

thermeco₂ ADR ADS

Compressed air refrigeration dryers with the natural refrigerant CO₂





Dryer type	Volume flow	Heating capacity
ADR 4100	4100 m ³ /h	44 kW
ADR 5400	5440 m ³ /h	55 kW
ADR 6600	6650 m ³ /h	70 kW
ADR 11000	11000 m ³ /h	118 kW
ADR 13600	13600 m ³ /h	140 kW
ADR 20500	20450 m ³ /h	210 kW
ADR 27500	27500 m ³ /h	305 kW
ADR 37500	37000 m ³ /h	428 kW
ADR 50300	50300 m ³ /h	555 kW
ADS 68500	68500 m ³ /h	727 kW

Volume flow based on the air compressor inlet condition (20°C, 1 bar), operating gauge pressure 7 bar at a compressed air inlet temperature of 35°C, cooling water temperature 25°C and pressure dew point temperature of 3°C as per DIN ISO 7183.





Compressed air refrigeration dryers for production

The thermeco $_2$ ADR/ADS Series from thermea. Energysystems comprise refrigeration dryers for compressed air systems with high temperature heat reclamation up to 90°C and dryer capacities from 4100 to 68500 m³/h. The machines are particularly suitable for production application, ensuring short amortisation times.

Top energy efficiency in production

- Compressed air drying with simultaneous process heat provision up to 90°C (heat-cold coupling) with up to 100% heat reclamation.
- Compressed air drying without heat utilisation at very good refrigeration COPs through largely subcritical process management
- Trouble-free operation through high temperature recooling even under difficult recooling conditions
- Exact capacity control either multistage or via frequency converter
- Control via PLC Siemens Simatic S7
- Combined operation of several plants possible
- Silicon-free version for the automotive industry

Sustainability by using the natural refrigerant CO,

- Favourable for the climate and the environment through the world's first standard production compressed air dryer series
- Without greenhouse potential and breakdown products that are harmful for the environment
- Simple substance (non-toxic, non-combustible, cost efficient in the long run)
- No regulatory requirements and stipulations

thermeco, machines proven in practice

- Slaughterhouse | Heat reclamation | Heating and hot water preparation 800 kW
- Computer centre | Server cooling | District heating 430 kW
- Aquacenter/Hotel | Geothermal power | Heating and hot water preparation 1675 kW
- Broadcasting building | Air conditioning | Heating and hot water preparation 330 kW
- Automotive manufacturer | Refrigeration dryer for compressed air | 26000 m³/h
- Office building DGNB Standard Gold | Geothermal power | Heating and cooling 200 kW
- Tropical hotel | A/C cold | Hot water preparation 340 kW
- University | Ventilation heat reclamation | Heating and hot water preparation 45 kW

For detailed production information, please request it from:

thermea. Energiesysteme GmbH | Jakobsdorfer Strasse 4-6 | D-01458 Ottendorf-Okrilla Fon: +49 (0)35205 47440 | E-Mail: mail@thermea.de



Made in Germany