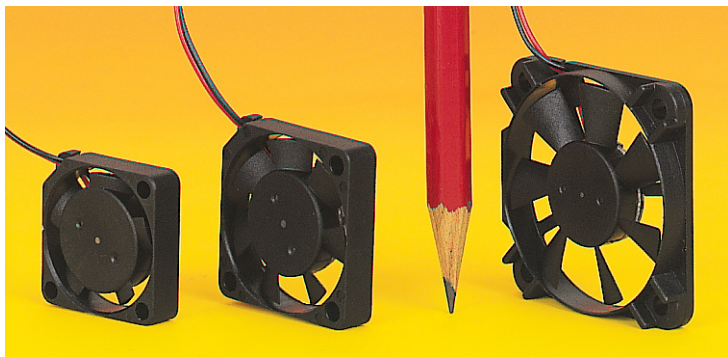


# Micro Slim-6mm Deep and Standard

## Axial Flow Fans - Low Voltage dc



### Micro Slim - 6mm Deep



#### Features:

- 25, 30 and 40mm micro slim fans.
- Ideal for precision cooling or compact equipment.
- Patented single coil brushless 8 pole motor.
- Locked rotor protection.
- Precision ball bearings.

### Standard



#### Features:

- Low cost, low noise, brushless DC fans.
- Housing and impeller made from UL94V-0 thermoplastic.
- Fitted with ball bearings and 300mm, 22 AWG lead wire.

### Specifications:

|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| Motor                 | : Patented brushless DC motor design.                                              |
| Frame                 | : Injection moulded non-flammable black thermoplastic.                             |
| Impeller              | : Injection moulded non-flammable black thermoplastic.                             |
| Bearing               | : Precision, life-lubricated ball bearings system.                                 |
| Insulation            | : Class E integral ground system rated at 100°C.                                   |
| Insulation resistance | : More than 500M Ohm between internal stator and leadwire (+) measured by 500V dc. |
| Dielectric strength   | : 600V ac for one minute.                                                          |
| Safety protection     | : Electronic locked rotor protection.                                              |
| Operating temperature | : -10°C to +70°C.                                                                  |
| Storage temperature   | : -40°C to +80°C.                                                                  |

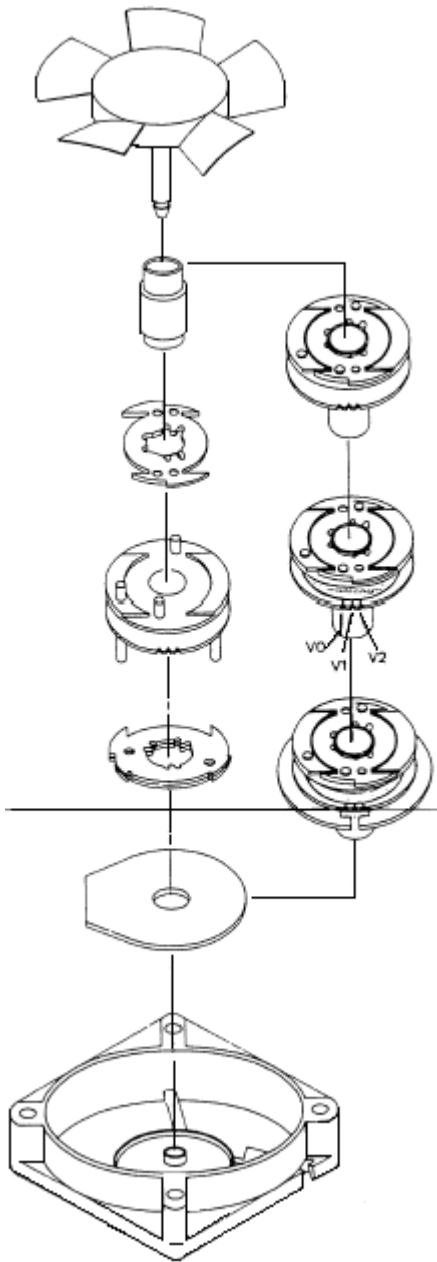
#### Operating voltage

|            |                |
|------------|----------------|
| Standard   | : 12V and 24V. |
| Micro slim | : 5V dc.       |

#### Operating life

|                  |                          |
|------------------|--------------------------|
| Standard         | : >50,000 hours at 40°C. |
| Micro slim       | : 50,000 hours.          |
| AWG for standard | : 22 AWG.                |

# Micro Slim-6mm Deep and Standard Axial Flow Fans - Low Voltage dc



## The Advantages of Patented Motor Design:

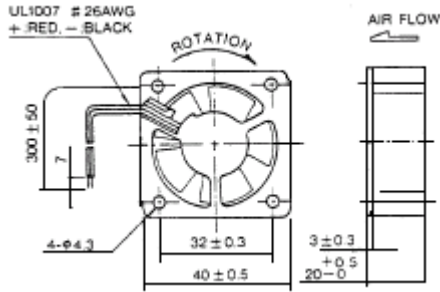
1. Allows creation of the smallest and thinnest brushless DC Fan Motor in the world.
2. The bobbin design protects the winding coils from abrasion and damage during assembly.
3. Ease of manufacture and assembly providing low cost and high reliability.
4. Superior dielectric strength due to the unique wound bobbin construction of the Multicomp design.
5. Increased performance to size ratio due to smaller hub design which allows for larger fan blades.
6. Increased torque through more poles to reduce the power consumption of fan motor.  
Example: Dual poles can be augmented into four, six and eight poles respectively.
7. The notches in the bobbin separate the 3 coil wires which adjoin v0, v1 and v2 to the circuit board provided the protection from a short circuit design.
8. Ideal for precision cooling or compact equipment.

# Micro Slim-6mm Deep and Standard Axial Flow Fans - Low Voltage dc



## Product Guide

### Dimensions:

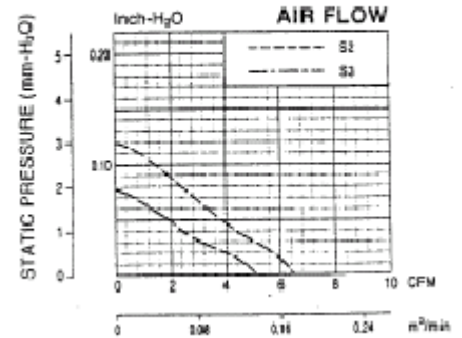


### 40 x 40 x 20mm

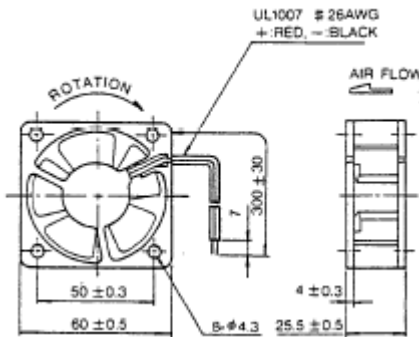
- 5.2 to 7.0 CFM.
- 5 and 12V dc (nominal).
- Patented single-coil brushless 4 poles DC motor design.
- Locked rotor protection.
- Low power consumption.
- Polarity protected.
- Precision ball bearing system.
- 26 AWG lead wire.
- "+" Red and "-" Black.

### Performance

○ : 5V/12V



### Dimensions:

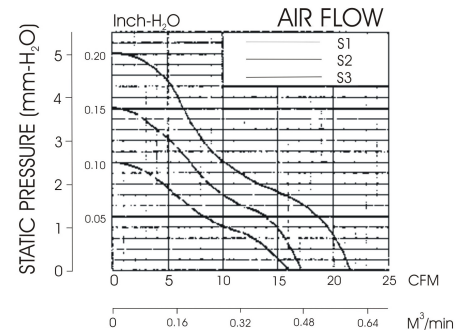


### 60 x 60 x 25mm

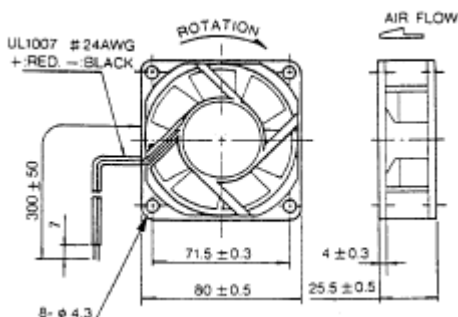
- 15.9 to 22.1 CFM.
- 12 and 24V dc (nominal).
- Patented single-coil brushless 4 poles DC motor design.
- Locked rotor protection.
- Polarity protected.
- Precision ball bearing system.
- 26 AWG lead wire.
- "+" Red and "-" Black.

### Performance

○ : 12V/24V



### Dimensions:

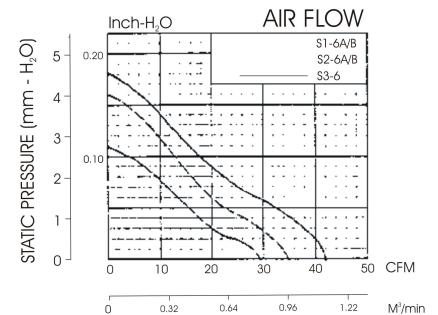


### 80 x 80 x 25mm

- 29.4 to 42.5 CFM.
- 12 and 24V dc (nominal).
- Patented single-coil brushless DC motor design.
- Available with 4 poles or 6 poles motor.
- Locked rotor protection.
- Polarity protected.
- Precision ball bearing system.
- 24 AWG lead wire.
- "+" Red and "-" Black.

### Performance

○ : 12V/24V



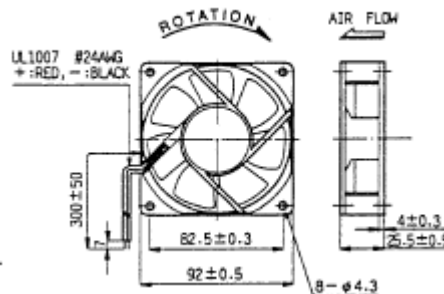
# Micro Slim-6mm Deep and Standard Axial Flow Fans - Low Voltage dc



## Dimensions:

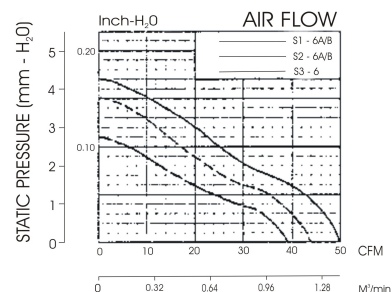
**92 x 92 x 25mm**

## Performance



- 39 to 51 CFM.
- 12 and 24V dc (nominal).
- Patented single-coil brushless DC motor design.
- Locked rotor protection.
- Available with 4 poles or 6 poles motor.
- Polarity protected.
- Precision ball bearing system.
- 24 AWG lead wire.
- "+" Red and "-" Black.

○ : 12V/24V



## Specification Table - Standard

| Height | Width | Depth | Voltage<br>(V dc) | Input<br>Power<br>(Watts) | Air Flow  |          | Noise<br>(dBA<br>at 1m) | Cut-out<br>Diameter | Fix<br>centres  | Fix<br>Centres<br>Diameter | Part Number*     |
|--------|-------|-------|-------------------|---------------------------|-----------|----------|-------------------------|---------------------|-----------------|----------------------------|------------------|
|        |       |       |                   |                           | cu ft/min | ltrs/sec |                         |                     |                 |                            |                  |
| 40     |       | 20    | 12                | 1.00                      | 7.3       | 3.4      | 26                      | 38                  | 32.0 x 32.0     | 4.3                        | MCKDE1204PKB1    |
|        |       |       | 24                | 0.96                      | 6.2       | 2.9      | 25                      |                     |                 |                            | MVKDE2404PKB2    |
| 60     | 25    | 12    | 1.40              | 18.0                      | 8.4       | 31       | 58                      | 50.0 x 50.0         | MCKDE1206PTB2   |                            |                  |
|        |       | 24    | 1.90              |                           |           |          |                         |                     | MCKDE2406PTB2   |                            |                  |
| 80     |       | 12    | 2.00              | 35.0                      | 16.5      | 32.5     | 77                      | 71.5 x 71.5         | MCKDE1208PTB2-6 |                            |                  |
|        |       | 24    | 3.12              |                           |           | 32.0     |                         |                     | MCKDE2408PTB2-6 |                            |                  |
| 92     |       | 12    | 2.10              | 45.0                      | 21.2      | 34       | 89                      | 82.5 x 82.5         | MCKDE1209PTB2-6 |                            |                  |
|        |       | 24    | 2.90              |                           |           |          |                         |                     | MCKDE2409PTB2-6 |                            |                  |
| 119    |       |       | 12                | 3.60                      | 80.0      | 37.7     | 41                      | 116                 | 104.8 x 104.8   |                            | MCKDE1212PTB2-6  |
|        |       |       | 24                | 4.80                      |           |          | 42                      |                     |                 |                            | MCKDE2412PTB2-6  |
|        | 38    | 12    | 6.80              | 108.0                     | 50.9      |          |                         |                     |                 |                            | MCKDE1212PMB1-6A |
|        |       | 24    | 5.50              |                           |           |          | 98.0                    |                     |                 |                            | 46.2             |
|        |       |       |                   |                           |           |          |                         |                     |                 |                            |                  |
|        |       |       |                   |                           |           |          |                         |                     |                 |                            |                  |

\*Suffix with '-6' : Motor with six poles.

Suffix with '-6A' : Motor with six poles protected by IC.

Dimensions : Millimetres (Unless specified)



# Micro Slim-6mm Deep and Standard

## Axial Flow Fans - Low Voltage dc



**Specification Table - Micro Slim**

| Height | Width | Depth | Type                  | Power Watts | Airflow   |          | Noise (dBA at 1m) | Voltage (V dc) | Part Number* |
|--------|-------|-------|-----------------------|-------------|-----------|----------|-------------------|----------------|--------------|
|        |       |       |                       |             | cu ft/min | ltrs/sec |                   |                |              |
| 25     | 6     |       | Standard, 25mm        | 0.60        | 1.60      | 0.76     | 29                | 5              | KDE502PEB1-8 |
|        |       |       | Low noise, 25mm       | 0.40        | 1.20      | 0.57     | 21                |                | KD0502PEB2-8 |
|        |       |       | Super low noise, 25mm | 0.25        | 0.75      | 0.35     | 11                |                | KD0502PEB3-8 |
| 30     |       |       | Standard, 30mm        | 0.65        | 3.00      | 1.43     | 25                |                | KD0503PEB1-8 |
|        |       |       | Low noise, 30mm       | 0.45        | 2.40      | 1.15     | 20                |                | KD0503PEB2-8 |
|        |       |       | Super low noise, 30mm | 0.28        | 1.90      | 0.90     | 13                |                | KD0503PEB3-8 |
| 40     |       |       | Standard, 40mm        | 0.70        | 5.50      | 2.60     | 26                |                | KD0504PEB1-8 |
|        |       |       | Low noise, 40mm       | 0.50        | 4.35      | 2.07     | 22                |                | KD0504PEB2-8 |
|        |       |       | Super low noise, 40mm | 0.30        | 3.5       | 1.66     | 16                |                | KD0504PEB3-8 |

Dimensions : Millimetres (Unless specified)

\*Suffix with '-8' : Motor with eight poles.

# Micro Slim-6mm Deep and Standard Axial Flow Fans - Low Voltage dc



## Notes:

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