



# COMPACT SCD

Case Mounted Axial Flow Fan

# COMPACT SCD

## Product Overview

- 7 standard sizes from 315mm to 630mm
- Air volume flow rates up to 4.84 m<sup>3</sup>/s
- Static pressures up to 190 Pa
- Suitable for operating temperatures up to +70°C
- Available in **AC**



**Featuring our high efficiency Series 1 impeller, the Compact SCD makes light work of handling large volumes of air against low resistance. The fan design, construction and finish provide a strong, durable and weatherproofed range.**

### Easy Installation

Fans are supplied with a fitted IP55 terminal box, which allows the fan to be positioned conveniently to incoming electrical inputs.

### Efficient Performance

Impellers are adjustable pitch aerofoil with blades made from high quality GRP. Combined with increased blade chord and twist, we have achieved 7% higher efficiency, reducing overall energy consumption. Increased blade root reduces stress levels making our range of impellers ideal for arduous fan applications.

### Corrosion Resistance

Specially treated against corrosion, powder coated with polyester epoxy paint.

### Controllability

The Eltadrive range of inverters has been designed encompassing the latest technology and combining robustness with reliability. Using an inverter to control fans via sensors to reduce fan speeds can provide significant cost savings through lower energy consumption.

### Warranty

Each SCD has a 12 month warranty.

### Construction

The all metal fan casing provides a long lasting and robust construction. The units have been constructed from mild steel and suitably treated to ensure full corrosion protection, with both motor and axial impeller mounted within the length of the unit casing. The casing shall have a powder coated polyester epoxy paint finish in Telegrey 1 (RAL 7045).

### Motor

Single phase TENV motors shall be Class F insulated, and fitted with integral thermal overload protection. Motors are protected against dust and water ingress to IP55. Three phase multi-voltage TENV motors are wound for either (Delta) 230V/3Ph/50Hz or (Star) 400V/3Ph/50Hz connection, suitable for speed control when used with the Eltadrive VSD range of frequency inverter controls. Fans are suitable for operating temperatures between -20°C and +70°C fixed speed and -20°C and +50°C when used with a speed controller. Electrical connection to the motor shall be provided by an IP55 terminal box.

### Impeller

Increased twist aerofoil impeller provides improved efficiency and acoustics suitable for higher stress applications.

### Typical Applications

- Factories
- Sports Halls
- Shops
- Industrial Units
- Warehousing
- Schools
- Kitchens

### Contents

Page	Information
3	Performance Range Curves
4	Performance, SFP & Electrical Data
5	Sound Data
6	Dimensional Data
7	Accessories
21	Notes

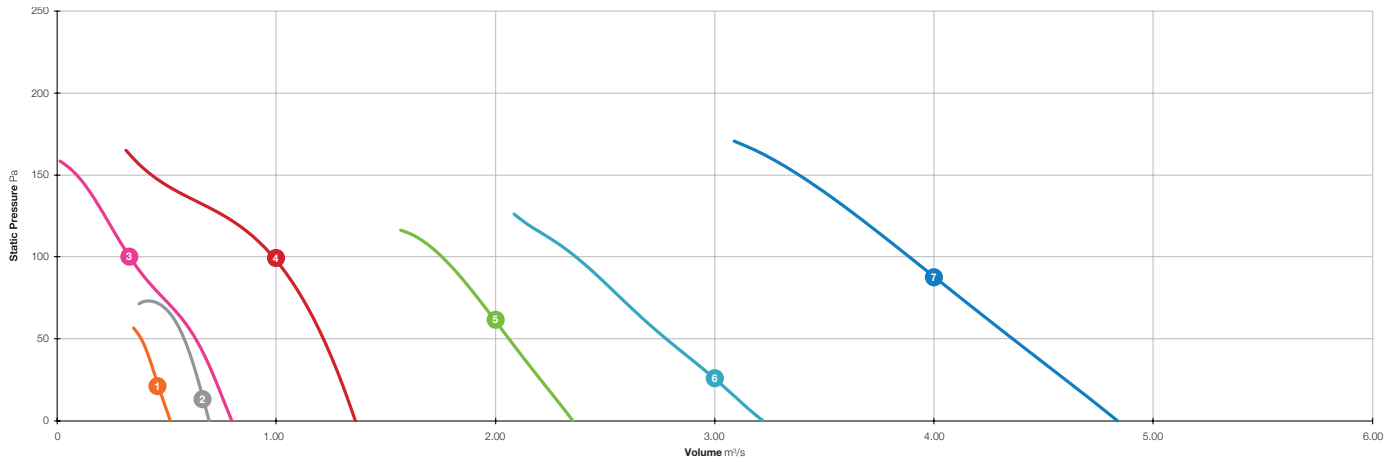
### Product Coding

Code	Reference
<b>SCD</b>	Product Range
<b>315</b>	Diameter (315/350/400...)
<b>/</b>	
<b>4</b>	Number of Poles (2/4/6)
<b>-</b>	
<b>3</b>	Voltage Supply (Single Phase / Three Phase)
<b>AC</b>	Motor Type (AC/EC)
<b>A - Z</b>	Additional Coding (A - Z) Product Variants
e.g.	<b>SCD315 / 4 - 3AC</b>

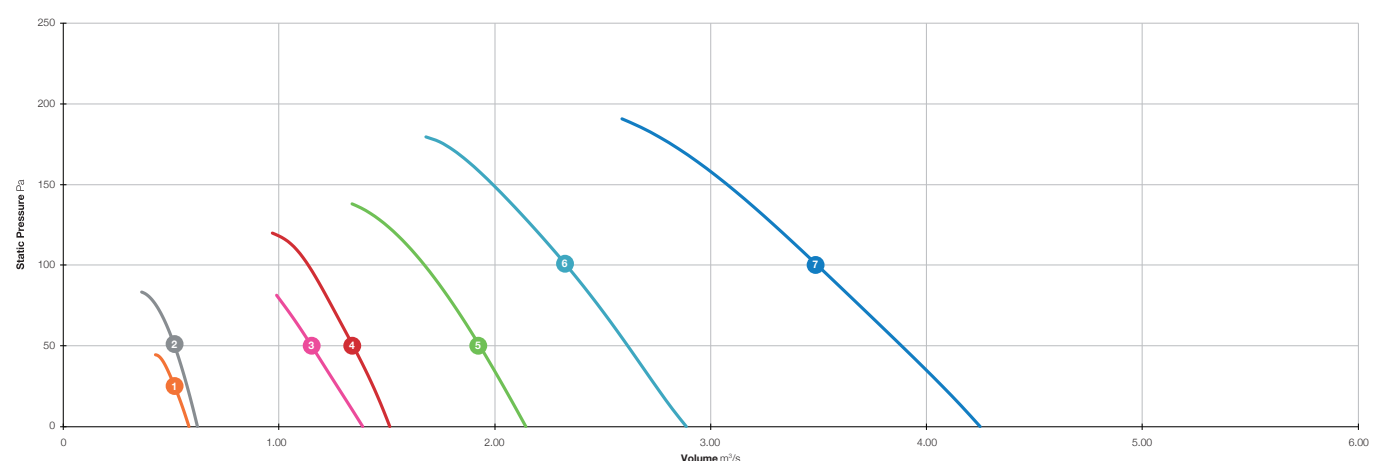
# COMPACT SCD



## Performance Range Curves



- 1 SCD315/4-1AC
- 4 SCD450/4-1AC
- 7 SCD630/4-1AC
- 2 SCD350/4-1AC
- 5 SCD500/4-1AC
- 6 SCD560/4-1AC
- 3 SCD400/4-1AC



- 1 SCD315/4-3AC
- 4 SCD450/4-3AC
- 7 SCD630/4-3AC
- 2 SCD350/4-3AC
- 5 SCD500/4-3AC
- 6 SCD560/4-3AC
- 3 SCD400/4-3AC

# COMPACT SCD



## Performance, SFP & Electrical Data

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	Δ / Y		
SCD315/4-1AC	1395	m³/s	0.515	0.452	0.384	-	-	-	18.1	<125W	0.070	0.51	Mains	Inlet	47
		W/(L/s)	0.20	0.23	0.29	-	-	-						Outlet	47
SCD350/4-1AC	1395	m³/s	0.695	0.644	0.581	-	-	-	27.7	<125W	0.120	0.56	Mains	Inlet	52
		W/(L/s)	0.16	0.18	0.21	-	-	-						Outlet	51
SCD400/4-1AC	1335	m³/s	0.797	0.722	0.632	0.484	0.331	0.090	27.6	<125W	0.121	0.61	Mains	Inlet	47
		W/(L/s)	0.14	0.17	0.21	0.28	0.39	1.57						Outlet	50
SCD450/4-1AC	1375	m³/s	1.360	1.290	1.210	1.110	0.986	0.432	31.7	41	0.318	1.55	Mains	Inlet	57
		W/(L/s)	0.21	0.22	0.25	0.28	0.32	0.73						Outlet	56
SCD500/4-1AC	1295	m³/s	1.980	1.820	1.690	1.550	1.280	-	31.2	40	0.411	1.97	Mains	Inlet	56
		W/(L/s)	0.22	0.25	0.27	0.30	0.35	-						Outlet	57
SCD560/4-1AC	1310	m³/s	3.220	3.006	2.778	2.570	2.365	-	34.4	41	0.882	3.89	Mains	Inlet	60
		W/(L/s)	0.27	0.29	0.32	0.35	0.38	-						Outlet	60
SCD630/4-1AC	1280	m³/s	4.837	4.600	4.359	4.122	3.888	3.385	36.5	41	1.443	6.46	Mains	Inlet	63
		W/(L/s)	0.30	0.31	0.33	0.35	0.37	0.43						Outlet	66

Data provided is at standard air density of 1.2 kg/m³.

ErP data in accordance with Regulation (EU) 327/2011. Measurement category used to determine energy efficiency: C.

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.

# COMPACT SCD



## Performance, SFP & Electrical Data

Three Phase 380V to 415V / 50Hz

Product Code	Speed r/min	Airflow SFP	Airflow m <sup>3</sup> /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	Δ / Y		
SCD315/4-3AC	1440	m <sup>3</sup> /s	<b>0.584</b>	<b>0.517</b>	-	-	-	-	15.9	<125W	0.120	0.33	Y	Inlet	50
		W/(L/s)	0.21	0.24	-	-	-	-						Outlet	49
SCD350/4-3AC	1435	m <sup>3</sup> /s	<b>0.622</b>	<b>0.574</b>	<b>0.517</b>	<b>0.432</b>	-	-	26.2	<125W	0.124	0.34	Y	Inlet	52
		W/(L/s)	0.17	0.19	0.23	0.29	-	-						Outlet	52
SCD400/4-3AC	1405	m <sup>3</sup> /s	<b>1.387</b>	<b>1.269</b>	<b>1.51</b>	<b>1.025</b>	-	-	31.5	40	0.324	0.64	Y	Inlet	51
		W/(L/s)	0.24	0.24	0.29	0.32	-	-						Outlet	55
SCD450/4-3AC	1405	m <sup>3</sup> /s	<b>1.513</b>	<b>1.435</b>	<b>1.343</b>	<b>1.243</b>	<b>1.136</b>	-	38.8	48	0.306	0.60	Y	Inlet	60
		W/(L/s)	0.18	0.19	0.22	0.24	0.27	-						Outlet	59
SCD500/4-3AC	1435	m <sup>3</sup> /s	<b>2.143</b>	<b>2.039</b>	<b>1.930</b>	<b>1.811</b>	<b>1.674</b>	-	38.5	46	0.485	1.07	Y	Inlet	59
		W/(L/s)	0.20	0.22	0.24	0.26	0.29	-						Outlet	60
SCD560/4-3AC	1445	m <sup>3</sup> /s	<b>2.887</b>	<b>2.746</b>	<b>2.615</b>	<b>2.479</b>	<b>2.330</b>	<b>1.989</b>	42.3	49	0.730	1.74	Y	Inlet	61
		W/(L/s)	0.21	0.23	0.26	0.28	0.31	0.37						Outlet	61
SCD630/4-3AC	1435	m <sup>3</sup> /s	<b>4.249</b>	<b>4.073</b>	<b>3.884</b>	<b>3.690</b>	<b>3.494</b>	<b>3.075</b>	37.5	43	1.222	2.70	Y	Inlet	65
		W/(L/s)	0.25	0.27	0.29	0.32	0.34	0.40						Outlet	67

Data provided is at standard air density of 1.2 kg/m<sup>3</sup>.

ErP data in accordance with Regulation (EU) 327/2011. Measurement category used to determine energy efficiency: C.

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.

# COMPACT SCD

## Sound Data

Single Phase 220V to 240V / 50Hz

Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SCD315/4-1AC	1395	Inlet	63	68	73	64	59	53	48	45	75
		Outlet	62	71	73	64	61	55	49	48	76
SCD350/4-1AC	1395	Inlet	63	82	77	68	62	60	55	48	83
		Outlet	64	82	75	68	63	60	55	49	83
SCD400/4-1AC	1335	Inlet	58	64	59	61	64	62	54	44	70
		Outlet	61	75	71	68	66	62	55	48	78
SCD450/4-1AC	1375	Inlet	75	81	83	76	67	64	59	54	86
		Outlet	80	81	82	74	67	66	60	56	86
SCD500/4-1AC	1295	Inlet	67	80	81	75	69	66	61	55	84
		Outlet	68	79	81	74	70	68	63	58	84
SCD560/4-1AC	1310	Inlet	75	80	80	79	76	69	64	63	86
		Outlet	77	79	80	78	75	70	68	67	85
SCD630/4-1AC	1280	Inlet	77	79	77	80	79	76	75	72	86
		Outlet	79	81	82	83	83	78	74	72	89

Data provided at standard air density of 1.2 kg/m<sup>3</sup>.

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.

# COMPACT SCD



## Sound Data

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

Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SCD315/4-3AC	1440	Inlet	67	72	78	66	61	56	51	46	80
		Outlet	68	74	76	66	61	57	53	50	79
SCD350/4-3AC	1435	Inlet	68	82	77	70	63	59	54	48	84
		Outlet	69	83	77	69	64	60	55	50	84
SCD400/4-3AC	1405	Inlet	69	70	66	67	68	65	60	53	76
		Outlet	71	80	77	72	70	66	63	59	83
SCD450/4-3AC	1405	Inlet	77	83	85	79	70	67	62	57	88
		Outlet	82	83	84	77	70	68	63	59	88
SCD500/4-3AC	1435	Inlet	70	82	84	78	72	69	65	59	87
		Outlet	71	82	84	77	73	71	67	62	87
SCD560/4-3AC	1445	Inlet	74	81	82	80	77	72	68	64	87
		Outlet	76	81	81	79	76	73	70	67	86
SCD630/4-3AC	1435	Inlet	74	80	79	81	80	78	78	73	88
		Outlet	78	83	83	84	83	79	75	71	90

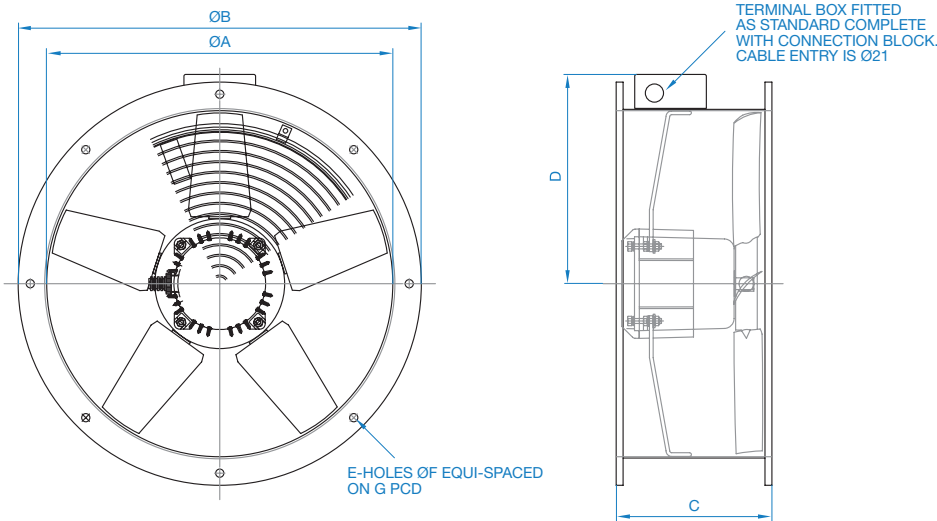
Data provided at standard air density of 1.2 kg/m<sup>3</sup>.  
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.  
 The Sound Power Level Spectra are in dB re-1pW.

# COMPACT SCD



## Dimensional Data

Product Code	A	B	C	D	E	F	G	Weight kg
SCD315/4-1AC	315	382	180	207	8	10	356	9
SCD315/4-3AC	315	382	180	207	8	10	356	9
SCD350/4-1AC	350	421	180	224	8	10	395	10
SCD350/4-3AC	350	421	180	224	8	10	395	10
SCD400/4-1AC	400	466	190	249	8	10	438	12
SCD400/4-3AC	400	466	190	249	8	10	438	12
SCD450/4-1AC	450	515	190	274	12	10	487	14
SCD450/4-3AC	450	515	190	274	12	10	487	14
SCD500/4-1AC	500	567	250	300	12	10	541	21
SCD500/4-3AC	500	567	250	300	12	10	541	21
SCD560/4-1AC	560	636	250	330	16	12	605	23
SCD560/4-3AC	560	636	250	330	16	12	605	23
SCD630/4-3AC	630	709	250	365	16	12	674	30
SCD630/4-3AC	630	709	250	365	16	12	674	30



Dimensions are in mm.



# COMPACT SCD



## Accessories

### Single Phase

Product Code	Transformer Controller	Ancillary Pack*	AV Mounts (set of 4)**	Flanged Silencer 1D Podded	Flanged Silencer 1D Unpodded
<a href="#">SCD315/4-1AC</a>	149-TC12	APK315SCD/001	062-001	068-0315-1DEP	068-0315-1DENP
<a href="#">SCD350/4-1AC</a>	149-TC12	APK350SCD/001	062-001	068-0350-1DEP	068-0350-1DENP
<a href="#">SCD400/4-1AC</a>	149-TC12	APK400SCD/001	062-001	068-0400-1DEPC	068-0400-1DENPC
<a href="#">SCD450/4-1AC</a>	149-TC14	APK450SCD/001	062-001	068-0450-1DEPC	068-0450-1DENPC
<a href="#">SCD500/4-1AC</a>	149-TC18	APK500SCD/002	062-002	068-0500-1DEPC	068-0500-1DENPC
<a href="#">SCD560/4-1AC</a>	149-TC18	APK560SCD/002	062-002	068-0560-1DEPC	068-0560-1DENPC
<a href="#">SCD630/4-1AC</a>	-	APK630SCD/002	062-002	068-0630-1DEPC	068-0630-1DENPC

Product Code	Flanged Silencer 2D Podded	Flanged Silencer 2D Unpodded	Impeller Side Guard	Powder Coated Matching Flanges (each)
<a href="#">SCD315/4-1AC</a>	068-0315-2DEP	068-0315-2DENP	078C-0315-C	061A-0315-C
<a href="#">SCD350/4-1AC</a>	068-0350-2DEP	068-0350-2DENP	078C-0350-C	061A-0350-C
<a href="#">SCD400/4-1AC</a>	068-0400-2DEPC	068-0400-2DENPC	078C-0400-C	061A-0400-C
<a href="#">SCD450/4-1AC</a>	068-0450-2DEPC	068-0450-2DENPC	078C-0450-C	061A-0450-C
<a href="#">SCD500/4-1AC</a>	068-0500-2DEPC	068-0500-2DENPC	078C-0500-C	061A-0500-C
<a href="#">SCD560/4-1AC</a>	068-0560-2DEPC	068-0560-2DENPC	078C-0560-C	061A-0560-C
<a href="#">SCD630/4-1AC</a>	068-0630-2DEPC	068-0630-2DENPC	078C-0630-C	061A-0630-C

Product Code	Powder Coated Mounting Feet (each)	Standard Ambient Flexible Connectors (each)	Wall Cowl	Wiring Diagram
<a href="#">SCD315/4-1AC</a>	060A-0315-C	063-0315-MAN150	SWC25/31	152-500
<a href="#">SCD350/4-1AC</a>	060A-0350-C	063-0350-MAN150	SWC35/40	152-500
<a href="#">SCD400/4-1AC</a>	060A-0400-C	063-0400-MAN150	SWC35/40	152-500
<a href="#">SCD450/4-1AC</a>	060A-0450-C	063-0450-MAN150	SWC45/50	152-500
<a href="#">SCD500/4-1AC</a>	060A-0500-C	063-0500-MAN150	SWC45/50	152-500
<a href="#">SCD560/4-1AC</a>	060A-0560-C	063-0560-MAN150	SWC56/63	152-500
<a href="#">SCD630/4-1AC</a>	060A-0630-C	063-0630-MAN200	SWC56/63	152-500

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

\*\*Supplied as a single mount.

# COMPACT SCD



## Accessories

### Three Phase

Product Code	Ancillary Pack*	AV Mounts (set of 4)**	Eltadrive Variable Speed Drive 1PH-3PH IP66	Eltadrive Variable Speed Drive 3PH-3PH IP66
<a href="#">SCD315/4-3AC</a>	APK315SCD/001	062-001	149-ODE3-12037-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD350/4-3AC</a>	APK350SCD/001	062-001	149-ODE3-12037-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD400/4-3AC</a>	APK400SCD/001	062-001	149-ODE3-12037-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD450/4-3AC</a>	APK450SCD/001	062-001	149-ODE3-12037-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD500/4-3AC</a>	APK500SCD/002	062-002	149-ODE3-12075-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD560/4-3AC</a>	APK560SCD/002	062-002	149-ODE3-12075-1K1B	149-ODE3-14075-3KA1B
<a href="#">SCD630/4-3AC</a>	APK630SCD/002	062-002	149-ODE3-12150-1K1B	149-ODE3-14150-3KA1B

Product Code	Flanged Silencer 1D Podded	Flanged Silencer 1D Unpodded	Flanged Silencer 2D Podded	Flanged Silencer 2D Unpodded	Impeller Side Guard	Powder Coated Matching Flanges (each)
<a href="#">SCD315/4-3AC</a>	068-0315-1DEP	068-0315-1DENP	068-0315-2DEP	068-0315-2DENP	078C-0315-C	061A-0315-C
<a href="#">SCD350/4-3AC</a>	068-0350-1DEP	068-0350-1DENP	068-0350-2DEP	068-0350-2DENP	078C-0350-C	061A-0350-C
<a href="#">SCD400/4-3AC</a>	068-0400-1DEPC	068-0400-1DENPC	068-0400-2DEPC	068-0400-2DENPC	078C-0400-C	061A-0400-C
<a href="#">SCD450/4-3AC</a>	068-0450-1DEPC	068-0450-1DENPC	068-0450-2DEPC	068-0450-2DENPC	078C-0450-C	061A-0450-C
<a href="#">SCD500/4-3AC</a>	068-0500-1DEPC	068-0500-1DENPC	068-0500-2DEPC	068-0500-2DENPC	078C-0500-C	061A-0500-C
<a href="#">SCD560/4-3AC</a>	068-0560-1DEPC	068-0560-1DENPC	068-0560-2DEPC	068-0560-2DENPC	078C-0560-C	061A-0560-C
<a href="#">SCD630/4-3AC</a>	068-0630-1DEPC	068-0630-1DENPC	068-0630-2DEPC	068-0630-2DENPC	078C-0630-C	061A-0630-C

Product Code	Powder Coated Mounting Feet (each)	Standard Ambient Flexible Connectors (each)	Transformer Controller	Wall Cowl	Wiring Diagram
<a href="#">SCD315/4-3AC</a>	060A-0315-C	063-0315-MAN150	149-TC33	SWC25/31	152-611
<a href="#">SCD350/4-3AC</a>	060A-0350-C	063-0350-MAN150	149-TC33	SWC35/40	152-611
<a href="#">SCD400/4-3AC</a>	060A-0400-C	063-0400-MAN150	149-TC33	SWC35/40	152-611
<a href="#">SCD450/4-3AC</a>	060A-0450-C	063-0450-MAN150	149-TC33	SWC45/50	152-611
<a href="#">SCD500/4-3AC</a>	060A-0500-C	063-0500-MAN150	149-TC33	SWC45/50	152-611
<a href="#">SCD560/4-3AC</a>	060A-0560-C	063-0560-MAN150	149-TC310	SWC56/63	152-611
<a href="#">SCD630/4-3AC</a>	060A-0630-C	063-0630-MAN200	149-TC310	SWC56/63	152-611

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

\*\*Supplied as a single mount.



## Building Services

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