

# IGBT ASSEMBLIES

Powerex produces assemblies combining IGBT and IPM modules with other power components into integrated power structures to meet standard and customer specific application demands.

## POW-R-PAK

### Applications Include:

- Energy Storage
- Distributed Power Generation
- Industrial Power Supplies
- Motor Drives
- Power Quality

### Basic Circuit Configurations:

- H-Bridge
- Half-Bridge
- Three-Phase Bridge
- Three-Phase Bridge + Brake

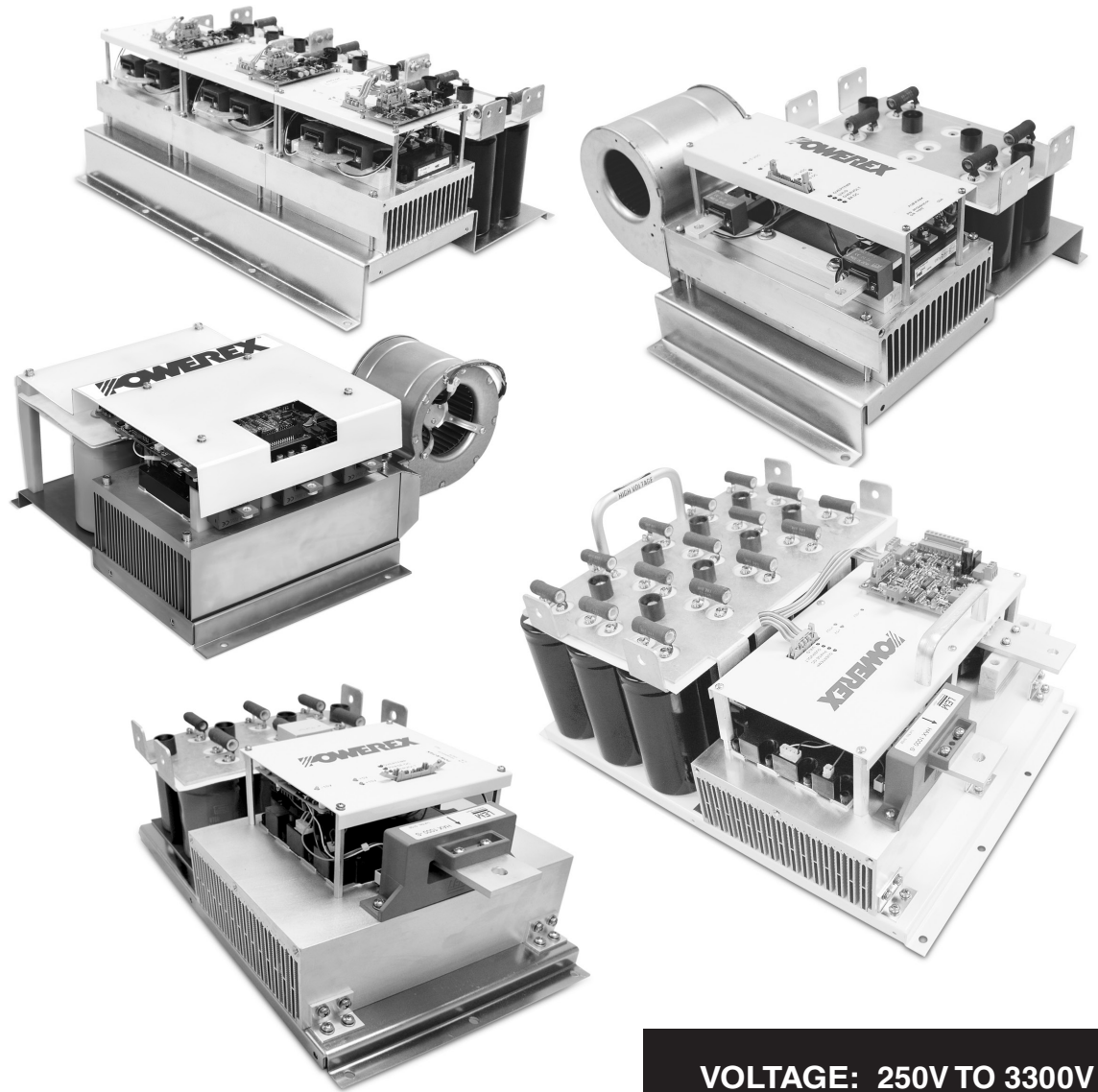
### Additional Available Options:

- Blower / Fan
- Converter / Inverter
- Diode or SCR
- Dual Inverter or Converter

*Note: Custom IGBT Assemblies Also Available*

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**VOLTAGE: 250V TO 3300V**  
**CURRENT: 50A TO 2800A**

Custom  
Modules

**IGBT  
Assemblies**

Assemblies

Fast Recovery  
Diode Modules

Thyristor &  
Diode  
Modules

Discrete  
Rectifiers

Discrete  
Thyristors

SiC  
Modules

## PP IGBT Assembly Overview

To determine the proper IGBT assembly for your application the following information is needed.

### (1) Type:

PP (Air Cooled) Is a fan required?

PPL (Liquid Cooled) Type of liquid cooling: water or glycol.

### (2) Power:

Single-Phase

Input (VAC) Current (Amps)

Output (VAC) Current (Amps)

Three-Phase

Input (VAC) Current (Amps)

Output (VAC) Current (Amps)

### (3) Ambient Temperature (°C)

### 4) Switching Frequency (kHz)

### (5) Circuit Configuration:

H-Bridge Three-Phase Bridge

Half-Bridge Three-Phase + Brake

Other

### (6) Options:

Blower / Fan Diode or SCR

Converter / Inverter Dual Inverter or Converter

Application Specific

### (7) Assembly:

Prototype

Production - Estimated Annual Volume

Please email this information to our IPP Department at [ipp@pwr.com](mailto:ipp@pwr.com).

A Powerex engineer will review the information and contact you to discuss your assembly needs.

## Numbering System

PP100T120-XX is an IGBT air cooled assembly using IGBTs rated at 1200 Volts and 100 Amperes.

PP 100 T 120 - XX

(1) (2) (3) (4) (5)

#### (1) Type:

PP = Air Cooled

PPL = Liquid Cooled

#### (4) IGBT Voltage:

060 = 600V

120 = 1200V

170 = 1700V

#### (2) Device Maximum Rating (I<sub>c</sub>)

#### (3) Circuit Configuration:

T = Three-Phase

D = Half-Bridge

B = H-Bridge

R = Three-Phase + Brake

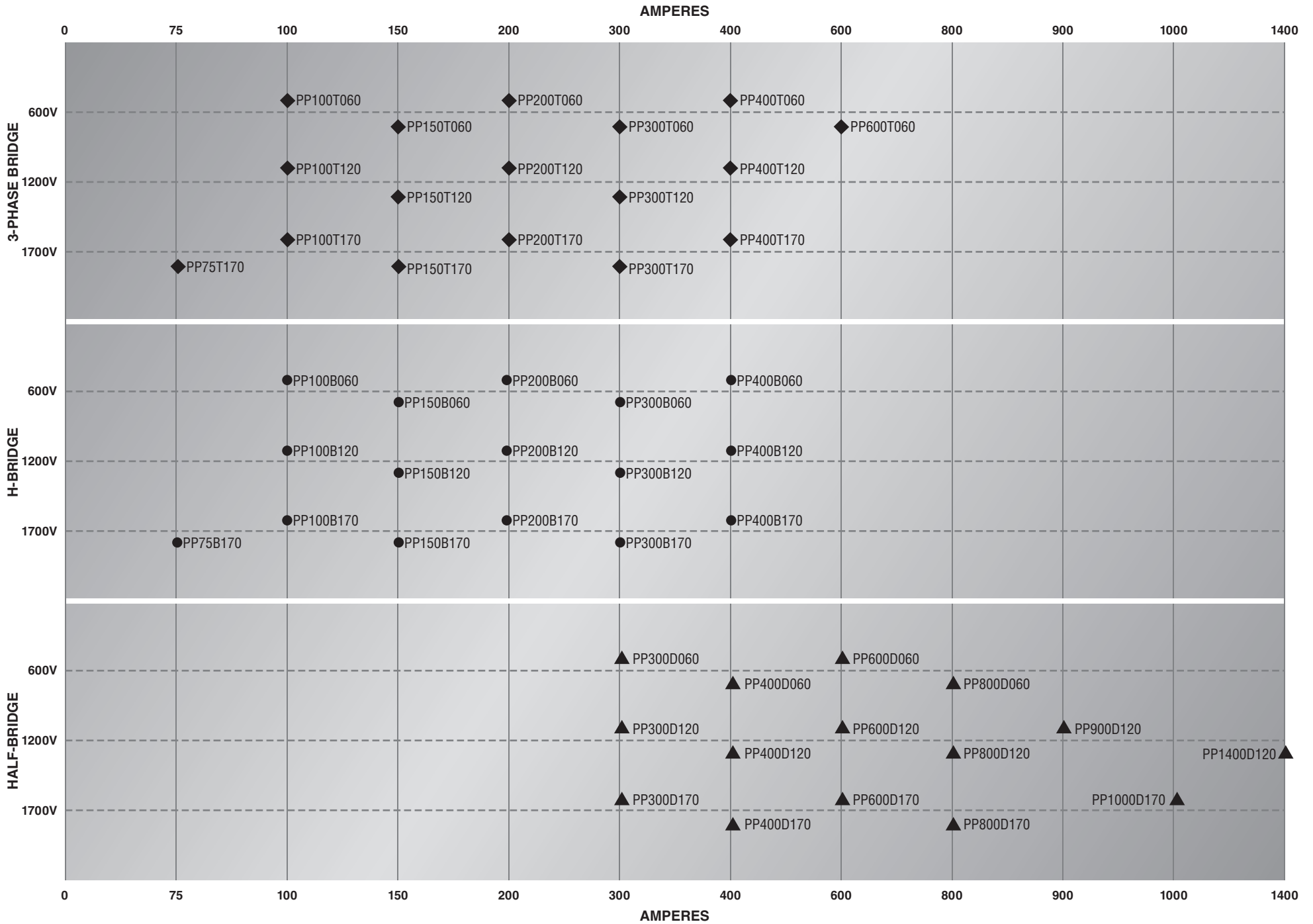
#### (5) Options:

- Blower / Fan

- Diode or SCR Converter

- Dual Inverter

- Application Specific Design / Configuration



- Custom Modules
- IGBT Assemblies**
- Assemblies
- Fast Recovery Diode Modules
- Thyristor & Diode Modules
- Discrete Rectifiers
- Discrete Thyristors
- SiC Modules