



K-factor

ELECTRONICS MADE EASY

*industrial transformers
reversible autotransformers
k-factor transformers*

*three phase transformers up to 500kVA
three phase reversible autotransformers*



*electronic and electromechanical
voltage stabilizers*



power inverters

uninterruptible power supplies

hi-grade isolation transformers



*frequency converters
static variable transformers
test equipments*

THREE PHASE K-FACTOR TRANSFORMERS

K-factor transformers are designed to manage the heating effect caused by harmonics and high neutral currents. The K-factor index shows the ability of the transformer to withstand the harmonics operating within his thermal limits, through conductors of a proper size. The design of the K-factor transformers considers the "stray" losses caused by nonlinear loads and the DC component caused by triplen harmonics. The additional current which circulates in the delta winding which may leads to a core saturation and voltage instability is taken into consideration and does not bring to a shorter life of the transformer.

K-factor rating:	K-4, K-13, K-20
Overload capacity	500% for 1/60" - 200% for 30"
Dielectric strength	4,2kVac min.
Impedance voltage	from 3% to 5%
Taps on primary	± 2x2.5% FCAN, ±2x2.5% FCBN
Input voltage range:	±6% on rated voltage
Max regulation at full load	up to 3%
Audible noise	< 60dB at 1mt.
Enclosure type:	IP23, metal, epoxy painted RAL7032
Operating temperature:	0°C to 50°C
Operating humidity:	up to 90% relative (non condensing)
Operating altitude:	up to 1000mt above sea level

da / from
15kVA

a / to
300kVA

ingresso
input
**208-220-380-
400-440-480-
600Vac**
or others on request

uscita
output
**208-220-380-
400-440-480-
600Vac**
or others on request

frequenza
frequency
50/60 Hz

norme
standards
**en61558-2-4
cei 96-8
vde 0550
bs 171**

TYPICAL LOAD K-FACTORS

Load type	k-factor
Electric discharge lighting	K-4
UPS with optional input filtering	K-4
Welders	K-4
Induction heating equipment	K-4
PLCs and solid state controls	K-4
Telecommunication equipments	K-13
UPS without input filtering	K-13
Multiwire receptacle circuits in general care areas of healthcare facilities and classrooms of schools	K-13
Multiwire receptacle circuits supplying inspection or testing equipment on an assembly or production line	K-13
Mainframe computer load	K-20
Solid state motor drives	K-20

DESIGN STYLE AND FEATURES

Electrostatic shield between windings
Totally isolates distribution system from hazards of harmonics and power disturbances
Totally enclosed IP23 non-ventilated design
Low temperature rise
Copper wound

Magnetic and resistive properties of the K-factor transformers are enhanced when it is designed specifically for non-linear loads. De-rating a transformer does not assure that it will perform correctly when subjected to non-linear loads.. Copper windings and a double sized neutral conductor, allow to handle the heat generated by harmonic currents.

K-4 RATED TRANSFORMERS

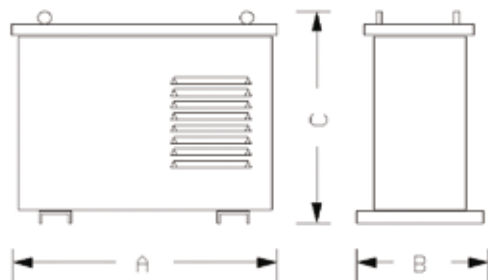
PART NO.	POWER KVA	WIDTH	DEPTH	HEIGHT	WEIGHT KG.
TTI427-K4	15	550	365	520	120
TTI547-K4	30	710	440	770	150
TTI667-K4	45	775	570	825	170
TTI757-K4	75	775	570	825	250
TTI807-K4	100	775	570	825	350
TTI817-K4	150	1100	700	1000	420
TTI827-K4	200	1100	700	1000	600
TTI835-K4	300	1100	700	1000	690

K-13 RATED TRANSFORMERS

PART NO.	POWER KVA	WIDTH	DEPTH	HEIGHT	WEIGHT KG.
TTI427-K13	15	710	440	770	140
TTI547-K13	30	710	440	770	180
TTI667-K13	45	775	570	825	270
TTI757-K13	75	775	570	825	360
TTI807-K13	100	1100	700	1000	440
TTI817-K13	150	1100	700	1000	600
TTI827-K13	200	1200	800	1400	680
TTI835-K13	300	1200	800	1400	1100

K-20 RATED TRANSFORMERS

PART NO.	POWER KVA	WIDTH	DEPTH	HEIGHT	WEIGHT KG.
TTI427-K20	15	710	440	770	150
TTI547-K20	30	775	570	825	240
TTI667-K20	45	775	570	825	290
TTI757-K20	75	775	570	825	460
TTI807-K20	100	1100	700	1000	530
TTI817-K20	150	1200	800	1400	750
TTI827-K20	200	1200	800	1400	980
TTI835-K20	300	1200	800	1400	1250



a wide range of products from your partner in high quality electrical and electronic products made in Italy



SINGLE PHASE ISOLATION TRANSFORMERS FROM 25VA TO 3KVA
SINGLE PHASE SAFETY TRANSFORMERS FROM 25VA TO 3KVA
SINGLE PHASE AUTOTRANSFORMERS, OPEN TYPE, UP TO 5KVA
SPECIAL TRANSFORMERS WITH CUSTOM INPUT/OUTPUT VOLTAGE



SINGLE PHASE REVERSIBLE AUTOTRANSFORMERS
SINGLE PHASE PROTECTED TRANSFORMERS



SINGLE PHASE ISOLATION TRANSFORMERS FROM 4KVA UP TO 100KVA
THREE PHASE TRANSFORMERS FROM 300VA TO 500KVA
THREE PHASE AUTOTRANSFORMERS FROM 1KVA TO 500KVA
THREE PHASE AUTOTRANSFORMERS FOR INDUCTION MOTOR STARTING
THREE PHASE FILTER REACTANCES
SPECIAL TRANSFORMERS WITH CUSTOM INPUT/OUTPUT VOLTAGE



THREE PHASE AUTOTRANSFORMERS FROM 1KVA TO 500KVA IN ENCLOSURE
K-FACTOR TRANSFORMERS
ENCLOSURES FOR TRANSFORMERS



SINGLE PHASE ELECTRONIC VOLTAGE STABILIZERS FROM 300VA TO 20KVA
SINGLE PHASE ELECTROMECHANICAL VOLTAGE STABILIZERS FROM 2KVA TO 50KVA
THREE PHASE ELECTROMECHANICAL VOLTAGE STABILIZERS FROM 3KVA TO 600KVA
SINGLE PHASE VOLTAGE ADAPTERS FROM 0.5KVA TO 5KVA



SINGLE PHASE 50/60Hz FREQUENCY CONVERTERS FROM 0.5KVA TO 15KVA
THREE PHASE 50/60Hz FREQUENCY CONVERTERS FROM 5KVA TO 100KVA
SINGLE AND THREE PHASE ELECTROMECHANICAL A/C VARIABLE POWER SUPPLIES
UNINTERRUPTIBLE POWER SUPPLIES UP TO 20KVA, SINGLE AND THREE PHASE



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WORLDS' CHAMPIONSHIP
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