

# PRODUCT APPLICATIONS *ELEVATORS*



# ELEVATORS

**Recommended Product**

**PHASE PERFECT®**

**\$2,793.19**

PROJECTED ANNUAL SAVINGS



## POWERING YOUR ELEVATOR

When single-phase power is your only option, selecting the right phase converter for your three-phase elevator installation is crucial. It can lead to significant annual savings, which will continue to grow and compound as electricity costs rise.

Even a modest elevator installation, such as in a small residential apartment building, can use thousands of dollars per year in electricity while idle when powered with a rotary phase converter. Rotary converters can use power equivalent to a household oven -- when they're just idling! The Phase Perfect® has standby power usage more in line with an incandescent light bulb.

## FLEXIBILITY

The Phase Perfect® can power any three-phase load, anywhere. No need to run utility three-phase power to your building and spend tens of thousands of dollars. Our Phase Perfect® will provide balanced utility grade three-phase power onsite at a fraction of the cost.

## RELIABILITY

Over 20 years of development has resulted in a robust and proven phase conversion technology. Utilizing solid-state technology, our phase converters have no moving parts which minimize maintenance and failure points. Our soft start capabilities allow us to reduce stress on motors and components, extending their lifespan.



# WE BEAT THE COMPETITION

Our phase converters are the best product for elevator installations. We beat the competition in design, footprint, efficiency, power balance, standby losses and most importantly, **WE SAVE YOU MONEY.** Calculate your potential cost savings below with our cost savings calculator.

## PT Annual Savings Calculator

**Typical HVAC System Installation, Estimated Annual Savings with Phase Perfect® versus Rotary:**

# \$2,793.19/year

	Phase Perfect® Digital Phase Converter	Rotary Phase Converter
Starting Load Horsepower <u>1</u>	20 HP	40 HP
Standby Power Consumption <u>2</u>	80 W	2260 W
Idle Power Cost <u>3</u>	\$102.50	\$2,895.69

**Starting Load Horsepower**

20 HP

Horsepower rating of largest or combined load that will be connected to the Phase Perfect®

**Electricity Cost (Per kw/hr)**

\$0.16

The cost in cents per kilowatt/hour your utility charges you for electricity usage. You can estimate costs for your region by looking at the [Average Price Chart on eia.gov](#).

**Estimated Power On Time**

52

Weeks per Year

7

Days per Week

Number of weeks per year and days per week you anticipate needing 3 Phase power available. For example: a business with typical operating hours might be 50 weeks per year and 5 days per week, while an elevator installation would require 52 weeks per year and 7 days per week.

**Estimated Idle Time**

22

Hours per Day

The number of hours per day you anticipate not drawing a significant 3 Phase load. For example: a typical business might not draw a significant load right away in the morning, during breaks, or over the lunch hour, while an elevator might be idle 20 or more hours per day.





PHASE CONVERTING | 230 V & 460 V | VOLTAGE DOUBLING  
NEMA 3R OUTDOOR ENCLOSURE | 5 - 175 HP

## **PHASE**PERFECT® DIGITAL PHASE CONVERTERS



World's Only  
Digital Phase  
Converter



Voltage  
Doubling



Phase-to-Phase  
Voltage Balance



98.7% Efficient  
At Full Load



508A  
Panel Shop

### Phase Conversion & Voltage Doubling

#### Cost Savings for Long Lead Applications

Phase conversion allows three-phase output from a single-phase input, giving you access to three-phase power anywhere. Voltage doubling eliminates the need for a transformer while minimizing motor lead wire size on 460 V systems running on a 230 V source, saving you hundreds on wire costs.



### Panel Shop Options

- ▶ **Quiet Model**
  - Additional inductance built-in makes these models quieter than the competition
- ▶ **MCCB Service Disconnect**
  - Breaker equipped with external, service-rated, disconnect to support easy field serviceability
- ▶ **MODBUS**
  - Allows information exchange between devices for simple communication.
- ▶ **50Hz Operation**
- ▶ **On/Off Switch**
  - Allows toggling of device power without the need to remove it from the power source
- ▶ **Strikesorb Surge Protection**
  - Protect your drive from damaging input voltage spikes with a high-quality, surge protective device



# PHASE PERFECT

## Features

### Voltage Balance Within 2%

Phase Technologies' Digital Phase Converters offer line-to-line voltages that are balanced within 2%, improving equipment performance and lifespan. A balanced voltage is one of the most important factors when considering efficiency, power output, reliability, and longevity. Even slight voltage imbalances can increase current, leading to excessive heat and motor damage.

### 2X Starting Capacity

With twice the starting capacity of a rotary phase converter, a single Phase Perfect Digital Phase Converter is capable of starting motors up to their stated HP. No derate required. Typically, you would choose a Phase Perfect rated above the sum of total current drawn for all connected loads. However, Phase Perfect Digital Phase Converters can be oversized, or split into multiple units, to better accommodate the available incoming power.

### Utility Grade Three-Phase Output

Phase Perfect Digital Phase Converters provide a safe, clean, utility-quality three-phase output capable of starting and stopping motors across the line while running electronics such as transformers, contactors, circuit boards, lights, and heaters.

### Simple Installation

With two wires in and three wires out, installation of Phase Perfect Digital Phase Converters are virtually "plug-and-play." Once installed, three-phase equipment can be easily connected to the output just like they would to a utility three-phase power supply.

### Regenerative (PT, PTE)

Maximize efficiency with balanced, stable voltage to the load and full regeneration on shutdown.

### Voltage Doubling Output (PTE)

Eliminates the need for a transformer converting 230 V input to a 460 V output.

## Product Specifications

Model / Part Number	HP	Rated Current Input (Amps)	Rated Current Output (Amps)	Input Voltage (Volts)	Output Voltage (Volts)	Output (kVA)	Standby Power Consumption (Watts)
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PT ENTERPRISE

#### 230V Models

PTE007	7.5	45 A	26 A	230 V	230 V	10.8 kVA	70 W
PTE010	10	62 A	36 A	230 V	230 V	14.9 kVA	74 W
PTE015	15	90 A	52 A	230 V	230 V	21.6 kVA	77 W
PTE020	20	111 A	64 A	230 V	230 V	26.6 kVA	80 W

#### Voltage Doubling

PTE207	7.5	45 A	13 A	230 V	460 V	10.8 kVA	200 W
PTE210	10	62 A	18 A	230 V	460 V	14.9 kVA	320 W
PTE215	15	94 A	27 A	230 V	460 V	22.4 kVA	435 W

#### 460V Models

PTE407	7.5	22 A	13 A	460 V	460 V	10.8 kVA	52 W
PTE410	10	32 A	18 A	460 V	460 V	14.9 kVA	68 W
PTE415	15	48 A	27 A	460 V	460 V	22.4 kVA	71 W
PTE420	20	55 A	32 A	460 V	460 V	26.6 kVA	74 W

PT PERFORMANCE

#### 230V Models

PT007	7.5	45 A	26 A	230 V	230 V	10.8 kVA	70 W
PT010	10	62 A	36 A	230 V	230 V	14.9 kVA	74 W
PT020	20	111 A	64 A	230 V	230 V	26.6 kVA	80 W
PT030	30	165 A	95 A	230 V	230 V	39.4 kVA	175 W
PT040	40	225 A	130 A	230 V	230 V	54.0 kVA	190 W
PT050	50	286 A	165 A	230 V	230 V	68.5 kVA	235 A
PT060	60	329 A	190 A	230 V	230 V	78.9 kVA	260 W
PT075	75	416 A	240 A	230 V	230 V	99.7 kVA	300 W

#### 460V Models

PT407	7.5	22 A	13 A	460 V	460 V	10.8 kVA	52 W
PT410	10	32 A	18 A	460 V	460 V	14.9 kVA	68 W
PT415	15	47 A	27 A	460 V	460 V	22.4 kVA	71 W
PT420	20	55 A	32 A	460 V	460 V	26.6 kVA	74 W
PT430	30	80 A	46 A	460 V	460 V	38.2 kVA	87 W
PT440	40	105 A	61 A	460 V	460 V	50.7 kVA	180 W
PT450	50	134 A	77 A	460 V	460 V	64.0 kVA	190 W
PT460	60	157 A	91 A	460 V	460 V	75.6 kVA	220 W
PT475	75	185 A	107 A	460 V	460 V	88.9 kVA	270 W
PT4100	100	246 A	142 A	460 V	460 V	118.0 kVA	300 W
PT4150	150	343 A	198 A	460 V	460 V	164.4 kVA	300 W
PT4175	175	381 A	220 A	460 V	460 V	182.9 kVA	300 W





**DIGITAL PHASE  
CONVERTERS**

**VARIABLE  
FREQUENCY  
DRIVES**

**MOTOR  
PROTECTION**

**SOFT  
STARTER**

**508A  
PANEL  
SHOP**

## OUR MISSION

Relentlessly seek to *provide Uncommon Value, solutions, innovation, and support for the industries that we serve.*

