# RAPTOR SDA

## Case Mounted Axial Flow Fan

**Select** models available for next day delivery

# RAPTOR SDA

## Product Overview

- 8 standard sizes from 250mm to 630mm
- Air volume flow rates up to 4.60 m³/s
- Static pressures up to 290 Pa
- Suitable for operating temperatures up to +70°C
- Available in **AC** & **EC**

**The Raptor SDA is a short cased mounted axial fan and is normally mounted in ductwork applications. It incorporates the Ziehl-Abegg FE2owlet aerofoil profiled impeller. Both strong and durable, this range also boasts low noise and increased efficiency levels.**

### Easy Installation

A fitted IP55 terminal box allows the fan to be positioned conveniently to incoming electrical inputs.

### Efficient Performance

Aerofoil section, sickle shaped blades, with serrated trailing edges and winglets based on bionic insights.

### Corrosion resistance

Specially treated against corrosion, powder coated with polyester epoxy paint in pastel beige (RAL 7032).

### Controllability

A range of transformer voltage controllers used to provide five speed step control of single phase or three phase motors.

### Energy saving

Extremely energy efficient as a result of EC technology, easy to commission, built in motor protection and compact in design to reduce casing sizes. AC external rotor motor variants also available.

### Warranty

Each SDA has a 12 month warranty.

### Construction

Constructed from mild steel and suitably treated to ensure full corrosion protection. The guard is powder coated polyester epoxy paint finish in black (RAL9005). Fan casings are powder coated polyester epoxy paint finish in pastel beige (RAL 7032).

### Motor

Motors are highly efficient, lightweight external rotor motors, insulated to Class F, with integral thermal overload protection. Sizes 250-350 weatherproofed to IP44. Sizes 400-630 weatherproofed to IP54. All fans are suitable for use with a speed controller.

### Impeller

The Ziehl-Abegg FE2owlet impeller has a unique serrated trailing edge which provides optimised flow and improved acoustics. The Aerofoil blades, complete with winglets, enable increased impeller efficiency.

### Typical Applications

- Sports Halls
- Squash Courts
- Schools & Colleges
- Shops
- Retail Parks
- Commercial
- Kitchens
- Factories
- Industrial Units
- Warehousing

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### Product Coding

| Code | Reference |
|---|---|
| SDA | Product Range |
| 250 | Diameter (250/350/400...) |
| / | |
| 4 | Number of Poles (2/4/6) |
| – | |
| 1 | Voltage Supply (Single Phase / Three Phase) |
| AC | Motor Type (AC/EC) |
| A - Z | Additional Coding (A - Z) Product Variants |
| e.g. | **SDA250 / 4-1AC** |


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# RAPTOR SDA

## Performance Range Curves

AC EC

1 SDA250 / 4-1AC
2 SDA315 / 4-1AC
3 SDA350 / 4-1AC
4 SDA400 / 4-1AC
5 SDA400 / 4 / 6-3AC*
6 SDA450 / 4-1AC
7 SDA450 / 4 / 6-3AC*
8 SDA450 / 6-1AC
9 SDA500 / 4-1AC
10 SDA500 / 4 / 6-3AC*
11 SDA500 / 6-1AC
12 SDA560 / 4-1AC
13 SDA560 / 4 / 6-3AC*
14 SDA560 / 6-1AC
15 SDA630 / 4 / 6-3AC*
16 SDA630 / 6-1AC
17 SDA630 / 6 / 8-3AC*

1 SDA350 / 4-1EC
2 SDA400 / 4-1EC
3 SDA450 / 4-1EC
4 SDA500 / 4-1EC
5 SDA500 / 4-3EC
6 SDA630 / 4-1EC
7 SDA630 / 4-3EC

*For low speed data refer to performance tables.

Elta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.

# RAPTOR SDA

## Performance, SFP & Electrical Data

AC

**Single Phase** 220V to 240V / 50Hz

| Product Code | Speed r/min | Airflow SFP | Airflow m³/s @ Static Pressure Pa | | | | | | At Best Efficiency Point | | | Electrical Data | dBA @ 3m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 25 | 50 | 75 | 100 | 150 | Overall Eff % | FMEG N | Input kW | Peak Amps | | |
| SDA250/4-1AC | 1374 | m³/s | 0.260 | 0.213 | - | - | - | - | - | <125W | 0.046 | 0.24 | Inlet | 39 |
| | | W/(L/s) | 0.14 | 0.22 | - | - | - | - | | | | | Outlet | 40 |
| SDA315/4-1AC | 1320 | m³/s | 0.607 | 0.563 | 0.507 | 0.431 | - | - | 22.4 | <125W | 0.110 | 0.50 | Inlet | 46 |
| | | W/(L/s) | 0.21 | 0.23 | 0.26 | 0.30 | - | - | | | | | Outlet | 46 |
| SDA350/4-1AC | 1075 | m³/s | 0.714 | 0.597 | 0.429 | - | - | - | 24.0 | <125W | 0.119 | 0.54 | Inlet | 45 |
| | | W/(L/s) | 0.16 | 0.20 | 0.28 | - | - | - | | | | | Outlet | 45 |
| SDA400/4-1AC | 1359 | m³/s | 1.003 | 0.960 | 0.899 | 0.831 | 0.757 | - | 31.1 | 41 | 0.234 | 1.04 | Inlet | 49 |
| | | W/(L/s) | 0.19 | 0.21 | 0.24 | 0.27 | 0.31 | - | | | | | Outlet | 49 |
| SDA450/4-1AC | 1302 | m³/s | 1.854 | 1.779 | 1.652 | 1.529 | 1.422 | - | 34.0 | 42 | 0.545 | 2.45 | Inlet | 50 |
| | | W/(L/s) | 0.28 | 0.29 | 0.31 | 0.34 | 0.37 | - | | | | | Outlet | 49 |
| SDA450/6-1AC | 915 | m³/s | 1.260 | 1.138 | 1.011 | 0.800 | - | - | 30.0 | 41 | 0.189 | 0.89 | Inlet | 42 |
| | | W/(L/s) | 0.14 | 0.16 | 0.19 | 0.23 | - | - | | | | | Outlet | 41 |
| SDA500/4-1AC | 1250 | m³/s | 2.396 | 2.232 | 2.076 | 1.926 | 1.765 | 1.241 | 32.9 | 40 | 0.719 | 3.18 | Inlet | 51 |
| | | W/(L/s) | 0.29 | 0.31 | 0.34 | 0.37 | 0.41 | 0.57 | | | | | Outlet | 51 |
| SDA500/6-1AC | 910 | m³/s | 1.719 | 1.549 | 1.363 | 1.155 | - | - | 30.4 | 41 | 0.289 | 1.25 | Inlet | 46 |
| | | W/(L/s) | 0.15 | 0.17 | 0.20 | 0.24 | - | - | | | | | Outlet | 46 |
| SDA560/4-1AC | 1341 | m³/s | 3.244 | 3.137 | 3.004 | 2.857 | 2.710 | 2.420 | 35.8 | 42 | 1.150 | 5.13 | Inlet | 63 |
| | | W/(L/s) | 0.32 | 0.34 | 0.37 | 0.40 | 0.42 | 0.48 | | | | | Outlet | 63 |
| SDA560/6-1AC | 924 | m³/s | 2.192 | 2.052 | 1.902 | 1.738 | 1.561 | - | 33.0 | 42 | 0.390 | 2.18 | Inlet | 52 |
| | | W/(L/s) | 0.19 | 0.21 | 0.24 | 0.27 | 0.30 | - | | | | | Outlet | 52 |
| SDA630/6-1AC | 872 | m³/s | 2.985 | 2.786 | 2.572 | 2.339 | 2.081 | - | 32.2 | 40 | 0.660 | 2.82 | Inlet | 49 |
| | | W/(L/s) | 0.18 | 0.20 | 0.23 | 0.26 | 0.30 | - | | | | | Outlet | 50 |

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.
Peak Amps @ 230V / 1PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

# RAPTOR SDA

## Performance, SFP & Electrical Data

AC

**Three Phase** 380V to 415V / 50Hz

| Product Code | Speed r/min | Airflow SFP | Airflow m³/s @ Static Pressure Pa | | | | | | | | At Best Efficiency Point | | | Electrical Data | | dBA @ 3m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 25 | 50 | 75 | 100 | 150 | 200 | 250 | Overall Eff % | FMEG N | Input kW | Peak Amps | Δ / Y | | |
| SDA400/4/6-3AC | 1387 | m³/s | 1.018 | 0.960 | 0.895 | 0.829 | 0.755 | - | - | - | 32.4 | 41 | 0.227 | 0.44 | Δ | Inlet | 49 |
| | | W/(L/s) | 0.16 | 0.19 | 0.22 | 0.25 | 0.28 | - | - | - | | | | | | Outlet | 50 |
| | 1156 | m³/s | 0.874 | 0.809 | 0.717 | 0.600 | - | - | - | - | - | | 0.165 | 0.28 | Y | Inlet | 46 |
| | | W/(L/s) | 0.15 | 0.18 | 0.22 | 0.28 | - | - | - | - | | | | | | Outlet | 46 |
| SDA450/4/6-3AC | 1377 | m³/s | 1.995 | 1.875 | 1.755 | 1.636 | 1.517 | 1.282 | - | - | 34.0 | 42 | 0.538 | 1.07 | Δ | Inlet | 50 |
| | | W/(L/s) | 0.25 | 0.27 | 0.29 | 0.32 | 0.35 | 0.41 | - | - | | | | | | Outlet | 49 |
| | 1111 | m³/s | 1.587 | 1.428 | 1.276 | 1.127 | 0.975 | - | - | - | - | | 0.381 | 0.68 | Y | Inlet | 45 |
| | | W/(L/s) | 0.24 | 0.27 | 0.31 | 0.35 | 0.40 | - | - | - | | | | | | Outlet | 45 |
| SDA500/4/6-3AC | 1339 | m³/s | 2.448 | 2.363 | 2.277 | 2.177 | 2.054 | 1.785 | 1.440 | - | 34.2 | 41 | 0.764 | 1.37 | Δ | Inlet | 53 |
| | | W/(L/s) | 0.27 | 0.29 | 0.31 | 0.33 | 0.36 | 0.42 | 0.50 | - | | | | | | Outlet | 53 |
| | 1075 | m³/s | 1.935 | 1.772 | 1.597 | 1.403 | 1.185 | - | - | - | - | | 0.476 | 0.89 | Y | Inlet | 48 |
| | | W/(L/s) | 0.27 | 0.28 | 0.32 | 0.37 | 0.43 | - | - | - | | | | | | Outlet | 48 |
| SDA560/4/6-3AC | 1295 | m³/s | 3.098 | 3.020 | 2.924 | 2.811 | 2.691 | 2.453 | 2.196 | - | 33.7 | 40 | 1.169 | 2.52 | Δ | Inlet | 57 |
| | | W/(L/s) | 0.32 | 0.34 | 0.36 | 0.39 | 0.42 | 0.49 | 0.55 | - | | | | | | Outlet | 57 |
| | 916 | m³/s | 2.348 | 2.152 | 1.939 | 1.733 | 1.511 | - | - | - | - | | 0.654 | 1.27 | Y | Inlet | 51 |
| | | W/(L/s) | 0.25 | 0.29 | 0.33 | 0.38 | 0.43 | - | - | - | | | | | | Outlet | 51 |
| SDA630/4/6-3AC | 1342 | m³/s | 4.593 | 4.482 | 4.360 | 4.244 | 4.115 | 3.834 | 3.514 | 3.141 | 40.7 | 46 | 1.812 | 3.38 | Δ | Inlet | 67 |
| | | W/(L/s) | 0.36 | 0.38 | 0.40 | 0.42 | 0.44 | 0.50 | 0.55 | 0.62 | | | | | | Outlet | 67 |
| | 1068 | m³/s | 3.816 | 3.620 | 3.430 | 3.226 | 3.014 | 2.562 | - | - | - | | 1.324 | 2.17 | Y | Inlet | 59 |
| | | W/(L/s) | 0.31 | 0.34 | 0.37 | 0.40 | 0.43 | 0.52 | - | - | | | | | | Outlet | 59 |
| SDA630/6/8-3AC | 906 | m³/s | 3.000 | 2.821 | 2.627 | 2.433 | 2.266 | - | - | - | 33.8 | 42 | 0.620 | 1.20 | Δ | Inlet | 49 |
| | | W/(L/s) | 0.17 | 0.18 | 0.21 | 0.23 | 0.27 | - | - | - | | | | | | Outlet | 48 |
| | 736 | m³/s | 2.480 | 2.257 | 1.965 | 1.598 | - | - | - | - | - | | 0.412 | 0.74 | Y | Inlet | 46 |
| | | W/(L/s) | 0.15 | 0.17 | 0.21 | 0.27 | - | - | - | - | | | | | | Outlet | 44 |

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.
Peak Amps @ 400V / 3PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

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Confirmation of dimensions and data will be supplied on request.

# RAPTOR SDA

## Performance, SFP & Electrical Data

EC

**Single Phase** 200V to 277V / 50Hz or 60Hz

| Product Code | Control Voltage V | Speed r/min | Airflow SFP | Airflow m³/s @ Static Pressure Pa | | | | | | | At Best Efficiency Point | | | Electrical Data | dBA @ 3m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 25 | 50 | 75 | 100 | 150 | 200 | Overall Eff % | FMEG N | Input kW | Peak Amps | | |
| SDA350/4-1EC | 10 | 1952 | m³/s | 1.199 | 1.152 | 1.104 | 1.055 | 1.004 | 0.895 | 0.766 | 38.6 | 47 | 0.424 | 1.98 | Inlet | 57 |
| | | | W/(L/s) | 0.31 | 0.34 | 0.36 | 0.39 | 0.42 | 0.48 | 0.55 | | | | | Outlet | 58 |
| | 8 | 1548 | m³/s | 0.924 | 0.877 | 0.820 | 0.752 | 0.676 | - | - | - | | - | 1.05 | Inlet | 52 |
| | | | W/(L/s) | 0.22 | 0.23 | 0.26 | 0.28 | 0.32 | - | - | | | | | Outlet | 53 |
| | 5 | 934 | m³/s | 0.555 | 0.461 | - | - | - | - | - | - | | - | 0.32 | Inlet | 41 |
| | | | W/(L/s) | 0.09 | 0.12 | - | - | - | - | - | | | | | Outlet | 41 |
| | 2 | 320 | m³/s | 0.190 | - | - | - | - | - | - | - | | - | 0.11 | Inlet | 20 |
| | | | W/(L/s) | 0.05 | - | - | - | - | - | - | | | | | Outlet | 20 |
| SDA400/4-1EC | 10 | 1811 | m³/s | 1.410 | 1.370 | 1.324 | 1.274 | 1.219 | 1.097 | 0.947 | 49.5 | 59 | 0.490 | 2.29 | Inlet | 58 |
| | | | W/(L/s) | 0.30 | 0.32 | 0.34 | 0.36 | 0.39 | 0.45 | 0.53 | | | | | Outlet | 58 |
| | 8 | 1427 | m³/s | 1.134 | 1.055 | 0.984 | 0.912 | 0.832 | - | - | - | | - | 1.17 | Inlet | 53 |
| | | | W/(L/s) | 0.18 | 0.21 | 0.23 | 0.26 | 0.29 | - | - | | | | | Outlet | 53 |
| | 5 | 865 | m³/s | 0.673 | 0.560 | 0.410 | - | - | - | - | - | | - | 0.35 | Inlet | 41 |
| | | | W/(L/s) | 0.08 | 0.11 | 0.15 | - | - | - | - | | | | | Outlet | 41 |
| | 2 | 297 | m³/s | 0.224 | - | - | - | - | - | - | - | | - | 0.11 | Inlet | 20 |
| | | | W/(L/s) | 0.04 | - | - | - | - | - | - | | | | | Outlet | 20 |
| SDA450/4-1EC | 10 | 1303 | m³/s | 1.362 | 1.306 | 1.220 | 1.090 | 0.908 | - | - | 41.0 | 51 | 0.284 | 1.38 | Inlet | 56 |
| | | | W/(L/s) | 0.18 | 0.20 | 0.22 | 0.26 | 0.32 | - | - | | | | | Outlet | 56 |
| | 8 | 1025 | m³/s | 1.049 | 0.979 | 0.823 | - | - | - | - | - | | - | 0.72 | Inlet | 51 |
| | | | W/(L/s) | 0.12 | 0.13 | 0.17 | - | - | - | - | | | | | Outlet | 52 |
| | 5 | 621 | m³/s | 0.640 | - | - | - | - | - | - | - | | - | 0.23 | Inlet | 41 |
| | | | W/(L/s) | 0.05 | - | - | - | - | - | - | | | | | Outlet | 41 |
| | 2 | 215 | m³/s | 0.213 | - | - | - | - | - | - | - | | - | 0.10 | Inlet | 20 |
| | | | W/(L/s) | 0.04 | - | - | - | - | - | - | | | | | Outlet | 20 |
| SDA500/4-1EC | 10 | 1433 | m³/s | 2.384 | 2.317 | 2.245 | 2.165 | 2.077 | 1.860 | 1.523 | 40.1 | 47 | 0.740 | 3.32 | Inlet | 57 |
| | | | W/(L/s) | 0.27 | 0.29 | 0.31 | 0.33 | 0.35 | 0.40 | 0.47 | | | | | Outlet | 57 |
| | 8 | 1148 | m³/s | 1.921 | 1.828 | 1.713 | 1.562 | 1.321 | - | - | - | | - | 1.76 | Inlet | 52 |
| | | | W/(L/s) | 0.17 | 0.19 | 0.21 | 0.24 | 0.29 | - | - | | | | | Outlet | 52 |
| | 5 | 689 | m³/s | 1.120 | 0.958 | - | - | - | - | - | - | | - | 0.48 | Inlet | 42 |
| | | | W/(L/s) | 0.08 | 0.10 | - | - | - | - | - | | | | | Outlet | 41 |
| | 2 | 230 | m³/s | 0.352 | - | - | - | - | - | - | - | | - | 0.29 | Inlet | 20 |
| | | | W/(L/s) | 0.08 | - | - | - | - | - | - | | | | | Outlet | 20 |
| SDA630/4-1EC | 10 | 1056 | m³/s | 3.398 | 3.225 | 3.053 | 2.874 | 2.676 | 2.134 | - | 46.3 | 53 | 0.737 | 3.42 | Inlet | 53 |
| | | | W/(L/s) | 0.16 | 0.19 | 0.22 | 0.24 | 0.27 | 0.35 | - | | | | | Outlet | 53 |
| | 8 | 845 | m³/s | 2.679 | 2.492 | 2.274 | 2.003 | 1.620 | - | - | - | | - | 2.06 | Inlet | 49 |
| | | | W/(L/s) | 0.11 | 0.13 | 0.16 | 0.19 | 0.23 | - | - | | | | | Outlet | 49 |
| | 5 | 507 | m³/s | 1.555 | 1.291 | - | - | - | - | - | - | | - | 0.54 | Inlet | 41 |
| | | | W/(L/s) | 0.05 | 0.07 | - | - | - | - | - | | | | | Outlet | 41 |
| | 2 | 179 | m³/s | 0.524 | - | - | - | - | - | - | - | | - | 0.30 | Inlet | 20 |
| | | | W/(L/s) | 0.12 | - | - | - | - | - | - | | | | | Outlet | 20 |

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.
A variable speed drive is integrated within the fan.
Peak Amps @ 230V / 1PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

# RAPTOR SDA

## Performance, SFP & Electrical Data

EC

**Three Phase** 380V to 480V / 50Hz or 60Hz

| Product Code | Control Voltage V | Speed r/min | Airflow SFP | Airflow m³/s @ Static Pressure Pa | | | | | | | At Best Efficiency Point | | | Electrical Data | dBA @ 3m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 25 | 50 | 75 | 100 | 150 | 200 | Overall Eff % | FMEG N | Input kW | Peak Amps | | |
| SDA500/4-3EC | 10 | 1555 | **m³/s** | **2.649** | **2.590** | **2.518** | **2.428** | **2.319** | **2.059** | **1.672** | 41.8 | 47 | 0.920 | 1.53 | Inlet | 59 |
| | | | W/(L/s) | 0.31 | 0.32 | 0.34 | 0.36 | 0.39 | 0.45 | 0.54 | | | | | Outlet | 58 |
| | 8 | 1245 | **m³/s** | **2.073** | **1.997** | **1.902** | **1.793** | **1.674** | - | - | - | | - | 0.94 | Inlet | 53 |
| | | | W/(L/s) | 0.20 | 0.22 | 0.24 | 0.26 | 0.29 | - | - | | | | | Outlet | 53 |
| | 5 | 747 | **m³/s** | **1.232** | **1.080** | - | - | - | - | - | - | | - | 0.37 | Inlet | 43 |
| | | | W/(L/s) | 0.08 | 0.11 | - | - | - | - | - | | | | | Outlet | 43 |
| | 2 | 250 | **m³/s** | **0.406** | - | - | - | - | - | - | - | | - | 0.17 | Inlet | 20 |
| | | | W/(L/s) | 0.04 | - | - | - | - | - | - | | | | | Outlet | 20 |
| SDA630/4-3EC | 10 | 1208 | **m³/s** | **3.826** | **3.706** | **3.589** | **3.471** | **3.348** | **3.073** | **2.702** | 48.5 | 55 | 1.087 | 1.94 | Inlet | 56 |
| | | | W/(L/s) | 0.21 | 0.23 | 0.25 | 0.28 | 0.30 | 0.35 | 0.41 | | | | | Outlet | 55 |
| | 8 | 971 | **m³/s** | **3.102** | **2.925** | **2.768** | **2.610** | **2.436** | **1.891** | - | - | | - | 1.05 | Inlet | 53 |
| | | | W/(L/s) | 0.13 | 0.16 | 0.18 | 0.21 | 0.23 | 0.30 | - | | | | | Outlet | 52 |
| | 5 | 582 | **m³/s** | **1.841** | **1.592** | **0.651** | - | - | - | - | - | | - | 0.43 | Inlet | 43 |
| | | | W/(L/s) | 0.06 | 0.08 | 0.19 | - | - | - | - | | | | | Outlet | 43 |
| | 2 | 195 | **m³/s** | **0.576** | - | - | - | - | - | - | - | | - | 0.18 | Inlet | 20 |
| | | | W/(L/s) | 0.03 | - | - | - | - | - | - | | | | | Outlet | 20 |

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.
A variable speed drive is integrated within the fan.
Peak Amps @ 400V / 3PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

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Confirmation of dimensions and data will be supplied on request.

# RAPTOR SDA

## Sound Data

AC

**Single Phase** 220V to 240V / 50Hz

| Product Code | | Sound Power Level dBW @ Octave Band Hz | | | | | | | | Total dB |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63Hz | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | |
| SDA250/4-1AC | Inlet | 68 | 70 | 59 | 55 | 52 | 52 | 49 | 42 | 73 |
| | Outlet | 67 | 72 | 58 | 54 | 53 | 53 | 48 | 41 | 73 |
| SDA315/4-1AC | Inlet | 64 | 70 | 63 | 65 | 63 | 55 | 51 | 45 | 73 |
| | Outlet | 67 | 70 | 63 | 65 | 61 | 56 | 52 | 46 | 73 |
| SDA350/4-1AC | Inlet | 68 | 71 | 64 | 63 | 60 | 56 | 51 | 47 | 74 |
| | Outlet | 71 | 70 | 64 | 63 | 60 | 58 | 53 | 47 | 75 |
| SDA400/4-1AC | Inlet | 79 | 77 | 69 | 63 | 64 | 63 | 58 | 53 | 82 |
| | Outlet | 78 | 77 | 70 | 65 | 65 | 63 | 58 | 51 | 81 |
| SDA450/4-1AC | Inlet | 74 | 78 | 73 | 64 | 64 | 64 | 60 | 53 | 81 |
| | Outlet | 78 | 78 | 72 | 65 | 64 | 63 | 58 | 53 | 82 |
| SDA450/6-1AC | Inlet | 67 | 69 | 62 | 56 | 58 | 57 | 51 | 43 | 72 |
| | Outlet | 68 | 68 | 62 | 57 | 57 | 56 | 49 | 43 | 72 |
| SDA500/4-1AC | Inlet | 74 | 79 | 68 | 62 | 66 | 68 | 61 | 52 | 81 |
| | Outlet | 76 | 80 | 70 | 65 | 66 | 66 | 60 | 52 | 82 |
| SDA500/6-1AC | Inlet | 71 | 77 | 70 | 56 | 59 | 59 | 53 | 46 | 79 |
| | Outlet | 72 | 77 | 69 | 57 | 60 | 58 | 51 | 45 | 79 |
| SDA560/4-1AC | Inlet | 83 | 82 | 82 | 76 | 79 | 78 | 74 | 67 | 89 |
| | Outlet | 83 | 82 | 82 | 76 | 79 | 78 | 74 | 67 | 89 |
| SDA560/6-1AC | Inlet | 75 | 78 | 68 | 66 | 70 | 67 | 61 | 52 | 81 |
| | Outlet | 75 | 78 | 68 | 66 | 70 | 67 | 61 | 52 | 81 |
| SDA630/6-1AC | Inlet | 71 | 72 | 68 | 66 | 65 | 65 | 49 | 52 | 77 |
| | Outlet | 72 | 73 | 69 | 68 | 67 | 62 | 58 | 52 | 78 |

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.


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# RAPTOR SDA

## Sound Data

AC

**Three Phase** 380V to 415V / 50Hz

| Product Code | Speed r/min | | Sound Power Level dBW @ Octave Band Hz | | | | | | | | Total dB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63Hz | 125Hz | 250Hz | 500Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | |
| SDA400/4/6-3AC | 1387 | Inlet | 78 | 79 | 68 | 64 | 64 | 63 | 59 | 53 | 82 |
| | | Outlet | 77 | 79 | 69 | 64 | 65 | 64 | 59 | 51 | 82 |
| | 1156 | Inlet | 74 | 74 | 64 | 61 | 61 | 60 | 55 | 48 | 78 |
| | | Outlet | 72 | 73 | 65 | 62 | 62 | 60 | 54 | 46 | 76 |
| SDA450/4/6-3AC | 1377 | Inlet | 73 | 77 | 67 | 64 | 65 | 65 | 60 | 53 | 79 |
| | | Outlet | 79 | 77 | 70 | 65 | 64 | 64 | 59 | 53 | 82 |
| | 1111 | Inlet | 71 | 72 | 61 | 63 | 60 | 60 | 54 | 47 | 75 |
| | | Outlet | 75 | 71 | 63 | 64 | 60 | 59 | 53 | 46 | 77 |
| SDA500/4/6-3AC | 1339 | Inlet | 74 | 79 | 68 | 67 | 68 | 68 | 64 | 56 | 81 |
| | | Outlet | 76 | 79 | 70 | 71 | 68 | 66 | 63 | 55 | 82 |
| | 1075 | Inlet | 70 | 74 | 73 | 62 | 62 | 62 | 55 | 48 | 78 |
| | | Outlet | 70 | 73 | 72 | 65 | 62 | 60 | 53 | 48 | 77 |
| SDA560/4/6-3AC | 1295 | Inlet | 80 | 83 | 74 | 72 | 73 | 72 | 69 | 62 | 86 |
| | | Outlet | 80 | 83 | 74 | 72 | 73 | 72 | 69 | 62 | 86 |
| | 916 | Inlet | 80 | 77 | 68 | 66 | 67 | 66 | 61 | 53 | 82 |
| | | Outlet | 80 | 77 | 68 | 66 | 67 | 66 | 61 | 53 | 82 |
| SDA630/4/6-3AC | 1342 | Inlet | 85 | 93 | 81 | 82 | 83 | 83 | 78 | 70 | 95 |
| | | Outlet | 85 | 93 | 81 | 82 | 83 | 83 | 78 | 70 | 95 |
| | 1068 | Inlet | 88 | 83 | 78 | 75 | 76 | 73 | 68 | 60 | 90 |
| | | Outlet | 88 | 83 | 78 | 75 | 76 | 73 | 68 | 60 | 90 |
| SDA630/6/8-3AC | 906 | Inlet | 70 | 68 | 64 | 65 | 65 | 65 | 59 | 52 | 75 |
| | | Outlet | 67 | 67 | 63 | 65 | 65 | 63 | 59 | 52 | 73 |
| | 736 | Inlet | 73 | 65 | 60 | 64 | 62 | 62 | 54 | 47 | 75 |
| | | Outlet | 73 | 65 | 60 | 59 | 61 | 60 | 53 | 47 | 74 |

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.

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Confirmation of dimensions and data will be supplied on request.

# RAPTOR SDA

## Sound Data

EC

**Single Phase** 200V to 277V / 50Hz or 60Hz

| Product Code | Control Voltage V | | Sound Power Level dBW @ Octave Band Hz | | | | | | | | Total dB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63Hz | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | |
| SDA350/4-1EC | 10 | Inlet | 84 | 79 | 73 | 70 | 72 | 73 | 68 | 65 | 86 |
| | | Outlet | 83 | 78 | 76 | 71 | 73 | 73 | 68 | 64 | 86 |
| | 8 | Inlet | 81 | 76 | 69 | 65 | 67 | 68 | 62 | 59 | 83 |
| | | Outlet | 80 | 75 | 72 | 66 | 68 | 68 | 62 | 58 | 82 |
| | 5 | Inlet | 74 | 65 | 58 | 54 | 57 | 55 | 48 | 45 | 75 |
| | | Outlet | 73 | 64 | 61 | 55 | 58 | 55 | 48 | 44 | 74 |
| SDA400/4-1EC | 10 | Inlet | 85 | 77 | 71 | 69 | 73 | 73 | 72 | 67 | 87 |
| | | Outlet | 84 | 77 | 73 | 70 | 73 | 73 | 71 | 67 | 86 |
| | 8 | Inlet | 81 | 75 | 67 | 64 | 67 | 68 | 67 | 60 | 83 |
| | | Outlet | 79 | 75 | 68 | 65 | 67 | 67 | 66 | 60 | 81 |
| | 5 | Inlet | 71 | 62 | 57 | 53 | 55 | 57 | 53 | 45 | 72 |
| | | Outlet | 70 | 61 | 58 | 54 | 55 | 57 | 52 | 44 | 71 |
| SDA450/4-1EC | 10 | Inlet | 90 | 83 | 79 | 69 | 70 | 68 | 63 | 57 | 91 |
| | | Outlet | 88 | 82 | 81 | 70 | 70 | 68 | 63 | 57 | 90 |
| | 8 | Inlet | 87 | 80 | 75 | 64 | 65 | 63 | 57 | 51 | 88 |
| | | Outlet | 85 | 79 | 77 | 65 | 65 | 63 | 57 | 51 | 86 |
| | 5 | Inlet | 80 | 69 | 64 | 53 | 55 | 50 | 43 | 37 | 81 |
| | | Outlet | 78 | 68 | 66 | 54 | 55 | 50 | 43 | 37 | 79 |
| SDA500/4-1EC | 10 | Inlet | 88 | 84 | 73 | 70 | 73 | 71 | 66 | 60 | 90 |
| | | Outlet | 88 | 88 | 77 | 71 | 72 | 69 | 65 | 60 | 91 |
| | 8 | Inlet | 85 | 82 | 67 | 65 | 67 | 66 | 60 | 54 | 87 |
| | | Outlet | 83 | 82 | 71 | 66 | 67 | 64 | 59 | 54 | 86 |
| | 5 | Inlet | 80 | 70 | 58 | 55 | 57 | 54 | 47 | 38 | 80 |
| | | Outlet | 79 | 69 | 59 | 56 | 57 | 53 | 45 | 38 | 80 |
| SDA630/4-1EC | 10 | Inlet | 82 | 76 | 70 | 65 | 69 | 68 | 62 | 56 | 84 |
| | | Outlet | 82 | 76 | 70 | 65 | 69 | 68 | 62 | 56 | 84 |
| | 8 | Inlet | 83 | 72 | 65 | 62 | 66 | 64 | 56 | 50 | 84 |
| | | Outlet | 83 | 72 | 65 | 62 | 66 | 64 | 56 | 50 | 84 |
| | 5 | Inlet | 76 | 65 | 57 | 54 | 59 | 50 | 41 | 34 | 76 |
| | | Outlet | 76 | 65 | 57 | 54 | 59 | 50 | 41 | 34 | 76 |

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.


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# RAPTOR SDA

## Sound Data

EC

**Three Phase** 380V to 480V / 50Hz or 60Hz

| Product Code | Control Voltage V | | Sound Power Level dBW @ Octave Band Hz | | | | | | | | Total dB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63Hz | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | |
| SDA500/4-3EC | 10 | Inlet | 88 | 82 | 76 | 71 | 75 | 73 | 68 | 62 | 90 |
| | | Outlet | 88 | 84 | 80 | 73 | 74 | 71 | 67 | 62 | 90 |
| | 8 | Inlet | 85 | 80 | 69 | 66 | 69 | 67 | 62 | 56 | 86 |
| | | Outlet | 85 | 83 | 73 | 67 | 68 | 66 | 61 | 56 | 87 |
| | 5 | Inlet | 83 | 69 | 59 | 57 | 59 | 56 | 49 | 41 | 83 |
| | | Outlet | 82 | 70 | 61 | 58 | 59 | 55 | 47 | 41 | 82 |
| SDA630/4-3EC | 10 | Inlet | 84 | 78 | 75 | 69 | 72 | 71 | 65 | 59 | 86 |
| | | Outlet | 85 | 79 | 76 | 69 | 70 | 68 | 64 | 59 | 87 |
| | 8 | Inlet | 83 | 81 | 72 | 65 | 70 | 67 | 60 | 54 | 86 |
| | | Outlet | 84 | 80 | 72 | 65 | 69 | 64 | 58 | 54 | 86 |
| | 5 | Inlet | 74 | 66 | 59 | 57 | 61 | 54 | 46 | 38 | 75 |
| | | Outlet | 75 | 66 | 59 | 56 | 62 | 52 | 44 | 37 | 76 |

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.

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Confirmation of dimensions and data will be supplied on request.

# RAPTOR SDA

## Dimensional Data

### Single & Three Phase

| Product Code | A | B | C | D | E | F | G | Weight kg |
|---|---|---|---|---|---|---|---|---|
| SDA250/4-1AC | 257 | 306 | 180 | 174 | 8 | 7 | 286 | 5 |
| SDA315/4-1AC | 317 | 382 | 180 | 209 | 8 | 10 | 356 | 7.5 |
| SDA350/4-1AC | 356 | 421 | 180 | 229 | 8 | 10 | 395 | 8 |
| SDA350/4-1EC | 356 | 421 | 180 | 229 | 8 | 10 | 395 | 8 |
| SDA400/4-1AC | 400 | 466 | 205 | 251 | 12 | 10 | 438 | 10 |
| SDA400/4-1EC | 400 | 466 | 205 | 251 | 12 | 10 | 438 | 9 |
| SDA400/4/6-3AC | 400 | 466 | 205 | 251 | 12 | 10 | 438 | 9.5 |
| SDA450/4-1AC | 450 | 521 | 255 | 278 | 12 | 10 | 487 | 20.5 |
| SDA450/4-1EC | 450 | 521 | 255 | 278 | 12 | 10 | 487 | 14 |
| SDA450/4/6-3AC | 450 | 521 | 300 | 278 | 12 | 10 | 487 | 18.5 |
| SDA450/6-1AC | 450 | 521 | 255 | 278 | 12 | 10 | 487 | 18.5 |
| SDA500/4-1AC | 503 | 575 | 250 | 304 | 12 | 10 | 541 | 21.5 |
| SDA500/4-1EC | 503 | 575 | 250 | 304 | 12 | 10 | 541 | 18 |
| SDA500/4-3EC | 503 | 575 | 250 | 304 | 12 | 10 | 541 | 18 |
| SDA500/4/6-3AC | 503 | 575 | 250 | 304 | 12 | 10 | 541 | 21.5 |
| SDA500/6-1AC | 503 | 575 | 250 | 304 | 12 | 10 | 541 | 20.5 |
| SDA560/4-1AC | 560 | 641 | 272 | 333 | 16 | 12 | 605 | 29 |
| SDA560/4/6-3AC | 560 | 641 | 272 | 333 | 16 | 12 | 605 | 25.5 |
| SDA560/6-1AC | 560 | 641 | 272 | 333 | 16 | 12 | 605 | 23.5 |
| SDA630/4-1EC | 634 | 709 | 250 | 370 | 16 | 12 | 674 | 25 |
| SDA630/4-3EC | 634 | 709 | 250 | 370 | 16 | 12 | 674 | 25 |
| SDA630/4/6-3AC | 634 | 709 | 250 | 370 | 16 | 12 | 674 | 37.4 |
| SDA630/6-1AC | 634 | 709 | 250 | 370 | 16 | 12 | 674 | 24.5 |
| SDA630/6/8-3AC | 634 | 709 | 250 | 370 | 16 | 12 | 674 | 24.5 |

Dimensions are in mm.


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# RAPTOR SDA

## Accessories

AC

### Single Phase

| Product Code | AC Electronic Controller | Ancillary Pack* | AV Mounts (set of 4) | Flanged Silencers 1D Podded | Flanged Silencers 1D Unpodded | Flanged Silencers 2D Podded |
|---|---|---|---|---|---|---|
| **SDA250/4-1AC** | 149-EL31 | APK250SCD/001 | 062-001 | 068-0250-1DEP | 068-0250-1DENP | 068-0250-2DEP |
| **SDA315/4-1AC** | 149-EL31 | APK315SCD/001 | 062-001 | 068-0315-1DEP | 068-0315-1DENP | 068-0315-2DEP |
| **SDA350/4-1AC** | - | APK350SCD/001 | 062-001 | 068-0350-1DEP | 068-0350-1DENP | 068-0350-2DEP |
| **SDA400/4-1AC** | 149-EL31TK | APK400SCD/001 | 062-001 | 068-0400-1DEPC | 068-0400-1DENPC | 068-0400-2DEPC |
| **SDA450/4-1AC** | 149-EL61TK | APK450SCD/001 | 062-001 | 068-0450-1DEPC | 068-0450-1DENPC | 068-0450-2DEPC |
| **SDA450/6-1AC** | 149-EL31TK | APK450SCD/001 | 062-001 | 068-0450-1DEPC | 068-0450-1DENPC | 068-0450-2DEPC |
| **SDA500/4-1AC** | 149-EL61TK | APK500SCD/002 | 062-002 | 068-0500-1DEPC | 068-0500-1DENPC | 068-0500-2DEPC |
| **SDA500/6-1AC** | 149-EL31TK | APK500SCD/002 | 062-002 | 068-0500-1DEPC | 068-0500-1DENPC | 068-0500-2DEPC |
| **SDA560/4-1AC** | - | APK560SCD/002 | 062-002 | 068-0560-1DEPC | 068-0560-1DENPC | 068-0560-2DEPC |
| **SDA630/6-1AC** | 149-EL61TK | APK630SCD/002 | 062-002 | 068-0630-1DEPC | 068-0630-1DENPC | 068-0630-2DEPC |

| Product Code | Flanged Silencers 2D Unpodded | Powder Coated Matching Flanges (each) | Powder Coated Mounting Feet (each) | Standard Ambient Flexible Connectors (each) | Transformer Controller | Wall Cowl | Wiring Diagram |
|---|---|---|---|---|---|---|---|
| **SDA250/4-1AC** | 068-0250-2DENP | 061A-0250-C | 060A-0250-C | 063-0250-MAN150 | 149-TC12 | SWC25/31 | 152-177 |
| **SDA315/4-1AC** | 068-0315-2DENP | 061A-0315-C | 060A-0315-C | 063-0315-MAN150 | 149-TC12 | SWC25/31 | 152-104B |
| **SDA350/4-1AC** | 068-0350-2DENP | 061A-0350-C | 060A-0350-C | 063-0350-MAN150 | 149-TC12 | SWC35/40 | 152-104B |
| **SDA400/4-1AC** | 068-0400-2DENPC | 061A-0400-C | 060A-0400-C | 063-0400-MAN150 | 149-TC14 | SWC35/40 | 152-104B |
| **SDA450/4-1AC** | 068-0450-2DENPC | 061A-0450-C | 060A-0450-C | 063-0450-MAN150 | 149-TC18 | SWC45/50 | 152-104B |
| **SDA450/6-1AC** | 068-0450-2DENPC | 061A-0450-C | 060A-0450-C | 063-0450-MAN150 | 149-TC14 | SWC45/50 | 152-104B |
| **SDA500/4-1AC** | 068-0500-2DENPC | 061A-0500-C | 060A-0500-C | 063-0500-MAN150 | 149-TC18 | SWC45/50 | 152-104B |
| **SDA500/6-1AC** | 068-0500-2DENPC | 061A-0500-C | 060A-0500-C | 063-0500-MAN150 | 149-TC12 | SWC45/50 | 152-104B |
| **SDA560/4-1AC** | 068-0560-2DENPC | 061A-0560-C | 060A-0560-C | 063-0560-MAN150 | 149-TC110 | SWC56/63 | 152-104B |
| **SDA630/6-1AC** | 068-0630-2DENPC | 061A-0630-C | 060A-0630-C | 063-0630-MAN200 | 149-TC18 | SWC56/63 | 152-104B |

* Consists of Flexible Connections, Matching Flanges, AV Mounts and Mounting Feet.

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# RAPTOR SDA

## Accessories

AC

### Three Phase

| Product Code | Ancillary Pack* | AV Mounts (set of 4) | Flanged Silencers 1D Podded | Flanged Silencers 1D Unpodded | Flanged Silencers 2D Podded | Flanged Silencers 2D Unpodded |
|---|---|---|---|---|---|---|
| **SDA400/4/6-3AC** | APK400SCD/001 | 062-001 | 068-0400-1DEPC | 068-0400-1DENPC | 068-0400-2DEPC | 068-0400-2DENPC |
| **SDA450/4/6-3AC** | APK450SCD/001 | 062-001 | 068-0450-1DEPC | 068-0450-1DENPC | 068-0450-2DEPC | 068-0450-2DENPC |
| **SDA500/4/6-3AC** | APK500SCD/002 | 062-002 | 068-0500-1DEPC | 068-0500-1DENPC | 068-0500-2DEPC | 068-0500-2DENPC |
| **SDA560/4/6-3AC** | APK560SCD/002 | 062-002 | 068-0560-1DEPC | 068-0560-1DENPC | 068-0560-2DEPC | 068-0560-2DENPC |
| **SDA630/4/6-3AC** | APK630SCD/002 | 062-002 | 068-0630-1DEPC | 068-0630-1DENPC | 068-0630-2DEPC | 068-0630-2DENPC |
| **SDA630/6/8-3AC** | APK630SCD/002 | 062-002 | 068-0630-1DEPC | 068-0630-1DENPC | 068-0630-2DEPC | 068-0630-2DENPC |

| Product Code | Powder Coated Matching Flanges (each) | Powder Coated Mounting Feet (each) | Standard Ambient Flexible Connectors (each) | Transformer Controller | Wall Cowl |
|---|---|---|---|---|---|
| **SDA400/4/6-3AC** | 061A-0400-C | 060A-0400-C | 063-0400-MAN150 | 149-TC33 | SWC35/40 |
| **SDA450/4/6-3AC** | 061A-0450-C | 060A-0450-C | 063-0450-MAN150 | 149-TC33 | SWC45/50 |
| **SDA500/4/6-3AC** | 061A-0500-C | 060A-0500-C | 063-0500-MAN150 | 149-TC33 | SWC45/50 |
| **SDA560/4/6-3AC** | 061A-0560-C | 060A-0560-C | 063-0560-MAN150 | 149-TC33 | SWC56/63 |
| **SDA630/4/6-3AC** | 061A-0630-C | 060A-0630-C | 063-0630-MAN200 | 149-TC310 | SWC56/63 |
| **SDA630/6/8-3AC** | 061A-0630-C | 060A-0630-C | 063-0630-MAN200 | 149-TC33 | SWC56/63 |

* Consists of Flexible Connections, Matching Flanges, AV Mounts and Mounting Feet.

# RAPTOR SDA

## Accessories

EC

### Single Phase

| Product Code | Ancillary Pack* | AV Mounts (set of 4) | EC Electronic Controller | Flanged Silencers 1D Podded | Flanged Silencers 1D Unpodded | Flanged Silencers 2D Podded |
|---|---|---|---|---|---|---|
| **SDA350/4-1EC** | APK350SCD/001 | 062-001 | 149-POT-10 | 068-0350-1DEP | 068-0350-1DENP | 068-0350-2DEP |
| **SDA400/4-1EC** | APK400SCD/001 | 062-001 | 149-POT-10 | 068-0400-1DEPC | 068-0400-1DENPC | 068-0400-2DEPC |
| **SDA450/4-1EC** | APK450SCD/001 | 062-001 | 149-POT-10 | 068-0450-1DEPC | 068-0450-1DENPC | 068-0450-2DEPC |
| **SDA500/4-1EC** | APK500SCD/002 | 062-002 | 149-POT-10 | 068-0500-1DEPC | 068-0500-1DENPC | 068-0500-2DEPC |
| **SDA630/4-1EC** | APK630SCD/002 | 062-002 | 149-POT-10 | 068-0630-1DEPC | 068-0630-1DENPC | 068-0630-2DEPC |

| Product Code | Flanged Silencers 2D Unpodded | Powder Coated Matching Flanges (each) | Powder Coated Mounting Feet (each) | Standard Ambient Flexible Connectors (each) | Wall Cowl | Wiring Diagram |
|---|---|---|---|---|---|---|
| **SDA350/4-1EC** | 068-0350-2DENP | 061A-0350-C | 060A-0350-C | 063-0350-MAN150 | SWC35/40 | 152-00044 |
| **SDA400/4-1EC** | 068-0400-2DENPC | 061A-0400-C | 060A-0400-C | 063-0400-MAN150 | SWC35/40 | 152-00298951 |
| **SDA450/4-1EC** | 068-0450-2DENPC | 061A-0450-C | 060A-0450-C | 063-0450-MAN150 | SWC45/50 | 152-00044 |
| **SDA500/4-1EC** | 068-0500-2DENPC | 061A-0500-C | 060A-0500-C | 063-0500-MAN150 | SWC45/50 | 152-MOEA03K1 |
| **SDA630/4-1EC** | 068-0630-2DENPC | 061A-0630-C | 060A-0630-C | 063-0630-MAN200 | SWC56/63 | 152-MOEA03K1 |

* Consists of Flexible Connections, Matching Flanges, AV Mounts and Mounting Feet.

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# RAPTOR SDA

## Accessories

EC

### Three Phase

| Product Code | Ancillary Pack* | AV Mounts (set of 4) | EC Electronic Controller | Flanged Silencers 1D Podded | Flanged Silencers 1D Unpodded | Flanged Silencers 2D Podded |
|---|---|---|---|---|---|---|
| **SDA500/4-3EC** | APK500SCD/002 | 062-002 | 149-POT-10 | 068-0500-1DEPC | 068-0500-1DENPC | 068-0500-2DEPC |
| **SDA630/4-3EC** | APK630SCD/002 | 062-002 | 149-POT-10 | 068-0630-1DEPC | 068-0630-1DENPC | 068-0630-2DEPC |

| Product Code | Flanged Silencers 2D Unpodded | Powder Coated Matching Flanges (each) | Powder Coated Mounting Feet (each) | Standard Ambient Flexible Connectors (each) | Wall Cowl | Wiring Diagram |
|---|---|---|---|---|---|---|
| **SDA500/4-3EC** | 068-0500-2DENPC | 061A-0500-C | 060A-0500-C | 063-0500-MAN150 | SWC45/50 | 152-MOEA03K3 |
| **SDA630/4-3EC** | 068-0630-2DENPC | 061A-0630-C | 060A-0630-C | 063-0630-MAN200 | SWC56/63 | 152-MOEA03K3 |

* Consists of Flexible Connections, Matching Flanges, AV Mounts and Mounting Feet.


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# AC ELECTRONIC CONTROLLER

## Accessories

- Stepless speed control allows precise fan speed selection
- Provides easy adjustment of fan duty for commissioning purposes
- TK versions offer means of motor protection via motor thermal contact
- IP51 enclosure
- Stepless speed control
- Minimum and maximum speed pre-set facility
- Suitable for operating temperatures up to 40°C
- Fitted motor protection fuse
- Suitable for two or three wire control

### Overview

TK versions are for use with fans fitted with thermal cut-out protection. In the event of the thermal cut-out, opening the controller will switch off and the trip indicator will be illuminated. Units are complete with illuminated on/off and start button. The start button must be pressed to start the controller once on/off switch is in the on position.

**Single Phase** 220V to 240V / 50Hz

| Product Code | Max Peak Current Amps | Weight kg | IP Rating |
|---|---|---|---|
| **149-EL31** | 3 | 0.35 | IP51 |
| **149-EL61** | 6 | 0.40 | IP51 |
| **149-EL101** | 10 | 0.80 | IP51 |

For controllers with TK function add suffix TK, EL21, EL41 and EL101 are not available with this option.

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# AV MOUNTS

## Accessories

- Fits directly to mounting feet
- Rubber with steel insert
- Supplied as set of 4, complete with fixings

| Product Code | A | B | C | D | E | F | G | Weight kg |
|---|---|---|---|---|---|---|---|---|
| 062-001 | 64 | 50 | 43 | 5.5 | 20 | M6 | Ø7 | 0.040 |
| 062-002 | 64 | 50 | 43 | 5.5 | 20 | M6 | Ø7 | 0.040 |

Dimensions are in mm.


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# EC ELECTRONIC CONTROLLER

## Accessories

- EC Type fans
- Variable Speed Drives (Inverters)

EC

| Product Code |
| --- |
| 149-POT-10 |

# FLANGED SILENCER

## Accessories

- Ideal for bolting directly to fan flange
- Ideal for all axial fans
- Ideal for cross talk elimination
- Ideal for flexible or spiral ducting

### Overview

Elta Fans are able to provide 2 types of cylindrical silencers as standard; Type DENP (without pod) and DEP (with pod), these are categorised as follows; Compact Silencers (ENP / EP), Standard Silencers (ENP / EP / Melinex).

### Construction

Both types are rigidly constructed in galvanised sheet steel, with a highly absorbent sound attenuating lining between the outer casing and the inner perforated steel lining. The end faces of the silencer has a series of threaded holes for direct mounting to the fixing flange/flexible collar. The EP (podded versions) will provide an improved level of attenuation. The inner acoustic pod is constructed from perforated steel sheet with a sound absorbent infill.

Melinex lined silencers must be used to prevent grease impregnation into the acoustic media for kitchen extract applications as prescribed in DW/172 HVAC Specification For Kitchen Ventilation Systems. For Melinex insertion losses, please contact Elta Fans. Silencers can be provided with differing lengths: 1D = 1 times diameter, 2D = 2 times diameter. The Velocity through podded silencer should not exceed 15m/s.

### Silencer Attenuation

To determine the sound level of a fan fitted with a silencer, the dynamic insertion loss should be subtracted from the sound power level spectrum (dBW) of the fan. This should be done for the entire octave band mid-frequency spectrum. The fan dBW ratings and silencer attenuation apply equally to in duct applications, with a silencer connected between the fan and the duct system.

### Dynamic Insertion Loss

The silencer attenuation is defined as the “dynamic insertion loss”. The values quoted in the tables represent the difference between the sound power level of a fan and silencer combination (dBW) and that of the fan alone (dBW). The dynamic insertion losses shown are the attenuations recorded under ideal working conditions. The achieved attenuation will vary according to the air velocity and flow pattern in the airways. Noise regeneration can occur at higher velocities, especially in EP silencers.

### Square / Rectangular Silencers

In highly noise sensitive areas, where the circular silencers cannot achieve the necessary attenuation levels, Elta can design and build optional splitter silencers for greater effect.

# FLANGED SILENCER

## Dynamic Insertion Loss & Pressure Graphs

### Dynamic Insertion Loss

| Fan Size | Silencer Length | Silencer Type | Insertion Loss @ Octave Band (Hz) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 0250 | 1D | ENP | -2 | -5 | -6 | -9 | -13 | -11 | -6 | -6 |
| | | EP | -4 | -6 | -8 | -11 | -14 | -16 | -11 | -10 |
| | 2D | ENP | -4 | -7 | -10 | -15 | -19 | -16 | -12 | -9 |
| | | EP | -7 | -10 | -15 | -16 | -15 | -17 | -13 | -13 |
| 0315-0560 | 1D | ENP | -2 | -5 | -6 | -9 | -13 | -11 | -6 | -6 |
| | | EP | -4 | -6 | -8 | -11 | -18 | -19 | -17 | -14 |
| | 2D | ENP | -4 | -8 | -12 | -17 | -23 | -17 | -12 | -10 |
| | | EP | -7 | -10 | -12 | -21 | -26 | -26 | -24 | -22 |
| 0630 | 1D | ENP | -3 | -4 | -9 | -15 | -15 | -8 | -7 | -6 |
| | | EP | -4 | -6 | -8 | -17 | -23 | -20 | -18 | -10 |
| | 2D | ENP | -6 | -8 | -13 | -22 | -22 | -13 | -12 | -9 |
| | | EP | -8 | -11 | -16 | -27 | -32 | -31 | -29 | -19 |

### Podded Silencers Pressure Graphs

For Ø250 podded pressure losses, please contact Elta Fans.

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# FLANGED SILENCER

## Dimensional Data

### **Compact** Ø400-630

Silencer 1DEPC Podded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0400-1DEPC | 400 | 400 | 500 | 12 | M8 | 438 | 16 |
| 068-0450-1DEPC | 450 | 450 | 602 | 12 | M8 | 487 | 18 |
| 068-0500-1DEPC | 500 | 500 | 652 | 12 | M8 | 541 | 22 |
| 068-0560-1DEPC | 560 | 560 | 712 | 16 | M10 | 605 | 26 |
| 068-0630-1DEPC | 630 | 630 | 782 | 16 | M10 | 674 | 32 |

Silencer 1DENPC Unpodded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0400-1DENPC | 400 | 400 | 500 | 12 | M8 | 438 | 13 |
| 068-0450-1DENPC | 450 | 450 | 602 | 12 | M8 | 487 | 15 |
| 068-0500-1DENPC | 500 | 500 | 652 | 12 | M8 | 541 | 18 |
| 068-0560-1DENPC | 560 | 560 | 712 | 16 | M10 | 605 | 22 |
| 068-0630-1DENPC | 630 | 630 | 782 | 16 | M10 | 674 | 26 |

Silencer 2DEPC Podded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0400-2DEPC | 400 | 800 | 500 | 12 | M8 | 438 | 26 |
| 068-0450-2DEPC | 450 | 900 | 602 | 12 | M8 | 487 | 31 |
| 068-0500-2DEPC | 500 | 1000 | 652 | 12 | M8 | 541 | 37 |
| 068-0560-2DEPC | 560 | 1120 | 712 | 16 | M10 | 605 | 46 |
| 068-0630-2DEPC | 630 | 1260 | 782 | 16 | M10 | 674 | 57 |

Silencer 2DENPC Unpodded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0400-2DENPC | 400 | 800 | 500 | 12 | M8 | 438 | 22 |
| 068-0450-2DENPC | 450 | 900 | 602 | 12 | M8 | 487 | 27 |
| 068-0500-2DENPC | 500 | 1000 | 652 | 12 | M8 | 541 | 32 |
| 068-0560-2DENPC | 560 | 1120 | 712 | 16 | M10 | 605 | 39 |
| 068-0630-2DENPC | 630 | 1260 | 782 | 16 | M10 | 674 | 48 |

Dimensions are in mm.


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# FLANGED SILENCER

## Dimensional Data

**Standard** Ø250-350

### Silencer 1DEP Podded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0250-1DEP | 250 | 250 | 350 | 8 | M8 | 299 | 9 |
| 068-0315-1DEP | 315 | 315 | 416 | 8 | M8 | 355 | 11 |
| 068-0350-1DEP | 350 | 350 | 452 | 8 | M8 | 395 | 13 |

### Silencer 1DENP Unpodded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0250-1DENP | 250 | 250 | 350 | 8 | M8 | 299 | 7 |
| 068-0315-1DENP | 315 | 315 | 416 | 8 | M8 | 355 | 9 |
| 068-0350-1DENP | 350 | 350 | 452 | 8 | M8 | 395 | 11 |

### Silencer 2DEP Podded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0250-2DEP | 250 | 500 | 350 | 8 | M8 | 299 | 13 |
| 068-0315-2DEP | 315 | 630 | 416 | 8 | M8 | 355 | 17 |
| 068-0350-2DEP | 350 | 700 | 452 | 8 | M8 | 395 | 21 |

### Silencer 2DENP Unpodded

| Product Code | Fan Dia | A | B | C | D | E | Weight kg |
|---|---|---|---|---|---|---|---|
| 068-0250-2DENP | 250 | 500 | 350 | 8 | M8 | 299 | 11 |
| 068-0315-2DENP | 315 | 630 | 416 | 8 | M8 | 355 | 15 |
| 068-0350-2DENP | 350 | 700 | 452 | 8 | M8 | 395 | 18 |

Dimensions are in mm.

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# POWDER COATED MATCHING FLANGES

## Accessories

- Fits directly to fan case flange
- Provides easy connection to flexible connector or ducting
- Powder coated steel (pastel beige, RAL 7032)

| Product Code | Fan Dia. A | B | C | D | E | F | G | Weight kg |
|---|---|---|---|---|---|---|---|---|
| 061A-0250-C | 250 | 306 | 30 | 1.6 | 8 | 7.5 | 286 | 0.5 |
| 061A-0315-C | 315 | 382 | 30 | 1.6 | 8 | 9.5 | 356 | 0.7 |
| 061A-0350-C | 350 | 421 | 30 | 1.6 | 8 | 9.5 | 395 | 1.0 |
| 061A-0400-C | 400 | 466 | 40 | 1.6 | 12 | 9.5 | 438 | 1.2 |
| 061A-0450-C | 450 | 515 | 40 | 1.6 | 12 | 9.5 | 487 | 2.2 |
| 061A-0500-C | 500 | 567 | 45 | 1.6 | 12 | 9.5 | 541 | 2.6 |
| 061A-0560-C | 560 | 636 | 45 | 1.6 | 16 | 11.5 | 605 | 3.0 |
| 061A-0630-C | 630 | 709 | 45 | 1.6 | 16 | 11.5 | 674 | 3.5 |

Dimensions are in mm.


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# POWDER COATED MOUNTING FEET

## Accessories

- For free standing mounting of ducted fans
- Fixes directly to fan case flange
- Powder coated steel (pastel beige, RAL 7032)
- Supplied individually, less fixings

| Product Code | Fan Dia. | A | B | C | D | E | F | Weight kg |
|---|---|---|---|---|---|---|---|---|
| 060A-0250-C | 250 | 200 | 230 | 170 | 20 | 40 | 1.6 | 0.9 |
| 060A-0315-C | 315 | 250 | 280 | 200 | 20 | 40 | 2.0 | 1.0 |
| 060A-0350-C | 350 | 280 | 310 | 225 | 20 | 40 | 2.0 | 1.3 |
| 060A-0400-C | 400 | 220 | 250 | 250 | 20 | 40 | 2.0 | 1.5 |
| 060A-0450-C | 450 | 240 | 275 | 275 | 20 | 40 | 2.0 | 2.0 |
| 060A-0500-C | 500 | 280 | 315 | 315 | 25 | 50 | 2.5 | 2.5 |
| 060A-0560-C | 560 | 320 | 355 | 355 | 25 | 50 | 2.5 | 4.0 |
| 060A-0630-C | 630 | 360 | 400 | 400 | 25 | 50 | 2.5 | 5.0 |

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# STANDARD AMBIENT FLEXIBLE CONNECTOR

## Accessories

- Fit to matching flanges to provide flexible connection
- PVC coating polyester
- Supplied with plated steel band fixings
- Alternative material available to order
- Suitable for temperature between -30°C and +70°C

| Product Code | Fan Dia. A | B | Weight kg |
|---|---|---|---|
| 063-0250-MAN150 | 250 | 150 | 0.5 |
| 063-0315-MAN150 | 315 | 150 | 0.6 |
| 063-0350-MAN150 | 350 | 150 | 0.7 |
| 063-0400-MAN150 | 400 | 150 | 0.9 |
| 063-0450-MAN150 | 450 | 150 | 1.1 |
| 063-0500-MAN150 | 500 | 150 | 1.2 |
| 063-0560-MAN150 | 560 | 150 | 1.3 |
| 063-0630-MAN200 | 630 | 200 | 1.4 |

Dimensions are in mm.


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# TRANSFORMER CONTROLLER

## Accessories

- IP40 enclosure
- Five speed stepped control
- Illuminated on/off switch (single phase units only)
- Fitted Motor Protection type D MCB (single phase units only)
- Suitable for operating temperatures up to 40°C
- Ideal for environments where noise is a primary consideration as these controls do not create magnetic hum associated with some step-less forms of speed control

### Features & Benefits

A range of transformer voltage controllers used to provide five speed step control of single phase or three phase motors where the peak current of the motor does not exceed the rating of the controller. Speed control is via selector switch. Single phase units are complete with illuminated on/off switch.

**Single Phase** 220V to 240V / 50Hz

| Product Code | Max Peak Current Amps | Weight kg | IP Rating |
|---|---|---|---|
| 149-TC12 | 2 | 3 | IP40 |
| 149-TC14 | 4 | 4 | IP40 |
| 149-TC18 | 8 | 6 | IP40 |
| 149-TC110 | 10 | 7 | IP40 |

**Three Phase** 380V to 415V / 50Hz

| Product Code | Max Peak Current Amps | Weight kg | IP Rating |
|---|---|---|---|
| 149-TC33 | 3 | 12 | IP40 |
| 149-TC310 | 10 | 25 | IP40 |

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# WALL COWL

## Accessories

- Protects fan openings prevailing weather conditions
- Minimises resistance to airflow
- Manufactured from GRP - colour (goose wing grey) impregnated into gel coat
- Complete with integral bird screen (galvanised mesh)

| Product Code | A | B | C | Grille Area m² | Weight kg |
|---|---|---|---|---|---|
| **SWC25/31** | 500 | 410 | 325 | 0.088 | 2 |
| **SWC35/40** | 610 | 510 | 390 | 0.140 | 3 |
| **SWC45/50** | 755 | 645 | 470 | 0.217 | 7 |
| **SWC56/63** | 935 | 815 | 555 | 0.345 | 10 |

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# WALL COWL

## Cowl Pressure Drop Curve

1 SWC25/31
2 SWC35/40
3 SWC45/50
4 SWC56/63

Determine pressure loss against required flow rate and add pressure loss value to system design pressure, verify that fan selection can accommodate extra pressure loss.
Original design: flow rate (m³/s) and pressure (Pa), with cowl becomes flow rate (m³/s) and (pressure (Pa) + pressure loss (Pa) from curve).

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# RAPTOR SDA

Notes



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# RAPTOR SDA

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