# 12V DC MARINE AIR CONDITIONERS — TECHNICAL DATA SHEET

Self-contained variable-speed units · Original and Evolution Lines

## TECHNICAL SPECIFICATIONS

| Specification | SDC08V12 | SDC10V12 | SDC12V12 | SDC15V12E |
|---|---|---|---|---|
| **Voltage** | 12 V DC | 12 V DC | 12 V DC | 12 V DC |
| **Max capacity in heating** | 8,000 BTU/h (2.3 kW) | 9,200 BTU/h (2.7 kW) | 11,600 BTU/h (3.4 kW) | 16,000 BTU/h (4.7 kW) |
| **Maximum absorbed power** | 540 W | 560 W | 600 W | 840 W |
| **Max current** | 45.0 A | 46.7 A | 50.0 A | 70.0 A |
| **Max capacity in cooling** | 8,400 BTU/h (2.5 kW) | 10,200 BTU/h (3 kW) | 12,400 BTU/h (3.6 kW) | 15,100 BTU/h (4.4 kW) |
| **Max power consumption (cooling)** | 420 W | 530 W | 530 W | 790 W |
| **Maximum current (cooling)** | 35.0 A | 44.2 A | 44.2 A | 65.8 A |
| **Capacity in ECO mode (cooling)** | 4,200 BTU/h (1.2 kW) | 4,200 BTU/h (1.2 kW) | 4,700 BTU/h (1.4 kW) | 5,400 BTU/h (1.6 kW) |
| **Power consumption in ECO mode (cooling)** | 160 W | 160 W | 150 W | 170 W |
| **Current in ECO mode (cooling)** | 13.3 A | 13.3 A | 12.5 A | 14.2 A |
| **Width** | 400 mm (15.7") | 400 mm (15.7") | 470 mm (18.5") | 470 mm (18.5") |
| **Height** | 300 mm (11.8") | 300 mm (11.8") | 300 mm (11.8") | 300 mm (11.8") |
| **Depth** | 300 mm (11.8") | 300 mm (11.8") | 330 mm (13") | 330 mm (13") |
| **Weight** | 22 kg (48.5 lb) | 22 kg (48.5 lb) | 28 kg (61.7 lb) | 28 kg (61.7 lb) |
| **Electrical panel dimensions (W × H × D)** | 250 × 250 × 109 mm (9.8 × 9.8 × 4.3") | 250 × 250 × 109 mm (9.8 × 9.8 × 4.3") | 250 × 250 × 109 mm (9.8 × 9.8 × 4.3") | 240 × 250 × 108 mm (9.4 × 9.8 × 4.3") |
| **Minimum air outlet duct diameter** | 125 mm (5") | 125 mm (5") | 125 mm (5") | 152 mm (6") |
| **Seawater connection** | 16 mm (1/2") | 16 mm (1/2") | 19 mm (3/4") | 19 mm (3/4") |
| **Condensate drain connection** | 16 mm (1/2") | 16 mm (1/2") | 16 mm (1/2") | 16 mm (1/2") |
| **Seawater flow / pressure drop (max)** | 1.2 $m^3/h$ – 4.2 $mH_2O$ (5.3 gpm – 13.8 $ftH_2O$) | 1.2 $m^3/h$ – 4.2 $mH_2O$ (5.3 gpm – 13.8 $ftH_2O$) | 1.3 $m^3/h$ – 4.5 $mH_2O$ (5.7 gpm – 14.7 $ftH_2O$) | 1.3 $m^3/h$ – 4.5 $mH_2O$ (5.7 gpm – 14.7 $ftH_2O$) |
| **Seawater flow / pressure drop (min)** | 0.8 $m^3/h$ – 1.9 $mH_2O$ (3.5 gpm – 6.2 $ftH_2O$) | 0.8 $m^3/h$ – 1.9 $mH_2O$ (3.5 gpm – 6.2 $ftH_2O$) | 0.9 $m^3/h$ – 2 $mH_2O$ (4 gpm – 6.6 $ftH_2O$) | 0.9 $m^3/h$ – 2 $mH_2O$ (4 gpm – 6.6 $ftH_2O$) |
| **Refrigerant charge** | 0.28 kg (9.9 oz) R410A | 0.28 kg (9.9 oz) R410A | 0.35 kg (12.3 oz) R410A | 0.39 kg (13.7 oz) R-454C |

*Nominal data. Values stated at maximum power.*

## CONSUMPTION AND PERFORMANCE IN TROPICAL CONDITIONS

*Values measured with seawater at 32 °C (89.6 °F).*

### SDC08V12

| Compressor speed | Cooling capacity (BTU/h) | Power consumed (W) | Current drawn (A) |
|---|---|---|---|
| 100% | 8,400 | 420 | 35.0 |
| 85% | 7,600 | 355 | 29.6 |
| 70% | 6,700 | 290 | 24.2 |
| 55% | 5,800 | 225 | 18.8 |
| **40% ECO** | 4,200 | 160 | 13.3 |

### SDC10V12

| Compressor speed | Cooling capacity (BTU/h) | Power consumed (W) | Current drawn (A) |
|---|---|---|---|
| 100% | 10,200 | 530 | 44.2 |
| 80% | 8,400 | 420 | 35.0 |
| 65% | 7,600 | 355 | 29.6 |
| 55% | 6,700 | 290 | 24.2 |
| 40% | 5,800 | 225 | 18.8 |
| **30% ECO** | 4,200 | 160 | 13.3 |

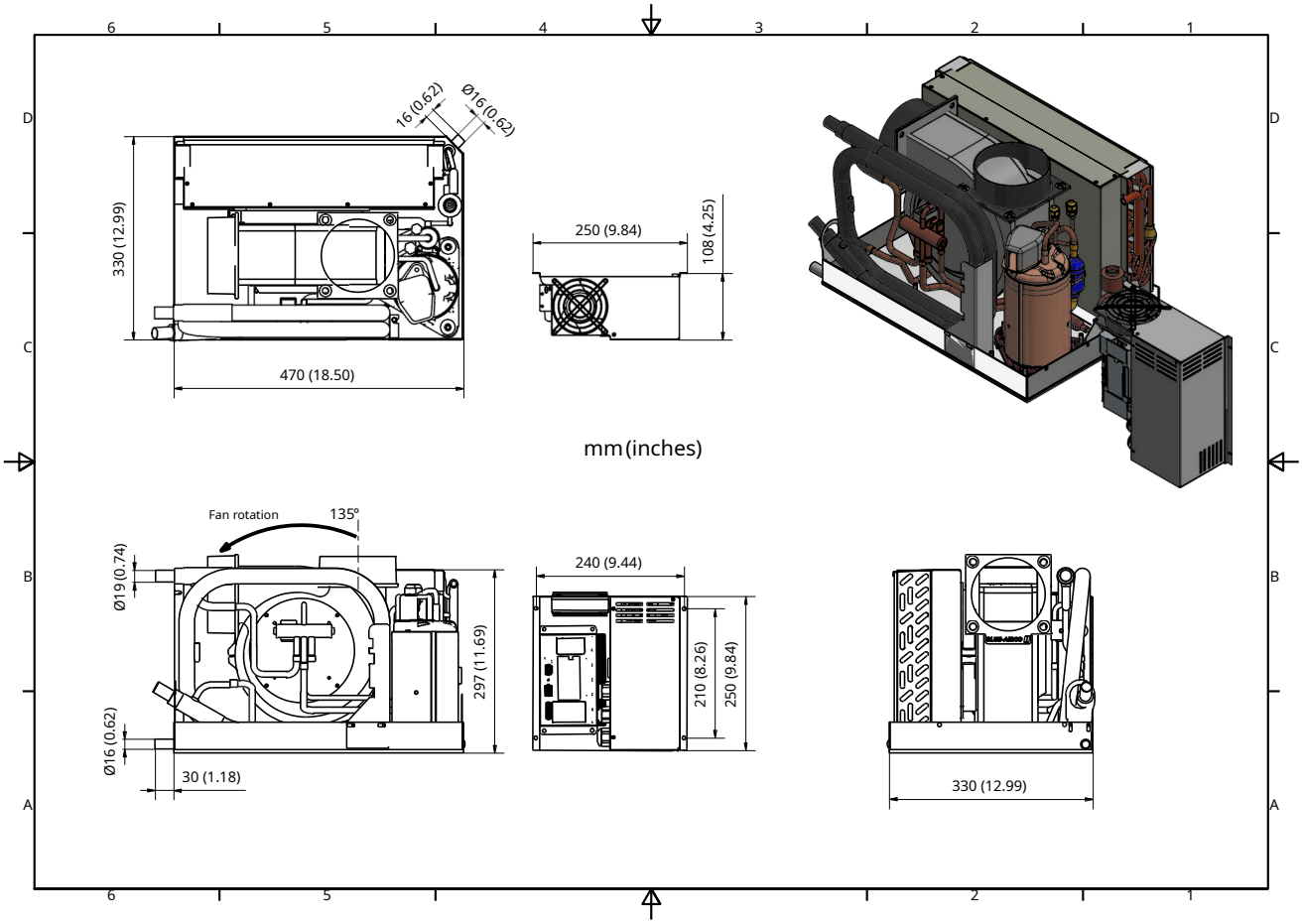
### SDC12V12

| Compressor speed | Cooling capacity (BTU/h) | Power consumed (W) | Current drawn (A) |
|---|---|---|---|
| 100% | 12,400 | 530 | 44.2 |
| 75% | 9,800 | 400 | 33.3 |
| 60% | 8,200 | 330 | 27.5 |
| 45% | 6,800 | 240 | 20.0 |
| **30% ECO** | 4,700 | 150 | 12.5 |

### SDC15V12E

| Compressor speed | Cooling capacity (BTU/h) | Power consumed (W) | Current drawn (A) |
|---|---|---|---|
| 100% | 15,100 | 790 | 65.8 |
| 85% | 13,600 | 620 | 51.7 |
| 70% | 12,600 | 510 | 42.5 |
| 50% | 9,800 | 370 | 30.8 |
| 30% | 6,200 | 200 | 16.7 |
| **25% ECO** | 5,400 | 170 | 14.2 |

# SDC15V12E


16 (0.62)
Ø16 (0.62)
330 (12.99)
470 (18.50)
250 (9.84)
108 (4.25)
mm (inches)
Fan rotation
135°
Ø19 (0.74)
Ø16 (0.62)
30 (1.18)
297 (11.69)
240 (9.44)
210 (8.26)
250 (9.84)
330 (12.99)