

Outdoor Cabinet DC Air Conditioner

Model: CS A 03 E D



Overview

The DC Series Air Conditioner is a high-efficiency cabinet cooling solution designed with full DC -48V inverter technology. It provides precise temperature control and reliable thermal protection for outdoor telecom cabinets, battery cabinets, and equipment enclosures. By maintaining a stable internal environment, the unit helps reduce overheating risks, improve equipment reliability, and support continuous operation in demanding outdoor applications.




Quick Specifications

DC -48V Power Supply	300 W Cooling Capacity	R134a Refrigerant	-40°C to +55°C Ambient Range
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Core Advantages

<p>PID PID Control</p> <p>Three-proof coated main control board with precise PID temperature control.</p>	<p>DC All-DC Design</p> <p>DC fans, DC compressor, and DC control board reduce conversion losses.</p>	<p>55°C High-Temperature Ready</p> <p>R134a system supports reliable operation in T3 and hot ambient conditions.</p>
<p>EER Energy Saving</p> <p>Low power design with EER ≥ 3.5 and SEER ≥ 5.5.</p>	<p>IP55 Outdoor Protection</p> <p>IP55 enclosure protection for cabinet and telecom applications.</p>	<p>RS485 Smart Interface</p> <p>LED display, RS485 communication, and dry contact alarm output.</p>

Typical Applications

<p></p> <p>Telecom Cabinets</p> <p>Reliable thermal control for outdoor telecom and communication cabinets.</p>	<p></p> <p>Battery Cabinets</p> <p>Stable temperature control for battery cabinets and backup power enclosures.</p>	<p></p> <p>Hybrid Energy Storage Cabinets</p> <p>Efficient thermal management for hybrid energy storage and power control cabinets.</p>
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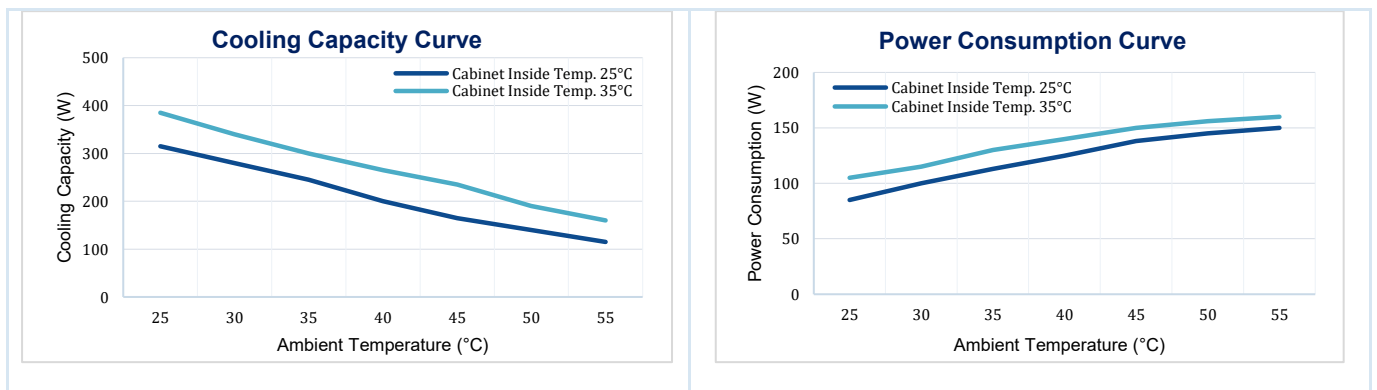
Designed for stable, low-power thermal control in outdoor telecom, battery, and hybrid energy storage cabinet applications.

Technical Parameters

Clean layout based on the original specification data.

Name	Outdoor Cabinet DC Air Conditioner
Model	CS A 03 E D
Mounting Method	Semi-embedded Mounting
Power Supply	-48±20% VDC
Cooling Capacity (L35/L35)	300 W
Power Consumption (L35/L35)	130 W
Cooling Capacity (L35/L55)	180 W
Power Consumption (L35/L55)	160 W
Internal Airflow	110 m³/h
Working Temperature Range	-40°C to +55°C
Max Noise Level	60 dB(A)
IP Grade	IP55
Net Weight	8 kg
Refrigerant	R134a
Dimensions	320x315x140 mm (H × W × D)
Compliance	CE & RoHS
Surface Treatment	Outdoor type powder coating, standard color: RAL7035

Performance Curves



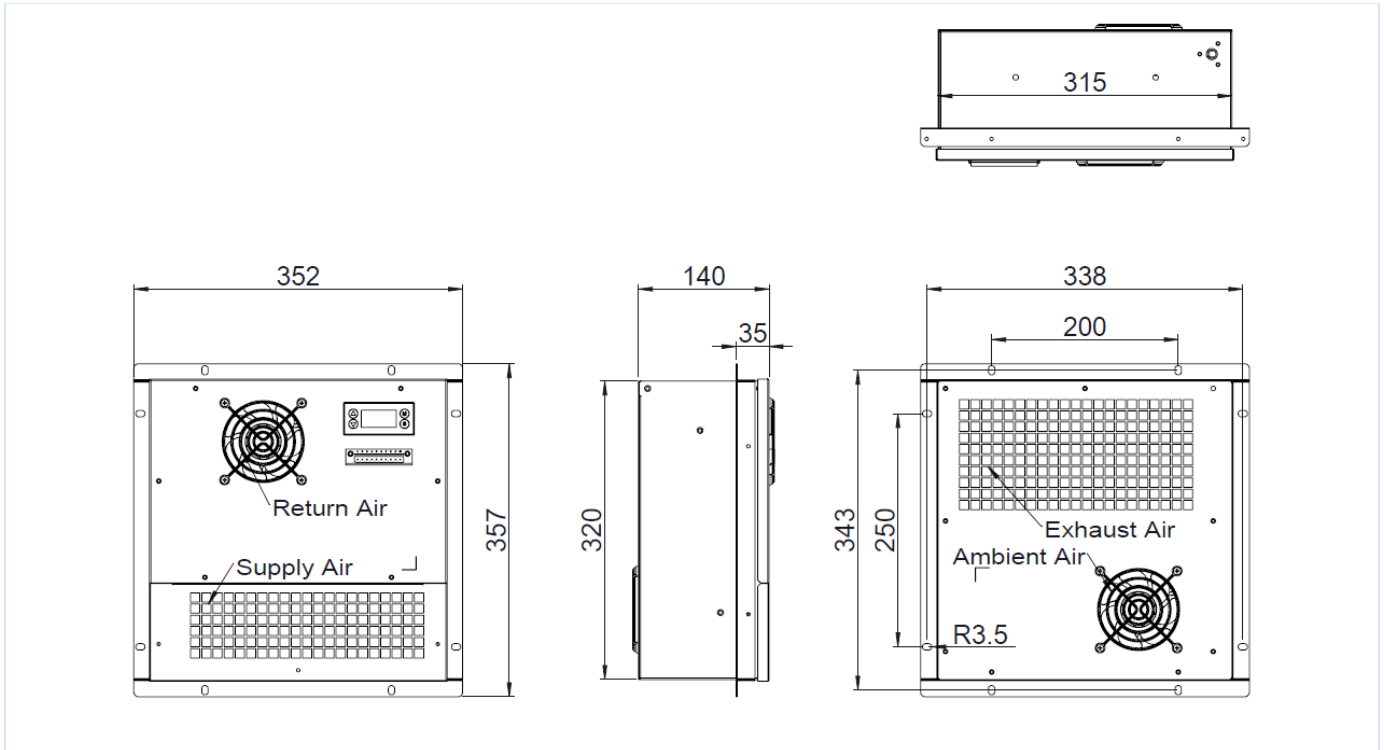
Note: Curves are presented for quick reference under different cabinet inside temperatures and ambient temperatures.

Product Dimension & Installation

Dimensions and installation opening information are retained from the original specification.

Code	Model	Installation
92100	CS A 03 E D	Semi-embedded Mounting

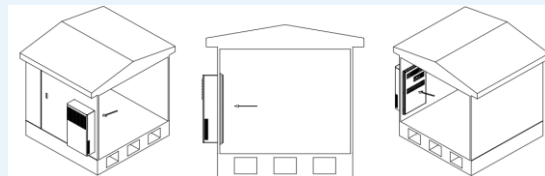
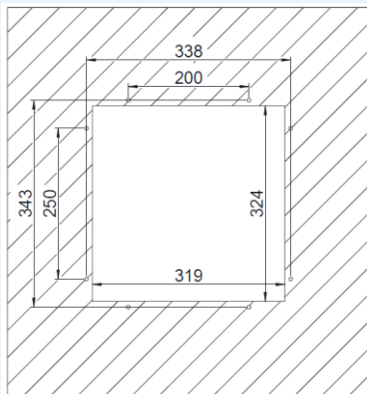
Product Dimension



Installation Opening & Notes

Opening Drawing

Reference cut-out and mounting opening.



Installation Checklist

Check these items before final mounting.

01 Vertical Mounting

Ensure the unit is installed vertically.

02 Airflow Clearance

Keep internal and external air paths unobstructed.

03 Wiring Check

Confirm power and terminal wiring are correct and firm.

04 Protective Cover

If a cover is used, aperture area should be $\geq 70\%$.

Focus: keep air circulation smooth and reserve front service space.

Display Panel & Terminal Instructions





Simplified operation and terminal definition page.

Display Panel



Panel Function

The display panel shows cabinet temperature under normal operation and alarm code when a malfunction occurs.

-  **Setting:** Flashing during setting or self-diagnosis mode.
-  **Cooling:** Lamp on when cooling is active.
-  **External fan:** Lamp on when external fan is running.
-  **Alarm:** Flashing when alarm is active.

Terminal Instructions



Terminal Instructions

Number	Symbol	Definition
1	0V	Positive pole of DC power
2	-48V	Negative pole of DC power
3	PE	Ground wire of DC power
4	ALR_NO	Normal open port of dry contract alarm output
5	ALR_COM	Common port of dry contract alarm output
6	ALR_NC	Normal closed port of dry contract alarm output
7	RS485+	RS485 communication
8	RS485-	RS485 communication
9	ECI	External control input-NO
10	ECI	External control input-NO