

## 1-phase to 3-phase Power Conversion



PhaseMAXX – The industrial mark of excellence



Phase conversion as good as it gets.

Miss Lisa is just as proud as the rest of us are when it comes to **PhaseMAXX** products.

We (and Miss Lisa) are pleased to display these terrific converters.

It's easy for us to say "unequaled, in product design and operation".

- See for yourself.
- Drop in at our Edmonton, Alberta, Canada facility to view PhaseMAXX.



**ASK** 

**FOR** 

**PhaseMAXX** 

**BY NAME** 

ΑT

**LEADING** 

**ELECTRICAL** 

**RESELLERS** 

**NEAR YOU** 

Rotary, Static, or Autotransformer Converters .... Engineered With Premium Quality – Carlo Gavazzi Motor Controls. These systems allow the use of three-phase equipment wherever installation of a utility supplied three-phase service is impractical or not available.

## **COST EFFECTIVE**

When three-phase power is not readily available or distance for extending the service is a major cost factor, **PhaseMAXX** proves to be the most feasible answer. When three-phase motor loads are only seasonal, **PhaseMAXX** eliminates costly utility demand charges. Single-phase services will not carry additional service charges, as do utility supplied three-phase power systems. Three-phase motors operating from a **PhaseMAXX** converter will generally have a service life five to eight times that of single-phase motors.

Motor starting currents are much higher when single-phase motors are utilized, and initial cost per horsepower is greatly reduced with the proper selection and installation of three-phase motors. Availability and maintainability of three-phase equipment proves to be a definite cost advantage whenever your dollars matter.

## **VERSATILITY**

**PhaseMAXX** - Rotary converters are designed for single or multiple motor applications. Motors of various speeds, duty cycles, wye or delta connected, may all be operated singly or simultaneously, and at constant or variable loads. Motors develop full rated horsepower.

**ASC** - Autotransformer converters are high efficiency products that will develop full rated HP for one 3 phase motor operating at 208, 230, 460, or 600v (from a 240v single phase source). No external transformers required for the voltage transformation!

## **DEPENDABLE POWER CONVERSION**

Both **PhaseMAXX** and **ASC** deliver proven performance. Designed and built in western Canada, these converters are backed by a complete stock of replacement parts, along with technical assistance provided by qualified personnel.

## **UNIQUE DESIGN**

**PhaseMAXX** Rotary converters create minimal noise and vibration that can be compared to that produced by any standard three-phase motor. These technologically advanced converters are supplied complete (\*\*) with their own magnetic starter & overload protection — unlike most competitive products. (\*\* excludes TX series)

The **PhaseMAXX** converter is available in several different type "T" series including;

- a) Triple rated (T), (TX), and (TZ) for single or multi-motor use.
- b) Triple rated soft-start (TZ) series.
- c) Triple rated multi-stage soft-start (2TZ) series.
- d) TCNC, TZCNC, and 2TZCNC for CNC applications as applicable to Class 2 & 3.

Each (T) series is readily available as converter Class 1, 2, and 3 - classed for operation of motors requiring moderate to the highest starting torque found in industry.

**PhaseMaxx** (CNC) enabled (Class 2 & 3) converters are specially engineered to provide critical voltage and current balance for Computer Numerically Controlled machine tools including CNC turning centers, and horizontal or vertical mills. Applications including Lasers, computers, transmitters, power supplies, and X-ray equipment can all be operated from the **PhaseMaxx** (CNC) enabled converter.

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**PhaseMAXX** (CNC) "World Class" equipment for the operation of your *other* "World Class" equipment.

equipment.

## **EASE OF INSTALLATION**

**PhaseMAXX** rotary converters are supplied as (two component packages) rated either for NEMA 1 (indoor) or NEMA 3 (weatherproof) installations. The converter controls enclosure is finished with an attractive grey enamel, and has provision for wall mounting. The rotary generator can be floor mounted near the controls enclosure, or may be installed in an isolated location.

Large input & output terminals for ease of connection are standard equipment on all **PhaseMAXX** products.

## **EFFICIENCY & VOLTAGE VARIABILITY**

**ASC** Autotransformer type converters deliver full rated HP at approximately 97% efficiency, and can be adjusted to provide current balance at a fixed load. These converters are supplied as model suffix (-24) 240v single phase input / 460v 3 phase output, (-44) 480v single phase input / 460v 3 phase output, or any other input / output voltage ratio.

The **ASC** converter suffix (-C-24) is designed for connection to an existing motor magnetic starter. Options can include main disconnect, load starter, and H/O/A selector or Stop/Start controls.

**ASC** models with suffixes (-24) or (-44) are essentially a complete electrical system consisting of Main breaker (rated as service entrance), load magnetic starter & overload, H/O/A selector, provision for pressure switch or pilot device, and surge suppressor, all in a NEMA 3 weatherproof enclosure — especially well suited to oilfield production equipment.

## Reliable Phase Conversion

**Engineered** to greatly surpass industry standards.

<u>Manufactured</u> through the stringent controls of a Quality Assurance Program to exceed even the highest of standards – *yours*.

Look into **PhaseMAXX** and see for yourself.

# Used Extensively in Industry and Agriculture for:

Woodworking
 Machines
 Plastics
 Boring
 Machines
 Transmitters
 Machines
 Conveyors
 Drills
 Feed Mills
 Blowers

Printing - Pumps

Welding - Hammer Mills

Compressors - Bucket Elevators

- And Multiple Other Uses

Converter Series (T, TX, TUS, TZ)	Close 1	
	Class 1	Total HP
<u> </u>	Largest HP	_
PhaseMAXX – 3TX	3	9
PhaseMAXX – 5TX	5	15
PhaseMAXX – 7TX	7.5	22
PhaseMAXX – 10TX	10	30
PhaseMAXX - 3TUS	3	9
PhaseMAXX – 5TUS	5	15
PhaseMAXX – 7TUS	7.5	22
PhaseMAXX – 10TUS	10	30
PhaseMAXX – 3T	3	9
PhaseMAXX – 5T	5	15
PhaseMAXX - 7T	7.5	22
PhaseMAXX - 10T	10	30
PhaseMAXX – 15T	15	45
PhaseMAXX – 20T	20	60
PhaseMAXX – 25T	25	75
PhaseMAXX – 30T	30	90
PhaseMAXX – 40T	40	120
PhaseMAXX - 50T	50	150
PhaseMAXX - 7TZ	7.5	22
PhaseMAXX – 10TZ	10	30
PhaseMAXX – 15TZ	15	45
PhaseMAXX – 152TZ	15	45
PhaseMAXX – 20TZ	20	60
PhaseMAXX - 202TZ	20	60
PhaseMAXX – 25TZ	25	75
PhaseMAXX – 252TZ	25	75
PhaseMAXX - 302TZ	30	90
PhaseMAXX – 402TZ	40	120
PhaseMAXX – 502TZ	50	150
Converter Series	Class 2 CNC	Class 2 CNC
(TCNC, TZCNC))	Largest HP	Total HP
PhaseMAXX – 3TCNC		
T HOSCIVII VIX		3.1
	2.5	3.1
PhaseMAXX – 5TCNC	3.3	4.1
PhaseMAXX - 5TCNC PhaseMAXX - 7TCNC	3.3 5	4.1 6.2
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC	3.3 5 6.7	4.1 6.2 8.3
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC	3.3 5 6.7 8.3	4.1 6.2 8.3 10.3
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC	3.3 5 6.7	4.1 6.2 8.3
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC	3.3 5 6.7 8.3	4.1 6.2 8.3 10.3
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC	3.3 5 6.7 8.3 10	4.1 6.2 8.3 10.3 12.5
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC PhaseMAXX – 20TCNC	3.3 5 6.7 8.3 10 13.3 16.6	4.1 6.2 8.3 10.3 12.5 16.6
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC PhaseMAXX – 20TCNC PhaseMAXX – 25TCNC PhaseMAXX – 30TCNC	3.3 5 6.7 8.3 10 13.3 16.6 20	4.1 6.2 8.3 10.3 12.5 16.6 20.7 25
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC PhaseMAXX – 20TCNC PhaseMAXX – 25TCNC	3.3 5 6.7 8.3 10 13.3 16.6	4.1 6.2 8.3 10.3 12.5 16.6 20.7
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC PhaseMAXX – 20TCNC PhaseMAXX – 25TCNC PhaseMAXX – 30TCNC PhaseMAXX – 40TCNC	3.3 5 6.7 8.3 10 13.3 16.6 20 26.6	4.1 6.2 8.3 10.3 12.5 16.6 20.7 25
PhaseMAXX – 5TCNC PhaseMAXX – 7TCNC PhaseMAXX – 10TCNC PhaseMAXX – 13TZCNC PhaseMAXX – 15TCNC PhaseMAXX – 20TCNC PhaseMAXX – 25TCNC PhaseMAXX – 30TCNC PhaseMAXX – 40TCNC Converter Models	3.3 5 6.7 8.3 10 13.3 16.6 20 26.6	4.1 6.2 8.3 10.3 12.5 16.6 20.7 25 33.2
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This table is indicative of Class 1 & 2 application converters, and is supplied as general information only. Many other models are available but not shown. (\* Available in any HP rating). Consult Electram to determine the Class of your particular application

## **ADDITIONAL MOTOR & SPEED CONTROL PRODUCTS**

See us for Carlo Gavazzi magnetic starters, limit switches, timers, proximity sensors, voltage sensing relays, Bremas cam switches, Rex Power Transformers (inc: Distribution, Auto, & Control), as well as AC Tech Variable Frequency Drives and Baldor or Leeson electric motors.

Electram also features "ESV" series solid-state phase converters. These sophisticated electronic devices provide single to three phase power conversion AND variable speed control for your 3 phase motors.

#### **WARRANTY**

Electram Rotary Equipment Ltd. warrants each of its products to be free from defects in materials or workmanship when operated under normal working conditions and in accordance with manufacturer's installation and operating instructions, for a period of one year from the date of purchase. This warranty shall be in lieu of any other warranty expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

Electram will repair or replace at its sole discretion, any component that has been found to be defective by the manufacturer, and is within the warranty period, provided that the complete converter is shipped with previous factory authorization, freight prepaid, to the nearest Electram factory outlet or authorized service station.

Electram Rotary Equipment Ltd. shall not be responsible for removal, installation, or any other incident or consequential damages arising from. or caused by the use of any of its products

Electram's liability under this warranty shall be solely limited to the replacement or repair of it's defective product within the warranty period, and shall not be liable under any circumstances for any damages including but not limited to personnel injury or labor costs. Under no circumstances will Electram be responsible for any expense in connection with any repairs made by anyone other than the factory or authorized depot, unless such repairs have been authorized in writing.

## **HOW CAN WE HELP YOU FURTHER?**

Our commitment to your electrical "well being" goes much further than just the initial sale. Expect unmatched product support from any one of Electram's dedicated professionals. Ask around, and see why Electram has the *best name* in the industry.

## **ELECTRAM ROTARY EQUIPMENT LTD.**

Electram is a progressive CSA / UL certified facility for the development and manufacture of phase conversion systems and motor control assemblies. We are committed to providing "World Class" products and are proud to produce goods labeled "Product Of Canada".

For more information, call us today at (Edmonton, Alberta, Canada) (780) 451-0418 or view our web site at www.electram.com

See for yourself why your choice for phase conversion should be Electram.

## Distributed By:

**PhaseMAXX** – The industrial mark of excellence