DBK Technology Limited.
21/F, Harbour Com. Bldg.
122 Connaught Rd. C.
Sheung Wan, Hong Kong.

Tel: ++852 2401 1011
Fax: ++852 2401 7202
E-Mail: info@dbk-tech.com

DBK David + Baader GmbH
Rheinstr. 72-74
D-76870 Kandel
Deutschland

Tel: ++49 (0) 72 75 7 03-0
Fax: ++49 (0) 72 75 7 03-249
E-Mail: info@dbk-group.de

Product Specification

Product Type: Typhoon 25 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	13th, Feb 2007	W. Muirhead	W. Muirhead

1. Product Description.

The Typhoon 25 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 ultra compact and cost efficient design. There are three primary variants giving different power as well as a heater-less version equipped with cooling fan only. The heater has a robust construction utilising high temperature plastic mouldings, coupled to a 25mm fan. The following options are available

1) Fan Type
As standard the heater is equipped with a cost effective 12Vdc T&T fan. Heaters can alternatively be supplied with Papst or Sunon fan, upon request.

2) Heater Voltage
Heating elements are 24V as standard, alternative voltage is available upon request.

3) Heater Power
Heating elements of 10W, 20W, and 40W are supplied as standard, alternative power rating is available upon request, depending upon configuration powers up to a maximum of 80W are available.

For ease of installation the product is supplied with M3 X 0.5mm brass inserts for attachment to a mounting bracket. Heater conforms to SKIII. Electrical connection (with separate pins for fan and heating element), is provided via a 4 position Molex connector as standard.

Standard Variants

DBK Part number	Power Output (@10°C)	Supply Voltage
Typhoon 25 10W	10 W	24Vac Heater / 12Vdc Fan
Typhoon 25 20W	20 W	24Vac Heater / 12Vdc Fan
Typhoon 25 40W	40 W	24Vac Heater / 12Vdc Fan
Typhoon 25 Heaterless	0 W (No Heating Element)	12Vdc Fan

Note: The above standard variants are equipped with T&T fan.

2. Technical Data

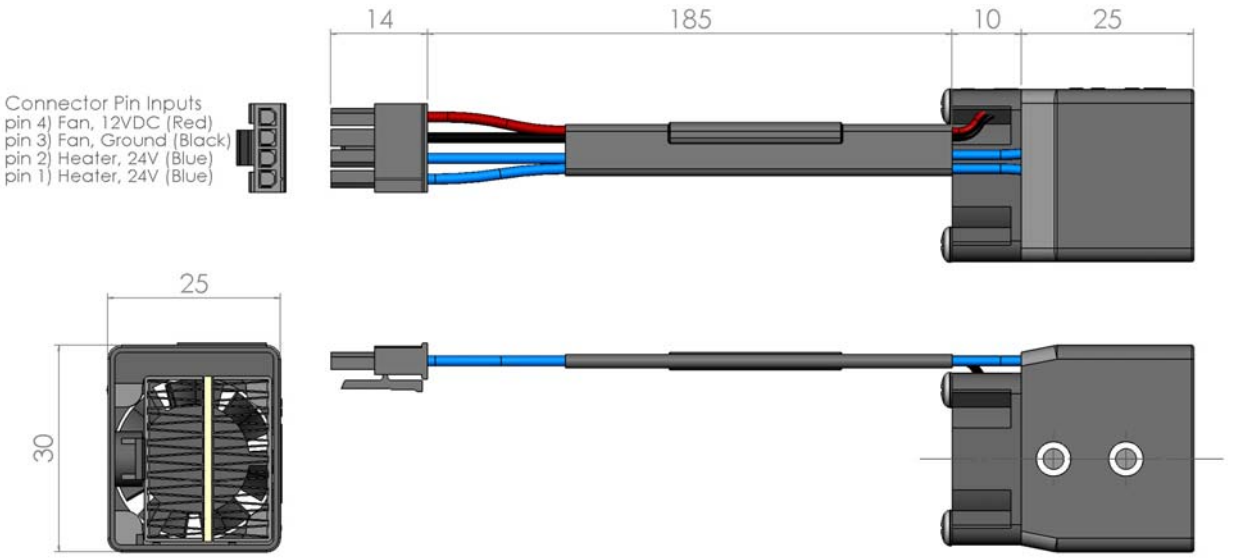
Key Characteristics

Nominal Power @ 10°C	10W	20W	40W
Typical peak in-rush current (A rms) @ 24 Vac	1.2	2.6	5.5
Maximum Body temperature (25°C Ambient)	40°C	50°C	90°C
Electrical protection Class	SK III / SELV	SK III / SELV	SK III / SELV
Storage Temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Fan Type (as standard)	T&T	T&T	T&T
Operating Temperature	-10°C to +50°C	-10°C to +50°C	-10°C to +50°C
Fan volumetric flow at 12 VDC (m^3/hr)	3.26	3.26	3.26
Fan life time – MTTF @ 45°C (Hrs)	70000	70000	70000
Nominal Input Voltage Heating Element	24V	24V	24V
Dims (mm) cross section	25x30	25x30	25x30
length	37	37	37
Harness length (mm)	185	185	185
Weight (g)	30	30	30
RoHS Approved	yes	yes	yes

Note: all data are for unit operated in vertical orientation, with T&T fan as standard.

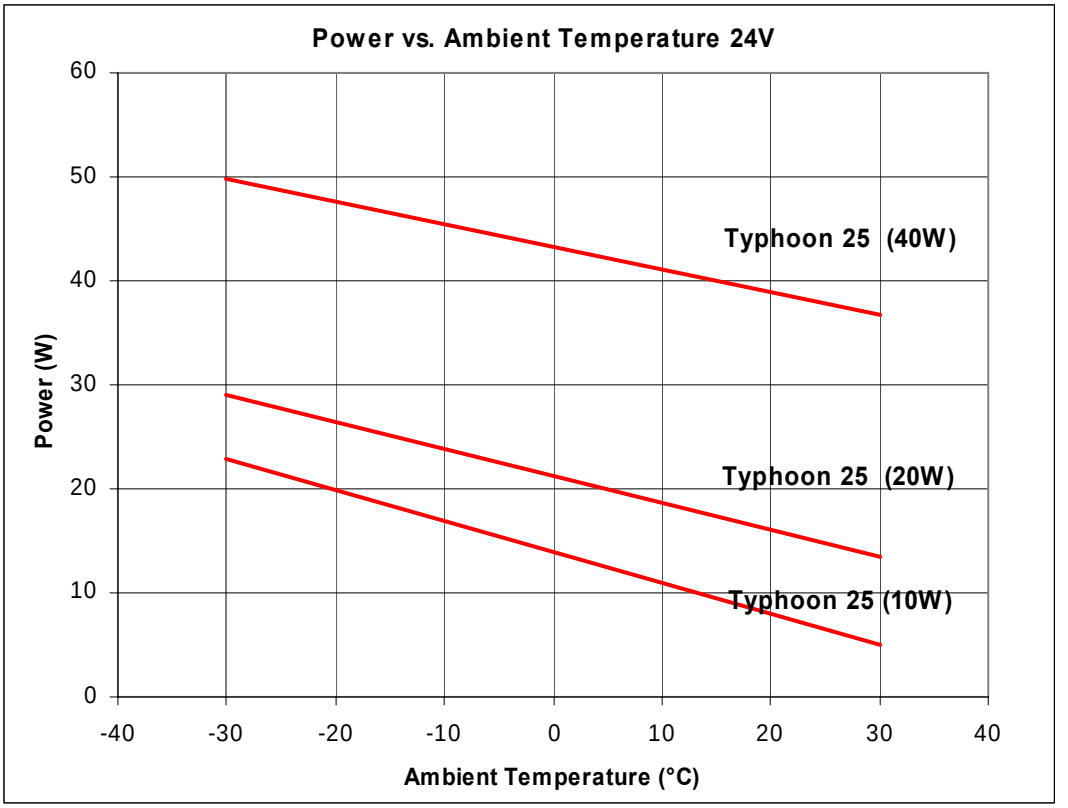
Dimension Drawings.

Typhoon 25 (10W, 20W, 40W)

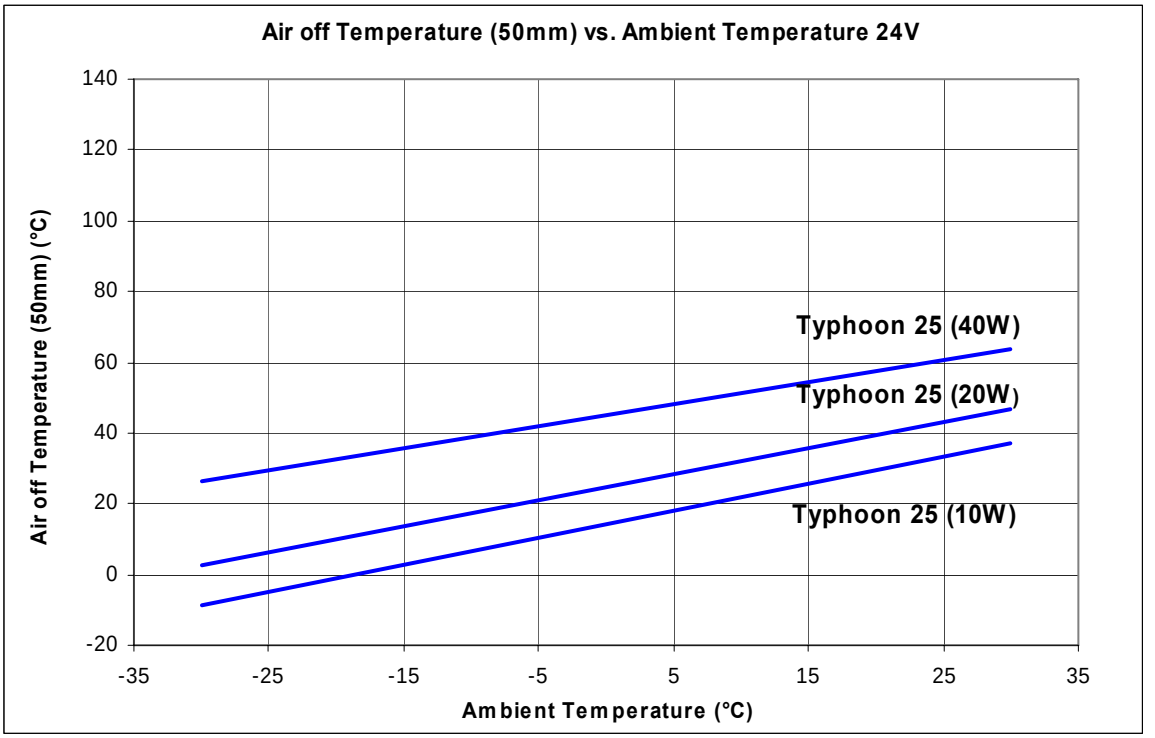


3. Characteristic Curves.

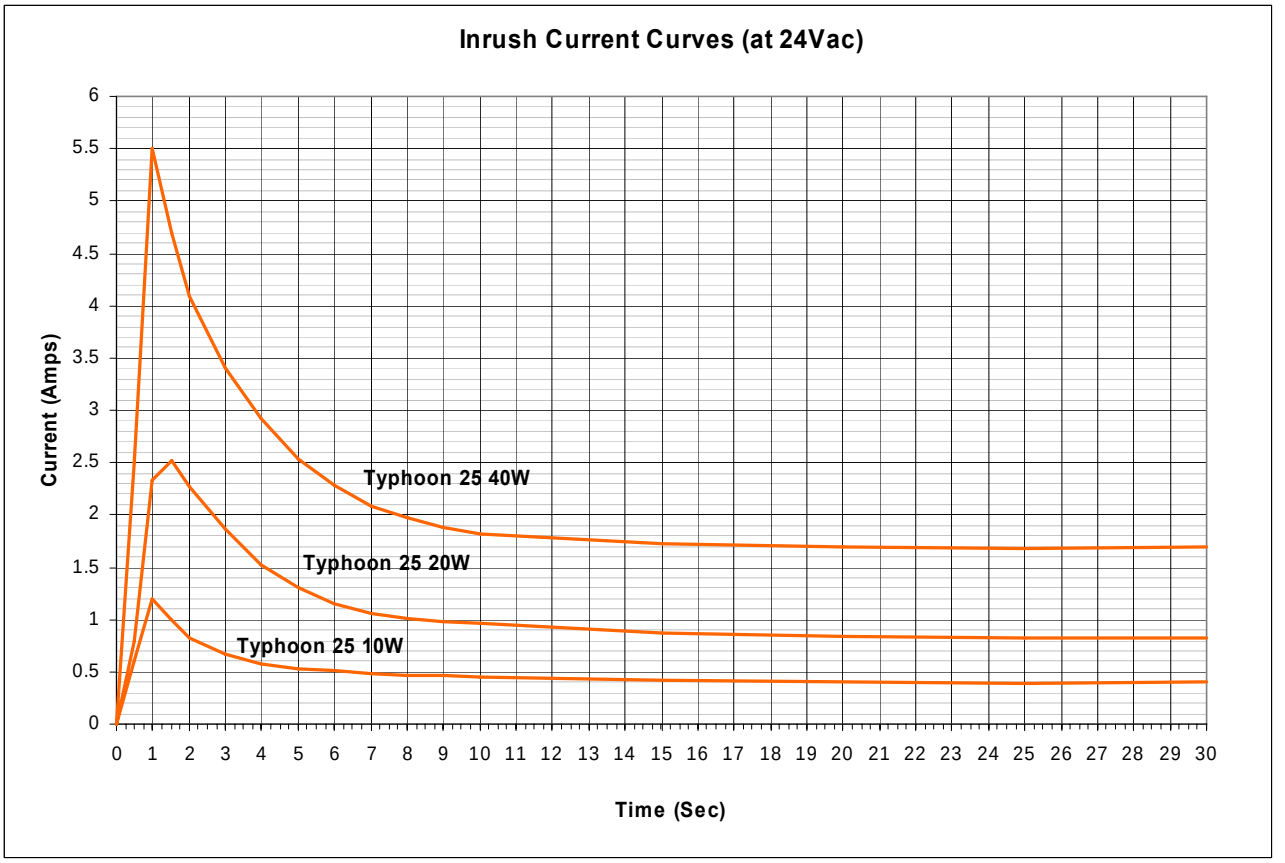
Heater Power vs. Ambient (intake) Temperature – 24Vac



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



Inrush Current Characteristics



4. Electrical Connections.

24Vac Versions:

Connector Pin Inputs
pin 4) Fan, 12VDC (Red)
pin 3) Fan, Ground (Black)
pin 2) Heater, 24V (Blue)
pin 1) Heater, 24V (Blue)

Typhoon 25 Heaterless Version:

Connector Pin Inputs
pin 4) Fan, 12VDC (Red)
pin 3) Fan, Ground (Black)
pin 2) Empty
pin 1) Empty

Fusing:

Heater Power	Suggested MCB rating (Type B)	Suggested fuse rating (Time Delay)
24Vac 10/20/40	2.5A for Typhoon 25 10W 5A for Typhoon 25 20W 8A for Typhoon 25 40W	2.5A for Typhoon 25 10W 5A for Typhoon 25 20W 8A for Typhoon 25 40W

5. Approvals, -Pending