

**DC Brushless Fan**

**KDE SERIES**

### page

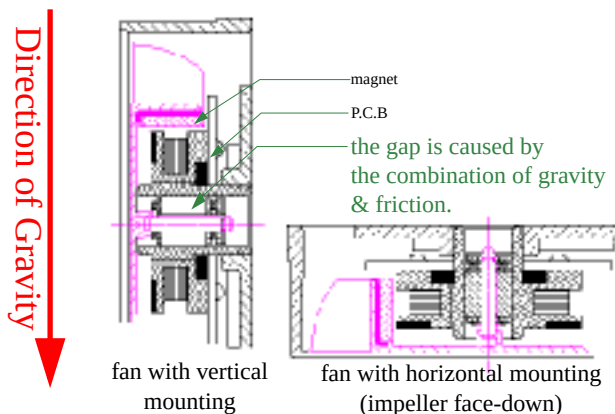
|    |                                                          |
|----|----------------------------------------------------------|
| 2  | ..... Magnetic System Design                             |
| 3  | ..... 3rd Wire Fan Information                           |
| 4  | ..... <b>DC Brushless Fan Model Number</b>               |
| 5  | ..... 17x17x8mm, 20x20x8mm                               |
| 6  | ..... 20x20x10mm, 25x25x6mm, 25x25x10mm, 25x25x15mm      |
| 7  | ..... 30x28x10mm, 30x30x6mm, 30x30x10mm, 30x30x15mm      |
| 8  | ..... 35x35x6mm, 35x35x10mm, 40x40x6mm, 40x40x8mm        |
| 9  | ..... 40x40x10mm, 40x40x20mm, 45x45x10mm                 |
| 10 | ..... 50x50x10mm, 50x50x15mm, 52x52x15mm, 55x55x10mm     |
| 11 | ..... 60x60x10mm, 60x60x15mm, 60x60x20mm, 60x60x25mm     |
| 12 | ..... 80x80x25mm, 92x92x25mm, 120x120x25mm, 120x120x38mm |

## Safety & Certification



### Comparison of Magnetic system design with traditional fans:

#### Traditional Motor Design(Sleeve)



For any traditional design fan, the shaft is carrying the weight of the rotor, therefore, the impeller tends to wobble during rotation.

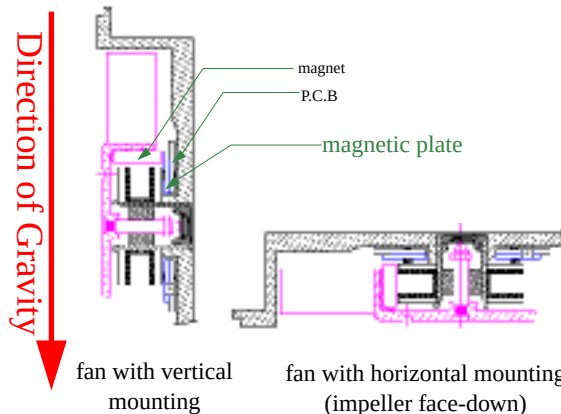
When the fan is operating, in particular, with vertical mounting or with impeller facing down, the wear of bearing, vibration and noise become more severe. (as shown above).

Thus for fan with traditional oil-impregnated sleeve bearing, it is not practical to change the orientation as this would make the wear of bearing and vibration worse.

Furthermore, the variation of noise level is large for different mounting angle.

- For traditional sleeve design, because of the weight on shaft, not only the impeller is prevented from circular motion with fixed center, but also tends to vibrate after long period wearing out of sleeve bearing and cause different degrees of noise level.
- In the traditional fan design, the impeller is secured in place by the lock washer. The rotational center point of the shaft is quite often altered by gravity effect. Accordingly, the impeller can not rotate with fixed center.
- In addition to the lock washer, oil ring and other spacing washers are used in the bearing system. All these loose hardware will increase the wear and result in higher noise and shorter operating life.

#### Motor with Magnetic System Design(VAPO)



The unique Magnetic System Design developed by Sunon working with the magnetic field created by the built-in magnet of the impeller generates a magnetic force that attracts the impeller uniformly in 360 degree circle towards the bearing when rotating. Therefore, Sunon fan with patented magnetic system design has the following design advantages:

- With the existence of the magnetic force, the impeller rotates evenly in fixed orbit with orbit center point. Consequently, the vibration of the impeller is significantly reduced as well as the wear of bearing. As a result, the operating life of fan is extended.
- In addition, the elimination in the use of some assembly hardware such as oil ring and washer, reduces friction and therefore the wear where the components contact with the bearing. Accordingly, life of the bearing is increased and the noise level is also reduced significantly.
- Since the impeller is rotating at fixed orbit and fixed center point and the weight of the impeller is entirely neutralized by the magnetic plate, the shaft is able to rotate with fixed center. True impeller will not vibrate when rotating in any mounting angle. The fan noise level is much lower and the operating life much longer.
- The above-mentioned advantages, plus the magnetic system design combined with the VAPO bearing which is made of special treated material for wear-resist and impact-resist can definitely replace the ball bearing.

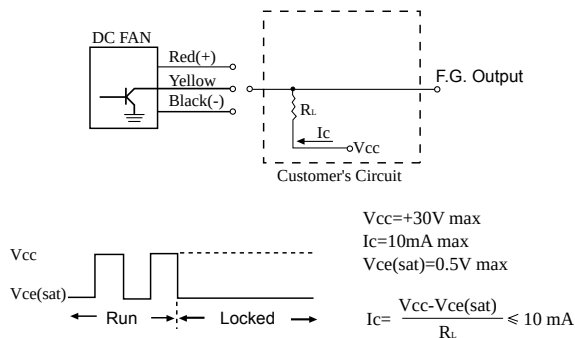
### Fan 3rd Wire Signal

Fan with switching driving circuit designed for rpm measurement:

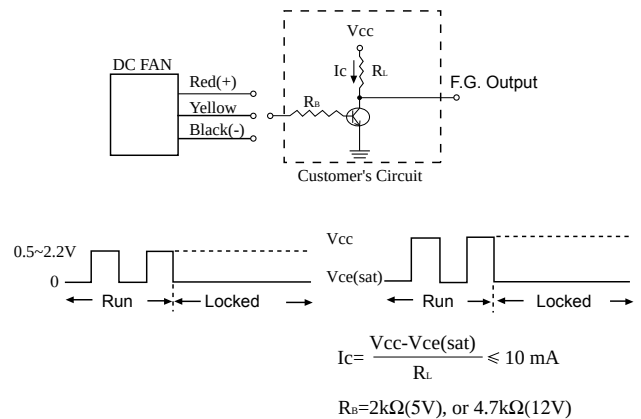
These fan motors have three lead wires: (+:Red,-:Black,output signal for 3rd wire:Yellow)

- **OCM Type** ♦ Low voltage start-up
- ♦ 3rd wire square wave signal was amplified by a transistor (open collector type)

- **TM Type** ♦ 3rd wire square wave signal was amplified by a transistor (open collector type)

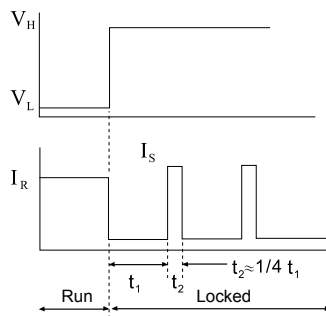


- **M Type** ♦ 3rd wire square wave signal was not amplified, only 0.5~2.2 volts (5V), 0.5~6.0 volts (12V)



### Fan with driver IC:

- **R Type (Rotation Detector)** □ □ □



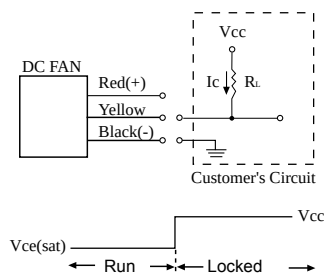
3<sup>rd</sup> wire signal :

Run :  $V_L$

Locked :  $V_H$

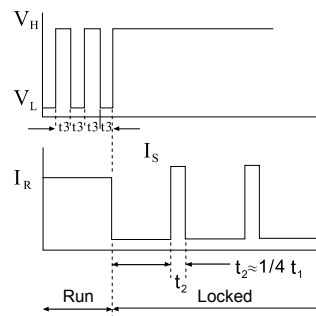
$t_1$ : Locked protection by cut-off run current ( $I_R$ )

$t_2$ : Auto-restart by sending starting current ( $I_S$ )



$$I_c = \frac{V_{cc}}{R_L}$$

- **F Type (Frequency Generator)**



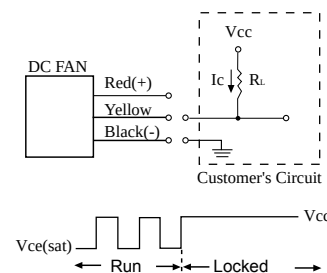
3<sup>rd</sup> wire signal :

Run : Square Wave

Locked :  $V_H$

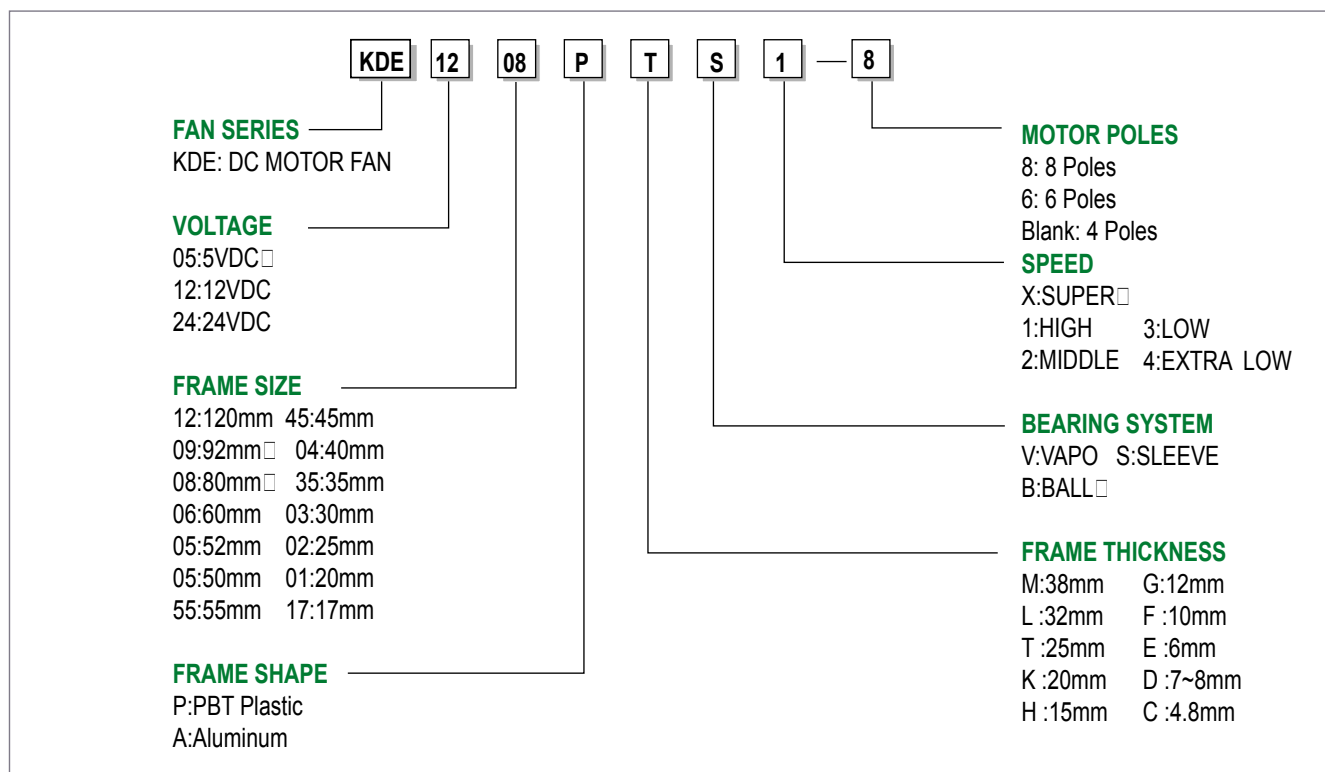
$t_3$ : F Type has open collector circuit designed for rpm measurement.

$$Rpm = \frac{60}{t_3 \times \text{Poles}}$$



$$I_c = \frac{V_{cc}}{R_L}$$

### DC Brushless Fan Model Numbering System



### Suffix P/N

Example: P/N: MS.(2).V.M.C89

- A : Motor protection by IC  
(Only available for 8025/9225/12025/12038 Series)
- AS : Motor protection by IC combined with a temperature sensor  
(Only available for 8025/9225/12025/12038 Series)
- AR : Motor protection by IC with rotation detector waveform  
(Only available for 8025/9225/12025/12038 Series)
- AF : Motor protection by IC with frequency generation waveform  
(Only available for 8025/9225/12025/12038 Series)
- MS : Magnetic system design with open collector
- (2) : Two ball bearing
- N : Smaller hub
- G : Big hub
- V : New blade
- OC : Low voltage start-up & open collector type
- OCM : OC with 3rd wire square wave signal amplified by a transistor
- OCC : OC with 3 caps
- OCCM : OCM with 3 caps
- TM : No low voltage start-up with open collector type  
(Only available for 2515/3015/4010/4510/5010/6010-8P/5215/6015/4020/6020/6025-4P Series)
- M : 3rd wire square wave signal was not amplified
- AXX : Lead wire different
- BXX : Special circuit design
- CXX : Special frame or impeller different

# SUNON KDE Series

## DC Brushless Fan

- MOTOR : Patented Brushless DC Motor design
- FRAME : □Injection molded non-flammable black thermoplastic  
UL 94V-0 Rating and aluminum
- IMPELLER : □Injection molded non-flammable black thermoplastic  
UL 94V-0 Rating
- BEARING : □Precision, life-lubricated ball bearing system  
Precision, oil-impregnated sintered sleeve bearing system
- INSULATION : Class E integral ground system rated @ 100 °C
- INSULATION RESISTANCE : □More than 500M ohm between internal stator and lead  
■ wire(+) measured by DC 500V
- DIELECTRIC STRENGTH : □600VAC for one minute
- SAFETY PROTECTION : □Electronic locked rotor protected
- OPERATING TEMPERATURE : -10 to +70 °C
- STORAGE TEMPERATURE : -40 to +70 °C
- OPERATING VOLTAGE : Rated Voltage ±15%
- OPERATING POWER : □Rated power & current tolerance ±15%
- PROFESSIONAL DESIGN : We can design to fit any special application requirement

## DC Brushless Fan

**1708**

**:17x17x8mm**



| Model         | P/N | Bearing<br>● VAPO<br>○ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|---------------|-----|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KDE0517PDB1-8 | V   | ○                                       | 5                          | 0.19□                     | 1.0□                            | 20000□         | 1.1□                 | 0.26□                                         | 29             | 4             |
| KDE0517PDB2-8 | V   | ○                                       | 5                          | 0.12□                     | 0.6□                            | 15000□         | 0.8□                 | 0.20□                                         | 27             | 4             |
| KDE0517PDB3-8 | V   | ○                                       | 5                          | 0.08□                     | 0.4□                            | 11000□         | 0.6□                 | 0.10□                                         | 25             | 4             |

**2008**

**:20x20x8mm**



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM)  | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|-----|---------|-------|-------|---------|--------|-------|-------------------------|-------|-----|
| KDE0501PDB1-8 |     | ○       | 5     | 0.20□ | 1.0□    | 15000□ | 1.3□  | 0.18□                   | 29□   | 5□  |
| KDE0501PDB2-8 |     | ○       | 5     | 0.12□ | 0.6□    | 12000□ | 1.0□  | 0.15□                   | 26□   | 5□  |
| KDE0501PDB3-8 |     | ○       | 5     | 0.08□ | 0.4□    | 9000□  | 0.7□  | 0.11□                   | 24□   | 5□  |

5

\*Specifications subject to change without notice

2000/9/1

2010

:20x20x10mm



| Model        | P/N | Bearing<br>● VAPO<br>○ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|--------------|-----|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KD0501PFV1-8 | MS  | ●                                       | 5                          | 0.17□                     | 0.9□                            | 15000□         | 2.2□                 | 0.26□                                         | 26□            | 6.5□          |
| KD0501PFV2-8 | MS  | ●                                       | 5                          | 0.09□                     | 0.45□                           | 10000□         | 1.45□                | 0.15□                                         | 22□            | 6.5□          |
| KD0501PFV3-8 | MS  | ●                                       | 5                          | 0.06                      | 0.3                             | 7300           | 0.86                 | 0.07                                          | 20□            | 6.5□          |
| KD0501PFB1-8 |     | ○                                       | 5                          | 0.16□                     | 0.8□                            | 17000□         | 1.5□                 | 0.33□                                         | 28□            | 6.5□          |
| KD0501PFB2-8 |     | ○                                       | 5                          | 0.11□                     | 0.5□                            | 14000□         | 1.1□                 | 0.21□                                         | 26□            | 6.5□          |
| KD0501PFB3-8 |     | ○                                       | 5                          | 0.06□                     | 0.3□                            | 10000□         | 1.8□                 | 0.13□                                         | 23□            | 6.5□          |
| KD0501PFB1-8 | MS  | ○                                       | 5                          | 0.17□                     | 0.9□                            | 15000□         | 2.2□                 | 0.26□                                         | 27.5□          | 6.5□          |
| KD0501PFB2-8 | MS  | ○                                       | 5                          | 0.09□                     | 0.45□                           | 10000□         | 1.45□                | 0.15□                                         | 23□            | 6.5□          |
| KD0501PFB3-8 | MS  | ○                                       | 5                          | 0.06□                     | 0.3□                            | 7300□          | 0.86□                | 0.07□                                         | 21□            | 6.5□          |

2506

:25x25x6mm



| Model        | P/N  | Bearing | (VDC) | (AMP) | (WATTS) | (RPM)  | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|--------------|------|---------|-------|-------|---------|--------|-------|-------------------------|-------|-----|
| KD0502PEV1-8 | MS.N | ●       | 5     | 0.16□ | 0.8□    | 13000□ | 3.0   | 0.22                    | 31    | 5   |
| KD0502PEV2-8 | MS.N | ●       | 5     | 0.11  | 0.6     | 11500  | 2.7   | 0.18                    | 26    | 5   |
| KD0502PEB1-8 |      | ○       | 5     | 0.12□ | 0.6□    | 13000□ | 1.6□  | 0.15□                   | 29□   | 6□  |
| KD0502PEB2-8 |      | ○       | 5     | 0.08□ | 0.4□    | 10000□ | 1.2□  | 0.10□                   | 26.5□ | 6□  |
| KD0502PEB3-8 |      | ○       | 5     | 0.05□ | 0.25□   | 7000□  | 0.8□  | 0.04□                   | 19□   | 6□  |
| KD0502PEB1-8 | MS.N | ○       | 5     | 0.16□ | 0.8     | 13000□ | 3.0   | 0.22                    | 32    | 5   |
| KD0502PEB2-8 | MS.N | ○       | 5     | 0.11  | 0.6     | 11500□ | 2.7   | 0.18                    | 27    | 5   |
| KD0502PEB1-8 | OC   | ○       | 5     | 0.10  | 0.5     | 11500  | 3.35  | 0.18                    | 27    | 6   |
| KD0502PEB2-8 | OC   | ○       | 5     | 0.10  | 0.5□    | 8500   | 2.5   | 0.11                    | 21    | 6   |

2510

:25x25x10mm



| Model        | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM)  | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|--------------|-----|---------|-------|-------|---------|--------|-------|-------------------------|-------|-----|
| KD0502PFV1-8 | MS  | ●       | 5     | 0.17□ | 0.9□    | 11500□ | 3.15□ | 0.20□                   | 25.4□ | 7 □ |
| KD0502PFV2-8 | MS  | ●       | 5     | 0.12□ | 0.6□    | 9500□  | 2.53□ | 0.16□                   | 24□   | 7□  |
| KD0502PFV3-8 | MS  | ●       | 5     | 0.06□ | 0.3□    | 6500□  | 1.83□ | 0.09□                   | 23□   | 7□  |
| KD0502PFV4-8 | MS  | ●       | 5     | 0.03□ | 0.15□   | 5000□  | 1.35□ | 0.05□                   | 20□   | 7□  |
| KD0502AFV1-8 | MS  | ●       | 5     | 0.17□ | 0.9□    | 11500□ | 3.15□ | 0.20□                   | 26.5  | 7□  |
| KD0502AFV2-8 | MS  | ●       | 5     | 0.12□ | 0.6□    | 9500□  | 2.53□ | 0.16□                   | 25    | 7□  |
| KD0502AFV3-8 | MS  | ●       | 5     | 0.06□ | 0.3     | 6500   | 1.83  | 0.09□                   | 23.5  | 7□  |
| KD0502PFB1-8 |     | ○       | 5     | 0.17□ | 0.9□    | 13000□ | 2.4□  | 0.20□                   | 33□   | 7□  |
| KD0502PFB2-8 |     | ○       | 5     | 0.12□ | 0.6□    | 10000□ | 2.0□  | 0.16□                   | 30□   | 7□  |
| KD0502PFB3-8 |     | ○       | 5     | 0.06□ | 0.3□    | 7000□  | 1.3□  | 0.09□                   | 26□   | 7□  |
| KD0502PFB4-8 |     | ○       | 5     | 0.03□ | 0.15□   | 5000□  | 0.8□  | 0.035□                  | 20□   | 7□  |
| KD0502PFB1-8 | MS  | ○       | 5     | 0.17□ | 0.9□    | 11500□ | 3.15□ | 0.20□                   | 26.5□ | 7□  |
| KD0502PFB2-8 | MS  | ○       | 5     | 0.12□ | 0.6□    | 9500□  | 2.53□ | 0.16□                   | 25□   | 7□  |
| KD0502PFB3-8 | MS  | ○       | 5     | 0.06□ | 0.3□    | 6500□  | 1.83□ | 0.09□                   | 23.5□ | 7□  |
| KD0502PFB4-8 | MS  | ○       | 5     | 0.03□ | 0.15□   | 5000□  | 1.35□ | 0.05□                   | 21□   | 7□  |
| KD0502AFB1-8 | MS  | ○       | 5     | 0.17□ | 0.9□    | 11500□ | 3.15□ | 0.20□                   | 27□   | 7□  |
| KD0502AFB2-8 | MS  | ○       | 5     | 0.12□ | 0.6□    | 9500□  | 2.53□ | 0.16□                   | 26□   | 7□  |
| KD0502AFB3-8 | MS  | ○       | 5     | 0.06□ | 0.3     | 6500   | 1.83  | 0.09                    | 24□   | 7□  |
| KD0502PFB1-8 | V   | ○       | 5     | 0.17  | 0.85    | 11500  | 3.15  | 0.20                    | 32□   | 7□  |
| KD0502PFB2-8 | V   | ○       | 5     | 0.12  | 0.6     | 9500   | 2.53  | 0.16                    | 29□   | 7□  |
| KD0502PFB3-8 | V   | ○       | 5     | 0.06  | 0.3     | 6500   | 1.83  | 0.09□                   | 37□   | 7□  |
| KD0502AFB1-8 | V   | ○       | 5     | 0.17  | 0.9     | 11500  | 3.15  | 0.20□                   | 31□   | 9□  |
| KD0502AFB2-8 | V   | ○       | 5     | 0.12  | 0.6     | 9500   | 2.53  | 0.16□                   | 29□   | 9   |
| KD0502AFB3-8 | V   | ○       | 5     | 0.06  | 0.3□    | 6500□  | 1.83□ | 0.09□                   | 27□   | 9□  |
| KD1202PFB1-8 |     | ○       | 12    | 0.08□ | 1.0□    | 13000□ | 2.4□  | 0.20□                   | 33□   | 7□  |
| KD1202PFB2-8 |     | ○       | 12    | 0.06□ | 0.7□    | 10000□ | 2.0□  | 0.16□                   | 30□   | 7□  |
| KD1202PFB3-8 |     | ○       | 12    | 0.04□ | 0.5□    | 7000□  | 1.3□  | 0.09□                   | 26□   | 7□  |

2515

:25x25x15mm



| Model        | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM)  | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|--------------|-----|---------|-------|-------|---------|--------|-------|-------------------------|-------|-----|
| KD0502PHB1-8 |     | ○       | 5     | 0.16  | 0.8□    | 12000□ | 3.7□  | 0.28□                   | 29□   | 11□ |
| KD0502PHB2-8 |     | ○       | 5     | 0.12□ | 0.6     | 10000□ | 3.1□  | 0.16□                   | 22□   | 11□ |
| KD0502PHB3-8 |     | ○       | 5     | 0.06  | 0.3□    | 7000   | 2.2   | 0.11                    | 16    | 11  |



# SUNON KDE Series

## DC Brushless Fan

3028

:30x28x10mm



| Model         | P/N | Bearing<br>● VAPO<br>○ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|---------------|-----|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KDE0528AFV1-8 | MS  | ●                                       | 5                          | 0.18□                     | 0.9□                            | 11000□         | 2.4□                 | 0.13□                                         | 30□            | 9□            |
| KDE0528AFV2-8 | MS  | ●                                       | 5                          | 0.12                      | 0.6                             | 9000           | 1.8                  | 0.10                                          | 28             | 9□            |
| KDE0528AFB1-8 |     | ○                                       | 5                          | 0.18□                     | 0.9□                            | 11000□         | 2.4□                 | 0.13□                                         | 32□            | 9□            |
| KDE0528AFB2-8 |     | ○                                       | 5                          | 0.12□                     | 0.6□                            | 9000□          | 1.8□                 | 0.10□                                         | 30□            | 9□            |
| KDE0528AFB3-8 |     | ○                                       | 5                          | 0.06□                     | 0.3□                            | 6500□          | 1.5□                 | 0.08□                                         | 27□            | 9□            |
| KDE0528AFB1-8 | MS  | ○                                       | 5                          | 0.18□                     | 0.9□                            | 11000□         | 2.4□                 | 0.13□                                         | 31□            | 9□            |
| KDE0528AFB2-8 | MS  | ○                                       | 5                          | 0.12□                     | 0.6□                            | 9000□          | 1.8□                 | 0.10□                                         | 29□            | 9□            |

3006

:30x30x6mm



| Model         | P/N  | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|------|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0503PEV1-8 | MS.N | ●       | 5     | 0.18□ | 0.9□    | 9500□ | 4.9□  | 0.14□                   | 28□   | 6   |
| KDE0503PEV2-8 | MS.N | ●       | 5     | 0.11  | 0.55□   | 8000  | 3.7□  | 0.09                    | 23□   | 6   |
| KDE0503PEB1-8 |      | ○       | 5     | 0.13□ | 0.65□   | 9500□ | 3.0□  | 0.15□                   | 31□   | 6   |
| KDE0503PEB2-8 |      | ○       | 5     | 0.09□ | 0.45□   | 7500□ | 2.4□  | 0.08□                   | 26□   | 6   |
| KDE0503PEB3-8 |      | ○       | 5     | 0.05□ | 0.3□    | 5500□ | 1.9   | 0.065□                  | 20□   | 6   |
| KDE0503PEB1-8 | MS.N | ○       | 5     | 0.18□ | 0.9□    | 9500□ | 4.9□  | 0.14□                   | 29□   | 6   |
| KDE0503PEB2-8 | MS.N | ○       | 5     | 0.11  | 0.55□   | 8000□ | 3.7□  | 0.09                    | 24    | 6   |

3010

:30x30x10mm



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g)  |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|------|
| KDE0503PFV1-8 | MS  | ●       | 5□    | 0.18□ | 0.9□    | 8000□ | 5.1□  | 0.14□                   | 22.5□ | 7.5  |
| KDE0503PFV2-8 | MS  | ●       | 5□    | 0.12□ | 0.6□    | 7000□ | 4.2□  | 0.11□                   | 20.5□ | 7.5□ |
| KDE0503PFV3-8 | MS  | ●       | 5□    | 0.06□ | 0.3□    | 5000□ | 3.15□ | 0.06□                   | 18.5□ | 7.5□ |
| KDE0503PFV4-8 | MS  | ●       | 5     | 0.03  | 0.15    | 4000  | 2.59  | 0.04                    | 17.5  | 7.5  |
| KDE0503PFB1-8 |     | ○       | 5     | 0.18□ | 0.9□    | 9500□ | 3.5□  | 0.14□                   | 27□   | 7.5□ |
| KDE0503PFB2-8 |     | ○       | 5     | 0.12□ | 0.6□    | 8000□ | 3.0□  | 0.11□                   | 25□   | 7.5  |
| KDE0503PFB3-8 |     | ○       | 5     | 0.06□ | 0.3□    | 5500□ | 2.3□  | 0.07□                   | 18.5□ | 7.5□ |
| KDE0503PFB4-8 |     | ○       | 5     | 0.03□ | 0.15□   | 4000□ | 1.4□  | 0.03□                   | 18□   | 7.5  |
| KDE0503PFB1-8 | MS  | ○       | 5□    | 0.18□ | 0.9□    | 8000□ | 5.1□  | 0.14□                   | 24□   | 7.5□ |
| KDE0503PFB2-8 | MS  | ○       | 5□    | 0.12□ | 0.6□    | 7000□ | 4.2□  | 0.11□                   | 22□   | 7.5  |
| KDE0503PFB3-8 | MS  | ○       | 5□    | 0.06□ | 0.3□    | 5000□ | 3.15□ | 0.06□                   | 20□   | 7.5□ |
| KDE0503PFB4-8 | MS  | ○       | 5□    | 0.03  | 0.15□   | 4000  | 2.59  | 0.04□                   | 18□   | 7.5  |
| KDE0503PFB1-8 | V   | ○       | 5□    | 0.18□ | 0.9□    | 8000  | 5.1   | 0.14                    | 28    | 7.5□ |
| KDE0503PFB2-8 | V   | ○       | 5□    | 0.12□ | 0.6□    | 7000  | 4.2   | 0.105                   | 26    | 7.5  |
| KDE0503PFB3-8 | V   | ○       | 5□    | 0.06□ | 0.3□    | 5000  | 3.15  | 0.06                    | 24    | 7.5□ |
| KDE0503PAB1-8 | V   | ○       | 5□    | 0.18□ | 0.9□    | 8000  | 5.1   | 0.14                    | 28    | 7.5  |
| KDE0503PAB2-8 | V   | ○       | 5□    | 0.12□ | 0.6□    | 7000  | 4.2   | 0.105                   | 26    | 7.5  |
| KDE0503PAB3-8 | V   | ○       | 5     | 0.06□ | 0.3□    | 5000□ | 3.15□ | 0.06                    | 24    | 7.5  |
| KDE1203PFB1-8 |     | ○       | 12□   | 0.08□ | 0.9□    | 9500□ | 3.5□  | 0.14□                   | 27□   | 9.5  |
| KDE1203PFB2-8 |     | ○       | 12□   | 0.07□ | 0.8□    | 8000□ | 3.0□  | 0.11□                   | 25□   | 9.5  |
| KDE1203PFB3-8 |     | ○       | 12□   | 0.05  | 0.6□    | 6500  | 2.3□  | 0.07                    | 18.5□ | 9.5  |
| KDE1203PFB1-8 | V   | ○       | 12□   | 0.08□ | 0.9□    | 8000  | 5.1   | 0.14                    | 32    | 7.5□ |
| KDE1203PFB2-8 | V   | ○       | 12□   | 0.07□ | 0.8□    | 7000  | 4.2   | 0.11                    | 20.5  | 7.5□ |
| KDE1203PFB3-8 | V   | ○       | 12    | 0.05□ | 0.6□    | 5000□ | 3.15  | 0.06□                   | 25    | 7.5  |

3015

:30x30x15mm



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0503PHB1-8 |     | ○       | 5□    | 0.17□ | 0.9□    | 8500□ | 6.0□  | 0.16□                   | 27□   | 12□ |
| KDE0503PHB2-8 |     | ○       | 5     | 0.12  | 0.6     | 7000  | 4.8   | 0.11                    | 22    | 12  |
| KDE0503PHB3-8 |     | ○       | 5□    | 0.07□ | 0.35□   | 5500□ | 3.2   | 0.10                    | 17□   | 12  |



# SUNON KDE Series

## DC Brushless Fan

**3506**

**:35x35x6mm**



| Model         | P/N  | Bearing  | Rating Voltage (VDC) | Power Current (AMP) | Power Consumption (WATTS) | Speed (RPM) | Air Flow (CFM) | Static Pressure (Inch-H <sub>2</sub> O) | Noise (dBA) | Weight (g) |
|---------------|------|----------|----------------------|---------------------|---------------------------|-------------|----------------|-----------------------------------------|-------------|------------|
| KDE0535PEV1-8 | MS.N | ● VAPO   | 5□                   | 0.19□               | 0.9□                      | 6800□       | 5.0□           | 0.07□                                   | 23□         | 7□         |
| KDE0535PEV2-8 | MS.N | ●        | 5                    | 0.12                | 0.6                       | 5800        | 4.3            | 0.055                                   | 19          | 7          |
| KDE0535PEB1-8 | MS.N | ○ SLEEVE | 5□                   | 0.19□               | 0.9□                      | 6800□       | 5.0□           | 0.07                                    | 24□         | 7□         |
| KDE0535PEB2-8 | MS.N | ○ BALL   | 5                    | 0.12                | 0.6                       | 5800        | 4.3            | 0.055                                   | 20          | 7          |

**3510**

**:35x35x10mm**



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0535PFV1-8 | MS  | ●       | 5     | 0.19□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 24□   | 9   |
| KDE0535PFV2-8 | MS  | ●       | 5□    | 0.13□ | 0.7□    | 6000□ | 4.5□  | 0.08□                   | 20.5□ | 9   |
| KDE0535PFV3-8 | MS  | ●       | 5     | 0.07□ | 0.3□    | 4500□ | 3.2□  | 0.05□                   | 19□   | 9   |
| KDE0535PFB1-8 |     | ○       | 5     | 0.19□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 25□   | 9   |
| KDE0535PFB2-8 |     | ○       | 5     | 0.13□ | 0.7□    | 6000□ | 4.5□  | 0.08□                   | 21□   | 9   |
| KDE0535PFB3-8 |     | ○       | 5     | 0.07□ | 0.3□    | 4500□ | 3.2□  | 0.05□                   | 18□   | 9   |
| KDE0535PFB1-8 | MS  | ○       | 5     | 0.19□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 25□   | 9   |
| KDE0535PFB2-8 | MS  | ○       | 5     | 0.13□ | 0.7□    | 6000□ | 4.5□  | 0.08□                   | 21□   | 9   |
| KDE0535PFB3-8 | MS  | ○       | 5     | 0.07□ | 0.3□    | 4500□ | 3.2□  | 0.05□                   | 19.5  | 9   |
| KDE1235PFV1-8 | MS  | ●       | 12□   | 0.08□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 24□   | 9   |
| KDE1235PFV2-8 | MS  | ●       | 12□   | 0.07□ | 0.8□    | 6000□ | 4.5□  | 0.08□                   | 20.5□ | 9   |
| KDE1235PFV3-8 | MS  | ●       | 12    | 0.05□ | 0.6□    | 4500□ | 3.2□  | 0.05□                   | 19□   | 9   |
| KDE1235PFB1-8 |     | ○       | 12□   | 0.08□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 25□   | 9   |
| KDE1235PFB2-8 |     | ○       | 12□   | 0.07□ | 0.8□    | 6000□ | 4.5□  | 0.08□                   | 21□   | 9   |
| KDE1235PFB3-8 |     | ○       | 12    | 0.05□ | 0.6□    | 4500□ | 3.2□  | 0.05□                   | 18□   | 9   |
| KDE1235PFB1-8 | MS  | ○       | 12□   | 0.08□ | 1.0□    | 7000□ | 5.2□  | 0.09□                   | 25□   | 9   |
| KDE1235PFB2-8 | MS  | ○       | 12□   | 0.07□ | 0.8□    | 6000□ | 4.5□  | 0.08□                   | 21□   | 9   |
| KDE1235PFB3-8 | MS  | ○       | 12□   | 0.05  | 0.6     | 4500  | 3.2   | 0.05                    | 19.5  | 9   |

**4006**

**:40x40x6mm**



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0504PEV1-8 | MS  | ●       | 5     | 0.21  | 1.0     | 7000  | 5.9   | 0.10□                   | 32    | 7.5 |
| KDE0504PEV2-8 | MS  | ●       | 5     | 0.11  | 0.55□   | 6000  | 5.3   | 0.07                    | 28    | 7.5 |
| KDE0504PEB1-8 |     | ○       | 5     | 0.14□ | 0.7□    | 6000□ | 5.5□  | 0.08□                   | 26□   | 7□  |
| KDE0504PEB2-8 |     | ○       | 5     | 0.10□ | 0.5□    | 5000□ | 4.4□  | 0.05□                   | 23□   | 7□  |
| KDE0504PEB3-8 |     | ○       | 5     | 0.06□ | 0.3□    | 4000□ | 3.5□  | 0.04□                   | 20□   | 7□  |
| KDE0504PEB1-8 | MS  | ○       | 5     | 0.21  | 1.0□    | 7000  | 5.9   | 0.10□                   | 33□   | 7.5 |
| KDE0504PEB2-8 | MS  | ○       | 5     | 0.11  | 0.55    | 6000  | 5.3   | 0.07                    | 29    | 7.5 |

**4008**

**:40x40x8mm**



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g)   |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-------|
| KDE0504PDV2-8 | MS  | ●       | 5     | 0.15  | 0.8□    | 5500□ | 5.3□  | 0.12□                   | 31□   | 11.8□ |
| KDE1204PDV2-8 | MS  | ●       | 12□   | 0.07□ | 0.8     | 5500  | 5.3   | 0.12                    | 31    | 11.8□ |

# SUNON KDE Series

## DC Brushless Fan

4010

:40x40x10mm



| Model          | P/N | Bearing<br>● VAPO<br>◎ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|----------------|-----|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| ★ KDE1204PFV1  | MS  | ●                                       | 12                         | 0.11□                     | 1.3□                            | 8200□          | 8.1□                 | 0.22□                                         | 33□            | 16□           |
| ★ KDE1204PFV2  | MS□ | ●                                       | 12                         | 0.08                      | 1.0                             | 7000           | 6.6                  | 0.17                                          | 28             | 16□           |
| KDE1204PFS1-8  | □   | ◎                                       | 12                         | 0.06□                     | 0.7□                            | 7000□          | 6.6□                 | 0.17□                                         | 30□            | 16            |
| KDE1204PFS2-8  | □   | ◎                                       | 12                         | 0.05□                     | 0.6□                            | 6000□          | 5.6□                 | 0.13□                                         | 28□            | 16□           |
| KDE1204PFS3-8  | □   | ◎                                       | 12□                        | 0.04□                     | 0.5□                            | 4500□          | 4.5□                 | 0.09□                                         | 22.8□          | 16□           |
| KDE1204PFB1-8  | □   | ○                                       | 12□                        | 0.06□                     | 0.7□                            | 7300□          | 6.9□                 | 0.19□                                         | 30.5□          | 16□           |
| KDE1204PFB2-8  | □   | ○                                       | 12□                        | 0.05□                     | 0.6□                            | 6100□          | 6.0□                 | 0.14□                                         | 28.5□          | 16□           |
| KDE1204PFB3-8□ | □   | ○                                       | 12□                        | 0.04□                     | 0.5□                            | 5300           | 4.8□                 | 0.10□                                         | 23.5□          | 16□           |
| KDE1204PFB1    | OC  | ○                                       | 12□                        | 0.12□                     | 1.4□                            | 8400□          | 8.3□                 | 0.19□                                         | 34.4□          | 15.5□         |
| KDE1204PFB2    | OC  | ○                                       | 12□                        | 0.08□                     | 1.0□                            | 6600□          | 6.5□                 | 0.15□                                         | 27□            | 15.5□         |
| KDE1204PFB3    | OC  | ○                                       | 12□                        | 0.05                      | 0.6                             | 5200           | 4.7                  | 0.10□                                         | 24□            | 15.5          |
| KDE1204PFB1    | MS  | ○                                       | 12                         | 0.11                      | 1.3                             | 8800           | 8.6                  | 0.23                                          | 37             | 16            |
| KDE1204PFB2    | MS  | ○                                       | 12                         | 0.08□                     | 1.0                             | 7600□          | 7.0                  | 0.18□                                         | 32             | 16□           |

□

4020

:40x40x20mm



| Model       | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|-------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0504PKS2 |     | ◎       | 5     | 0.21□ | 1.0□    | 6000□ | 6.5□  | 0.12□                   | 25.5□ | 28□ |
| KDE0504PKS3 |     | ◎       | 5     | 0.14□ | 0.7□    | 4500□ | 5.2□  | 0.08□                   | 22.8□ | 28□ |
| KDE0504PKB2 |     | ○       | 5     | 0.21□ | 1.0□    | 6500□ | 7.0□  | 0.16□                   | 29□   | 28□ |
| KDE0504PKB3 |     | ○       | 5     | 0.14□ | 0.7□    | 5300□ | 6.2□  | 0.12□                   | 24□   | 28□ |
| KDE1204PKVX | MS  | ●       | 12    | 0.13□ | 1.6□    | 8000□ | 10.0□ | 0.24□                   | 27.5□ | 30  |
| KDE1204PKV1 | MS  | ●       | 12    | 0.10□ | 1.2□    | 7000□ | 8.5□  | 0.19□                   | 25.5□ | 30  |
| KDE1204PKV2 | MS  | ●       | 12    | 0.07□ | 0.8□    | 6000□ | 7.3□  | 0.14□                   | 20□   | 30  |
| KDE1204PKV3 | MS  | ●       | 12    | 0.05  | 0.6     | 5000  | 6.0   | 0.10                    | 18    | 30  |
| KDE1204PKS2 |     | ◎       | 12□   | 0.07□ | 0.9□    | 6000□ | 6.5□  | 0.12□                   | 25.5□ | 28□ |
| KDE1204PKS3 |     | ◎       | 12    | 0.05□ | 0.6□    | 4500□ | 5.2□  | 0.08□                   | 22.8□ | 28□ |
| KDE1204PKB2 |     | ○       | 12    | 0.07□ | 0.9□    | 6400□ | 6.8□  | 0.15□                   | 29□   | 28  |
| KDE1204PKB3 |     | ○       | 12    | 0.05□ | 0.6     | 5000  | 6.0   | 0.11                    | 24    | 28  |
| KDE1204PKB1 | MS  | ○       | 12    | 0.10  | 1.2     | 7200  | 8.9   | 0.21                    | 26    | 30  |
| KDE1204PKB2 | MS  | ○       | 12    | 0.07  | 0.8     | 6200  | 7.7   | 0.16                    | 21.5  | 30  |
| KDE1204PKB3 | MS  | ○       | 12    | 0.05  | 0.6□    | 5200□ | 6.3□  | 0.11□                   | 18.5□ | 30□ |
| KDE2404PKS1 |     | ◎       | 24    | 0.07□ | 1.7□    | 7900□ | 8.4□  | 0.16□                   | 33.5□ | 35□ |
| KDE2404PKS2 |     | ◎       | 24    | 0.05□ | 1.2□    | 6000□ | 6.5□  | 0.12□                   | 25.5□ | 20□ |
| KDE2404PKS3 |     | ◎       | 24    | 0.03□ | 0.7□    | 4500□ | 5.2□  | 0.08□                   | 22.8□ | 20□ |
| KDE2404PKB2 |     | ○       | 24    | 0.04□ | 1.0□    | 6500□ | 7.0□  | 0.16□                   | 26.5□ | 20□ |
| KDE2404PKB3 |     | ○       | 24    | 0.03  | 0.7□    | 5000  | 6.0   | 0.11□                   | 23.5  | 20  |

□

□

4510

:45x45x10mm



| Model          | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|----------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| ★ KDE1245PFV1  | MS  | ●       | 12□   | 0.11□ | 1.3□    | 7400□ | 10□   | 0.20□                   | 33.5□ | 18□ |
| ★ KDE1245PFV2  | MS□ | ●       | 12□   | 0.08  | 1.0     | 6100  | 8.3   | 0.14□                   | 29.5  | 18  |
| KDE1245PFS1-8  | □   | ◎       | 12□   | 0.07□ | 0.8□    | 6000□ | 8.0□  | 0.14□                   | 28.5□ | 20  |
| KDE1245PFS2-8  | □   | ◎       | 12□   | 0.06□ | 0.7□    | 5200□ | 7.0□  | 0.11□                   | 27□   | 20□ |
| KDE1245PFS3-8  | □   | ◎       | 12□   | 0.04□ | 0.5□    | 4000□ | 5.5□  | 0.07□                   | 23□   | 20□ |
| KDE1245PFB1-8  | □   | ○       | 12□   | 0.07□ | 0.8□    | 6300□ | 9.0□  | 0.155□                  | 29□   | 20□ |
| KDE1245PFB2-8  | □   | ○       | 12□   | 0.06□ | 0.7□    | 5500□ | 7.5□  | 0.12□                   | 28□   | 20□ |
| KDE1245PFB3-8□ | □   | ○       | 12    | 0.04□ | 0.5□    | 4500□ | 6.2□  | 0.095□                  | 26□   | 20  |
| KDE1245PFB1    | OC  | ○       | 12    | 0.12□ | 1.4□    | 7100□ | 9.5□  | 0.16□                   | 33.8□ | 20  |
| KDE1245PFB2    | OC  | ○       | 12    | 0.08□ | 1.0□    | 5900□ | 8.0□  | 0.13□                   | 29□   | 20  |
| KDE1245PFB3    | OC  | ○       | 12    | 0.05  | 0.6     | 4400  | 6.1   | 0.10                    | 23□   | 20□ |
| KDE1245PFB1    | MS  | ○       | 12    | 0.11□ | 1.3     | 7500□ | 10.2  | 0.20□                   | 37□   | 18□ |
| KDE1245PFB2    | MS  | ○       | 12    | 0.08  | 1.0     | 6600  | 8.9   | 0.15                    | 33.5  | 18□ |

□

# SUNON KDE Series

## DC Brushless Fan

**5010**

**:50x50x10mm**



| Model         | P/N  | Bearing<br>● VAPO<br>◎ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|---------------|------|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KDE1205PFV1   | MS.G | ●                                       | 12                         | 0.15□                     | 1.8□                            | 6500□          | 12.3□                | 0.19□                                         | 35□            | 25□           |
| KDE1205PFV2   | MS.G | ●                                       | 12                         | 0.10                      | 1.2                             | 5500           | 10.4                 | 0.15                                          | 31             | 25            |
| KDE1205PFV1   | MS   | ●                                       | 12                         | 0.12□                     | 1.4□                            | 6300           | 12.0□                | 0.15□                                         | 34□            | 20□           |
| KDE1205PFV2   | MS   | ●                                       | 12                         | 0.09                      | 1.1                             | 5500           | 10.0                 | 0.12                                          | 30             | 20□           |
| KDE1205PFS1-8 |      | ◎                                       | 12                         | 0.07□                     | 0.9□                            | 5100           | 9.6                  | 0.105                                         | 30.5           | 24□           |
| KDE1205PFS2-8 |      | ◎                                       | 12                         | 0.06□                     | 0.7□                            | 4300           | 8.0                  | 0.09                                          | 29             | 24□           |
| KDE1205PFS3-8 |      | ◎                                       | 12                         | 0.04□                     | 0.5□                            | 3500           | 7.0                  | 0.065                                         | 21             | 24□           |
| KDE1205PFB1-8 |      | ○                                       | 12                         | 0.07□                     | 0.9                             | 5400           | 10.2                 | 0.11                                          | 31.5           | 24□           |
| KDE1205PFB2-8 |      | ○                                       | 12                         | 0.06□                     | 0.7□                            | 4700           | 9.2                  | 0.10                                          | 30             | 24□           |
| KDE1205PFB3-8 |      | ○                                       | 12                         | 0.04□                     | 0.5                             | 3800□          | 7.2□                 | 0.07                                          | 22□            | 24□           |
| KDE1205PFB1   | OC   | ○                                       | 12                         | 0.13□                     | 1.6□                            | 6000□          | 11.4□                | 0.12□                                         | 34.7□          | 23□           |
| KDE1205PFB2   | OC   | ○                                       | 12                         | 0.08□                     | 1.0□                            | 5000□          | 9.5□                 | 0.10□                                         | 28.9□          | 23□           |
| KDE1205PFB3   | OC   | ○                                       | 12                         | 0.06□                     | 0.7□                            | 4200           | 8.0                  | 0.08                                          | 24.3□          | 23□           |
| KDE1205PFB1   | MS.G | ○                                       | 12                         | 0.15□                     | 0.15□                           | 7000□          | 12.5□                | 0.19□                                         | 36□            | 25□           |
| KDE1205PFB2   | MS.G | ○                                       | 12                         | 0.10□                     | 0.10□                           | 5500□          | 10.4□                | 0.15                                          | 31.5□          | 25□           |
| KDE1205PFB1   | MS   | ○                                       | 12                         | 0.12□                     | 1.4□                            | 6500□          | 12.4□                | 0.17□                                         | 37□            | 20□           |
| KDE1205PFB2   | MS   | ○                                       | 12                         | 0.09                      | 1.1                             | 5500           | 10.0                 | 0.12                                          | 32             | 20            |

**5015**

**:50x50x15mm**



| Model       | P/N   | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|-------------|-------|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE1205PHV1 | MS    | ●       | 12    | 0.13□ | 1.5□    | 5500□ | 16□   | 0.21□                   | 33□   | 37  |
| KDE1205PHV2 | MS    | ●       | 12□   | 0.08□ | 1.0□    | 4500□ | 12    | 0.14                    | 28.5□ | 37  |
| KDE1205PHB1 | MS    | ○       | 12□   | 0.13□ | 1.5□    | 5800□ | 17    | 0.23□                   | 34□   | 37  |
| KDE1205PHB2 | MS    | ○       | 12□   | 0.08□ | 1.0□    | 4700□ | 13    | 0.17□                   | 29.5□ | 37  |
| KDE1205PHB2 | MS(2) | ○       | 12    | 0.08  | 1.0     | 4700  | 13    | 0.17                    | 29.5  | 37  |

**5215**

**:52x52x15mm**



| Model        | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|--------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0505PHS2  |     | ◎       | 5     | 0.38□ | 1.9□    | 5000□ | 12.4□ | 0.14□                   | 27□   | 39□ |
| KDE0505PHS3  |     | ◎       | 5□    | 0.24□ | 1.2□    | 4000□ | 7.6□  | 0.12□                   | 24□   | 39  |
| KDE0505PHB2  |     | ○       | 5□    | 0.38□ | 1.9□    | 5300□ | 12.7□ | 0.16□                   | 27.8□ | 39  |
| KDE0505PHB3  |     | ○       | 5     | 0.24□ | 1.2□    | 4300□ | 8.5□  | 0.14□                   | 25.4□ | 39  |
| KDE1205PHS2□ |     | ◎       | 12□   | 0.14□ | 1.7□    | 5000□ | 12.4□ | 0.14□                   | 27□   | 39  |
| KDE1205PHS3  |     | ◎       | 12□   | 0.08□ | 0.9□    | 4000□ | 7.6□  | 0.12□                   | 24□   | 39  |
| KDE1205PHB2  |     | ○       | 12□   | 0.14□ | 1.7□    | 5300□ | 12.7□ | 0.16□                   | 27.8□ | 39  |
| KDE1205PHB3  |     | ○       | 12□   | 0.08□ | 0.9     | 4300  | 8.5   | 0.14                    | 25.4  | 39  |

**5510**

**:55x55x10mm**



| Model         | P/N  | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|------|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE1255PFV1-8 | MS.G | ●       | 12□   | 0.15  | 1.8     | 5700  | 14.0  | 0.14                    | 37.4  | 26  |
| KDE1255PFV2-8 | MS.G | ●       | 12□   | 0.11  | 1.3     | 4700  | 12.0  | 0.11                    | 30.9  | 26  |
| KDE1255PFS1-8 |      | ◎       | 12□   | 0.08□ | 1.0□    | 5400□ | 13.0□ | 0.135□                  | 31□   | 16□ |
| KDE1255PFS2-8 |      | ◎       | 12□   | 0.06□ | 0.7□    | 4700□ | 11.5□ | 0.107□                  | 30□   | 16□ |
| KDE1255PFS3-8 |      | ◎       | 12□   | 0.05□ | 0.6□    | 4200□ | 10.3  | 0.09□                   | 26□   | 16□ |
| KDE1255PFB1-8 |      | ○       | 12    | 0.08□ | 1.0□    | 5600□ | 13.5□ | 0.14□                   | 32□   | 16□ |
| KDE1255PFB2-8 |      | ○       | 12    | 0.06□ | 0.7□    | 5000□ | 12.0□ | 0.11□                   | 31□   | 16□ |
| KDE1255PFB3-8 |      | ○       | 12    | 0.05  | 0.6     | 4500  | 10.6  | 0.09                    | 27    | 16□ |
| KDE1255PFB1-8 | MS.G | ○       | 12    | 0.15  | 1.8     | 5100  | 14.0  | 0.14                    | 37.4  | 26  |
| KDE1255PFB2-8 | MS.G | ○       | 12    | 0.11  | 1.3     | 4700  | 12.0  | 0.11                    | 30.9  | 26□ |

10

\*Specifications subject to change without notice

2000/9/1

# SUNON KDE Series

## DC Brushless Fan

6010

:60x60x10mm



| Model         | P/N  | Bearing<br>● VAPO<br>◎ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|---------------|------|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KDE1206PFV1   | MS.G | ●                                       | 12□                        | 0.16                      | 1.9□                            | 5200□          | 16.3□                | 0.13□                                         | 35□            | 22□           |
| KDE1206PFV2   | MS.G | ●                                       | 12□                        | 0.10                      | 1.2□                            | 4300□          | 13.8□                | 0.09□                                         | 34.5           | 22□           |
| KDE1206PFS2-8 |      | ◎                                       | 12□                        | 0.10□                     | 1.2□                            | 4200□          | 13.9□                | 0.107□                                        | 30□            | 22□           |
| KDE1206PFS3-8 |      | ◎                                       | 12                         | 0.07□                     | 0.8□                            | 3500□          | 12.0□                | 0.09□                                         | 26□            | 22            |
| KDE1206PFB2-8 |      | ○                                       | 12□                        | 0.10□                     | 1.2□                            | 4400□          | 14.5□                | 0.11□                                         | 31□            | 27□           |
| KDE1206PFB3-8 |      | ○                                       | 12□                        | 0.07□                     | 0.8□                            | 3700□          | 12.7 □               | 0.09□                                         | 27□            | 27□           |
| KDE1206PFB1   | MS.G | ○                                       | 12□                        | 0.16□                     | 1.9□                            | 5200□          | 16.3□                | 0.13□                                         | 36□            | 27□           |
| KDE1206PFB2   | MS.G | ○                                       | 12□                        | 0.10                      | 1.2                             | 4300           | 13.8                 | 0.09                                          | 35□            | 27□           |

6015

:60x60x15mm



| Model       | P/N  | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|-------------|------|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0506PHS2 |      | ◎       | 5     | 0.39□ | 1.9□    | 4000□ | 17.8□ | 0.135□                  | 31□   | 45  |
| KDE0506PHS3 |      | ◎       | 5     | 0.24□ | 1.2□    | 3300□ | 14.8□ | 0.11□                   | 26□   | 45□ |
| KDE0506PHB2 |      | ○       | 5     | 0.39□ | 1.9□    | 4200□ | 18.5□ | 0.15□                   | 31.5□ | 45□ |
| KDE0506PHB3 |      | ○       | 5□    | 0.24□ | 1.2□    | 3500□ | 15.2□ | 0.13□                   | 26.5  | 45□ |
| KDE1206PHV1 | MS.G | ●       | 12□   | 0.15□ | 1.8□    | 4300□ | 20.0□ | 0.18□                   | 37.5□ | 39□ |
| KDE1206PHV2 | MS.G | ●       | 12□   | 0.09  | 1.1□    | 3800□ | 17.0□ | 0.13□                   | 32.5□ | 39□ |
| KDE1206PHS2 |      | ◎       | 12□   | 0.16□ | 1.9□    | 4000□ | 17.8□ | 0.135□                  | 31□   | 45□ |
| KDE1206PHS3 |      | ◎       | 12□   | 0.09□ | 1.2□    | 3300□ | 14.8□ | 0.11□                   | 26□   | 45□ |
| KDE1206PHB2 |      | ○       | 12□   | 0.16□ | 1.9□    | 4200□ | 18.5□ | 0.15□                   | 31.5□ | 45□ |
| KDE1206PHB3 |      | ○       | 12□   | 0.09□ | 1.2□    | 3500□ | 15.2  | 0.13□                   | 26.5□ | 45□ |
| KDE1206PHB1 | MS.G | ○       | 12□   | 0.15□ | 1.8□    | 4300□ | 20.0□ | 0.18□                   | 38.5□ | 39□ |
| KDE1206PHB2 | MS.G | ○       | 12□   | 0.09  | 1.1     | 3800  | 17.0  | 0.13                    | 33.5  | 39□ |

6020

:60x60x20mm



| Model       | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|-------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE1206PKV1 | MS  | ●       | 12□   | 0.15  | 1.8□    | 4300□ | 22.0□ | 0.17□                   | 32□   | 52  |
| KDE1206PKV2 | MS  | ●       | 12□   | 0.09  | 1.1     | 3600  | 18.5□ | 0.14□                   | 27.5□ | 52  |
| KDE1206PKS1 |     | ◎       | 12□   | 0.21□ | 2.5□    | 4800□ | 18.2□ | 0.16□                   | 34□   | 50  |
| KDE1206PKS2 |     | ◎       | 12□   | 0.15□ | 1.8□    | 4200□ | 16.5□ | 0.13□                   | 31□   | 50□ |
| KDE1206PKS3 |     | ◎       | 12    | 0.09□ | 1.1□    | 3200□ | 13.9□ | 0.10□                   | 26.7□ | 50□ |
| KDE1206PKB1 |     | ○       | 12□   | 0.21□ | 2.5□    | 5000□ | 21.2□ | 0.17□                   | 37□   | 50□ |
| KDE1206PKB2 |     | ○       | 12□   | 0.15□ | 1.8□    | 4400□ | 19.0□ | 0.148□                  | 32□   | 50□ |
| KDE1206PKB3 |     | ○       | 12□   | 0.09  | 1.1□    | 3500□ | 16.0□ | 0.13□                   | 27□   | 50□ |
| KDE1206PKB1 | MS  | ○       | 12    | 0.15  | 1.8□    | 4300□ | 22.0□ | 0.17□                   | 32.5□ | 52  |
| KDE1206PKB2 | MS  | ○       | 12□   | 0.09□ | 1.1     | 3600  | 18.5□ | 0.14                    | 28    | 52  |

6025

:60x60x25mm



| Model       | P/N    | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|-------------|--------|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE0506PTS2 | V      | ◎       | 5     | 0.33□ | 1.7□    | 3700□ | 18.0□ | 0.15□                   | 29□   | 60□ |
| KDE0506PTS3 | V      | ◎       | 5     | 0.23□ | 1.2□    | 3100□ | 16.0□ | 0.10□                   | 25□   | 60□ |
| KDE1206PTV1 | MS     | ●       | 12□   | 0.15□ | 1.8□    | 4500□ | 23.0□ | 0.20□                   | 33.5□ | 55□ |
| KDE1206PTV2 | MS     | ●       | 12□   | 0.09  | 1.1□    | 3800□ | 19.0□ | 0.15                    | 30□   | 55  |
| KDE1206PTS1 | V      | ◎       | 12□   | 0.19□ | 2.3□    | 4300□ | 22.5  | 0.20□                   | 33.5□ | 60□ |
| KDE1206PTS2 | V      | ◎       | 12□   | 0.13□ | 1.6□    | 3700□ | 18.0  | 0.15□                   | 29    | 60□ |
| KDE1206PTS3 | V      | ◎       | 12□   | 0.09□ | 1.1□    | 3100□ | 16.0□ | 0.10□                   | 25□   | 60□ |
| KDE1206PTB1 | V      | ○       | 12□   | 0.19□ | 2.3□    | 4500□ | 23.5□ | 0.22□                   | 34□   | 60□ |
| KDE1206PTB2 | V      | ○       | 12□   | 0.13□ | 1.6□    | 4000  | 19.0□ | 0.16□                   | 31□   | 60□ |
| KDE1206PTB3 | V      | ○       | 12□   | 0.09□ | 1.1□    | 3200□ | 16.8□ | 0.11□                   | 27    | 60□ |
| KDE1206PTB1 | MS.(2) | ○       | 12    | 0.15□ | 1.8□    | 4500□ | 23.0□ | 0.20□                   | 34.5□ | 55□ |
| KDE1206PTB2 | MS.(2) | ○       | 12    | 0.09  | 1.1     | 3800□ | 19.0□ | 0.15□                   | 31□   | 55□ |
| KDE1206PTB1 | MS     | ○       | 12    | 0.15  | 1.8□    | 4500□ | 23.5□ | 0.21□                   | 34.5□ | 55□ |
| KDE1206PTB2 | MS     | ○       | 12    | 0.09  | 1.1     | 3800  | 19.3  | 0.15                    | 31    | 55□ |

# SUNON KDE Series

## DC Brushless Fan

**8025**

**:80x80x25mm**



| Model         | P/N | Bearing<br>● VAPO<br>◎ SLEEVE<br>○ BALL | Rating<br>Voltage<br>(VDC) | Power<br>Current<br>(AMP) | Power<br>Consumption<br>(WATTS) | Speed<br>(RPM) | Air<br>Flow<br>(CFM) | Static<br>Pressure<br>(Inch-H <sub>2</sub> O) | Noise<br>(dBA) | Weight<br>(g) |
|---------------|-----|-----------------------------------------|----------------------------|---------------------------|---------------------------------|----------------|----------------------|-----------------------------------------------|----------------|---------------|
| KDE2408PTS1-6 |     | ◎                                       | 24                         | 0.12                      | 2.9                             | 3000           | 41.7                 | 0.18                                          | 34             | 100           |
| KDE2408PTS2-6 |     | ◎                                       | 24                         | 0.10                      | 2.4                             | 2650           | 34.4                 | 0.16                                          | 30             | 100           |
| KDE2408PTS3-6 |     | ◎                                       | 24                         | 0.07                      | 1.7                             | 2200           | 29.4                 | 0.11                                          | 24.5           | 100           |
| KDE2408PTB1-6 |     | ○                                       | 24                         | 0.12                      | 2.9                             | 3200           | 42.5                 | 0.23                                          | 36.5           | 100           |
| KDE2408PTB2-6 |     | ○                                       | 24                         | 0.10                      | 2.4                             | 2800           | 35                   | 0.20                                          | 32.5           | 100           |
| KDE2408PTB3-6 |     | ○                                       | 24                         | 0.07                      | 1.7                             | 2500           | 30                   | 0.14                                          | 28.5           | 100           |

**9225**

**:92x92x25mm**



| Model         | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|---------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE2409PTS1-6 |     | ◎       | 24    | 0.12  | 2.9     | 2800  | 50    | 0.17                    | 35    | 121 |
| KDE2409PTS2-6 |     | ◎       | 24    | 0.09  | 2.2     | 2500  | 44    | 0.15                    | 33    | 121 |
| KDE2409PTS3-6 |     | ◎       | 24    | 0.07  | 1.7     | 2100  | 39    | 0.11                    | 27    | 121 |
| KDE2409PTB1-6 |     | ○       | 24    | 0.12  | 2.9     | 3000  | 51    | 0.20                    | 37    | 121 |
| KDE2409PTB2-6 |     | ○       | 24    | 0.09  | 2.2     | 2600  | 45    | 0.18                    | 34    | 121 |
| KDE2409PTB3-6 |     | ○       | 24    | 0.11  | 2.7     | 2300  | 40    | 0.13                    | 28    | 123 |

**12025**

**:120x120x25mm**



| Model          | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|----------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE1212PTS1-6A |     | ◎       | 12    | 0.38  | 4.6     | 3000  | 88    | 0.27                    | 44    | 200 |
| KDE1212PTS2-6A |     | ◎       | 12    | 0.30  | 3.6     | 2700  | 78    | 0.21                    | 40    | 200 |
| KDE1212PTS3-6A |     | ◎       | 12    | 0.20  | 2.4     | 2300  | 67    | 0.16                    | 35    | 200 |
| KDE1212PTB1-6A |     | ○       | 12    | 0.38  | 4.6     | 3100  | 90    | 0.28                    | 44.5  | 200 |
| KDE1212PTB2-6A |     | ○       | 12    | 0.30  | 3.6     | 2800  | 80    | 0.22                    | 41    | 200 |
| KDE1212PTB3-6A |     | ○       | 12    | 0.20  | 2.4     | 2400  | 69    | 0.17                    | 35.5  | 200 |
| KDE2412PTS1-6A |     | ◎       | 24    | 0.22  | 5.3     | 3000  | 88    | 0.27                    | 44    | 200 |
| KDE2412PTS2-6A |     | ◎       | 24    | 0.17  | 4.1     | 2700  | 78    | 0.21                    | 40    | 200 |
| KDE2412PTS3-6A |     | ◎       | 24    | 0.13  | 3.1     | 2300  | 67    | 0.16                    | 35    | 200 |
| KDE2412PTB1-6A |     | ○       | 24    | 0.22  | 5.3     | 3100  | 90    | 0.28                    | 44.5  | 200 |
| KDE2412PTB2-6A |     | ○       | 24    | 0.17  | 4.1     | 2800  | 80    | 0.22                    | 41    | 200 |
| KDE2412PTB3-6A |     | ○       | 24    | 0.13  | 3.1     | 2400  | 69    | 0.17                    | 35.5  | 200 |

**12038**

**:120x120x38mm**



| Model          | P/N | Bearing | (VDC) | (AMP) | (WATTS) | (RPM) | (CFM) | (Inch-H <sub>2</sub> O) | (dBA) | (g) |
|----------------|-----|---------|-------|-------|---------|-------|-------|-------------------------|-------|-----|
| KDE1212PMSX-6A |     | ◎       | 12    | 0.63  | 7.6     | 3100  | 119   | 0.32                    | 45    | 326 |
| KDE1212PMS1-6A |     | ◎       | 12    | 0.57  | 6.8     | 3000  | 107   | 0.30                    | 41    | 326 |
| KDE1212PMS2-6A |     | ◎       | 12    | 0.43  | 5.1     | 2700  | 97    | 0.24                    | 36    | 326 |
| KDE1212PMS3-6A |     | ◎       | 12    | 0.27  | 3.2     | 2300  | 83    | 0.18                    | 34    | 326 |
| KDE1212PMBX-6A |     | ○       | 12    | 0.63  | 7.6     | 3150  | 120   | 0.34                    | 46.5  | 326 |
| KDE1212PMB1-6A |     | ○       | 12    | 0.57  | 6.8     | 3100  | 108   | 0.31                    | 42    | 326 |
| KDE1212PMB2-6A |     | ○       | 12    | 0.43  | 5.1     | 2800  | 98    | 0.25                    | 36.5  | 326 |
| KDE1212PMB3-6A |     | ○       | 12    | 0.27  | 3.2     | 2400  | 84    | 0.19                    | 35    | 326 |
| KDE2412PMSX-6A |     | ◎       | 24    | 0.30  | 7.2     | 3100  | 119   | 0.32                    | 45    | 326 |
| KDE2412PMS1-6A |     | ◎       | 24    | 0.28  | 6.7     | 3000  | 107   | 0.30                    | 41    | 326 |
| KDE2412PMS2-6A |     | ◎       | 24    | 0.23  | 5.5     | 2700  | 97    | 0.24                    | 36    | 326 |
| KDE2412PMS3-6A |     | ◎       | 24    | 0.17  | 4.0     | 2300  | 83    | 0.18                    | 34    | 326 |
| KDE2412PMBX-6A |     | ○       | 24    | 0.30  | 7.2     | 3150  | 120   | 0.34                    | 46.5  | 326 |
| KDE2412PMB1-6A |     | ○       | 24    | 0.28  | 6.7     | 3100  | 108   | 0.31                    | 42    | 326 |
| KDE2412PMB2-6A |     | ○       | 24    | 0.23  | 5.5     | 2800  | 98    | 0.25                    | 36.5  | 326 |
| KDE2412PMB3-6A |     | ○       | 24    | 0.17  | 4.0     | 2400  | 84    | 0.19                    | 35    | 326 |

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\*Specifications subject to change without notice

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