# Smart-Boost<sup>™</sup> Rotary Converters



Single Phase Input Voltage: 208 - 245 Volts 3 Phase Rated Output: 208 - 245 Volts Minimum Single Phase Circuit: 50 Amps Best Performance Single Motor Start: 10HP Recommended 3 Phase Sizing: 24 Amps Voltage Balance: Based on input +/-5-10%

SB-20

**Professional. Powerful. Affordable.** Smart-Boost<sup>™</sup> offers more than you would expect from a phase converter. Unparalleled starting power for the toughest starting applications.

#### **Control Panel Features**

- 600% Motor Starting Boost Current
- Built-In Motor Starter with Start/ Stop Push Button Switch
- Digitally Controlled with Solid State
  Switches
- Complete Phase Power Failure
  Protection
- Voltage Differential Technology
- Power "ON" Indicator Light
- 10 Year Parts / Lifetime Labor Warranty

**Typical Wiring Diagram** 

CONVERTEI

HASE

Made In the USA

BREAKER BOX

SINGLE PHASE



### **Idler Generator Features**

- Custom Made Rotary Phase Converter Generators
- Low Impedance/High Efficiency Design
- Custom Copper Windings and Rotor
- Made by ABB / Baldor Electric USA
- Available in ODP and TEFC
- Shielded Windings
- Made In the USA



North America Phase Converter Co. 2728 South 163rd Street New Berlin, WI 53151 877-545-2926 NorthAmericaPhaseConverters.com

THREE

HASE



## Specifications

| Model                                  |                                |
|--|--------------------------------|
| Brand                                  | NAPCES                         |
| Line                                   | Smart-Boost™                   |
| Model #                                | SB-20                          |
| General Specifications                 |                                |
| Horse Power (HP)                       | 20                             |
| Kilo-watt (kW)                         | 14.9                           |
| Frequency (Hz)                         | 60                             |
| Generator Type                         | ODP                            |
| Enclosure Type                         | NEMA 1 (Indoor)                |
| Generator Frame                        | 256                            |
| Single Phase Electrical Specifications |                                |
| Voltage Input                          | 208-245                        |
| Minimum Fuse Size                      | 50                             |
| Minimum Circuit Breaker Size           | 50                             |
| Maximum Fuse Size                      | 100                            |
| Maximum Circuit Breaker Size           | 100                            |
| Minimum Wire Input                     | 2 AWG                          |
| Idle Amperage                          | 5.94                           |
| Three Phase Electrical Specifications  |                                |
| Voltage Output                         | 208-245 based on input voltage |
| Output Amperage                        | 54                             |
| Voltage Balance                        | 5-10%                          |
| Minimum Wire to Generator              | 6 AWG                          |
| Minimum Wire to Load                   | 6 AWG or based on load         |
| Dimensions & Weights                   |                                |
| Enclosure (H X W X D)                  | 24" X 18" X 8"                 |
| Idler (Approx.) Length X Diameter      | 18" X 10"                      |
| Approx. Total Shipping Weight          | 238 lbs. (ODP)                 |

| The SB-20 Smart-Boost <sup>™</sup> Phase Converter is best sized for: |  |
|---|--|
| Easy / Light Motor Loads - up to 15 HP                                |  |
| Examples of Easy Loads: Table Saw, Milling Machine ,Drill Press       |  |
| Medium Motor Loads - up to 12 HP                                      |  |
| Examples of Medium Loads: Belt Sander, Grinder, Mixer                 |  |
| Hard Motor Loads - up to 10 HP  |  |
| Examples of Hard Loads: Gearhead Lathe, Dust Collector , Fan          |  |
| Very Hard Motor Load - up to 10 HP                                    |  |
| Examples of Very Hard Motor Loads: Air Compressor, Sub. Pump          |  |
| CNC, Resistive and Inductive Loads - 24 Amps @240 Volts               |  |

#### Sizing Notes

For light/easy motor loads: Size rotary phase converter 1.25 times larger then the motor load

For medium motor loads: Size rotary phase converter 1.5 times larger then the motor load

For heavy/hard motor loads: Size rotary phase converter double the size of motor load

For very hard motor loads: Size rotary phase converter double the size of motor load

For CNC, resistive and inductive loads: Recommend Pro-Line or Smart-Phase<sup>m</sup>



Built-In Motor Stater with Start / Stop Switch



Solid State Controller with Zero Degree Power Switches (Thyristors)



Complete 3 Phase Power Guard Protection



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