

Product Specification

Product Type: Typhoon 300 / 450 / 600 Fan Heater



Contents

1. Product Description
2. Technical Data
3. Drawing
4. Characteristic Curves
5. Electrical Connection
6. Approvals

Issue	Revision Information	Date	Author	Approved
P1	Preliminary Release	13 th , Feb 2007	W. Muirhead	W. Muirhead

1. Product Description.

The Typhoon 300/450/600 range of fan heaters comprises forced air enclosure heaters that use PTC ceramic heating technology. It completes the existing product range of DBK's fan heater series as the heater is designed for reliability and high performance in hazardous and aggressive environments such as industrial and marine use*. There are six primary variants giving different power and supply voltage capability. It has a robust construction utilising high temperature plastic mouldings, coupled to an 80mm fan. The heating element is a DBK "HPG" type element, with electrically insulated and corrosion resistant (anodised) fins. Heater conforms to IP20 and SKI. For ease of installation the product is supplied with a factory fitted 35mm DIN-rail mounting clip, and electrical connection via flying leads.

Variants

DBK Part number	Power Output (@25°C)	Supply Voltage
Typhoon 300 230V	300 W	230Vac Heater & Fan
Typhoon 450 230V	450 W	230Vac Heater & Fan
Typhoon 600 230V	600 W	230Vac Heater & Fan
Typhoon 300 110V	300 W	115Vac Heater & Fan
Typhoon 450 110V	450 W	115Vac Heater & Fan
Typhoon 600 110V	600 W	115Vac Heater & Fan

*Heaters have been tested in customers marine applications for highest ignition protection requirements e.g:
 ISO 8846 "Small craft, electrical devices, protection against ignition of surrounding flammable gases"
 SAE J1171 "External Ignition Protection of Marine Electrical Devices".
 ABYC E11 "AC and DC Electrical Systems on Boats. American Boat & Yacht Council Standards for Boats"

2. Technical Data

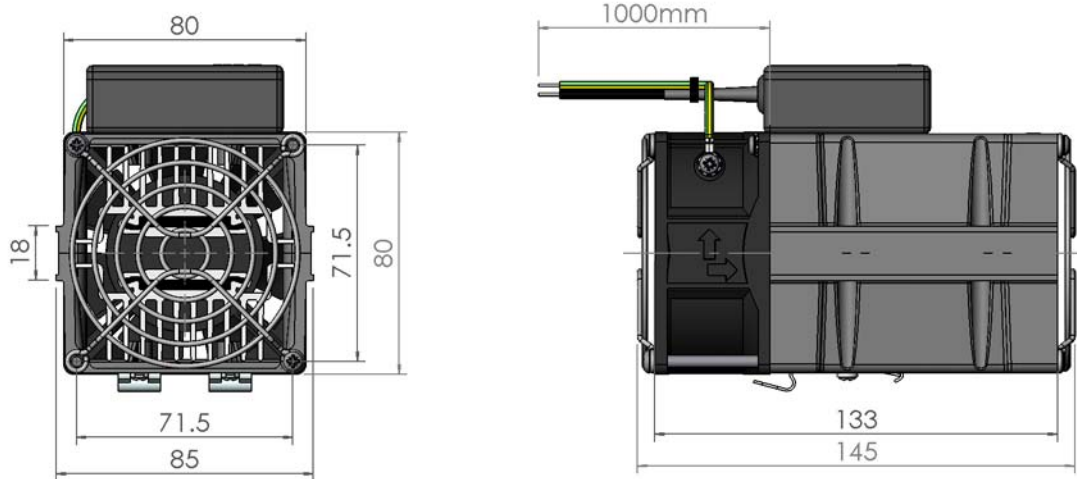
Key Characteristics

Nominal Power @ 25°C	300W	450W	600W
Typical peak in-rush current (A rms) @ 230 Vac	8	10	14
Maximum Body temperature (40°C Ambient)	70°C	70°C	70°C
Electrical protection Class	I	I	I
Ingress protection	IP20	IP20	IP20
Storage Temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Operating Temperature	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Fan volumetric flow at 50Hz (230 Vac) (m ³ /hr)	40	40	40
Fan volumetric flow at 60Hz (115 Vac) (m ³ /hr)	50	50	50
Fan life time – MTTF @ 70°C (Hrs)	65,000	65,000	65,000
Nominal Input Voltage (depending on part)	115V 230V	115V 230V	115V 230V
Dims (mm)	cross section	85x103	85x103
	length	145	205
Harness length (mm)	1000	1000	1000
Weight (g)	890	1190	1200
Finger guard at inlet & outlet	yes	yes	yes
RoHS Approved	yes	yes	yes

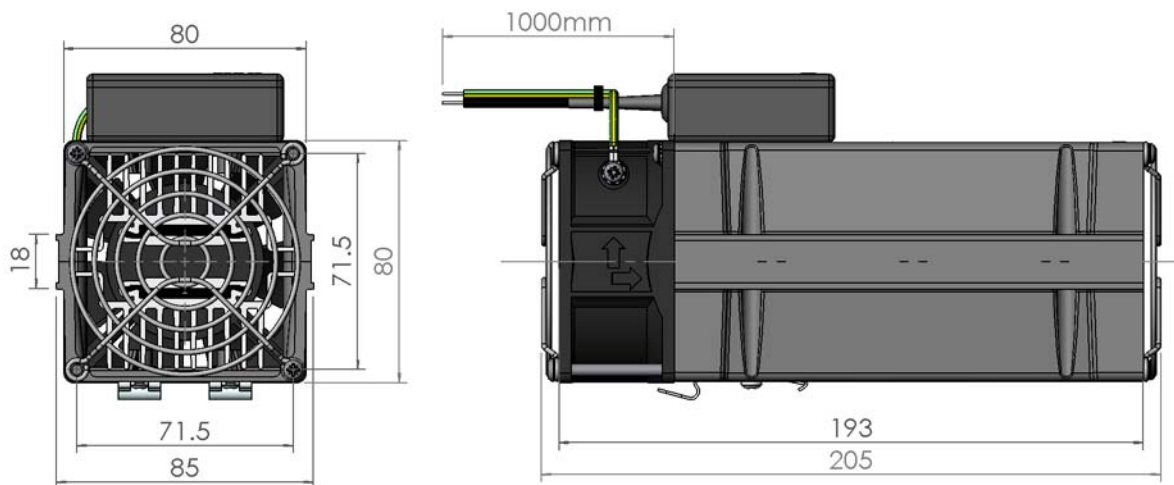
Note: all data are for unit operated in vertical orientation.

Dimension Drawings.

Typhoon 300

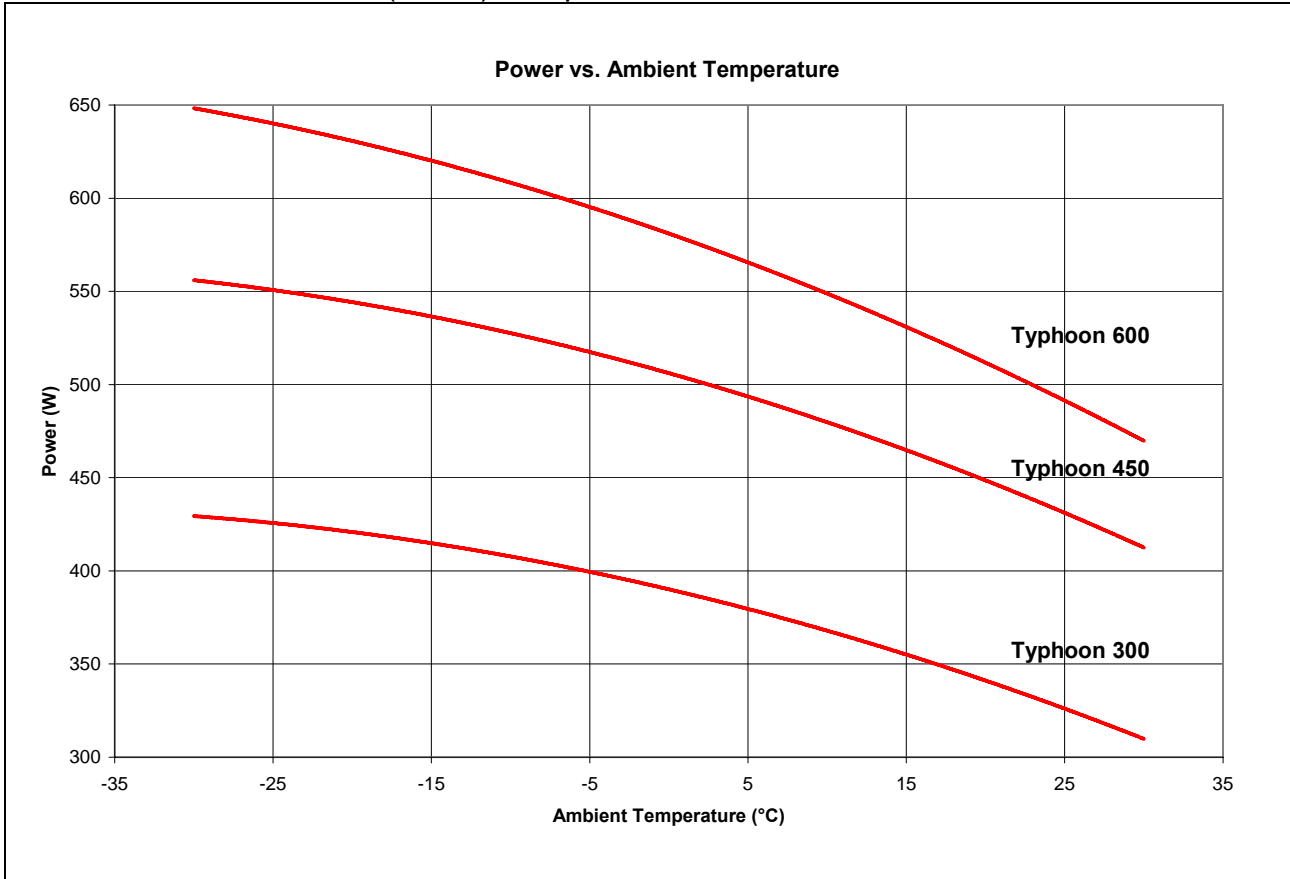


Typhoon 450 & 600

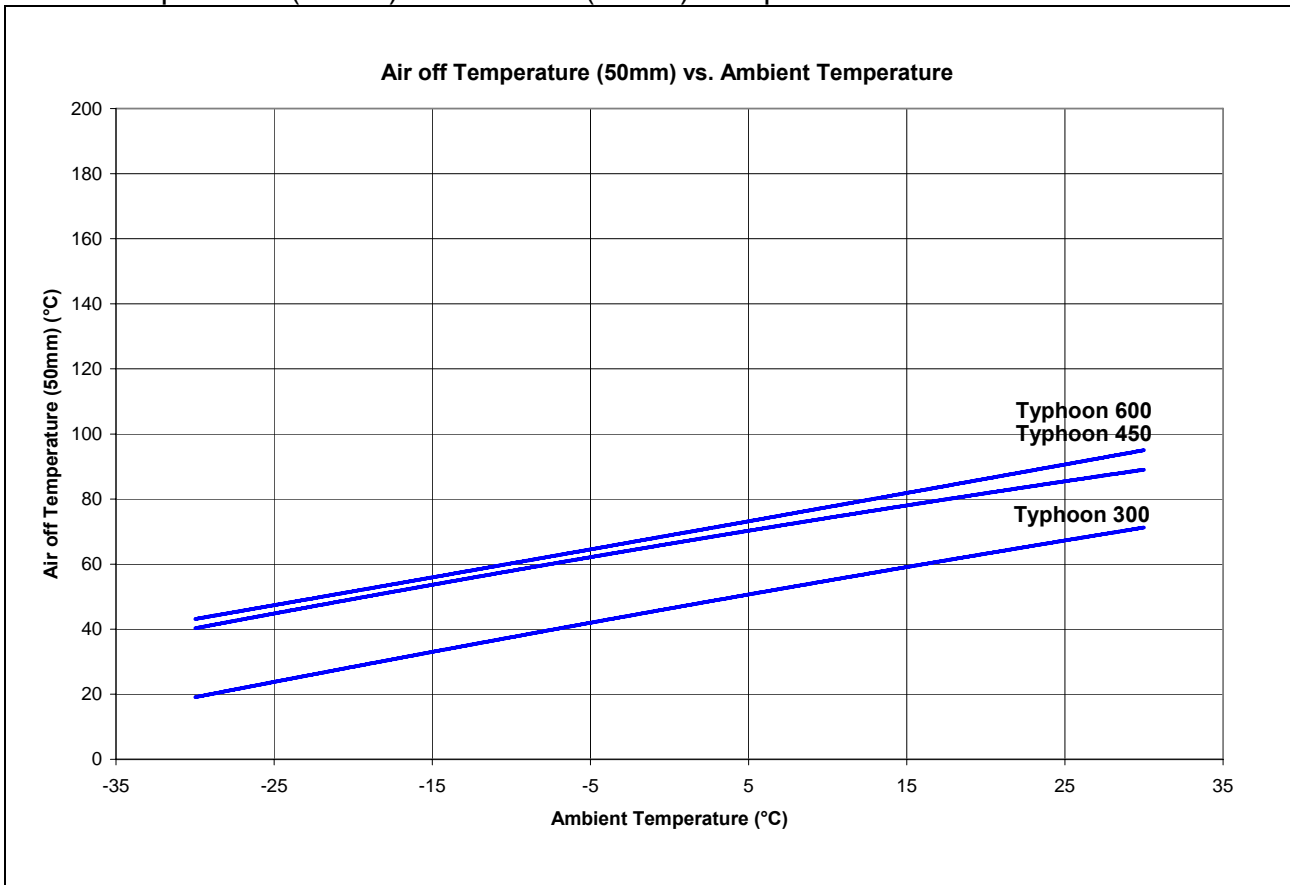


3. Characteristic Curves.

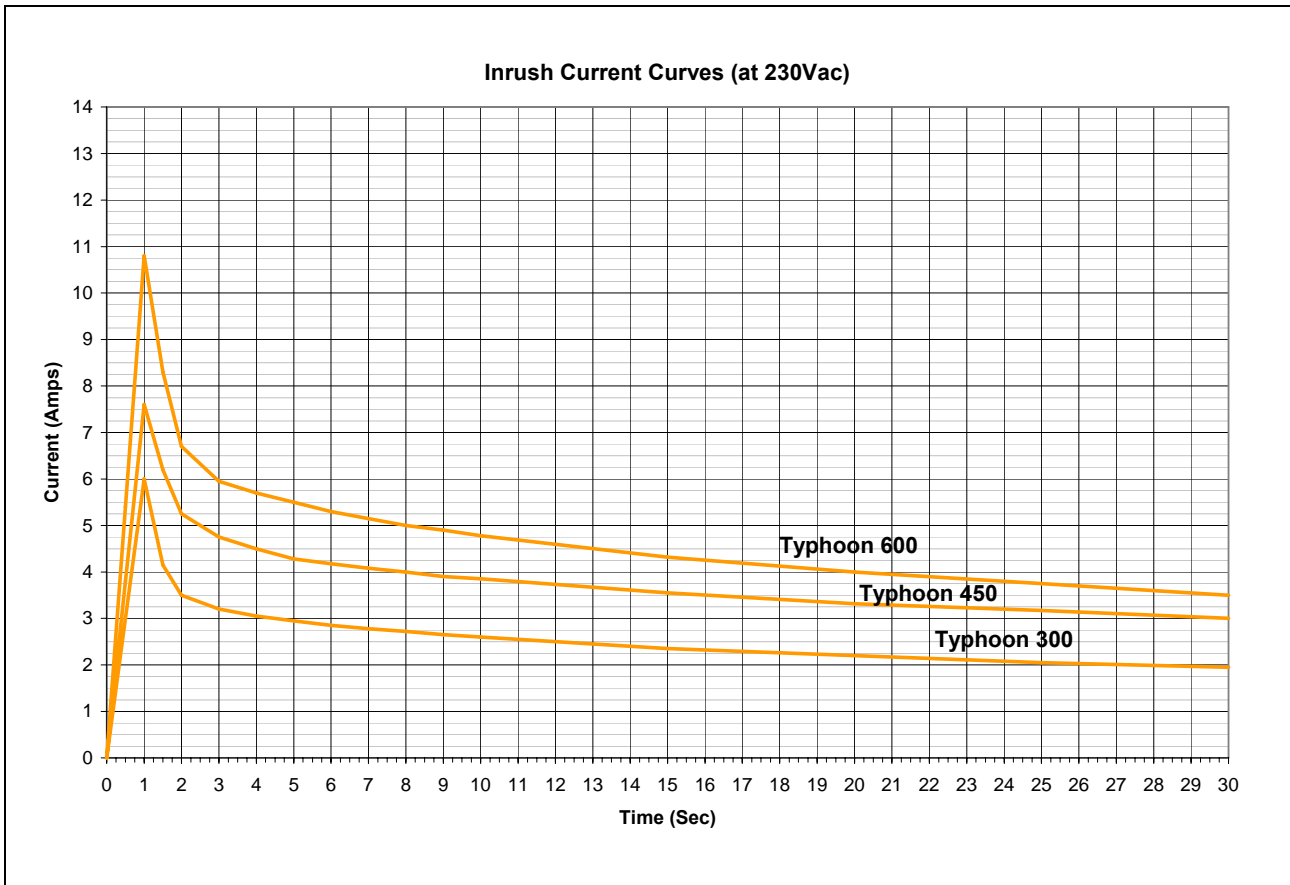
Heater Power vs. Ambient (intake) Temperature – 230Vac



Air off Temperature (50mm) vs. Ambient (intake) Temperature - 230Vac



Inrush Current Characteristics



4. Electrical Connections.

230Vac Versions:

Blue = Neutral
 Black = Live
 Yellow/Green = Ground (fan)

115Vac Versions:

White = Neutral
 Black = Live
 Green = Ground (fan)

Fusing:

Heater Power	Suggested MCB rating (Type B)	Suggested fuse rating (Time Delay)
115Vac or 230Vac 300/450/600	10A for Typhoon 300 13A for Typhoon 450 16A for Typhoon 600	10A for Typhoon 300 13A for Typhoon 450 16A for Typhoon 600

5. Approvals, -Pending

