

FEATURES

- High Reliability Proven Design
- DCR4160A42
- Forced Air Cooling
- Redundant Fan (Optional)
- RC Snubber
- Pressure Switch
- IR Temperature Sensor (Optional)
- DC Fuse (Optional)
- Gate Drive (Optional)
- Easily Maintainable Design

APPLICATIONS

- Power Generation
- Renewables

The Dynex Standard Assemblies range consists of proven high reliability Heatsink Assemblies for a challenging range of applications.

The DSS1300AP1-B6C-1700 is a controlled bridge rectifier spread across 3 individual phase arm assemblies. The forced air-cooled design has been optimised for high reliability operation for deployment in applications that require continuous operation and long lifetime. The Thyristor characteristics have been tailored specifically to lower the overall losses of the assembly to improve reliability as well as increase efficiency.

The design can be altered to suit a specific application requirement. Contact your local representative to find out more.

KEY PARAMETERS

I_{dc}	(max)	1300A
V_{ac}		1200V
P	(max)	2250kVA

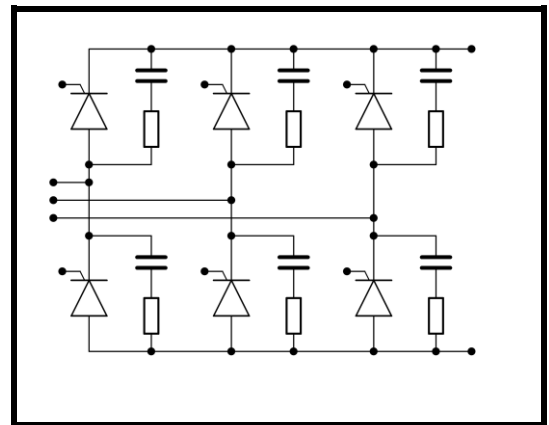
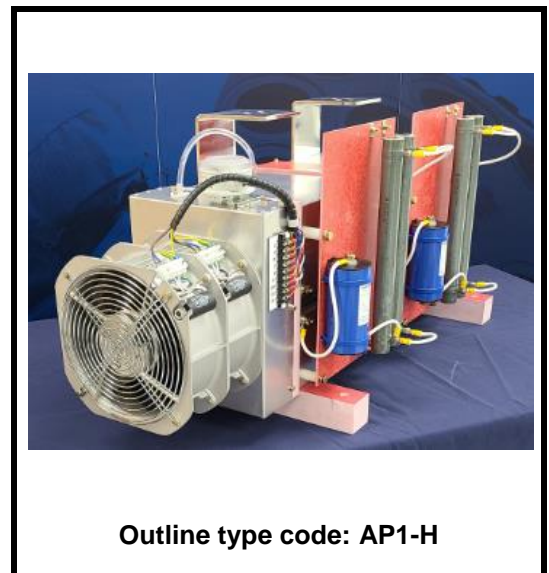


Fig. 1 Circuit configuration



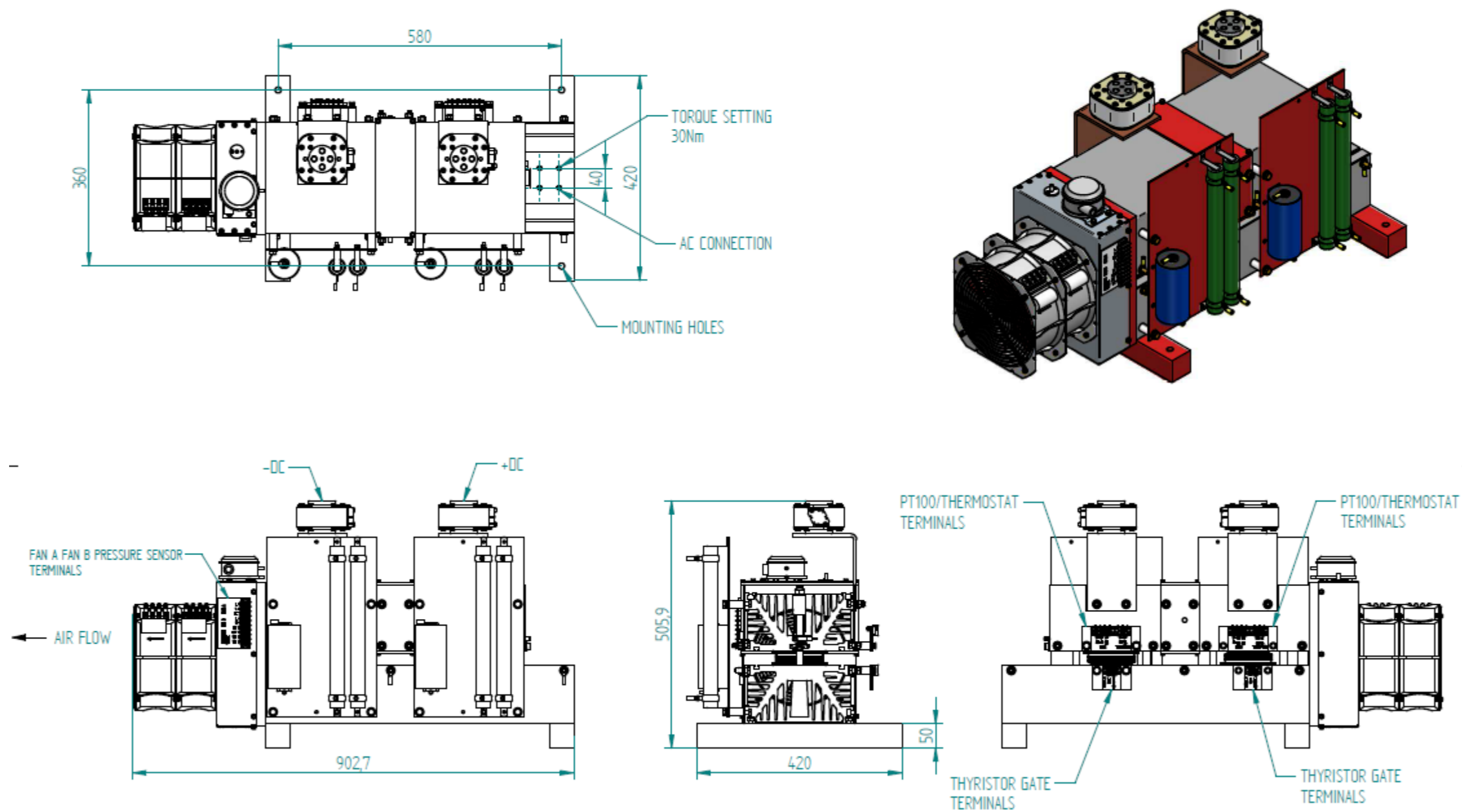
Outline type code: AP1-H

**Fig. 2 Package
(Image shows 1 phase arm)**

Symbol	Parameter	Min.	Typ.	Max.	Units
	Electrical Characteristics				
I_{dc}	DC Current Continuous (50 Hz) - $T_{Air Inlet} = 40^{\circ}C$			1300	A
V_{AC}			1200		V
V_{DC}				1700	V
P_{Total}				2250	kVA
V_{ISO}	50Hz 1min			6.0	kV _{ac}
X	Assumed Transformer Reactance	6			%
	Mechanical/Environmental				
Weight	Per phase		50		Kg
PD	Pollution Degree (EN 50178)		2		
	Fan Noise		59		dB
IP	Ingress Protection (EN 60529)		00		
	Pressure Switch Aux Contact Current (230V _{ac})			0.5	A
	Fan Data				
V_{Fan}	Fan voltage		230		V _{ac}
f_{Fan}	Fan Frequency		50 / 60		Hz
P_{Fan}	Fan Power		74 / 80		W
	Snubber – per Thyristor				
R			55		Ω
C			0.33		μF

PACKAGE DETAILS

For further package information, please visit our website or contact Customer Services.
 All dimensions in mm, unless stated otherwise.
DO NOT SCALE.



Nominal Weight: 50kg

Module Outline Type Code: AP1-H

Fig. 3 Outline drawing of one Phase Arm (3 assemblies required per Bridge)

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The products must not be touched when operating because there is a danger of electrocution or severe burning. Always use protective safety equipment such as appropriate shields for the product and wear safety glasses. Even when disconnected any electric charge remaining in the product must be discharged and allowed to cool before safe handling using protective gloves.

Extended exposure to conditions outside the product ratings may affect reliability leading to premature product failure. Use outside the product ratings is likely to cause permanent damage to the product. In extreme conditions, as with all semiconductors, this may include potentially hazardous rupture, a large current to flow or high voltage arcing, resulting in fire or explosion. Appropriate application design and safety precautions should always be followed to protect persons and property.

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Target Information:	This is the most tentative form of information and represents a very preliminary specification. No actual design work on the product has been started.
Provisional Information:	Some initial development work has been performed. The datasheet represents a view of the end product based on very limited information. Certain details will change.
Preliminary Information:	The product design is complete and final characterisation for volume production is in progress. The datasheet represents the product as it is now understood but details may change.
No Annotation:	The product has been approved for production and unless otherwise notified by Dynex any product ordered will be supplied to the current version of the data sheet prevailing at the time of our order acknowledgement.

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