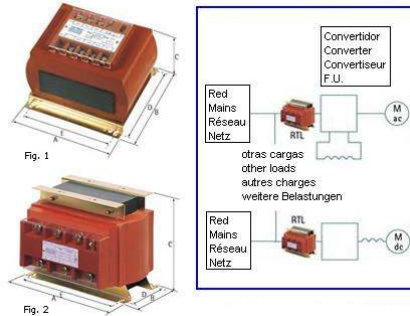
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
RTLX2.5	2,5 A	0,75 kW / 1 HP	11,762	120	74	107	44	100	6	1	1.4
RTLX4	4 A	1,1 kW / 1,5 HP	7,351	120	74	107	44	100	6	1	1.4
RTLX5	5 A	1,5 kW / 2 HP	5,881	120	74	107	44	100	6	1	1.6
RTLX6.3	6,3 A	2,2 kW / 3 HP	4,667	120	74	107	44	100	6	1	1.9
RTLX8	8 A	3 kW / 4 HP	3,676	120	84	107	54	100	6	1	2.3
RTLX10	10 A	4 kW / 5,5 HP	2,941	120	84	107	54	100	6	1	2.7
RTLX12.5	12,5 A	5,5 kW / 7,5 HP	2,352	150	125	183	64	100	6	1	3.9
RTLX16	16 A	6,5 kW / 8,7 HP	1,838	150	135	183	74	100	6	1	5.1
RTLX20	20 A	7,5 kW / 10 HP	1,470	150	140	183	79	100	6	1	5.9
RTLX25	25 A	11 kW / 15 HP	1,176	150	145	184	84	100	6	1	6.5
RTLX31.5	31,5 A	15 kW / 20 HP	0,933	150	155	184	94	100	6	1	7.9
RTLX40	40 A	18,5 kW / 25 HP	0,735	150	165	184	104	100	6	1	9.2
RTLX50	50 A	22 kW / 30 HP	0,588	180	150	220	89	120	6	1	10.6
RTLX63	63 A	30 kW / 40 HP	0,467	180	155	220	94	120	6	1	11.6
RTLX80	80 A	37 kW / 50 HP	0,368	180	165	221	104	120	6	1	13.7
RTLX100	100 A	45 kW / 60 HP	0,294	180	205	220	144	120	6	1	20.7
RTLX125	125 A	55 kW / 75 HP	0,235	180	185	221	154	120	9	1	22.8
RTLX160	160 A	75 kW / 100 HP	0,184	180	207	221	169	120	9	2	26.1
RTLX200	200 A	90 kW / 125 HP	0,147	240	173	293	129	160	10	2	32.8
RTLX250	250 A	110-132 kW / 150-180 HP	0,118	240	188	294	144	160	10	2	38.5
RTLX315	315 A	150-160 kW / 205-220 CV	0,093	340	234	374	135	310	10	2	46.5
RTLX400	400 A	185-200 kW / 250-270 CV	0,074	340	254	374	155	310	10	2	57
RTLX500	500 A	220-250 kW / 300-340 CV	0,059	340	289	373	190	310	10	2	74
RTLX630	630 A	280-315 kW / 405-425 CV	0,047	360	371	523	195	300	12	2	102
RTLX800	800 A	370-400 kW / 500-540 CV	0,037	360	381	523	205	300	12	2	115
RTLX1000	1000 A	440-500 kW / 600-680 CV	0,029	360	421	523	245	300	12	2	142

## RTL - THREE PHASE CAST RESIN LINE INDUCTOR

Serie: RTL



- Advantages of cast resin technique:
  - Protection against corrosive environments
  - Suitable for elevated vibration levels
  - No damage of wire isolation due to current peaks
  - Reduction of noise and internal vibrations
- Drop voltage: 4%
- Reduction of current harmonics generated by the load, resulting in energy consumption reduction and power factor improvement
- Reduction of the crest factor of the current wave, extending the lifetime of the equipment and avoiding breakdowns
- Attenuation of microcuts in the supply voltage generated by power converters, causing malfunctioning of computers, PLC's and other sensitive equipment



### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
RTL2.5	2,5 A	0,75 kW / 1 CV	11,762	135	145	108	125	102	7	1	1.5
RTL4	4 A	1,1 kW / 1,5 CV	7,351	135	145	108	125	102	7	1	1.7
RTL5	5 A	1,5 kW / 2 CV	5,881	135	145	108	125	102	7	1	2
RTL6.3	6,3 A	2,2 kW / 3 CV	4,667	135	145	108	125	102	7	1	2.5
RTL8	8 A	3 kW / 4 CV	3,676	135	145	108	125	102	7	1	2.7
RTL10	10 A	4 kW / 5,5 CV	2,941	170	165	138	145	125	7	1	3.4
RTL12.5	12,5 A	5,5 kW / 7,5 CV	2,352	170	165	138	145	125	7	1	3.9
RTL16	16 A	6,5 kW / 8,7 CV	1,838	170	165	138	145	125	7	1	5.3
RTL20	20 A	7,5 kW / 10 CV	1,470	210	198	185	178	173	7	1	6
RTL25	25 A	11 kW / 15 CV	1,176	210	198	185	178	173	7	1	7.5
RTL31.5	31,5 A	15 kW / 20 CV	0,933	210	198	185	178	173	7	1	9.7
RTL40	40 A	18,5 kW / 25 CV	0,735	210	198	185	178	173	7	1	10.2
RTL50	50 A	22 kW / 30 CV	0,588	280	190	205	80	250	9	2	13.9
RTL63	63 A	30 kW / 40 CV	0,467	280	190	205	100	250	9	2	16.7
RTL80	80 A	37 kW / 50 CV	0,368	280	190	205	115	250	9	2	20.1
RTL100	100 A	45 kW / 60 CV	0,294	280	220	205	110	250	9	2	24.5
RTL125	125 A	55 kW / 75 CV	0,235	340	220	255	106	310	9	2	30.3

### Technical characteristics

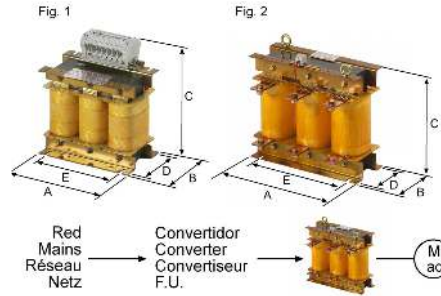
Isolation	Class F - 155°C
Winding	Class HC - 200°C
Thermal class	F
Thermal over load factor	5 %
Frequency	50-60 Hz
Protection degree	IP-20
Includes	Thermal protection against over temperature
Temperature rise	< 90 °C
Standard	IEC/EN/UNE-EN 60289, CE
Ambient temperature	40°C
Line voltage	380 - 460 V
Test voltage	3 kV (1 min, 50 Hz)

# RTOX - THREE PHASE INDUCTOR FOR OUTPUT POWER CONVERTER

Serie: RTOX



- Inductor for conditioning the output voltage of the power converter
- Attenuation of voltage spikes at the output of the power converter; these spikes cause deterioration of the motor isolation.
- Reduction of the reflection effect due to long cable lengths between converter and motor. This reflection amplifies the voltage at the motor terminals.
- These inductors are recommended for cable lengths of 50m or more between power converter and motor.



## Technical characteristics

Isolation	Class F - 155°C
Thermal over load factor	5 %
Protection degree	IP-00
Includes	Thermal protection against over temperature
Temperature rise	< 90 °C
Ambient temperature	40°C
Live voltage	400 V
Test voltage	3 kV (1 min, 50 Hz)
Standards	IEC/EN/UNE-EN 60289, CE

## Products and dimensions

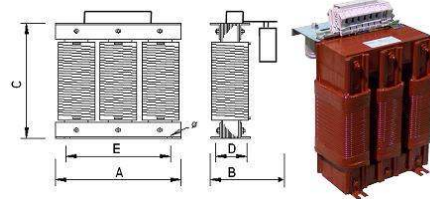
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
RTOX2.5	2,5 A	8,821	3 %	150	110	184	49	100	6	1	2
RTOX4	4 A	5,513	3 %	150	120	184	59	100	6	1	3.2
RTOX5	5 A	4,411	3 %	150	120	184	59	100	6	1	3.3
RTOX6.3	6,3 A	3,501	3 %	150	120	184	59	100	6	1	3.4
RTOX8	8 A	2,757	3 %	150	125	185	64	100	6	1	4
RTOX10	10 A	2,205	3 %	150	130	185	69	100	6	1	4.7
RTOX12.5	12,5 A	1,764	3 %	150	135	186	74	100	6	1	5.4
RTOX16	16 A	1,378	3 %	150	140	186	79	100	6	1	6.3
RTOX20	20 A	1,103	3 %	150	150	186	89	100	6	1	7.8
RTOX25	25 A	0,882	3 %	150	155	187	94	100	6	1	8.5
RTOX31.5	31,5 A	0,700	3 %	180	150	223	89	120	6	1	11.1
RTOX40	40 A	0,551	3 %	180	165	223	104	120	6	1	13.9
RTOX50	50 A	0,441	3 %	180	180	223	119	120	6	1	16.7
RTOX63	63 A	0,350	3 %	180	205	223	144	120	6	1	21.3
RTOX80	80 A	0,276	3 %	240	175	294	114	160	6	1	27.3
RTOX100	100 A	0,221	3 %	240	190	294	129	160	6	1	32.4
RTOX125	125 A	0,176	3 %	240	215	294	154	160	9	1	40.7
RTOX160	160 A	0,138	3 %	340	219	375	120	310	10	2	38.7
RTOX200	200 A	0,110	3 %	340	239	375	140	310	10	2	49.1
RTOX250	250 A	0,088	3 %	340	259	375	160	310	10	2	59
RTOX315	315 A	0,070	3 %	340	294	375	195	310	10	2	77
RTOX400	400 A	0,055	3 %	340	319	376	220	310	10	2	93
RTOX500	500 A	0,044	3 %	410	319	446	210	385	12	2	128
RTOX630	630 A	0,035	3 %	410	359	446	250	385	12	2	159

## FTOX - OUTPUT FILTER FOR POWER CONVERTERS

Serie: FTOX



- Attenuation of voltage spikes at the output of the power converter; these spikes cause deterioration of the motor isolation.
- Reduction of the reflection effect due to long cable lengths between converter and motor. This reflection amplifies the voltage at the motor terminals.
- These inductors are recommended for cable lengths of 50m or more between power converter and motor.



### Technical characteristics

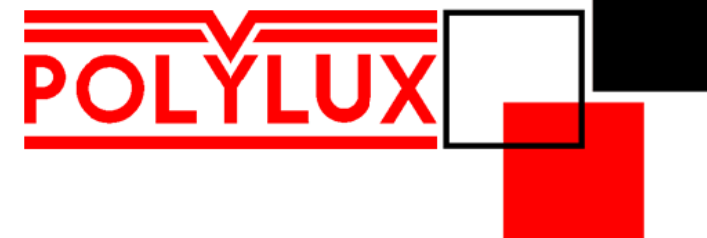
Thermal class	F
Thermal over load factor	5 %
Protection degree	IP-00
Includes	Thermal protection against over temperature
Temperature rise	< 90 °C
Remark	Maximum output voltage 2Un (800V)
Ambient temperature	40°C
Line voltage	400 V
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
FTOX2.5	2,5 A	8,821	3 %	150	180	184	49	100	6		2.3
FTOX4	4 A	5,513	3 %	150	190	184	59	100	6		3.5
FTOX5	5 A	4,411	3 %	150	190	184	59	100	6		3.6
FTOX6.3	6,3 A	3,501	3 %	150	190	184	59	100	6		3.7
FTOX8	8 A	2,757	3 %	150	195	185	64	100	6		4.3
FTOX10	10 A	2,205	3 %	150	200	185	69	100	6		5
FTOX12.5	12,5 A	1,764	3 %	150	205	186	74	100	6		5.7
FTOX16	16 A	1,378	3 %	150	210	186	79	100	6		6.6
FTOX20	20 A	1,103	3 %	150	220	186	89	100	6		8.1
FTOX25	25 A	0,882	3 %	150	225	187	94	100	6		8.8
FTOX31.5	31,5 A	0,700	3 %	180	220	223	89	120	6		11.4
FTOX40	40 A	0,551	3 %	180	235	223	104	120	6		14.2
FTOX50	50 A	0,441	3 %	180	250	223	119	120	6		17
FTOX63	63 A	0,350	3 %	180	275	223	144	120	6		21.6
FTOX80	80 A	0,276	3 %	240	245	294	114	160	6		27.6
FTOX100	100 A	0,221	3 %	240	260	294	129	160	6		32.7
FTOX125	125 A	0,176	3 %	240	285	294	154	160	9		41
FTOX160	160 A	0,138	3 %	340	289	375	120	310	10		39
FTOX200	200 A	0,110	3 %	340	309	375	140	310	10		49.4
FTOX250	250 A	0,088	3 %	340	329	375	160	310	10		59
FTOX315	315 A	0,070	3 %	340	364	375	195	310	10		77
FTOX400	400 A	0,055	3 %	340	389	376	220	310	10		93
FTOX500	500 A	0,044	3 %	410	389	446	210	385	12		128
FTOX630	630 A	0,035	3 %	410	429	446	250	385	12		159

# WEB CATALOGUE

## COMPENSATORS (HARMONIC FILTERS)



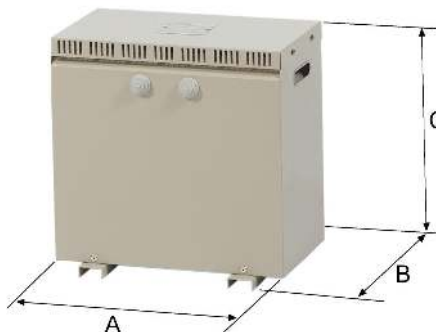


# C10D/C20D - HARMONIC FILTER COMPENSATOR FOR OFFICE BUILDINGS C10D AND C20D

Serie: C10D/C20D



- Filtering of harmonics 3rd, 9th, 15th
- Line voltage: C10D: 400 V, C20D: 400 V+N
- \*) C10D: Selection according to phase current
- \*) C20D: Selection according to neutral current
- Note: For selection, please consult the application guide



## Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	3, 9, 15 (C10D + C20D)
Frequency	50-60 Hz
Protection degree	IP-23
Includes	C20D: Lifting eyebolts as from 200 A
Set of wheels (optional)	RUE060 wheels from C20D63 to C20D315 RUE125 wheels from C20D400 to C20D630 <a href="#">Link to wheels prices</a>
Maximum admissible 3rd harmonic in voltage	2,5 %
Maximum admissible THD-I	--
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2, CE IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	15 % (C10D + C20D)
Reduction of neutral current and neutral - earth voltage up to	75 % (C10D + C20D)
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

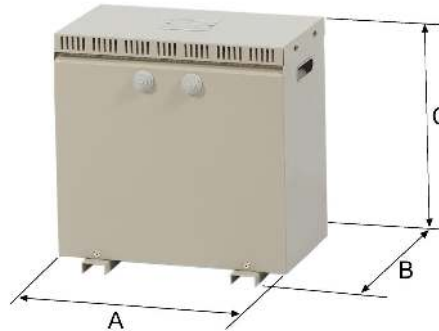
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
C10D16	16 A	400 V	400 V	189	175	215	165	100	6		5.2
C10D20	20 A	400 V	400 V	244	190	252	180	150	6		7.7
C10D25	25 A	400 V	400 V	244	190	252	180	150	6		8.6
C10D31.5	31,5 A	400 V	400 V	244	190	252	180	150	6		10.4
C10D40	40 A	400 V	400 V	244	190	252	180	150	6		10.6
C10D50	50 A	400 V	400 V	314	230	315	205	200	6		13.3
C10D63	63 A	400 V	400 V	314	230	315	205	200	6		13.7
C10D80	80 A	400 V	400 V	314	230	315	205	200	6		14.4
C10D100	100 A	400 V	400 V	314	230	315	205	200	6		17.5
C10D125	125 A	400 V	400 V	314	230	315	205	200	6		18.2
C10D160	160 A	400 V	400 V	314	230	315	205	200	6		21.5
C10D200	200 A	400 V	400 V	384	260	383	245	250	6		24.9
C10D250	250 A	400 V	400 V	384	260	383	245	250	6		28.7
C10D315	315 A	400 V	400 V	384	260	383	245	250	6		38
C10D400	400 A	400 V	400 V	454	340	575	300	300	12		44.9
C20D25	25A I neut	400 V + N		454	340	575	300	300	12		50
C20D31.5	31,5A I neut	400 V + N		454	340	575	300	300	12		62
C20D40	40A I neut	400 V + N		525	395	640	355	350	12		80
C20D50	50A I neut	400 V + N		525	395	640	355	350	12		98
C20D63	63A I neut	400 V + N		595	395	708	355	350	12		99
C20D80	80A I neut	400 V + N		595	395	708	355	350	12		102
C20D100	100A I neut	400 V + N		595	395	708	355	350	12		109
C20D125	125A I neut	400 V + N		595	395	708	355	350	12		129
C20D160	160A I neut	400 V + N		595	395	708	355	350	12		152
C20D200	200A I neut	400 V + N		789	490	965	450	426	13		204
C20D250	250A I neut	400 V + N		789	490	965	450	426	13		235
C20D315	315A I neut	400 V + N		789	490	965	450	426	13		276
C20D400	400A I neut	400 V + N		964	684	1252	604	472	18		365
C20D500	500A I neut	400 V + N		964	684	1252	604	472	18		416
C20D630	630A I neut	400 V + N		964	684	1252	604	472	18		467

# C10D/C22D - HARMONIC FILTER COMPENSATOR FOR OFFICE BUILDINGS C10D AND C22D

Serie: C10D/C22D



- Filtering of harmonics 3rd, 5th, 7th, 9th, 15th, 17th, 19th
- Line voltage: C10D: 400 V, C22D: 400 V+N
- \*) C10D: Selection according to phase current
- \*) C22D: Selection according to phase current
- Note: For selection, please consult the application guide



## Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	3, 5, 7, 9, 15, 17, 19 (C10D + C20D) + (C10D + C22D)
Frequency	50-60 Hz
Protection degree	IP-23
Includes	C22D: Lifting eyebolts as from 25 kVA
Set of wheels (optional)	RUE060 wheels from C22D12.5 to C22D40 RUE125 wheels from C22D50 to C22D160 <a href="#">Link to wheels prices</a>
Maximum admissible 3rd harmonic in voltage	2,5 %
Maximum admissible THD-I	- -
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2, CE IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	40 % (C10D + C20D) + (C10D + C22D)
Reduction of neutral current and neutral - earth voltage up to	80 % (C10D + C20D) + (C10D + C22D)
Reduction of THD-I and THD-V up to	75 % (C10D + C20D) + (C10D + C22D)
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

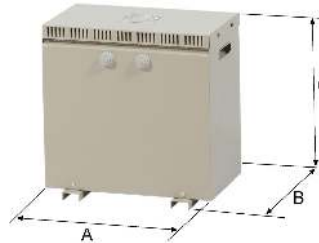
Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
C10D16	16 A	400 V	400 V	189	175	215	165	100	6		5.2
C10D20	20 A	400 V	400 V	244	190	252	180	150	6		7.7
C10D25	25 A	400 V	400 V	244	190	252	180	150	6		8.6
C10D31.5	31,5 A	400 V	400 V	244	190	252	180	150	6		10.4
C10D40	40 A	400 V	400 V	244	190	252	180	150	6		10.6
C10D50	50 A	400 V	400 V	314	230	315	205	200	6		13.3
C10D63	63 A	400 V	400 V	314	230	315	205	200	6		13.7
C10D80	80 A	400 V	400 V	314	230	315	205	200	6		14.4
C10D100	100 A	400 V	400 V	314	230	315	205	200	6		17.5
C10D125	125 A	400 V	400 V	314	230	315	205	200	6		18.2
C10D160	160 A	400 V	400 V	314	230	315	205	200	6		21.5
C10D200	200 A	400 V	400 V	384	260	383	245	250	6		24.9
C10D250	250 A	400 V	400 V	384	260	383	245	250	6		28.7
C10D315	315 A	400 V	400 V	384	260	383	245	250	6		38
C10D400	400 A	400 V	400 V	454	340	575	300	300	12		44.9
C22D10	10 kVA	400 V + N	400 V + N	525	395	640	355	350	12		97
C22D12.5	12,5 kVA	400 V + N	400 V + N	595	395	708	355	350	12		107
C22D16	16 kVA	400 V + N	400 V + N	595	395	708	355	350	12		130
C22D20	20 kVA	400 V + N	400 V + N	595	395	708	355	350	12		150
C22D25	25 kVA	400 V + N	400 V + N	789	490	965	450	426	13		201
C22D31.5	31,5 kVA	400 V + N	400 V + N	789	490	965	450	426	13		217
C22D40	40 kVA	400 V + N	400 V + N	789	490	965	450	426	13		248
C22D50	50 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		376
C22D63	63 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		390
C22D80	80 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		457
C22D100	100 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		518
C22D125	125 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		622
C22D160	160 kVA	400 V + N	400 V + N	1192	744	1430	664	677	18		751

## C25D - HARMONIC FILTER COMPENSATOR FOR OFFICE BUILDINGS C25D-0/180, WITH GALVANIC ISOLATION

Serie: C25D



- Filtering of harmonics 3rd, 5th, 7th, 9th, 15th, 17th, 19th
- Line voltage: C25D-0: 400 V, C25D-180: 400 V+N
- Note: For selection, please consult the application guide



### Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	3, 9, 15 with one compensator 3, 5, 7, 9, 15, 17, 19 combining C25D-0/180
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 25kVA RUE060 wheels from 10 kVA to 40kVA RUE125 wheels from 50kVA to 160kVA <a href="#">Link to wheels prices</a>
Set of wheels (optional)	
Maximum admissible 3rd harmonic in voltage	- -
Maximum admissible THD-I	90 %
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2 CE, IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	15 % with one compensator 45 % combining C25D-0/180
Reduction of neutral current and neutral-earth volt.	up to 90 %
Reduction THD-I and THD-V up to	THD-I: 45 %, THD-V: 40% with one comensator THD-I: 85 %, THD-V: 65% combining C25D-0 and C25D-180
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
C25D10-0	10 kVA	400 V	400 V + N	595	395	708	355	350	12		106
C25D12.5-0	12,5 kVA	400 V	400 V + N	595	395	708	355	350	12		126
C25D16-0	16 kVA	400 V	400 V + N	595	395	708	355	350	12		149
C25D20-0	20 kVA	400 V	400 V + N	595	395	708	355	350	12		175
C25D25-0	25 kVA	400 V	400 V + N	789	490	965	450	426	13		216
C25D31.5-0	31,5 kVA	400 V	400 V + N	789	490	965	450	426	13		254
C25D40-0	40 kVA	400 V	400 V + N	789	490	965	450	426	13		292
C25D50-0	50 kVA	400 V	400 V + N	964	684	1252	604	472	18		418
C25D63-0	63 kVA	400 V	400 V + N	964	684	1252	604	472	18		526
C25D80-0	80 kVA	400 V	400 V + N	964	684	1252	604	472	18		578
C25D100-0	100 kVA	400 V	400 V + N	964	684	1252	604	472	18		623
C25D125-0	125 kVA	400 V	400 V + N	1192	744	1430	664	677	18		750
C25D160-0	160 kVA	400 V	400 V + N	1192	744	1430	664	677	18		834
C25D10-180	10 kVA	400 V + N	400 V + N	595	395	708	355	350	12		106
C25D12.5-180	12,5 kVA	400 V + N	400 V + N	595	395	708	355	350	12		126
C25D16-180	16 kVA	400 V + N	400 V + N	595	395	708	355	350	12		149
C25D20-180	20 kVA	400 V + N	400 V + N	595	395	708	355	350	12		175
C25D25-180	25 kVA	400 V + N	400 V + N	789	490	965	450	426	13		216
C25D31.5-180	31,5 kVA	400 V + N	400 V + N	789	490	965	450	426	13		254
C25D40-180	40 kVA	400 V + N	400 V + N	789	490	965	450	426	13		292
C25D50-180	50 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		418
C25D63-180	63 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		526
C25D80-180	80 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		578
C25D100-180	100 kVA	400 V + N	400 V + N	964	684	1252	604	472	18		623
C25D125-180	125 kVA	400 V + N	400 V + N	1192	744	1430	664	677	18		750
C25D160-180	160 kVA	400 V + N	400 V + N	1192	744	1430	664	677	18		834

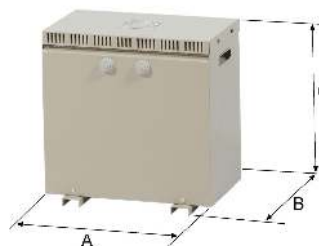
## C30D - HARMONIC FILTER COMPENSATOR FOR OFFICE BUILDINGS C30D, WITH GALVANIC ISOLATION

Serie: C30D



E-2011

- Filtering of harmonics 3rd, 5th, 7th, 9th, 15th, 17th, 19th
- Input voltage: 400 V+N, output: 2 x 400 V+N
- Note: For selection, please consult the application guide



### Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	3, 5, 7, 9, 15, 17, 19
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 25kVA
Set of wheels (optional)	RUE060 wheels from C30D10 to C3031.5 RUE125 wheels from C30D40 to C30D160 <a href="#">Link to wheels prices</a>
Maximum admissible 3rd harmonic in voltage	- -
Maximum admissible THD-I	110 %
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2, CE IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	45 %
Reduction of neutral current and neutral - earth voltage up to	90 %
Reduction of THD-I and THD-V up to	85 %
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

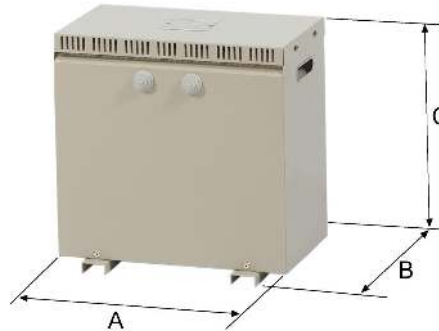
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
C30D10	10 kVA	400 V + N	2 x 400 V+N	595	395	708	355	350	12	110
C30D12.5	12,5 kVA	400 V + N	2 x 400 V+N	595	395	708	355	350	12	131
C30D16	16 kVA	400 V + N	2 x 400 V+N	595	395	708	355	350	12	153
C30D20	20 kVA	400 V + N	2 x 400 V+N	595	395	708	355	350	12	175
C30D25	25 kVA	400 V + N	2 x 400 V+N	789	490	965	450	426	13	222
C30D31.5	31,5 kVA	400 V + N	2 x 400 V+N	789	490	965	450	426	13	279
C30D40	40 kVA	400 V + N	2 x 400 V+N	964	684	1252	604	472	18	383
C30D50	50 kVA	400 V + N	2 x 400 V+N	964	684	1252	604	472	18	390
C30D63	63 kVA	400 V + N	2 x 400 V+N	964	684	1252	604	472	18	449
C30D80	80 kVA	400 V + N	2 x 400 V+N	964	684	1252	604	472	18	534
C30D125	125 kVA	400 V + N	2 x 400 V+N	1192	744	1430	664	677	18	758
C30D160	160 kVA	400 V + N	2 x 400 V+N	1192	744	1430	664	677	18	854

# C10F - HARMONIC FILTER COMPENSATOR FOR INDUSTRIAL INSTALLATIONS C10F

Serie: C10F



- Filtering of harmonics 5th, 7th, 11th, 13th, 17th, 19th
- Input voltage: 400 V+N, output: 400 V+N
- Note: For selection, please consult the application guide



## Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	5, 7, 17, 19 5, 7, 11, 13, 17, 19 in combination with RTL or RTLX inductances
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 40 kVA
Set of wheels (optional)	RUE060 wheels from C10F16 to C10F80 RUE125 wheels from C10F125 to C10F200 <a href="#">Link to wheels prices</a>
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2, CE IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	20 % 35 % in combination with RTL or RTLX inductances
Reduction of THD-I and THD-V up to	60 % 85 % in combination with RTL or RTLX inductances
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

## Products and dimensions

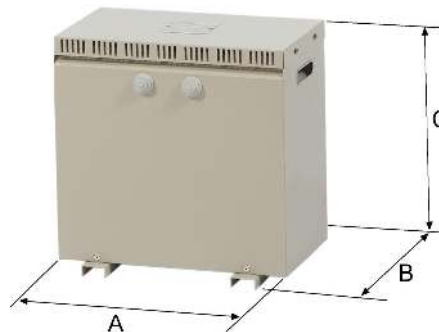
Reference	Rating	I.voltage	O.voltage	Dimensions mm					Fig.	Weight kg
				A	B	C	D	E		
C10F10	10 kVA	400 V + N	400 V + N	525	395	640	355	350	12	80
C10F12.5	12,5 kVA	400 V + N	400 V + N	525	395	640	355	350	12	96
C10F16	16 kVA	400 V + N	400 V + N	595	395	708	355	350	12	101
C10F20	20 kVA	400 V + N	400 V + N	595	395	708	355	350	12	109
C10F25	25 kVA	400 V + N	400 V + N	595	395	708	355	350	12	128
C10F31.5	31,5 kVA	400 V + N	400 V + N	595	395	708	355	350	12	153
C10F40	40 kVA	400 V + N	400 V + N	789	490	965	450	426	13	197
C10F50	50 kVA	400 V + N	400 V + N	789	490	965	450	426	13	213
C10F63	63 kVA	400 V + N	400 V + N	789	490	965	450	426	13	248
C10F80	80 kVA	400 V + N	400 V + N	789	490	965	450	426	13	290
C10F125	125 kVA	400 V + N	400 V + N	964	684	1252	604	472	18	448
C10F160	160 kVA	400 V + N	400 V + N	964	684	1252	604	472	18	517
C10F200	200 kVA	400 V + N	400 V + N	964	684	1252	604	472	18	625

## C20F - HARMONIC FILTER COMPENSATOR FOR INDUSTRIAL INSTALLATIONS C20F, WITH GALVANIC ISOLATION

Serie: C20F



- Filtering of harmonics 5°, 7°, 11°, 13°, 17°, 19°
- Input voltage: 400V, output: 2 x 400V + N
- Note: For selection, please consult the application guide



### Technical characteristics

Isolation	Class H - 180°C
Winding	Class HC - 200°C
Cover	In metal enclosure, epoxy polyester painted
Filtering of harmonics coming from the load	5, 7, 17, 19 5, 7, 11, 13, 17, 19 in combination with RTL o RTLX inductances
Frequency	50-60 Hz
Protection degree	IP-23
Includes	Lifting eyebolts as from 31,5 kVA
Set of wheels (optional)	RUE060 wheels from C20F10 to C20F50 RUE125 wheels from C20F63 to C20F250 <a href="#">Link to wheels prices</a>
Standards	IEC/EN/UNE-EN 60076 - 60726, CE IEC/EN/UNE-EN 61000-3-2, CE IEC/EN/UNE-EN 61000-3-4 IEE 519, CE
Reduction of phase current up to	20 % 35 % in combination with RTL o RTLX inductances
Reduction of THD-I y THD-V up to	60 % 85 % in combination with RTL o RTLX inductances
Cooling	ANAN
Ambient temperature	30°C
Test voltage	3 kV (1 min, 50 Hz)

### Products and dimensions

Reference	Rating	I.voltage	O.voltage	Dimensions mm						Fig.	Weight kg
				A	B	C	D	E	Ø		
C20F10	10 kVA	400 V	2 x 400 V+N	595	395	708	355	350	12		103
C20F12.5	12,5 kVA	400 V	2 x 400 V+N	595	395	708	355	350	12		109
C20F16	16 kVA	400 V	2 x 400 V+N	595	395	708	355	350	12		131
C20F20	20 kVA	400 V	2 x 400 V+N	595	395	708	355	350	12		153
C20F25	25 kVA	400 V	2 x 400 V+N	595	395	708	355	350	12		173
C20F31.5	31,5 kVA	400 V	2 x 400 V+N	789	490	965	450	426	13		213
C20F40	40 kVA	400 V	2 x 400 V+N	789	490	965	450	426	13		253
C20F50	50 kVA	400 V	2 x 400 V+N	789	490	965	450	426	13		289
C20F63	63 kVA	400 V	2 x 400 V+N	964	684	1252	604	472	18		405
C20F80	80 kVA	400 V	2 x 400 V+N	964	684	1252	604	472	18		449
C20F100	100 kVA	400 V	2 x 400 V+N	964	684	1252	604	472	18		497
C20F125	125 kVA	400 V	2 x 400 V+N	964	684	1252	604	472	18		607
C20F160	160 VA	400 V	2 x 400 V+N	1192	744	1430	664	677	18		758
C20F200	200 kVA	400 V	2 x 400 V+N	1192	744	1430	664	677	18		830
C20F250	250 kVA	400 V	2 x 400 V+N	1192	744	1430	664	677	18		1136

# WEB CATALOGUE

## OPTIONAL

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### Enclosures

- Different IP degrees
- Paint in accordance with ISO 12994-2 category C5
- Enclosure thickness  $\geq$  2mm
- Different RAL colours
- Stainless steel

### Accessories

- Wheels
- Brass cable glands
- Industrial plugs/sockets (CETAC type)
- Tap changers
- By-pass
- Breakers and MCBs
- Signal LEDs
- Over-temperature protections (bimetal contact, PT-100, PTC xxx°C and temperature control unit)
- Anti-condensation heaters and hygrometers
- Extractor fan with filter

### Other characteristics

- Special voltages up to 7,2kV
- Taps and regulations
- Low losses
- High ambient temperature
- Low inrush current
- Electrostatic screens
- Low temperature rise
- High efficiency
- Special connection group
- Special isolation voltage
- Certification according to DNV, Lloyd's, BV, etc.
- Special k factor
- Low noise level
- Safety class II



*Contact us if other options are required*

# WEB CATALOGUE

## POLYLUX, S.L.

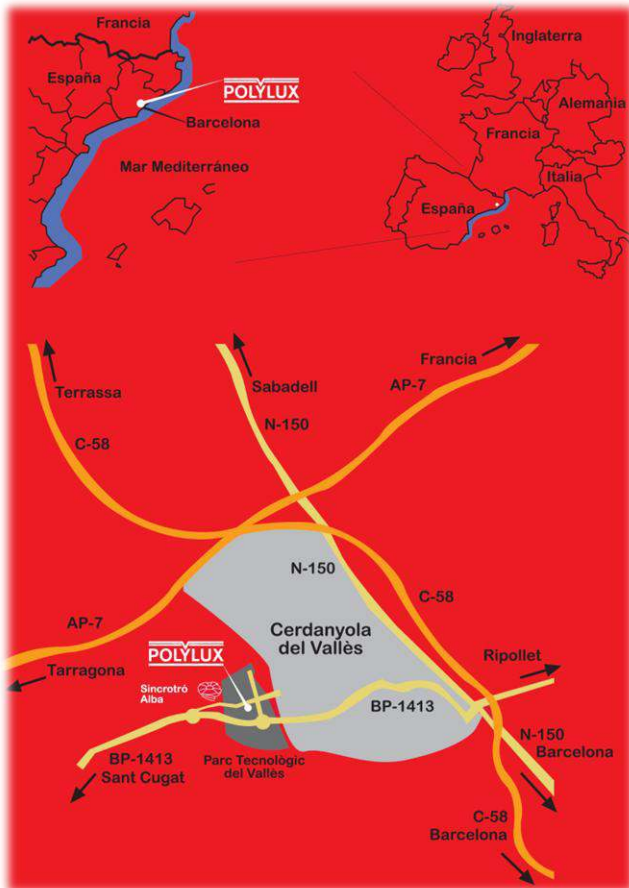
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**POLYLUX**