

# ASSEMBLIES

## Air Cooled / Liquid Cooled / Integrated Power Structures

Powerex has developed a wide line-up of standard air or liquid cooled rectifier / thyristor assemblies in all common circuit configurations utilizing either discrete disc or isolated baseplate power semiconductors. A range of standard extrusions or chill blocks and clamps are used to produce a comprehensive range of assemblies from 100 to 6000A DC output in air cooled and 400 to 15000A DC output when liquid cooled.

When standard assemblies are not sufficient, the Powerex engineering team will design and manufacture power semiconductor assemblies to specific application requirements. These engineered solutions provide the optimum solution to electrical, thermal or mechanical challenges.

### Applications Include:

- Battery Chargers
- Induction Heating / Melting
- Motor Controls
- Motor Starters
- Power Supplies
- Transportation
- UPS
- Welding

### Circuit Configurations:

- Single
- Half-Bridge
- AC Switch
- Common Cathode/Common Anode
- Single-Phase Bridge
- Three-Phase Bridge

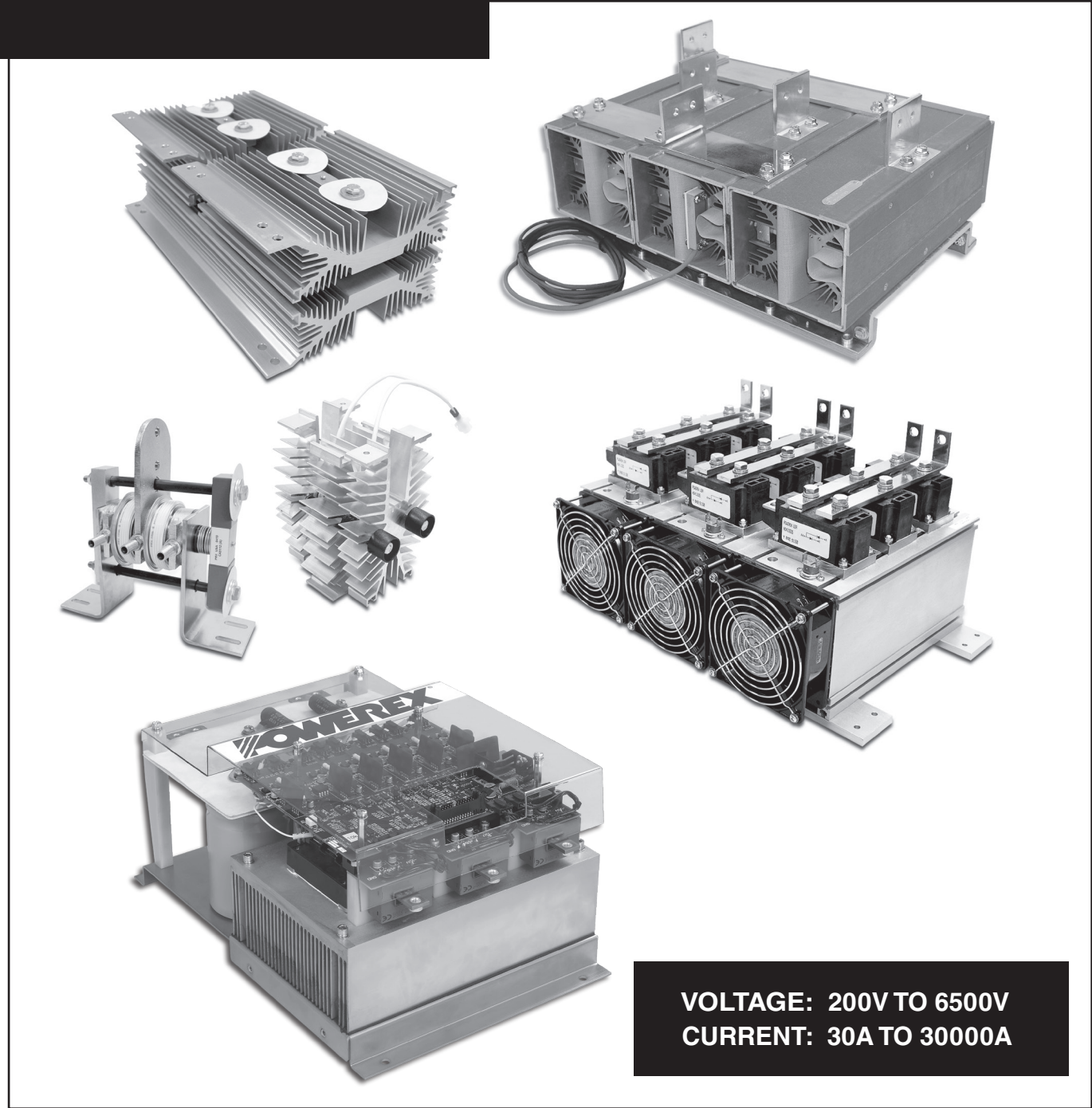
### Options Available in

#### Engineered Assemblies:

- Bus Bars
- Fans
- Fuses
- Insulators
- Terminal Blocks
- Thermal Sensors
- Snubbers (R-C Transient Suppressors)

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**VOLTAGE: 200V TO 6500V**  
**CURRENT: 30A TO 30000A**

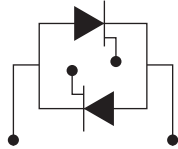
## PA Assembly Overview

Powerex assemblies with the PA prefix are available in two varieties. PAA assemblies are disc based assemblies and PAB assemblies are module based assemblies. Fans are not included as part of the standard assembly.

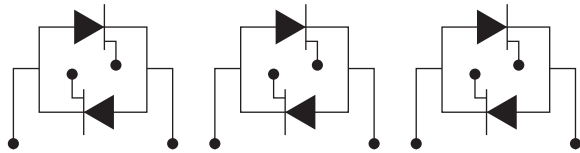
If your application requirements do not allow the selection of a standard assembly, as listed on pages K-4 through K-5, then to determine the proper assembly for your application, the following information is needed:

### (1) Choose the Circuit Type:

Single Phase AC Switch



Three Phase AC Switch



### (2) Electrical Parameters:

- Maximum Continuous Output Current (Amps)
  - Maximum Overload
    - Output DC Current (Amps)
    - Overload Duration (Sec)
- Input Voltage (Volts)
  - (Vac-rms for Single Phase, Vac-RMS line-to-line for Three Phase)
- Line Frequency (50 Hertz or 60 Hertz)

### (3) Environmental Parameters:

- Maximum Ambient Temperature (°C)
- Maximum Altitude (feet above sea level) (ft)

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.

## PA Numbering System

PAA6T6200620 is a 600 Volt disc based, Three-Phase AC Assembly.



(1,2) Circuit Code:

Rectifier	SCR	Half-Control	Full-Control
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### PA (AC Switch)

Powerex supplies the sink jumper (AC connection) on the PA air cooled assembly types only.



(3,4) Sink Code: Customer Specific

(5,6,7,8) Device Code: Application Specific

(9,10) Voltage Code:

02 = 200
04 = 400
06 = 600
08 = 800
10 = 1000
12 = 1200
14 = 1400
16 = 1600
18 = 1800
20 = 2000
22 = 2200
24 = 2400
26 = 2600
28 = 2800
30 = 3000

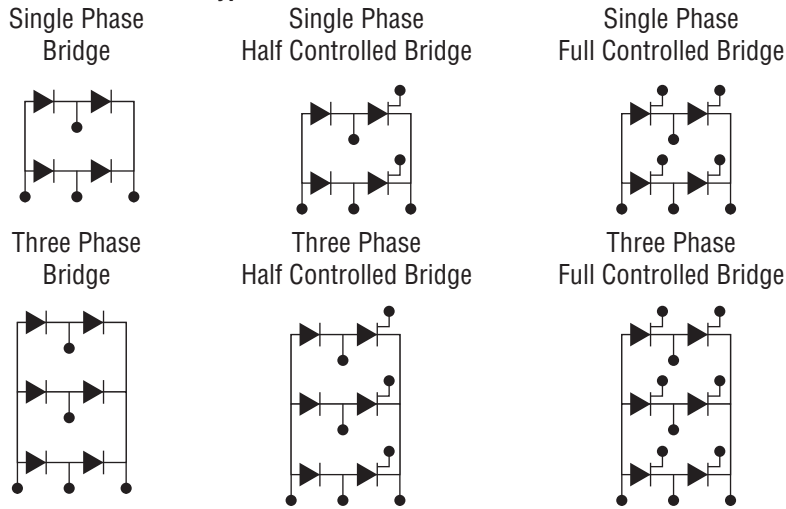
(11,12) Current Code: Device Specific

# PD Assembly Overview

Powerex assemblies with the PD prefix are available in two varieties. PDA assemblies are disc based assemblies and PDB assemblies are module based assemblies. Fans are not included as part of the standard assembly.

If your application requirements do not allow the selection of a standard assembly, as listed on pages K-6 through K-11, then to determine the proper assembly for your application, the following information is needed:

## (1) Choose the Circuit Type:



## (2) Electrical Parameters:

- Maximum Continuous Output Current (Amps)
- Maximum Overload
  - Output DC Current (Amps)
  - Overload Duration (Sec)
- Input Voltage (Volts)
  - (Vac-rms for Single Phase, Vac-RMS line-to-line for Three Phase)
- Line Frequency (50 Hertz or 60 Hertz)

## (3) Environmental Parameters:

- Maximum Ambient Temperature (°C)
- Maximum Altitude (feet above sea level) (ft)

Please mail 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.

# PD Numbering System

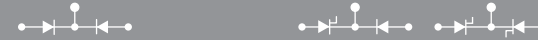
PDA9T9R92210 is a 2200 Volt, Air Cooled Doubler Assembly.



## (1,2) Circuit Code:

Rectifier      SCR      Half-Control      Full-Control

### PC (Positive Centertap – Common Cathode Connection)



(3,4) Sink Code: Customer Specific

### PD (Doubler Assemblies)

Remember to check the number of assemblies required for your circuit configuration.



(5,6,7,8) Device Code: Application Specific

### (9,10) Voltage Code:

- 02 = 200
- 04 = 400
- 06 = 600
- 08 = 800
- 10 = 1000
- 12 = 1200
- 14 = 1400
- 16 = 1600
- 18 = 1800
- 20 = 2000
- 22 = 2200
- 24 = 2400
- 26 = 2600
- 28 = 2800
- 30 = 3000

### PN (Negative Centertap – Common Anode Connection)



### PP (Parallel Connection)

Connections available as Special Purpose Assemblies with selected device matching negotiated with Powerex application engineers.



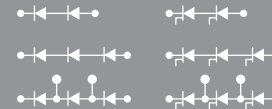
### PR (Single Assemblies)

Remember to check the number of assemblies required for your circuit configuration.



### PS (Series Connection)

Connections available as Special Purpose Assemblies with the following options: device selection and matching; chill blocks and fittings (targets); disc clamp designs with additional spring deflection and additional voltage capabilities, corona (CIV, CEV) and Hipot testing, balancing capacitors, resistors.



(11,12) Current Code: Device Specific

### PT (Single Assemblies)

Remember to check the number of assemblies required for your circuit configuration.

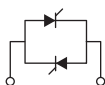


## Three-Phase AC Switch

### Discs, Hockey Pucks

Part Number	Voltage	Output Current A <sub>RMS</sub> Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PAA6T6200620*	600	400	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PAA6T6201220*	1200	400	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PAA6T6201620*	1600	400	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PAA7T7200645*	600	600	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7201245*	1200	600	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7201645*	1600	600	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7200655*	600	700	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7201255*	1200	700	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7201655*	1600	700	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PAA7T7S00675*	600	800	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PAA7T7S01275*	1200	800	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PAA7T7S01675*	1600	800	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PAA9T9G00610*	600	1350	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAA9T9G01210*	1200	1350	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAA9T9G01610*	1600	1350	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAA9T9G00612*	600	1700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAA9T9G01212*	1200	1700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAA9T9G01612*	1600	1700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PAAATA200616*	600	2100	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PAAATA201216*	1200	2100	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PAAATA201616*	1600	2100	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PAAATA200618*	600	2500	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PAAATA201218*	1200	2500	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PAAATA201618*	1600	2500	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.



Single Phase Assembly –  
(3 Required for Three-Phase Circuit)

# Three-Phase AC Switch

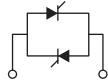
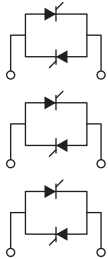
## Isolated Modules

Part Number	Voltage	Output Current $I_{rms}$ Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PAB1CD430890	800	100	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	6	K-14
PAB1CD431290	1200	100	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	6	K-14
PAB1CD431690	1600	100	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	6	K-14
PAB2CD630815	800	150	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	8	K-15
PAB2CD631215	1200	150	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	8	K-15
PAB2CD631615	1600	150	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	8	K-15
PAB3ND430825	800	200	12.00 x 4.92 x 8.00	1	50	800	18.75	8.5	10	K-16
PAB3ND431225	1200	200	12.00 x 4.92 x 8.00	1	50	800	18.75	8.5	10	K-16
PAB3ND431625	1600	200	12.00 x 4.92 x 8.00	1	50	800	18.75	8.5	10	K-16
PAB2LD430850*	800	300	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PAB2LD431250*	1200	300	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PAB2LD431650*	1600	300	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.

PAB1CD430890, PAB1CD431290, PAB1CD431690,  
PAB2CD630815, PAB2CD631215, PAB2CD631615,  
PAB3ND430825, PAB3ND431225, PAB3ND431625

PAB2LD430850, PAB2LD431250, PAB2LD431650

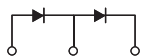


Single Phase Assembly –  
**(3 Required for Three-Phase Circuit)**

## Three-Phase DC Rectifier Discs, Hockey Pucks

Part Number	Voltage	Output Current Avg Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDA6R6200630*	600	850	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6R6201230*	1200	850	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6R6201630*	1600	850	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA7R7S00608*	600	1200	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01208*	1200	1200	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01608*	1600	1200	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S00612*	600	1650	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01212*	1200	1650	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01612*	1600	1650	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S00616*	600	2450	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01216*	1200	2450	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7R7S01616*	1600	2450	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA9R9G00612*	600	2700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01212*	1200	2700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01612*	1600	2700	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G00618*	600	3300	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01218*	1200	3300	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01618*	1600	3300	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G00622*	600	4500	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01222*	1200	4500	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9R9G01622*	1600	4500	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDAARA200636*	600	5800	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAARA201236*	1200	5800	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAARA201636*	1600	5800	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.



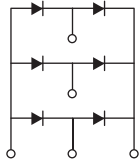
Single Phase Assembly –  
(3 Required for Three-Phase Circuit)

# Three-Phase DC Rectifier Isolated Modules

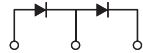
Part Number	Voltage	Output Current A <sub>DC</sub> Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDB1CD410899	800	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD411299	1200	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD411699	1600	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB2CD610816	800	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD611216	1200	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD611616	1600	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB3ND410826	800	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND411226	1200	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND411626	1600	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB2LD410860*	800	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD411260*	1200	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD411660*	1600	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.

PDB1CD410899, PDB1CD411299, PDB1CD411699,  
PDB2CD610816, PDB2CD611216, PDB2CD611616,  
PDB3ND410826, PDB3ND411226, PDB3ND411626



PDB2LD410860, PDB2LD411260, PDB2LD411660

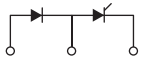


Single Phase Assembly –  
**(3 Required for Three-Phase Circuit)**

## Three-Phase Half Controlled Rectifier Discs, Hockey Puks

Part Number	Voltage	Output Current Apc Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDA6T6R60620*	600	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6R61220*	1200	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6R61620*	1600	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6R60630*	600	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6R61230*	1200	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6R61630*	1600	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA7T7R70645*	600	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7T7R71245*	1200	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7T7R71645*	1600	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7TSRS0665*	600	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7TSRS1265*	1200	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7TSRS1665*	1600	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7TSRS0675*	600	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7TSRS1275*	1200	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7TSRS1675*	1600	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA9T9R90610*	600	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9R91210*	1200	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9R91610*	1600	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9R90612*	600	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9R91212*	1200	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9R91612*	1600	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDAATARA0618*	600	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAATARA1218*	1200	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAATARA1618*	1600	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.



Single Phase Assembly –  
(3 Required for Three-Phase Circuit)



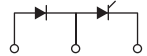
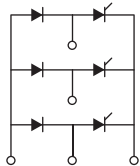
# Three-Phase Half Controlled Rectifier Isolated Modules

Part Number	Voltage	Output Current A <sub>DC</sub> Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDB1CD420890	800	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD421290	1200	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD421690	1600	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB2CD620815	800	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD621215	1200	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD621615	1600	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB3ND420825	800	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND421225	1200	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND421625	1600	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB2LD420850*	800	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD421250*	1200	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD421650*	1600	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.

PDB1CD420890, PDB1CD421290, PDB1CD421690,  
PDB2CD620815, PDB2CD621215, PDB2CD621615,  
PDB3ND420825, PDB3ND421225, PDB3ND421625

PDB2LD420850, PDB2LD421250, PDB2LD421650

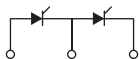


Single Phase Assembly –  
**(3 Required for Three-Phase Circuit)**

## Three-Phase Full Controlled Rectifier Discs, Hockey Puks

Part Number	Voltage	Output Current Apc Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDA6T6200620*	600	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6201220*	1200	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6201620*	1600	500	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6200630*	600	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6201230*	1200	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA6T6201630*	1600	600	13.125 x 5.75 x 5.75	3	50	1000	12.8	5.8	1	K-12
PDA7T7200645*	600	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7T7201245*	1200	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7T7201645*	1600	800	13.125 x 5.625 x 6.25	3	50	1000	13.7	6.2	2	K-12
PDA7T7S00665*	600	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7T7S01265*	1200	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7T7S01665*	1600	950	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7T7S00675*	600	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7T7S01275*	1200	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA7T7S01675*	1600	1000	13.125 x 5.625 x 5.80	3	50	1000	12.8	5.8	3	K-13
PDA9T9G00610*	600	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9G01210*	1200	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9G01610*	1600	1750	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9G00612*	600	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9G01212*	1200	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDA9T9G01612*	1600	2200	17.125 x 9.938 x 6.44	3	50	1000	45.0	20.4	4	K-13
PDAATA200618*	600	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAATA201218*	1200	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14
PDAATA201618*	1600	3300	21.12 x 12.69 x 7.84	3	50	1000	86.4	39.2	5	K-14

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.



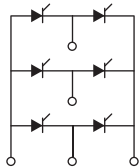
Single Phase Assembly –  
(3 Required for Three-Phase Circuit)

# Three-Phase Full Controlled Rectifier Isolated Modules

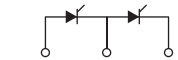
Part Number	Voltage	Output Current A <sub>DC</sub> Amperes	Package Size (inches)	Quantity Required for 3-Phase Circuit	Ambient Temperature (°C)	Inlet Air Velocity (LFM)	Approximate Weight		Outline Drawings	
							(lbs)	(kgs)	Number	Page
PDB1CD430890	800	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD431290	1200	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB1CD431690	1600	150	6.00 x 4.92 x 7.00	1	50	800	6.8	3.1	7	K-15
PDB2CD630815	800	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD631215	1200	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB2CD631615	1600	200	9.00 x 4.92 x 7.00	1	50	800	11.0	5.0	9	K-15
PDB3ND430625	600	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND431225	1200	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB3ND431625	1600	300	15.00 x 4.92 x 8.00	1	50	800	18.75	8.5	11	K-16
PDB2LD430850*	800	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD431250*	1200	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16
PDB2LD431650*	1600	450	9.00 x 4.92 x 8.00	3	50	800	12.5	5.6	12	K-16

\*Part number represents a single phase assembly, you will need three assemblies to complete a three-phase circuit.

PDB1CD430890, PDB1CD431290, PDB1CD431690,  
PDB2CD630815, PDB2CD631215, PDB2CD631615,  
PDB3ND430625, PDB3ND431225, PDB3ND431625

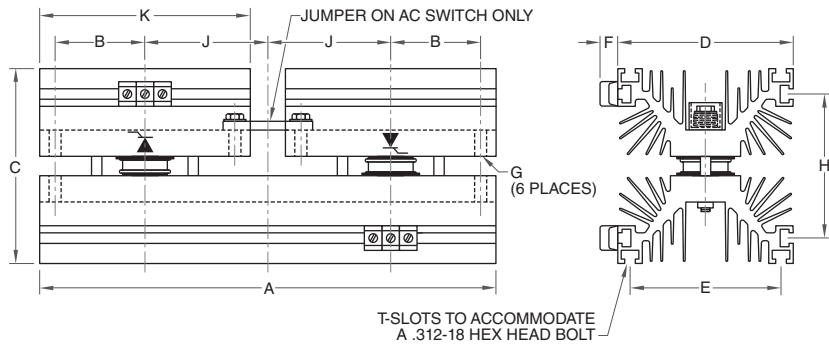


PDB2LD430850, PDB2LD431250, PDB2LD431650



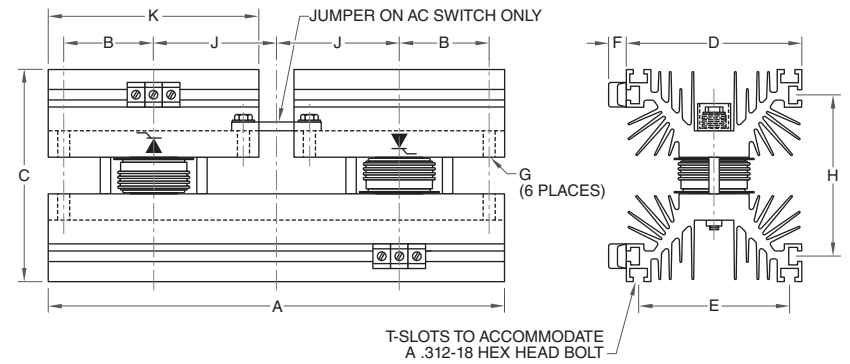
Single Phase Assembly –  
**(3 Required for Three-Phase Circuit)**

**1** PAA6T6200620, PAA6T6201220, PAA6T6201620, PDA6R6200630, PDA6R6201230, PDA6R6201630, PDA6T6200620, PDA6T6200630, PDA6T6201220, PDA6T6201230, PDA6T6201620, PDA6T6201630, PDA6T6R60620, PDA6T6R60630, PDA6T6R61220, PDA6T6R61230, PDA6T6R61620, PDA6T6R61630



Dim.	Inches	Millimeters
A	13.06 Max.	331.72 Max.
B	2.56	65.0
C	5.60 Max.	142.24 Max.
D	5.06 Max.	128.52 Max.
E	4.25 Ref.	107.9 Ref.
F	0.5 Ref.	12.7 Ref.
G	0.344 Dia.	8.75 Dia.
H	4.10 Ref.	104.14 Ref.
J	3.5 Ref.	88.9 Ref.
K	6.0 Ref.	152.4 Ref.

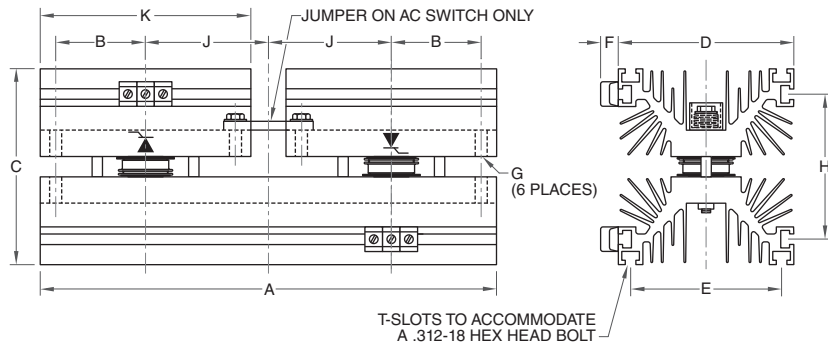
**2** PAA7T7200645, PAA7T7200655, PAA7T7201245, PAA7T7201255, PAA7T7201645, PAA7T7201655, PDA7T7200645, PDA7T7201245, PDA7T7201645, PDA7T7R70645, PDA7T7R71245, PDA7T7R71645



Dim.	Inches	Millimeters
A	13.06 Max.	331.72 Max.
B	2.56	65.0
C	6.06 Max.	153.92 Max.
D	5.06 Max.	128.52 Max.
E	4.25 Ref.	107.9 Ref.
F	0.5 Ref.	12.7 Ref.
G	0.344 Dia.	8.75 Dia.
H	4.59 Ref.	116.58 Ref.
J	3.5 Ref.	88.9 Ref.
K	6.0 Ref.	152.4 Ref.

3

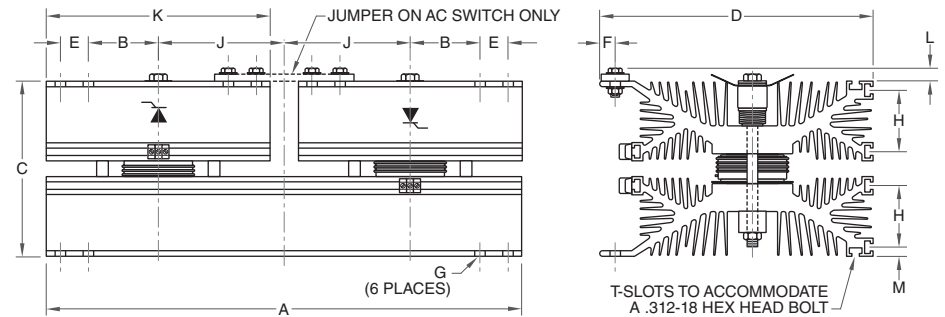
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Dim.	Inches	Millimeters
A	13.06 Max.	331.72 Max.
B	2.56	65.0
C	5.64 Max.	143.26 Max.
D	5.06 Max.	128.52 Max.
E	4.25 Ref.	107.9 Ref.
F	0.5 Ref.	12.7 Ref.
G	0.344 Dia.	8.75 Dia.
H	4.13 Ref.	104.9 Ref.
J	3.5 Ref.	88.9 Ref.
K	6.0 Ref.	152.4 Ref.

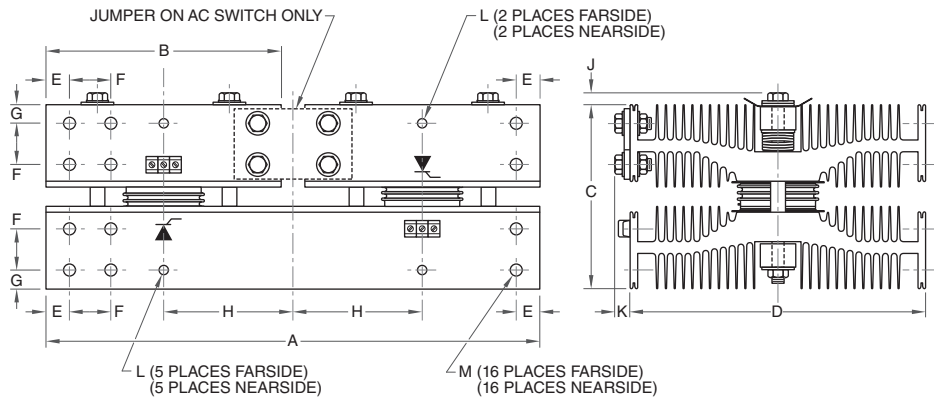
4

PAA9T9G00610, PAA9T9G00612, PAA9T9G01210, PAA9T9G01212, PAA9T9G01610, PAA9T9G01612, PDA9R9G00612, PDA9R9G00618, PDA9R9G00622, PDA9R9G01212, PDA9R9G01218, PDA9R9G01222, PDA9R9G01612, PDA9R9G01618, PDA9R9G01622, PDA9T9G00610, PDA9T9G00612, PDA9T9G01210, PDA9T9G01212, PDA9T9G01610, PDA9T9G01612, PDA9T9R90610, PDA9T9R90612, PDA9T9R91210, PDA9T9R91212, PDA9T9R91610, PDA9T9R91612



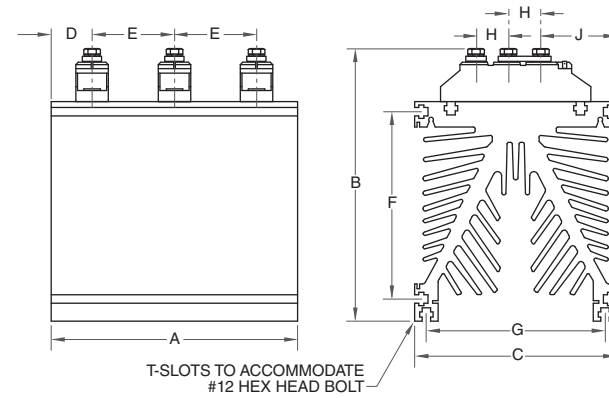
Dim.	Inches	Millimeters
A	17.06 Max.	433.32 Max.
B	2.5	63.5
C	6.3 Max.	160.02 Max.
D	9.86 Max.	250.95 Max.
E	1.0	25.4
F	0.75 Ref.	19.05 Ref.
G	0.375 Dia.	9.525 Dia.
H	2.16 Ref.	54.86 Ref.
J	4.5 Ref.	114.3 Ref.
K	8.0 Ref.	203.2 Ref.
L	0.5 Max.	12.7 Max.
M	0.33 Ref.	8.38 Ref.

**5** PAAATA200616, PAAATA200618, PAAATA201216, PAAATA201218, PAAATA201616, PAAATA201618,  
PDAARA200636, PDAARA201236, PDAARA201636, PDAATARA0618, PDAATARA1218, PDAATARA1618,  
PDAATA200618, PDAATA201218, PDAATA201618



Dim.	Inches	Millimeters
A	21.06 Max.	534.92 Max.
B	10.0 Ref.	254.0 Ref.
C	7.89 Max.	200.4 Max.
D	12.69 Max.	322.33 Max.
E	1.0	25.4
F	1.75	44.45
G	0.81	20.57
H	5.50	139.7
J	0.58 Ref.	14.73 Ref.
K	0.65 Ref.	16.51 Ref.

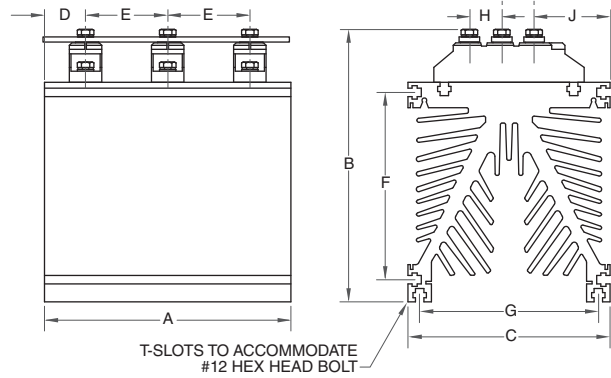
**6** PAB1CD430890, PAB1CD431290, PAB1CD431690



Dim.	Inches	Millimeters
A	6.0	152.5
B	7.0 Max.	177.83 Max.
C	4.92 Max.	125.0 Max.
D	1.0	25.4
E	2.0	50.8
F	4.53	115.06
G	4.33	109.98
H	0.79	20.07
J	1.5	31.1

7

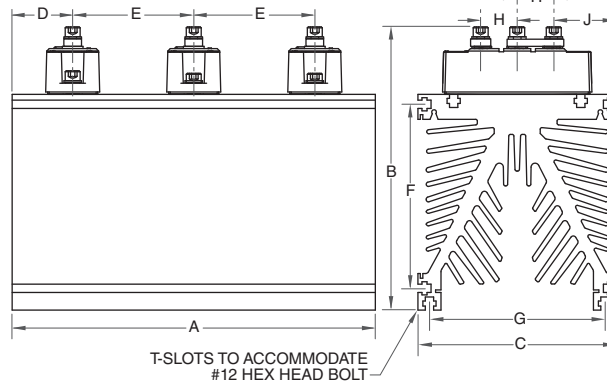
PDB1CD410899, PDB1CD411299, PDB1CD411699,  
PDB1CD420890, PDB1CD421290, PDB1CD421690,  
PDB1CD430890, PDB1CD431290, PDB1CD431690



Dim.	Inches	Millimeters
A	6.0	152.5
B	7.0 Max.	177.83 Max.
C	4.92 Max.	125.0 Max.
D	1.0	25.4
E	2.0	50.8
F	4.53	115.06
G	4.33	109.98
H	0.79	20.07
J	1.5	31.1

8

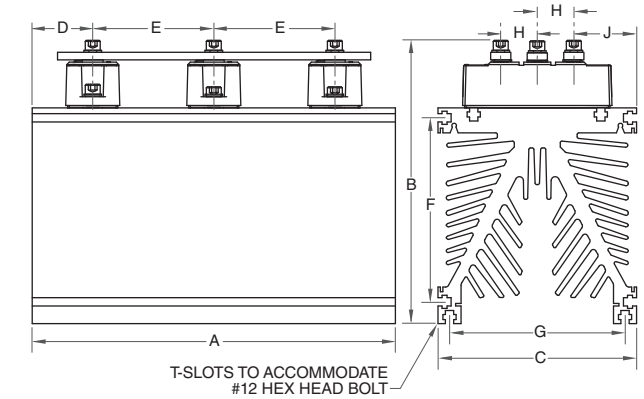
PAB2CD630815, PAB2CD631215, PAB2CD631615



Dim.	Inches	Millimeters
A	9.0	228.6
B	7.0 Max.	177.83 Max.
C	4.92 Max.	125.0 Max.
D	1.5	31.1
E	3.0	76.2
F	4.53	115.06
G	4.33	109.98
H	0.91	23.11
J	1.56	39.62

9

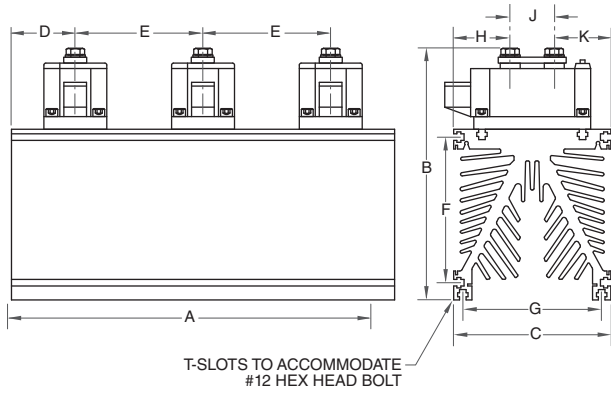
PDB2CD610816, PDB2CD611216, PDB2CD611616,  
PDB2CD620815, PDB2CD621215, PDB2CD621615,  
PDB2CD630815, PDB2CD631215, PDB2CD631615



Dim.	Inches	Millimeters
A	9.0	228.6
B	7.0 Max.	177.83 Max.
C	4.92 Max.	125.0 Max.
D	1.5	31.1
E	3.0	76.2
F	4.53	115.06
G	4.33	109.98
H	0.91	23.11
J	1.56	39.62

# 10

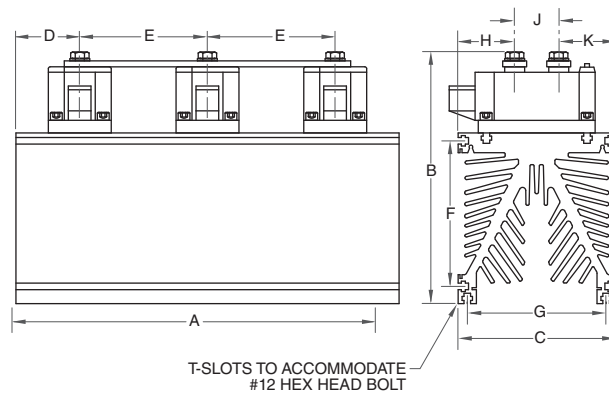
PAB3ND430825, PAB3ND431225, PAB3ND431625



Dim.	Inches	Millimeters
A	12.0	304.8
B	8.0 Max.	203.2 Max.
C	4.92 Max.	125.0 Max.
D	2.0	50.8
E	4.0	101.6
F	4.53	115.06
G	4.33	109.98
H	1.7	43.18
J	1.38	35.05
K	1.77	44.96

# 11

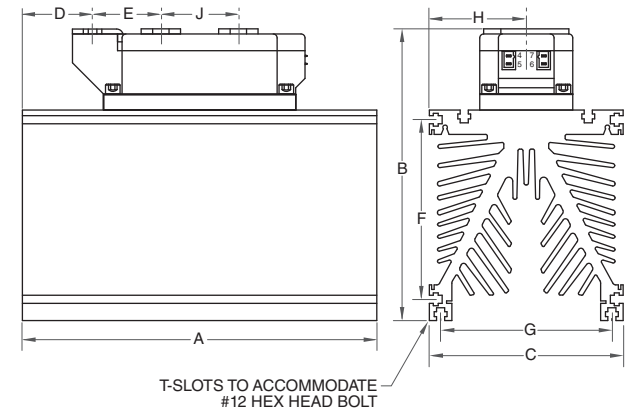
PDB3ND410826, PDB3ND411226, PDB3ND411626,  
PDB3ND420825, PDB3ND421225, PDB3ND421625,  
PDB3ND430625, PDB3ND431225, PDB3ND431625



Dim.	Inches	Millimeters
A	12.0	304.8
B	8.0 Max.	203.2 Max.
C	4.92 Max.	125.0 Max.
D	2.0	50.8
E	4.0	101.6
F	4.53	115.06
G	4.33	109.98
H	1.7	43.18
J	1.38	35.05
K	1.77	44.96

# 12

PAB2LD430850, PAB2LD431250, PAB2LD431650,  
PDB2LD410860, PDB2LD411260, PDB2LD411660,  
PDB2LD420850, PDB2LD421250, PDB2LD421650,  
PDB2LD430850, PDB2LD431250, PDB2LD431650



Dim.	Inches	Millimeters
A	9.0	228.6
B	8.0 Max.	203.2 Max.
C	4.92 Max.	125.0 Max.
D	1.78	45.21
E	1.73	43.94
F	4.53	115.06
G	4.33	109.98
H	2.46	62.48
J	1.97	50.04