g48filter-T >>>3-years warranty

250 kvar at 400 V 50 Hz

Code	TLFG48T250
Rated Voltage	400 ÷ 415 V ± 10%
Rated Frequency	50 Hz
Capacitors Voltage	480 V
THDi max	100 %
THDv max	≤ 6 %
Power (400 V)	250 kvar
Rated Current	360 A
Banks (400 V)	25 – 25 – 50 – 50 - 100 -
Steps	10*25 kVAr
Temperature class	-5 / +52°C
Insulating Voltage	690 V
Max overcurrent	1,43 In
Total losses	< 4 W/kvar
Reference standards	EN61921, EN61439-1

Capacitors

Three-phase metallized polypropylene Capacitors with Nitrogen Gas (N2) insulation "dry type", MKPG Series, Rated Voltage 480 V, Operating Voltage 400 V, Insulation Voltage 690 V, equipped with discharge resistors, overpressure safety device and IP20 terminals. Dielectric losses < 0,2W/kVAr. Reference Standards IEC60831-1/2, UL N.810, CSA
Overvoltage: 480 V (24h), 530 V (8h), 555 V (30m), 585 V (5m), 625 V (1m), 1450 V (Picco)
Overcurrent: 3In (24h), 4In (30m), 5In (15m), 10In (Picco)

Thyristor modules

The Thyristor is the intrinsic regulation organ in a Static Module and works in principle as an electronic switch that performs a switching process at each half of the power supply. The thyristors which form part of the module are "triggered" through a gate pulse; the current flows until its value falls below the value of the holding current, which in the alternating current circuits corresponds to the zero crossing of one of the two half-wave in the network. The Module consists of two phase Thyristors (one for the positive half-wave, the other for the negative one) connected in anti-parallel. The insertion of detuning capacitors and ballasts is thus accomplished without moving parts. The thyristors are commanded at the natural passage for the zero of the capacitor current. The capacitors are thus connected to the plant without significant transients; control is also such as to significantly limit harmonic emissions below the regulatory limits.

Detuning Reactors

Detuning reactors made of sheet oriented crystals, placed in series between the contactor and the capacitor bank, with the following features: linearity 1.8 Ip/In, realized in class H, over temperature range: 60°C, complete with thermal probe for switching off Capacitors Banks in case of overtemperature, limit the peak current inrush capacitors, detuning frequency 189 Hz (p=7%), standard for 5th Harmonic

Microprocessor PFC Controller

Automatic PFC Microprocessor Controller PCRJ Series, completed with backlit multilingual LCD Display in 10 languages with the following features: Operation on 4 Quadrants for cogeneration systems, Automatic Recognition of the direction of the current, RMS Voltage and Current, Uniform the use of each Bank / Status of each Bank / Weekly Power Factor, Capacitors overload, Overtemperature, Network THD, AUT / MAN, Protection for overcurrent, overvoltage and overtemperature and micro-interruptions, Setting of Maintenance Program/Advise by month/year

Switch Disconnector

N. 1 Switch Disconnectors with door interlock sized 1,43 time the nominal current of PFC Unit as per EN61921, 3*630 A

Fuses

NH00 Fuses 100 kA for the protection of each capacitor bank. Auxiliary circuits are protected through 10,3 x 38 Fuses

Transformer

Single phase transformer for separating the power circuit from the auxiliary circuit (230 Vac)

Cabinet

Sheet-steel enclosure 15 and 20/10, painted with epoxy dust paint, colour RAL7035 (others on request).
Protection degree IP30 external, IP00 internal (IP20 with open doors on live parts).
Internal wiring made with cables are FS17 type, Reference standards CEI EN 50575, CEI UNEL 35716, CEI EN 50525 e CPR UE305/11.
The configuration is in Modular Racks connected through copper busbar system (Type Tested KEMA ref. 5189-16 Icw 50 kA for 1 sec.).

Incoming cables	From the Bottom (From the top on request, code Y)
Dimensions / Weight	(W*H*D) 800*1730*600 mm / 385 Kg
Ventilation	Ventilation Forced with Fan and PFC Controller's thermostat, for alarm signal and switch off contactors in case of overtemperature (natural operation up to 35°C; forced ventilation from 35°; with a temperature of 50°, the PFC will be switched off)