cosmotec

your cooling solutions



Protherm CVE-CVO



Wall-mounted air conditioner The solution for **indoor & outdoor** applications

Efficiency

The growing need to reduce consumption has imposed the development of air conditioners strongly oriented to maximum efficiency, while maintaining robustness, reliability and compactness, all characteristics that can be found in **Protherm CVE/CVO** air conditioners.

SUSTAINABILITY

The higher efficiency and the use of less refrigerant gas, supported by the microchannel condenser, reduce resource consumption and CO2 emissions, making Protherm air conditioners more environmentally friendly.

cosmotec, with the *Protherm line*, offers a wide range of air conditioners to meet various customer needs, both for electrical panels in industrial applications and for shelters/cabinets for telecommunications, power distribution, and more.





The **Protherm** models feature high EER (Energy Efficiency Ratio) and consequent economic savings, excellent performance, and reduced stress on components, thanks to:

- Adequate design of components and airflow
- Use of high-performance compressors and fans
- Microchannel condensers, which with their reduced thickness allow for better airflow
- Energy-saving functions (SEM and SEM2)

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Flexibility

Applications

Protherm air conditioners are designed for both Indoor (CVE) and Outdoor (CVO) installations, covering the entire range of applications.

Range and power supply

The wide range of cooling capacities (300...6000W) and electrical power supplies (115V, 230V, 400V, 460V) make Protherm air conditioners the complete solution to meet all market demands.

Certifications

CE, UL Listed, and EAC certifications facilitate market access and avoid customs issues, as well as ensuring time and cost savings for subsequent approvals and increasing reliability.

Stulz Spa is authorized to perform UL tests in its own laboratory and independently prepare test reports.

Temperature

The extensive operating range allows for installation in all industrial environments and the ability to operate even in Outdoor environments with critical temperatures.

Reliability

Condensate dissipator

The presence of the integrated device in the unit provides greater safety in the work environment by eliminating the presence of water, without any electrical consumption and additional components, increasing efficiency and reliability.

Protection degree

The air conditioners are suitable for operation in all industrial environments, ensuring the correct degree of protection even in critical applications (IP54/55, Type 12/4/4x).

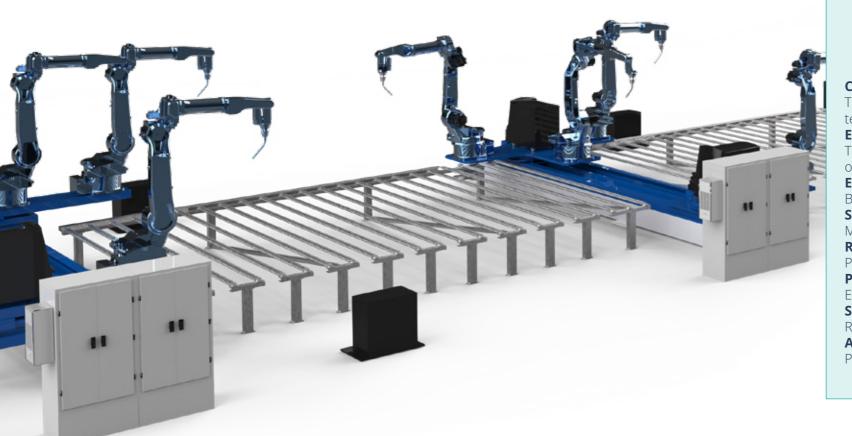
Remote monitoring

The air conditioners can be connected to a Modbus monitoring system for direct exchange with the conditioner. It allows for the saving of operating parameters, the rapid detection of a possible problem for quick service activation.

Sequencing

Some critical applications require system redundancy for conditioning. To meet this critical need, two **Protherm** air conditioners can be put in communication with each other and manage:

- Automatic rotation to balance operating hours
- Mutual support in case one unit has an alarm that prevents operation or if the cabinet temperature exceeds the threshold of the support unit.



EASY INSTALLATION

To make installation and maintenance tasks easy and quick. **Protherm** air conditioners offer several solutions:

- Two inserts to facilitate the positioning and fastening of the unit
- Component functionality verification procedure during unit startup
- Quick electrical connection (CE units)
- Installation and/or replacement/cleaning



XCB, a control for...

Cooling and Heating

The board manages the compressor and fans to cool the panel, but also, optionally, an electric resistor to prevent low temperatures inside the cabinet.

Enhanced Protection

oils, etc.) present in the environment.

Energy Saving

By reducing power consumption through the management of the evaporator fan. Silence

Management of the condenser fan if the application requires low noise levels. Reliability

Precise Cooling

Elimination of hot spots with the possibility of managing a remote probe. Safety

Remote monitoring via RS485 serial port and Modbus RTU protocol. Alerting

Presence of an alarm contact in exchange (NO/NC) and a remote contact/open door.



Not just standard....

Options

- Special color •
- AISI304/316 stainless steel frame
- LN version (only for 230V models)
- . Phase Control Module (only for ~3 models)
- Condenser Protective Treatment
- Electric Heating (only for CVO 230V models)

Accessories

- Air filter (only for painted version)
- Deflector (only for CVE)
- . Keypad (only for CVO)
- Semi-recessed/Recessed Frame .
- IP55 seal (only for CE models) .
- Sequencing Cable
- Modbus Serial Port
- Remote Probe

- The electronic board installed in the internal compartment offers adequate protection against external agents (dust,
- Possibility of system redundancy through sequencing function and communication between two air conditioners.

Applications



Hydrogen

Food & Beverage



Machine tools

Plastic





Energy Storage





Chemical/Pharma



Printing



In environments of certain industrial sectors or applications where air conditioners operate, aggressive and corrosive agents may be present, such as: chloride/sulfide compounds (coastal areas), sulfur oxides/nitrogen oxides (polluted industrial areas), suspended particles in the air/ cutting oils/solvents in factories, presence of iron dust, ammonia, sulfur oxide in the air. These substances lead to various corrosion or oxidation phenomena.Among the main components subject to deterioration are the external frame, electrical components, and refrigeration circuit located on the condensing/external side of the unit.

With two special products, Protherm **CVE0800220Z003** and **CVE2000261Z000**, **cosmotec** offers a conditioning solution with greater resistance to corrosion. The two conditioners are therefore suitable for operating in very critical working conditions and have a longer average life compared to standard conditioners. This is possible thanks to dedicated solutions for protecting elements of the frame, refrigeration circuit, and electronic control, components more prone to possible corrosive attack in certain environments with chemically aggressive substances.

Technical Features

- Wall-mounted Air Conditioners
- Indoor Application (CVE), Outdoor Application (CVO)
- External Installation, CVE (07/15/25)00S semi-recessed mounting available
- Cooling Capacity: 360...5600 W CVE 500...5600 W CVO
- Various power supplies available (115V, 230V, 400/460V)
- Refrigerant: R134a
- XCB electronic board + display (except CVE03 - display available as an accessory for CVO)
- Standard general alarm contacts and remote control (except CVE03)
- Certifications: CE, UL Listed, EAC
- Condensate dissipator starting from CVE11 and on CVE0700S
- Internal circuit protection rating:
- CVE & CVO CE (IP54 (IP55 option); CVE UL: Type 12; CVO UL: Nema 4 (4x with stainless steel option)
- Microchannel condenser
 (from CVE/CVO11 + CVE0700S)
- SEM and SEM² functions (with accessory)
- Sequencing and Modbus (with dedicated accessories)
- Operation down to -40°C ambient temperature for CVO UL Listed models
- Various options / accessories available

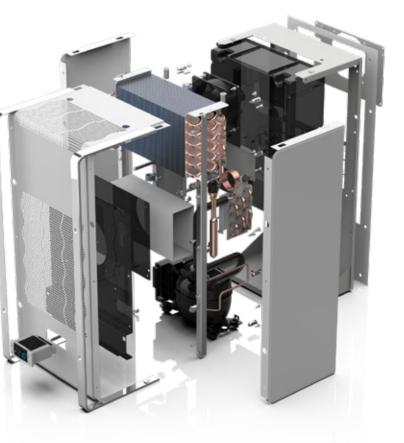
Technical data

		CVE03	CVE05	CVE07S	CVE08	CVE11	CVE15	CVE15S	CVE20	CVE25S	CVE30	CVE40	CVE60
Cooling capacity [W]	@L35L35,230V/50Hz	360	550	800	850	1100	1500	1500	2100	2550	3000	4000	5600
Power supply	115-1-60	•	•		•	•	•		•				
	230-1-50/60	•	•	•	•	•	•	•	•	•	•	•	
	400-2-50 460-2-60		•		•	•	•						
	400-3-50 460-3-60						•	•	•	•	•	•	•
Dimensions [mm]	Altezza	443	642	550	642	913	913/1005	950	1005	1580	1219	1219	1406
	Larghezza	325	315	279	315	413	413	400	413	400	514	514	556
	Profondità	206	221	286	221	248	248/263	304	263	305	347	347	403

		CVO05	CVO08	CV011	CV015	CVO20	CVO40	CVO60
Cooling capacity [W]	L35L35 @230V,50Hz	550	850	1100	1500	2100	4000	5600
	115-1-60							
	230-1-50/60						•	
Power supply	400-2-50 460-2-60							
	400-3-50 460-3-60							
	48Vdc							
	Altezza	636	636	906	906/999	999	1211	1399
Dimensions [mm]	Larghezza	315	315	413	413	413	514	556
	Profondità	233	233	272	272/286	286	370	428









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