ULTRA-K TRANSFORMERS

K-Rated Shielded Isolation Transformers

SERIES 600K

Designed to be used with non-linear or linear load applications such as:

- Switch mode power supplies
- Electronic solid state ballasts
- HID lighting
- Diode and SCR rectifiers
- Variable Speed Drives
- Inverters
- UPSs
- Frequency converters
- Arc welders
- Induction heaters
- Printing presses and all similar loads exhibiting non-linear characteristics

Controlled Power Company is an ENERGY STAR® Partner.

UL LISTED 1561

ISO 9001:2000 SGS

CONTROLLED POWER COMPANY

"World's recognized authority in power treatment"

Power Problems, Causes, & Solutions

PROBLEM #1:

Electrical Noise And Impulses

Lightning storms are only one cause of electrical noise and impulses. The majority of electrical impulses are generated by electrical equipment interacting with a facility's power infrastructure. For example, the cycling action of the light in a copy machine can cause more electrical noise problems per hour than a lightning storm. This electrical noise is damaging to surrounding office equipment and the cause of many interruptions, re-starts, system upsets and nuisance equipment behavior. Operation with these problems unchecked drastically affects overall performance, efficiency, and profitability.

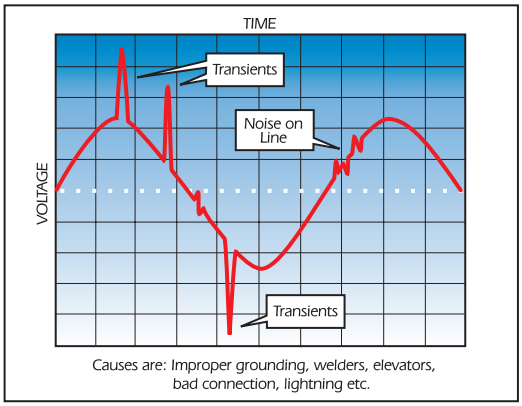


Figure 1: Noise and transients

SOLUTION:

A multi-shielded isolation transformer with excellent noise and impulse attenuation characteristics.

The ULTRA-K provides superior common and transverse noise attenuation and prohibits system backfeed from noise generating loads. The optional pre-wired, high frequency filter and category B3 TVSS offer your electrical loads unsurpassed noise and impulse protection and better overall performance.

PROBLEM #2:

Harmonic Loading of Electrical Systems

The modern office has a myriad of electronic equipment and electronic ballast lighting. Medical and industrial equipment have also joined the ranks of electronic control. The proliferation of this equipment was brought about by lower costs, improved efficiency and reduced physical size. This evolution will continue well into the future. These modern electrical loads introduce a power problem known as harmonics, which is caused by the non-linear current demand. The symptoms of this problem are:

- Decreased distribution capacity; limiting KVA availability
- Excessive neutral currents; exceeding design limits
- Higher levels of neutral-to-ground voltage
- Voltage distortion; decreasing motor life
- Circuit breakers trip below their rating
- Connections and conductors overheat
- Transformers overheat; reducing life
- Power factor correction capacitors fail prematurely
- Digital clocks run fast
- Major cause of electrical fires

Linear loads draw current throughout the entire 60Hz waveform, tracking the applied voltage (Figure 2). Non-linear loads draw current in short intervals with extraordinarily high magnitudes (Figure 3), generating harmonics (multiples of the fundamental 60Hz). The higher frequency harmonics travel along the outer edge of the conductor and create eddy currents in the transformer. The reduction of the effective cross-sectional area of the conductor (Skin Effect) creates additional heat that exceeds the safety limits of the conductors and introduces voltage distortion. Voltage distortion increases the transformer core flux density; creating higher core losses, magnetizing currents, and heating problems. In three phase wye circuits the problem intensifies; the triplen (3rd, 9th, 15th, 21st...) harmonics do not cancel, instead they add in the neutral as well as circulate in the delta primary of the transformer. Therefore, the transformer must be designed to handle these harmonic currents without overheating.

SOLUTION:

The ULTRA-K is designed to handle high harmonic currents with ratings of K4, K7, K13, K20. The higher the K-rating, the more harmonic current the transformer can handle. This is accomplished by incorporating precise design techniques without the cost of oversizing the transformer. To achieve the same harmonic handling capability of a K13 transformer, a standard transformer must be oversized 100%.

LINEAR LOAD

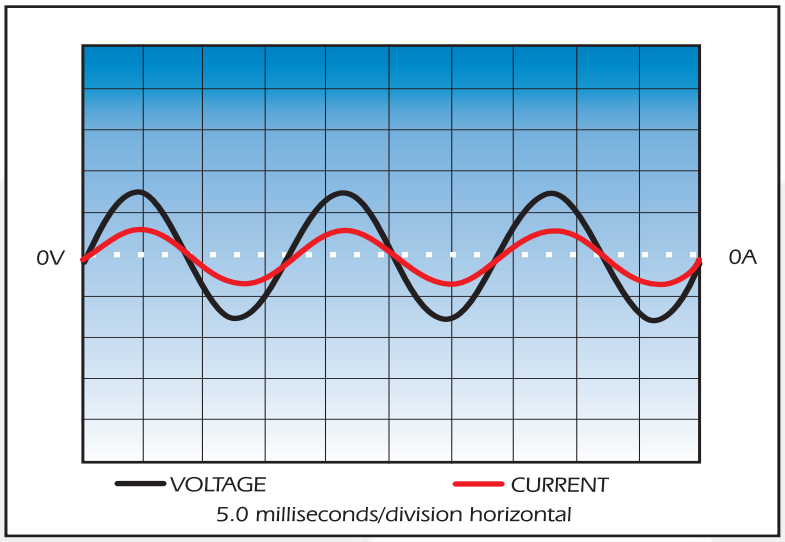


Figure 2: Voltage and current waveforms for a linear load

NON-LINEAR LOAD

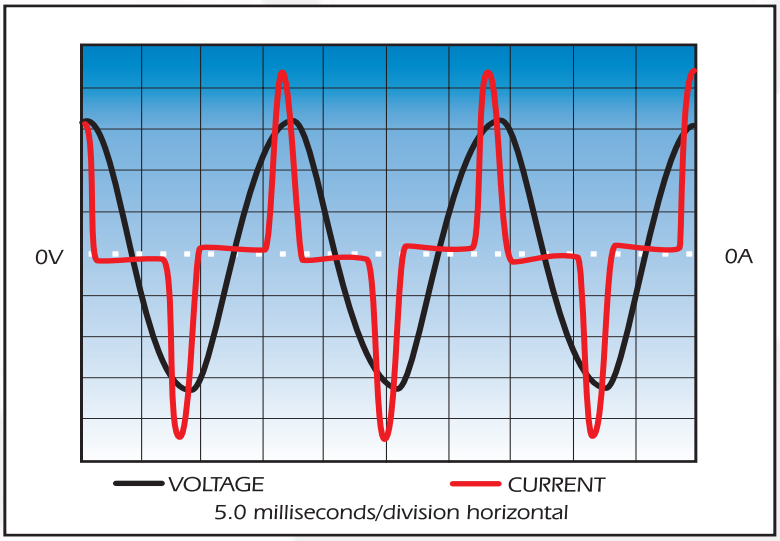
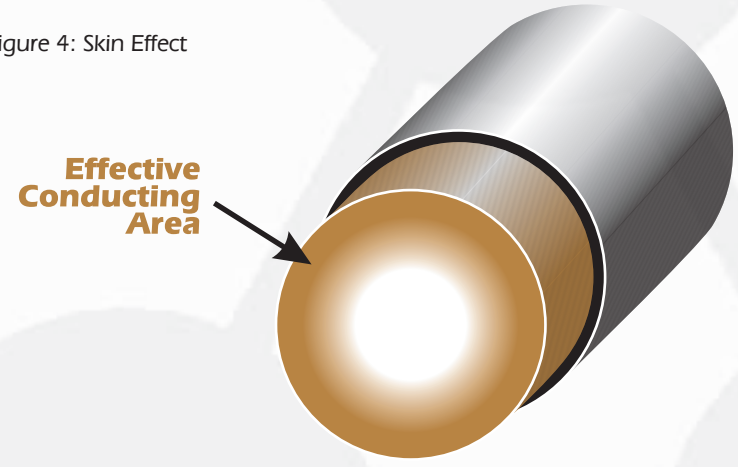


Figure 3: Voltage and current waveforms for a non-linear load

Figure 4: Skin Effect



PROBLEM #3:

The Distribution of Electrical Power

In addition to the attenuation of electrical noise, spikes and rating a transformer's proper K-factor; efficient and effective power distribution to the transformer load is a major installation and flexibility concern.

Computer and other electronic installations are subject to frequent change, expansion, or re-arrangement. An efficient and flexible method of distributing power to this equipment is necessary to increase total system flexibility and utilization; without going through expensive time consuming permanent wiring changes.

SOLUTION:

Single Phase Power Distribution

The single phase Ultra-K is designed for maximum application flexibility. The back panel interfaces with computer peripherals in any combination of three configurations. The Ultra-K can be ordered with known output receptacles, extension receptacles and/or field wired extensions. Changes are made later by simply installing the proper output distribution panel. The three optional output configurations are :

1. Receptacle Interface – The back panel can be customized to mount a large variety of receptacles. This interface option allows peripherals to plug in directly to the Ultra-K.

2. Flexible Extension with Receptacle Termination – The back panel accommodates a flexible extension with a large variety of receptacle terminations. The length of the flexible extension is specified in 5-foot increments.

3. Flexible Extension with Field Wired Termination – The third configuration is very similar to the configuration noted in (2) except that the termination is field installed wiring instead of receptacles.

SOLUTION:

Three Phase Power Distribution:

The three phase Ultra-K is hard-wired in and hard-wired out. Power distribution is accomplished by means of an optional Remote Power Distribution Center (RPD). The RPD incorporates a 42 pole panel board (an option of an additional 42 poles is available for 84 total), an input circuit breaker disconnect, and bottom access for flexible conduit. The RPD enclosure is designed for installation in an office, computer room, industrial control systems, or any setting where flexibility is desired.

K-RATED TRANSFORMERS

Controlled Power Company has been building the power protection industry's highest quality power control equipment for over twenty-five years. We have established an enviable reputation for quality during that time. The quality is reflected in the design, material, workmanship, and ultimately in the performance of the product.

Controlled Power Company manufactures the widest range of power equipment for regulating, conditioning, isolating, purifying and distributing incoming electrical power. State of the art technology is utilized in all products to optimize performance characteristics for various applications. This equipment protects sensitive electronic systems from erratic operation and failure due to power line transients, noise, or factors due to high harmonic current caused by the load.

WHAT K-FACTOR TO USE?

Ultra-K transformers are available from K4, K7, K13, K20. Making the correct selection is extremely important because it affects cost and can jeopardize safety. Calculations of harmonic content produce a precise K value. However, since power loads change constantly the calculated value can be questionable. New construction installations have no data. Empirical data allows us to use past practices to obtain the correct K rating.

HARMONICS	
Incidental Electronic Equipment Representing < 5%	K1
Harmonic Producing Equipment Representing < 35%	K4
Harmonic Producing Equipment Representing < 50%	K7
Harmonic Producing Equipment Representing < 75%	K13
Harmonic Producing Equipment Representing <100%	K20

*These figures provide a 25% margin.

A K7 Rated transformer is rated for 50% linear load and 50% non-linear load. A detailed analysis of a given installation by a consultant would reveal this. The problem, of course, is that everything changes. The mix may be 50/50 at one point in time and change to 80/20 in the future.

A K13 Rated transformer is rated for 75% non-linear loading. This transformer takes care of present and future needs.

A K20 Rated transformer is for installations that have an unusually high harmonic or non-linear content.

PRODUCT FUNCTION AND DESCRIPTION

The overall function of the Ultra-K is to deliver conditioned power to non-linear high-harmonic current loads and operate at safe temperatures while minimizing the harmonic current effect delivered to the power grid. An additional function of the Ultra-K is to attenuate both common and transverse mode noise going to the load.

The Ultra-K is offered with four different K-factors (K4, K7, K13, K20). The K-factor is a means of rating the transformer's ability to withstand the heating effects of harmonic and fundamental current flowing in the transformer. Utilization of the proper K-factor is absolutely essential in every installation. If too low a K-factor is used, it can result in waveform distortion, overheating, failure and fire.

PRODUCT FEATURES

The Ultra-K has many features to assure the user of reliable, trouble free, safe operation when using the proper K-rating. A few of the many features are:

- Multiple K-rating selection, K4, K7, K13, K20
- Designed for linear and non-linear loads
- All copper windings and conductors
- Double-sized neutral
- Removes triplen harmonic currents from the line
- High efficiency
- UL listed 1561 for K-Factor operation
- Double or triple shielded for high common mode noise attenuation
- Excellent transverse mode noise attenuation
- Optional filter for additional high frequency noise attenuation
- K13 or higher capable of handling 100% non-linear load
- Solves 88% of all typical power disturbance problems
- Heavy duty cabinet construction
- Category B3 load transient protection with optional TVSS
- Optional input/output breakers
- Integral Power Distribution available (single phase)
- Remote Power Distribution available (three phase)

SPECIFICATIONS & OPTIONS

Power Output
Single phase: 5, 8, 10, 15, 20, 25 KVA
Three phase: 15, 30, 50, 75, 100, 112, 125, 150, 225, 300, 500 KVA

Input Voltage
Single Phase: 208, 240 or 480
Three Phase: 208, 240, 480 or 600 Delta
Taps: 2-2.5% Full capacity above nominal (FCAN)
4-2.5% Full capacity below nominal (FCBN)
500 KVA 1-5% (FCAN), 2-5% (FCBN)
Special voltages available, consult factory

Output Voltage
Single Phase: 120/240 or 208
Three Phase: 208/120Y or 480/277Y
Special voltages available, consult factory

K-Factor Ratings
K4, K7, K13, K20

Harmonic Handling Capability
Designed to handle following percentages of fundamental and harmonics without exceeding temperature rise limits:

	K4	K7	K13	K20
Fundamental 60Hertz	91%	80%	50%	50%
3rd Harmonic	34%	51%	72%	50%
5th Harmonic	22%	29%	43%	65%
7th Harmonic	10%	13%	21%	25%
9th Harmonic	4%	10%	9%	20%
11th Harmonic	3%	3%	4%	4%
13th Harmonic	2%	2%	3%	3%
15th Harmonic	2%	2%	3%	3%
17th Harmonic	1%	1%	2%	2%

$K=\Sigma\ I_h(pu)^2h^2$, h=harmonic, I=RMS current of harmonic

Transient Suppression TVSS Option
6 mode, 120KA capacity 8/20usec, ANSI/IEEE 62.41 Cat B3, Conforms to UL 1449; 330v let-through rating for 120vac, 600v let-through rating for 277vac

Common Mode Noise Attenuation
Standard: Double Shielding – 126dB common mode noise attenuation
Optional: Triple Shielding – 146dB common mode noise attenuation

Efficiency
Typically 98% or higher

Output Distortion
Less than 1.0% total harmonic distortion added

Load Regulation
± 2% from no load to full load

Operating Frequencies
60 Hertz, ± 3 Hertz

Operating Temperatures
0°C to 40°C ambient

Audible Noise
45 to 55dBA @ 1 meter, depending on size

Output Impedance
3% to 4% depending on size

Basic Impulse Level
10KV

Harmonic Elimination
The load generated triplen harmonics of the fundamental (3rd, 9th, 15th, 21st, etc.) are eliminated from the input lines. 5th and 7th harmonics shift 30° for attenuation.

Enclosure
Single Phase: Commercial enclosure with patch panels for power distribution.
Three Phase: Heavy duty industrial enclosure. Optional Remote Power Distribution (RPD)

Construction
Standard: All copper winding and conductor construction, dry type transformer with M-6, grain-oriented silicon steel.

Neutral Size
Sized for twice the ampacity of the secondary phase conductor.

Cooling
Convection cooled

Temperature Rise
115°C average above 40°C ambient

Input and Output Interface
Single Phase: Input hard-wired. Output hard-wired or patch panels with wide choice of receptacles and cable lengths.
Three Phase: Standard hard-wired input and output. Optional input and/or output circuit breakers. Optional Remote Power Distribution Unit.

Standards
Systems are designed and manufactured referencing the following:

- National Electrical Manufacturers Association (NEMA)
- American National Standards Institute (ANSI)
- National Electric Code (NEC)
- Institute of Electrical and Electronic Engineers (IEEE)
- National Fire Protection Association (NFPA)

Safety
Underwriters Laboratories (UL) – UL Listed 1561, labeled for operation with or below a specific K-factor rating and CUL for Canadian use.

MODEL SELECTION GUIDE

ULTRA-K
Series 600K Shielded K-Rated Transformers

K-4 RATED TRANSFORMERS

SINGLE PHASE

MODEL NUMBER	POWER RATING	*INPUT VOLTAGE	#OUTPUT VOLTAGE	OUTPUT INTERFACE	CABINET DIMENSIONS (in.)	WEIGHT (lbs.)
5*#X-5K6-4	5	208/240/480	120/240 OR 208	Hard-wired or 4 ea. 2" panels	14.75W x 21D x 24H	278
5*#X-8K6-4	8	208/240/480	120/240 OR 208		14.75W x 21D x 24H	319
5*#X-10K6-4	10	208/240/480	120/240 OR 208	Hard-wired or 7 ea. 2" panels supports single or double pole breakers	21.5W x 29D x 30H	345
5*#X-15K6-4	15	208/240/480	120/240 OR 208		21.5W x 29D x 30H	401
5*#X-20K6-4	20	208/240/480	120/240 OR 208		21.5W x 29D x 30H	454
5*#X-25K6-4	25	208/240/480	120/240 OR 208		21.5W x 29D x 30H	484

*# See back page for input/output voltage selection guide to complete model number.

THREE PHASE

MODEL NUMBER	POWER RATING	*INPUT VOLTAGE	#OUTPUT VOLTAGE	OUTPUT INTERFACE	CABINET DIMENSIONS (in.)	WEIGHT (lbs.)
8*#X-15K6-4	15	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	419
8*#X-30K6-4	30	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	552
8*#X-50K6-4	50	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	873
8*#X-75K6-4	75	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	1194
8*#X-100K6-4	100	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1266
8*#X-112K6-4	112	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1350
8*#X-125K6-4	125	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1488
8*#X-150K6-4	150	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1638
8*#X-225K6-4	225	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2509
8*#X-300K6-4	300	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2758
8*#X-500K6-4	500	480/600	480/277 or 208/120	Hard-wire	45W x 48D x 61H	4860

*# See back page for input/output voltage selection guide to complete model number.

K-7 RATED TRANSFORMERS

SINGLE PHASE

MODEL NUMBER	POWER RATING	*INPUT VOLTAGE	#OUTPUT VOLTAGE	OUTPUT INTERFACE	CABINET DIMENSIONS (in.)	WEIGHT (lbs.)
5*#X-5K6-7	5	208/240/480	120/240 OR 208	Hard-wired or 4 ea. 2" panels	14.75W x 21D x 24H	278
5*#X-8K6-7	8	208/240/480	120/240 OR 208		14.75W x 21D x 24H	319
5*#X-10K6-7	10	208/240/480	120/240 OR 208	Hard-wired or 7 ea. 2" panels supports single or double pole breakers	21.5W x 29D x 30H	345
5*#X-15K6-7	15	208/240/480	120/240 OR 208		21.5W x 29D x 30H	401
5*#X-20K6-7	20	208/240/480	120/240 OR 208		21.5W x 29D x 30H	454
5*#X-25K6-7	25	208/240/480	120/240 OR 208		21.5W x 29D x 30H	484

*# See back page for input/output voltage selection guide to complete model number.

THREE PHASE

MODEL NUMBER	POWER RATING	*INPUT VOLTAGE	#OUTPUT VOLTAGE	OUTPUT INTERFACE	CABINET DIMENSIONS (in.)	WEIGHT (lbs.)
8*#X-15K6-7	15	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	419
8*#X-30K6-7	30	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	552
8*#X-50K6-7	50	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	873
8*#X-75K6-7	75	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	1194
8*#X-100K6-7	100	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1266
8*#X-112K6-7	112	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1350
8*#X-125K6-7	125	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1488
8*#X-150K6-7	150	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1638
8*#X-225K6-7	225	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2509
8*#X-300K6-7	300	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2758
8*#X-500K6-7	500	480/600	480/277 or 208/120	Hard-wire	45W x 48D x 61H	4860

*# See back page for input/output voltage selection guide to complete model number.

ULTRA-K
Series 600K Shielded K-Rated Transformers

K-13 RATED TRANSFORMERS						
SINGLE PHASE						
MODEL NUMBER	**POWER RATING**	***INPUT VOLTAGE**	**#OUTPUT VOLTAGE**	**OUTPUT INTERFACE**	**CABINET DIMENSIONS (in.)**	**WEIGHT (lbs.)**
5*#X-5K6-13	5	208/240/480	120/240 OR 208	Hard-wired or 4 ea. 2" panels	14.75W x 21D x 24H	289
5*#X-8K6-13	8	208/240/480	120/240 OR 208		14.75W x 21D x 24H	330
5*#X-10K6-13	10	208/240/480	120/240 OR 208	Hard-wired or 7 ea. 2" panels supports single or double pole breakers	21.5W x 29D x 30H	380
5*#X-15K6-13	15	208/240/480	120/240 OR 208		21.5W x 29D x 30H	415
5*#X-20K6-13	20	208/240/480	120/240 OR 208		21.5W x 29D x 30H	491
5*#X-25K6-13	25	208/240/480	120/240 OR 208		21.5W x 29D x 30H	554

*# See back page for input/output voltage selection guide to complete model number.

THREE PHASE						
MODEL NUMBER	**POWER RATING**	***INPUT VOLTAGE**	**#OUTPUT VOLTAGE**	**OUTPUT INTERFACE**	**CABINET DIMENSIONS (in.)**	**WEIGHT (lbs.)**
8*#X-15K6-13	15	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	468
8*#X-30K6-13	30	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	625
8*#X-50K6-13	50	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	954
8*#X-75K6-13	75	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	1196
8*#X-100K6-13	100	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1326
8*#X-112K6-13	112	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1350
8*#X-125K6-13	125	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1547
8*#X-150K6-13	150	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1880
8*#X-225K6-13	225	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2794
8*#X-300K6-13	300	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	3077
8*#X-500K6-13	500	480/600	480/277 or 208/120	Hard-wire	45W x 48D x 61H	4860

*# See back page for input/output voltage selection guide to complete model number.

K-20 RATED TRANSFORMERS						
SINGLE PHASE						
MODEL NUMBER	**POWER RATING**	***INPUT VOLTAGE**	**#OUTPUT VOLTAGE**	**OUTPUT INTERFACE**	**CABINET DIMENSIONS (in.)**	**WEIGHT (lbs.)**
5*#X-5K6-20	5	208/240/480	120/240 OR 208	Hard-wired or 4 ea. 2" panels	14.75W x 21D x 24H	289
5*#X-8K6-20	8	208/240/480	120/240 OR 208		14.75W x 21D x 24H	330
5*#X-10K6-20	10	208/240/480	120/240 OR 208	Hard-wired or 7 ea. 2" panels supports single or double pole breakers	21.5W x 29D x 30H	380
5*#X-15K6-20	15	208/240/480	120/240 OR 208		21.5W x 29D x 30H	415
5*#X-20K6-20	20	208/240/480	120/240 OR 208		21.5W x 29D x 30H	491
5*#X-25K6-20	25	208/240/480	120/240 OR 208		21.5W x 29D x 30H	554

*# See back page for input/output voltage selection guide to complete model number.

THREE PHASE						
MODEL NUMBER	**POWER RATING**	***INPUT VOLTAGE**	**#OUTPUT VOLTAGE**	**OUTPUT INTERFACE**	**CABINET DIMENSIONS (in.)**	**WEIGHT (lbs.)**
8*#X-15K6-20	15	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	468
8*#X-30K6-20	30	208/240/480/600	480/277 or 208/120	Hard-wire	23W x 20D x 28.5H	625
8*#X-50K6-20	50	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	954
8*#X-75K6-20	75	208/240/480/600	480/277 or 208/120	Hard-wire	35W x 25D x 39.5H	1196
8*#X-100K6-20	100	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1326
8*#X-112K6-20	112	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1350
8*#X-125K6-20	125	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1547
8*#X-150K6-20	150	208/240/480/600	480/277 or 208/120	Hard-wire	41.5W x 27.5D x 39H	1880
8*#X-225K6-20	225	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	2794
8*#X-300K6-20	300	480/600	480/277 or 208/120	Hard-wire	56W x 41.5D x 48H	3077
8*#X-500K6-20	500	480/600	480/277 or 208/120	Hard-wire	45W x 48D x 61H	4860

*# See back page for input/output voltage selection guide to complete model number.

K-RATED TRANSFORMERS

UK-001-898

STANDARD MODEL NUMBER SYSTEM								
PHASE	*INPUT VOLTS	#OUTPUT	FREQUENCY	KVA	K-RATING	SHIELDS	HF FILTERS	TVSS
1st Variable	2nd Variable	3rd Variable	4th Variable	5th Variable	6th Variable	7th Variable	8th Variable	9th Variable
5=Single Phase	B=208	B=208	X=60Hz	XXK6	4	A=2	F=Filter	S=TVSS
8=Three Phase	C=240	G=240/120			7	B=3	N=No	N=No
	D=480	H=480/240			13			
	E=600	L=208/120**			20			
		N=480/277**						

Example: 8DLX-75K6-13-AFS **Only available with Three Phase Systems

REMOTE POWER DISTRIBUTION CENTER

Voltage
Input: 208/120 3Ø
Output: 208/120 3Ø

Number of Poles
Standard: 42 poles
Optional: Additional 42 poles for 84 total

Input Interface
Hard-wired

Dimensions
21.5" Wide x 29.0" Deep x 44" High

Input Breaker
To protect panel board(s)
One feeder breaker per 42 pole panel

Weight
42 pole unit – 310lbs. (Without cables)
84 pole unit – 360lbs. (Without cables)

RPD U/L Pending

CONTROLLED POWER PRODUCTS

UNINTERRUPTIBLE POWER SYSTEMS

THE POWER PROCESSOR

THE POWER PURIFIER

THE POWER COMMANDER
Electronic Line Voltage Regulators
Series 900A
Single Phase–
15 KVA to 150 KVA
Three Phase–
15 KVA to 500 KVA

THE ULTRA-K TRANSFORMER
K-Rated Isolation Transformers
Series 600K
Single Phase–
5 KVA to 25 KVA
Three Phase–
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6 KVA to 500 KVA

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Single Phase–
250 VA to 25 KVA

THE POWER DELEGATOR
Power Distribution Centers
Series 7000A
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Series LTX, Series LT, Series MD, Series HV
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400 VA to 25 KVA
Three Phase–
10 KVA to 150 KVA

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