

Harmonic filtering compensator transformers IP-23



- Electromagnetic filters for the elimination of harmonics based on the cancellation and compensation of magnetic fluxes. Three phase isolating transformers with electrostatic shield between primary and secondary and galvanic isolation of the load.
- Improves energy efficiency, power factor and current and voltage distortion.
- Reduces phase currents, neutral current and neutral-earth voltage.
- **TAC3** compensator is especially designed to cancel homopolar current harmonics (3^o-9^o-15^o) generated by computers, fluorescents and discharge lamps, power supplies, motor starters and other types of single phase non-linear loads. Indicated for data centers, bank offices, telecommunication buildings, etc.
- **TAC5** compensator provides two outputs (12 pulses), each supplying 50% of the load. It is especially designed to cancel current harmonics (5^o-7^o-17^o) generated by frequency converters, variable speed drives for motors, UPS systems, rectifiers, soft-starters and other types of non-linear loads. Indicated for large HVAC installations, three phase coupled power converters and simultaneously working.
- Installed into metal enclosure IP-23 protection degree, resin polyester-epoxy powder coated with excellent physical-mechanical and anti-corrosive properties.

Technical characteristics

Power rating	5 ÷ 200 kVA
Input voltage	3 x 400 V
Output voltage	3 x 400 V + N
Frequency	50/60 Hz
Harmonics overload factor	K ≥ 20
Crest factor of current wave	4,5
Ambient temp.	30 °C
Insulation class	F (155 °C) Up to 100 kVA
	H (180 °C) From 125 kVA
Protection degree	IP-23
Safety class	Class I
Test voltage	3 kV
Standard	IEC/UNE-EN 61558-1 IEC/UNE-EN 60076-11

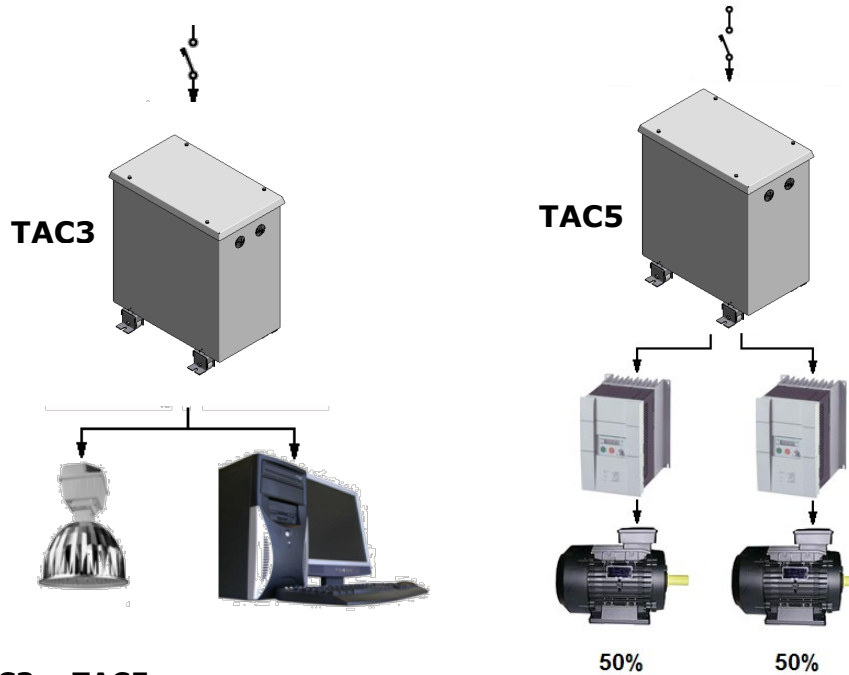


- Select model TAC3 or TAC5 according to harmonic type present in the network:

		TAC3	TAC5
Current harmonics at network		3 ^o -9 ^o -15 ^o	5 ^o -7 ^o -17 ^o
% Filtering	Neutral current	≈ 90 %	-
	Phase current	≈ 25 %	≈ 40%
	THD I	≈ 50%	≈ 80%
	THD V	≈ 50%	≈ 80%

- Select compensator rating according to the load:

$$kVA = \frac{\sqrt{3}}{1000} \times V_{TRMS} \times I_{TI}$$



Series TAC3 – TAC5

Rating kVA	Reference		Dimensions mm						Weight kg	Type
	TAC3	TAC5	A	B	C	D	E	Ø		
5	TAC3005	TAC5005	475	345	520	320	320	10	55	II
10	TAC3010	TAC5010	545	385	615	350	360	10	95	II
15	TAC3015	TAC5015	615	425	690	400	400	10	125	II
20	TAC3020	TAC5020	615	425	690	400	400	10	150	II
25	TAC3025	TAC5025	615	425	690	400	400	10	178	II
30	TAC3030	TAC5030	775	575	940	400	550	10	212	II
40	TAC3040	TAC5040	775	575	940	400	550	10	254	II
50	TAC3050	TAC5050	775	575	940	400	550	10	295	III
60	TAC3060	TAC5060	775	575	940	400	550	10	320	III
80	TAC3080	TAC5080	775	575	940	400	550	10	390	III
100	TAC3100	TAC5100	930	710	1275	480	670	16	495	III
125	TAC3125	TAC5125	930	710	1275	480	670	16	600	III
160	TAC3160	TAC5160	1070	880	1460	660	840	16	780	III
200	TAC3200	TAC5200	1070	880	1460	660	840	16	900	III

* Other features, power, voltage, IP00, etc., on request

* Torytrans reserves the right to modify the information in any time and without prior notice.

