

PHASEMASTER® ROTARY PHASE CONVERTER FOR BROADCAST TRANSMITTER SERVICE

TYPE T

The World Leader in Single to Three-Phase Electric Power Conversion

Converters offer the most economical way to operate your three-phase transmitter from a single-phase supply

The Phasemaster Rotary Converter is specially engineered for use with all makes and designs of radio and television broadcast transmitters. It produces 3-phase power from any single-phase line wherever utility three-phase is unavailable or cost prohibitive. It is low in initial cost and high in performance and efficiency.

Phasemaster boasts an operating experience record of more than forty years and is successfully operating more than 1,500 radio and television stations throughout North and South America and the Pacific Rim.

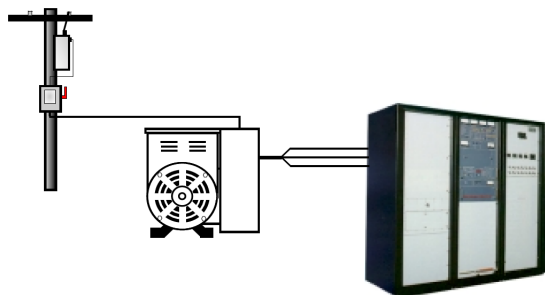
Phasemaster converters have been approved by the major transmitter manufacturers and are recommended extensively by consultants and utility companies.

Further, Kay Industries maintains extensive compatibility application and test data on most makes of commercial transmitters.

Phasemaster Expands Siting Options and saves money

The Phasemaster Rotary Converter solves a very common problem. An otherwise near perfect transmitter site turns out to be unsuitable because the utility does not have a nearby 3-phase line and it cost too much to extend one. The solution is a Phasemaster converter. It's low installed cost makes it the most economical alternative when compared to costly single-phase transmitters, or high maintenance diesel engine generators.

Documented savings of \$100,000 by using a Phasemaster converter are not uncommon. In certain cases, a converter may even reduce power bills by eliminating the demand charges which are very common on three-phase services but much less prevalent on single-phase service.



Performance

The Phasemaster converter produces a true three-phase output with each phase shifted by 120 degrees just like the utility line. In addition it provides many other performance benefits:

- Immediate power availability - A phase converter can be connected in a few hours compared to weeks or months for utility service extensions.
- Low maintenance trouble-free operation Phasemaster converters requires very little attention. It can operate 24 hours a day for years at a time.
- High efficiency design - the Kay Industries' patented construction minimizes noise and vibration and keeps losses to less than 5% of total system load. The output voltage is regulated to keep AM noise to a minimum
- Reduced outages from line noise - The converter's stored energy buffers the line and rides through short term disturbances.
- Integral lightning and surge protection guards against switching and other line transients.

Choose a transmitter site without worrying about 3-phase power availability. Phasemaster converters have helped thousands of broadcasters operate from single phase lines and saved them millions in three-phase installation



www.kayind.com

Corporate Office
P.O. Box 1323
South Bend, IN 46624
800-348-5257 219-289-5932 fax

Info@kayind.com

Western Region Office
Fremont, CA
510-656-8766

Eff: 2-3-14

Superior Construction

Phasemaster converters are built with high quality components to meticulous manufacturing standards consistent with the requirements of its CSA/NRTL listing. It contains no brushes, commutators, slip rings or other maintenance prone components. The large terminal compartment facilitates fast and easy installation.

Accessories and Options

A broad range of optional accessories are also offered to make Phasemaster fit with any station design. Automatic controls allow remote shutdown and easy coordination with transfer switches to back-up power supplies. Load range controls enable the converter output to be adjusted for variable loads.

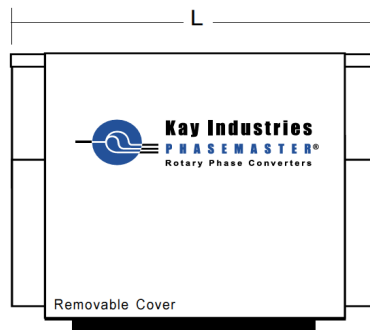
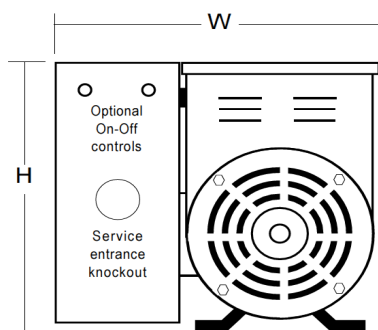
Selection and Ordering Information

The following data is essential to selecting the correct converter for your application:

- Transmitter type, AM FM or TV
- Manufacturer's model number and KW power rating
- Operating Voltage
- Type and size of incoming utility service
- Transmitter input power consumption in KW at full load or 100% modulation
- Operating load variations
- Other three-phase loads
- Size of utility service (Amps)

PHASEMASTER® ROTARY PHASE CONVERTER FOR BROADCAST TRANSMITTERS

TYPE T



Model No. Without Controls	Model No. With Auto Controls	Max. KW Out	Dimensions (Inches)			Weight (LBS.)	
			L	W	H	Manual	Auto
T-1300	T-1300-A	6	14	17	18	225	245
T-2000	T-2000-A	8	17	20	22	280	305
T-2500	T-2500-A	10	19	20	22	330	355
T-4000	T-4000-A	16	20	22	26	380	425
T-5000	T-5000-A	20	22	24	27	430	480
T-7500	T-7500-A	25	25	24	27	497	560
T-8000	T-8000-A	30	25	27	33	640	705
T-10000	T-10000-A	38	26	27	33	788	865
T-12000	T-12000-A	45	27	29	35	905	980
T-14000	T-14000-A	55	30	29	35	950	1030

OPERATING SPECIFICATIONS (All Ratings):

Input Voltage: 230 or 460V single-phase, 50 or 60 Hertz
 Output Voltage: 230 or 460V single-phase, 3-wire closed delta
 Output Regulation: 2-5% at rated output
 Harmonic Content: <1%
 Power Factor: .95 or greater at full load
 Operating Efficiency: >95% at full load
 Operating Reliability: MTBF 50,000 hours
 Surge Arrestors: 175V line-ground, Clamping Voltage @1500A: 600V

- This converter requires a separately mounted OR factory built-in disconnect switch and fuses for on-off control and short circuit protection.
- See Drawings 0302-T or 0302-TA for complete connection details including switch, fuse and feeder sizes.
- Actual dimensions will not exceed those shown.

What Our Customers Are saying...

"The Phasemaster certainly got us out of a real bind in that three-phase power was over a mile away. The cost to get it here was outrageous. The Phasemaster solved our problems and works for us 24 hours a day 7 days a week. I can recommend Phasemaster to anyone."
 - VP/GM, Texas AM-FM Station

"We have used a Phasemaster Model T-7500 with our 10KW Continental Transmitter at our mountain top site for over one year now. It has been in continuous duty since we signed on, providing uninterrupted service."
 - President.GM, California FM Station

"...this year we began operation from a new transmitter location on top of Greenbrier Mountain (elevation 3,000ft.). This move was made possible because of the availability of Phasemaster converters ... The cost of constructing a three phase power line to accomplish the same end would have been in excess of \$25,000.00"
 - VP/GM West Virginia AM Station

"I am happy to report that both the Phasemaster and transmitter have operated flawlessly ... running 24 hours a day, seven days a week"
 - Chief Engineer, College Television Station

WARRANTY - Kay Industries, Inc. (the manufacturer) guarantees all products of our manufacture against faulty material or workmanship for a period of five years from date of installation or 61 months from date of shipment from factory, whichever period first expires. In addition Kay Industries will replace all defective bearings regardless of cause for the life of the converter. Any part that you return to us within this warranty period showing unmistakable defect in material or workmanship will be renewed or replaced at our option F.O.B. factory without charge. The final decision that an original defect existed shall rest with the manufacturer. The liability of is limited to the renewal or replacement of the defective part. In no case will Kay Industries be liable for damage or loss incurred because of interruption of service or for consequential damages, transportation, labor or expense required to repair or replace defective parts or units. Kay Industries will not be responsible if its products have been improperly installed in any way. This warranty shall not apply to any of the manufacturer's products that must be replaced because of normal wear, that have been subjected to misapplication, misuse, neglect, accident or that have been repaired or altered outside of the manufacturer's factory unless expressly authorized by the manufacturer.



Corporate Office
 P.O. Box 1323
 South Bend, IN 46624
 800-348-5257 219-289-5932 fax

Western Region Office
 Fremont, CA
 510-656-8766