



The NEW!
PHASE PERFECT®
Digital Phase Converter

- Unmatched Power Quality
- 98.7% Efficient
- Rugged Solid-State Technology

**INTUITIVELY
ENGINEERED**

NEW DESIGN

The Best Phase Converter **JUST GOT BETTER**

Increased Efficiency

- Now 98.7% efficient at full load
- Lower standby losses

The Best Power Quality

- Voltage balance within 2%

Less Noise

- Compared to rotary phase converters, the Phase Perfect® is 82% quieter

Improved Starting Capability

- **NEW!** PERFECT Start™ - Proprietary control algorithm that prevents overcurrent tripping

Rugged & Reliable

- NEMA 1 indoor & NEMA 3R outdoor enclosures available

Higher Power Ratings

- 240V models - now up to 75 HP
- 480V Models - now up to 100 HP

The **NEW!** **PHASE PERFECT**®

The Phase Perfect® remains the world's only TRUE digital phase converter.

The Bottom Line

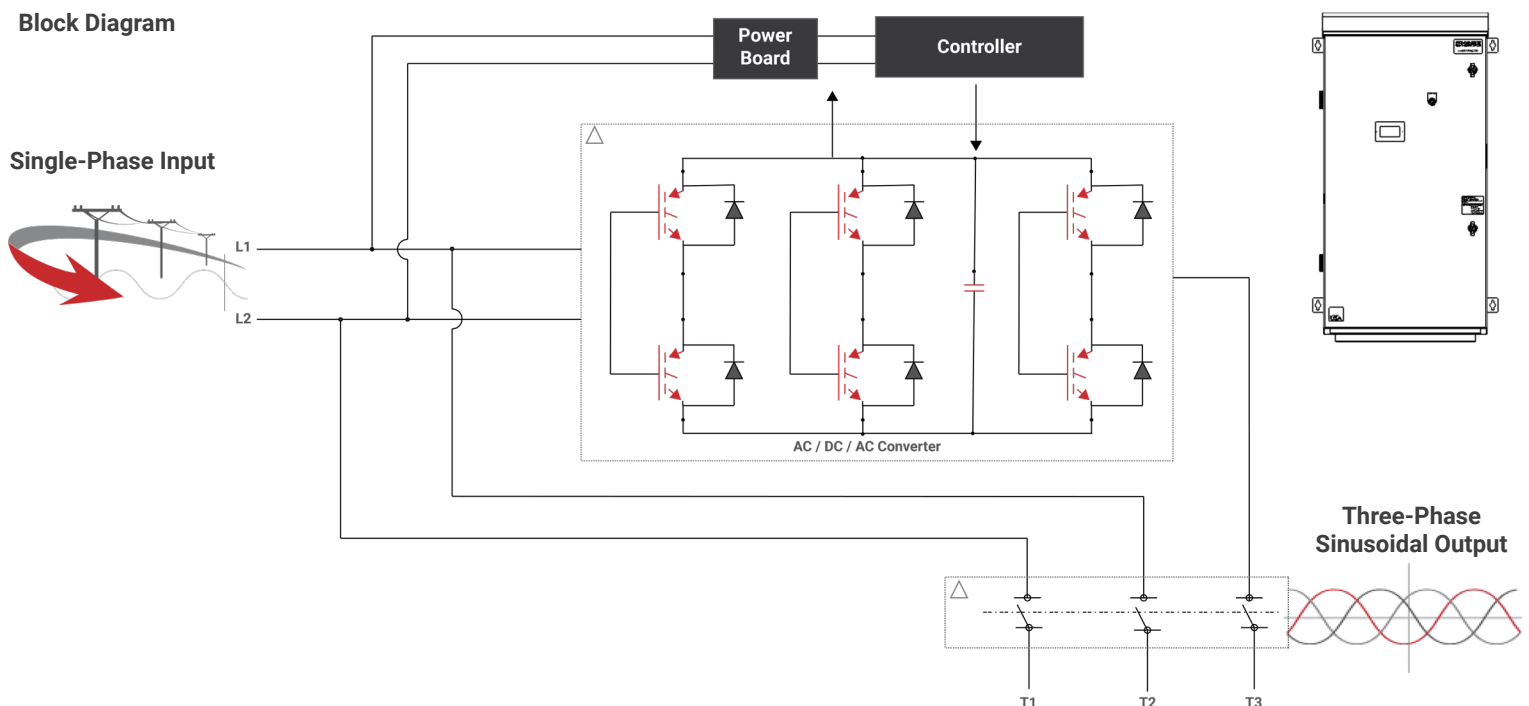
Users that require three-phase power don't always have it readily available from the utility main. If it is available, installation costs are often prohibitive and there is no guarantee of power quality, especially in high demand areas.

The Phase Perfect® offers an affordable, reliable, easy-to-install and operate solution that will power either one or multiple three-phase loads.

Our patented solid-state technology delivers power quietly, efficiently, and reliably to a wide array of applications and equipment.

True Digital Technology **NO MOTOR**

Block Diagram



Power Quality & Efficiency

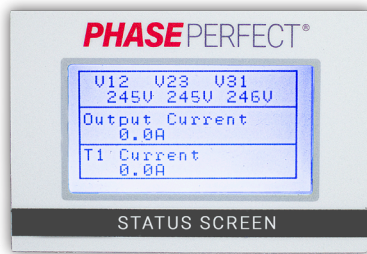
- Balanced output voltage allows motor loads to run more efficiently under full load.
- Low standby losses saves money when used in intermittent applications such as elevators. Losses are reduced by as much as 50%.
- Most importantly, better efficiency means lower costs.



The Formula For PERFECT POWER



NEW! Graphic Display



The Phase Perfect® now has an expanded easy-to-read exterior graphic display that shows operating current & voltage.

Low Noise Level

The new generation of Phase Perfect® Digital Phase Converters aren't much louder than a typical household appliance and are 82% quieter than rotary phase converters.

Phase Perfect® Noise Rating

75 dB

Significant Cost Savings

Machine Shop Installation

The Phase Perfect® Savings vs. Rotary

\$ 449/ year

Assumptions	PHASE PERFECT® Digital Phase Converter	Rotary Converter Equivalent
Starting Load Horsepower	20 HP	40 HP*
Power Requirement	240V 49 A 3-ph Delta	240V 49 A 3-ph Delta
Estimated Run Time	50 Weeks / Year 6 Hours / Day 5 Days / Week	
Standby Time	4 Hours / Day	
Standby Power	87 W	1420 W
Efficiency	98.7%	87%
Cost Per kw/hr	\$0.12	\$0.12
Total Cost To Run	\$2,154	\$2,603

**Note: The Phase Perfect® does NOT require oversizing. This data is comparing a rotary converter capable of starting a 20 HP load.*

A rotary phase converter requires a 40 HP idler motor to start a 20 HP load.

HVAC / Elevator Installation

The Phase Perfect® Savings vs. Rotary

\$1,447 / year

Assumptions	PHASE PERFECT® Digital Phase Converter	Rotary Converter Equivalent
Starting Load Horsepower	20 HP	40 HP*
Power Requirement	240V 49 A 3-ph Delta	240V 49 A 3-ph Delta
Estimated Run Time	52 Weeks / Year 4 Hours / Day 7 Days / Week	
Standby Time	20 Hours / Day	
Standby Power	87 W	1420 W
Efficiency	98.7%	87%
Cost Per kw/hr	\$0.12	\$0.12
Total Cost To Run	\$2,163	\$3,610

240V Digital Phase Converter

Model / Part Number	PT007	PT010	PT020	PT030	PT040	PT050	PT060	PT075
Rated Horsepower	7.5 HP	10 HP	20 HP	30 HP	40 HP	50 HP	60 HP	75 HP
Output kVA	10.8 kVA	14.9 kVA	26.6 kVA	39.5 kVA	54.0 kVA	68.6 kVA	78.9 kVA	99.8 kVA
Input Voltage	187 - 260 V	187 - 260 V	187 - 260 V	187 - 260 V	187 - 260 V	187 - 260 V	187 - 260 V	187 - 260 V
Output Voltage	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input
Phase-to-Phase Voltage Balance	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%
Maximum Steady-State Output	26 A	36 A	64 A	95 A	130 A	165 A	190 A	240 A
Standby Power Consumption	70 W	74 W	80 W	175 W	190 W	235 W	260 W	300 W
Efficiency	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%
Recommended Breaker Size	60 A	80 A	150 A	225 A	300 A	400 A	500 A	600 A

480V Digital Phase Converter

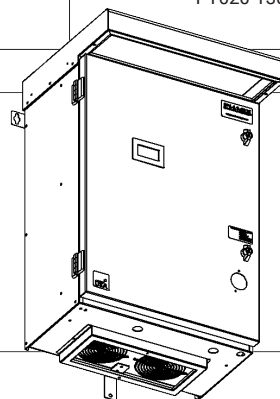
Model / Part Number	PT407	PT410	PT415	PT420	PT430	PT440	PT450	PT460	PT475	PT4100
Rated Horsepower	7.5 HP	10 HP	15 HP	20 HP	30 HP	40 HP	50 HP	60 HP	75 HP	100 HP
Output kVA	10.8 kVA	14.9 kVA	22.4 kVA	26.6 kVA	38.2 kVA	50.7 kVA	64.0 kVA	75.7 kVA	90 kVA	118 kVA
Input Voltage	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V	440 - 520 V
Output Voltage	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input	Equal To Input
Phase-to-Phase Voltage Balance	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%
Maximum Steady-State Output	13 A	18 A	27 A	32 A	46 A	61 A	77 A	91 A	107 A	142 A
Standby Power Consumption	52 W	68 W	71 W	74 W	87 W	180 W	190 W	220 W	270 W	300 W
Efficiency	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%
Recommended Breaker Size	30 A	40 A	60 A	70 A	100 A	150 A	175 A	200 A	250 A	400 A

Dimensions & Weight

Enclosure	Small	Medium	Large
Models	PT407, PT410, PT415, PT420	PT007, PT010, PT020, PT430	PT030, PT040, PT050, PT060, PT075, PT440, PT450, PT460, PT475, PT4100
NEMA 1 (H x W x D)	31 x 17 x 16 in	37 x 25 x 17 in	45 x 26 x 19 in
NEMA 3R (H x W x D)	31 x 22 x 16 in	37 x 25 x 19 in	46 x 26 x 20 in
<i>NOTE: Dimensions are measured at maximum size and includes mounting hardware.</i>			
Weight	PT407-62 lbs; PT410-64 lbs; PT415-68 lbs; PT420-74 lbs	PT007-100 lbs; PT010-102 lbs; PT020-130 lbs; PT430-139 lbs	PT030-259 lbs; PT040-259 lbs; PT050-270 lbs; PT060-285 lbs; PT075-288 lbs; PT440-282 lbs; PT450-282 lbs; PT460-293 lbs; PT475-299 lbs; PT4100-320 lbs

Optional Accessories

Accessories are simple to install and are designed specifically to integrate seamlessly with The NEW! Phase Perfect®.



- NEMA 3R Rain Cover
- MCCB & Service Rated Disconnect
- On/Off Switch
- Surge Protection