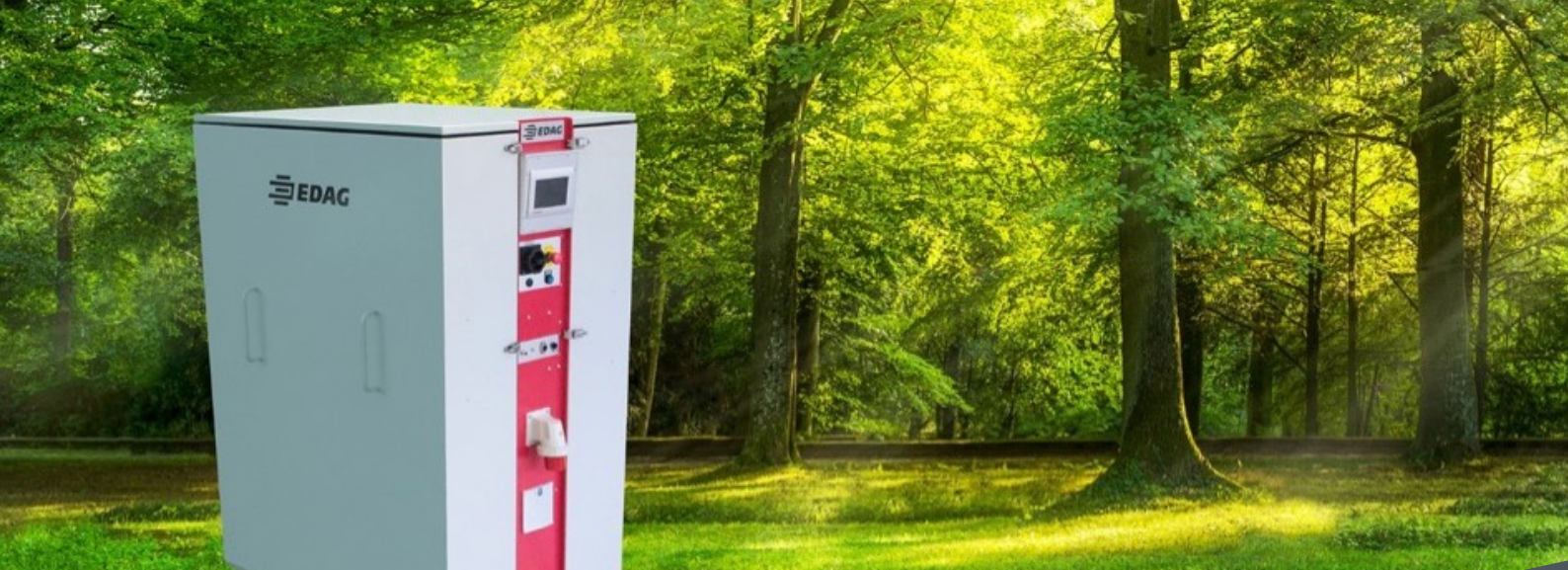


EDcool::$CO_2$

# EDAG Process Temperature Control System

## Precise process temperature control with climate-friendly $CO_2$ refrigerant

EDAG process temperature control units enable the process cooling of a wide range of customer-specific applications with climate-friendly $CO_2$ refrigerant technology.

The infinitely variable control of the flow temperature is carried out via an internally installed PT100/1000 temperature sensor, which can optionally also be connected externally.

A wide variety of different customer-specific additions, from media connections and communication interfaces to power controls, round off these highly flexible temperature control and conditioning units.

### Special features:

- High cooling capacity at low temperatures – climate friendly!
- Increasing energy efficiency through speed-controlled compressors
- Low maintenance costs due to the use of R744 ($CO_2$) as the refrigerant (no inspection due to F-gas regulation)
- Two-stage $CO_2$ booster refrigeration cycle
- Temperature control circuit with 30 l usable volume
- Static pressure in the temperature control circuit adjustable in the range 0 ... 6 $bar_Ü$
- Volume flow rate of temperature control circuit is adjustable (max. 60 l/min, max. 5 bar)
- Temperature control circuit with filling & venting function
- ECO / dynamic mode


### Concrete applications:

- Stator conditioning of electric motors at the EDAG Test Center in Ingolstadt
- Conditioning of power electronics at the EDAG Test Center in Ingolstadt
- Conditioning of HV batteries at the EDAG Test Center in Ingolstadt

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## Technical data

| | |
|---|---|
| **Dimensions & weight** | |
| Dimensions (length x width x height) | 1310 mm x 1020 mm x 1850 mm |
| Weight (empty) | Approx. 920 kg |
| **Electrical power & cooling water supply** | |
| Mains connection three-phase current (factory setting) | 400V, 3 ~50Hz / 32A / 11 kW |
| Cooling water connection (VL 18 °C) | G3/4 IG |
| Min. cooling water differential pressure | 1.5 $bar_{diff}$ |
| Max. cooling water pressure | 6 $bar_{Ü}$ |
| Min./max. ambient temperature | 5°C / 40°C |
| **Heating & cooling capacity with water / glycol** | |
| Temperature range (standard / optional) | -40 … +90°C / -40 … + 140°C |
| at +20°C | 17 kW* |
| at 0°C | 14 kW* |
| at -30°C | 8.0 kW* |
| at -40°C | 6.0 kW* (with water/glycol 40/60) |
| Thermal output (standard / customer-specific) | 6.0 kW / tbd |

* measured at lowest pump speed

## Control types/interfaces

| Internal temp | External temp (VL) | External temp (RL) | Differential pressure | Customer-specific |
|---|---|---|---|---|


## Contact

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