

COTES ALL-ROUND THE C35 RANGE



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IDEAL FOR USE IN

- Pharmaceutical production facilities
- Food industry processing facilities
- Cold stores/freezer facilities
- Waterworks
- General humidity management in all kinds of indoor spaces

DEHUMIDIFICATION THE WAY YOU WANT IT

C35 DEHUMIDIFIER
(model shown with PLC)



C35 DEHUMIDIFIER
WITH HEAT RECOVERY MODULE



C35 DEHUMIDIFIER
WITH AIR-COOLED CONDENSATION MODULE



ADVANTAGES

- Sleek, ultra-modern appearance
- Accurate, software-driven monitoring and control
- Exceptional build quality
- Exceptionally low energy consumption
- Better monitoring of service intervals
- Standardised heating and cooling modules
- Stainless steel cabinet
- Easy to clean and keep clean
- Low-noise operation
- Complies with ErP Directive 2015

BENEFITS

- Can be placed even in highly visible public places
- More cost-effective management of air humidity
- Long service life and low maintenance /repair costs
- Low operating costs
- Savings on manpower and maintenance
- Easy to maintain high hygiene levels
- Exact control of all aspects of ingoing and outgoing air flows
- Heat recovery reduces environmental footprint
- Easy to install

OPTIONAL EQUIPMENT

- Post-heating module
- Pre-cooling and post-cooling modules
- Heat recovery module
- Air-cooled condensation module
- Additional temperature and humidity sensors
- Extra insulation

ANCILLARY EQUIPMENT

- Different filter configurations, as required
- Brackets for wall mounting
- Brackets for floor mounting

Cotes All-Round C35 is an innovative range of elegant, versatile dehumidifiers, with moisture removal capacities of 3–6 kg per hour

Modular configurations

The sleek stainless steel cabinet, featuring the best of modern industrial design, makes Cotes All-Round dehumidifiers ideal for installation even in highly visible public locations. Standardised, modular configurations are available so you can easily integrate any heating units, cooling systems, heat recovery, fans, filters, sensors, control set-ups, etc. that you need for your particular operating set-up. Cotes All-Round units also feature built-in electronic monitoring and control capabilities that make it easy to customise the dehumidifier to your exact operating requirements and priorities.

Where they're used

Cotes All-Round dehumidifiers are designed for three main types of use.

C35D units are configured with particular focus on high ΔX values (the driest air possible) in industrial processes where it is essential to keep the levels of moisture in the air under stringent control.

C35E units, on the other hand, are specially configured for effective humidity management in enclosed spaces, and where the main focus is on keeping energy consumption to the minimum.

A specialised C35C design is also available, specially configured and designed for use in a wide range of cold stores and freezer facilities. For further details, please consult the data sheet for C35C.

Want to know more?

Contact Cotes experts at
T +45 5819 6322
or sales@cotes.com

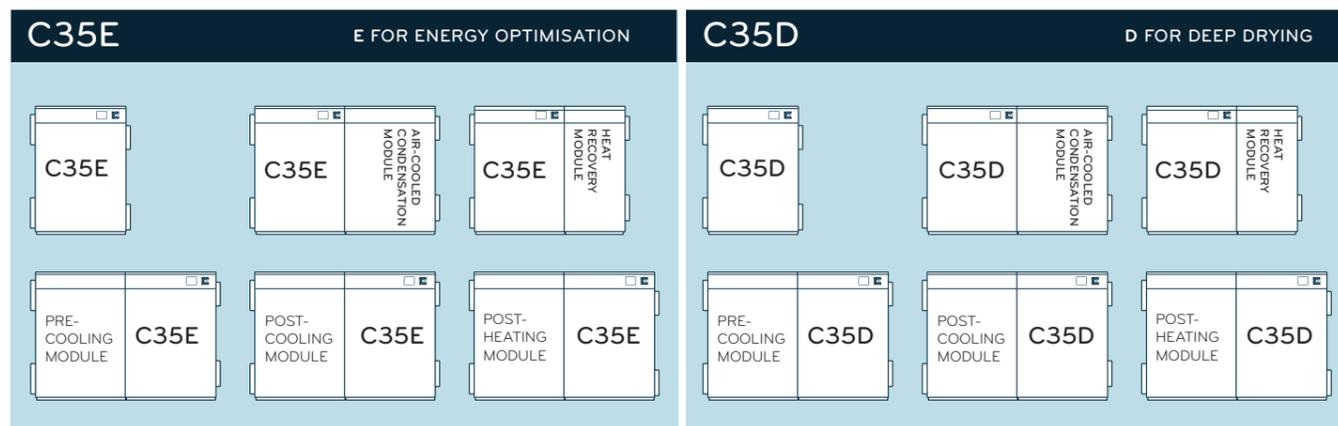
YOUR DECISION ABOUT CONTROL CONFIGURATIONS

A comprehensive range of software-based monitoring and control capabilities are available. You simply decide which configuration you need to have and order accordingly.

| MONITORING AND CONTROL SETUPS | A BASIC | B | C | D |
|---|----------|---|---|---|
| HOURLY COUNTER TO MONITOR RUNNING TIME | X | X | X | X |
| OVERHEATING ALARM | X | X | X | X |
| HUMIDITY CONTROLLER INCLUDING SENSOR (R/H AND DEW POINT) | OPTIONAL | X | X | X |
| SERVICE INDICATOR TO MONITOR MAINTENANCE REQUIREMENTS | | X | X | X |
| DATALOGGING FOR TRACKING CONDITIONS | | X | X | X |
| SERVICE ALARM MONITORING | | X | X | X |
| 3.5-INCH TOUCH PANEL | | X | X | X |
| FILTER AND ROTOR SERVICE ALARM | | X | X | X |
| CONTROL OF REGENERATION AIR FAN | | X | X | X |
| MEASUREMENT AND CONTROL AFTER DEW POINT | | X | X | X |
| TIMER, DAY/NIGHT TIMER AND CYCLE TIMER | | X | X | X |
| NETWORK FOR CONNECTIVITY (optional) | | X | X | X |
| MONITORING AND CONTROL VIA SMARTPHONE APP (optional) | | X | X | X |
| MONITORING AND CONTROL BY COTES SERVICE CENTRE (optional) | | X | X | X |
| CAPACITY CONTROL / MODULATING HEAT CONTROL | | X | X | X |
| POSSIBILITY FOR EXTRA HUMIDITY SENSOR | | | X | X |
| MONITORING AND CONTROL OF REGENERATION AND PROCESS FLOWS | | | X | X |
| QUIET PROGRAM | | | X | X |
| CUSTOM PROGRAM | | | X | X |
| ENERGY SAVING PROGRAM | | | X | X |
| ENERGY+ SAVING PROGRAM (for process applications) | | | | X |
| CONTINUOUS MEASUREMENT OF MOISTURE REMOVAL | | | | X |
| CAPACITY ALARM | | | | X |
| SPECIFIC HUMIDITY (g/kg) PROGRAM | | | | X |

MODULAR EQUIPMENT CONFIGURATIONS

You simply decide which equipment combinations you want for the exact specifications you need. Contact Cotes experts for details or alternative options.



COTES ALL-ROUND THE C35 RANGE

Choice of control configurations

Four different levels of electronic control functionalities are available for Cotes All-Round C35 units, so you can match the dehumidifier to your particular practical requirements and operating priorities.

An easy-to-read 3½-inch touch panel is fitted as standard to give you easy access to your chosen level of performance data, operating alarms and service interval monitoring. You can choose to activate completely standardised settings – where you just turn the unit on and forget about it – or to opt for varying degrees of control over air flow specifications.

You decide on the level of control access you need or want, via smartphones, web-based remote control, etc.

Heat recovery

You can order your All-Round C35 dehumidifier with a highly efficient aluminium cross-flow air-to-air heat exchanger to recover heat from the regeneration air leaving the unit. This thermal energy can then be reused to preheat the incoming regeneration air.

The heat exchanger is placed in a matching stainless steel case with inlets and outlets for the incoming and outgoing regeneration air.

These energy-saving heat recovery units can save as much as 20% on your energy bills, resulting in payback in as little as approx. 24 months.

Cotes heat recovery modules are available factory-fitted as standard, or can be retrofitted to existing All-Round C35 dehumidifiers.

Post-heating

Cotes All-Round dehumidifiers can be fitted with post-heating units after the adsorption rotor, as optional equipment, in order to ensure 100% control of both relative humidity and temperature.

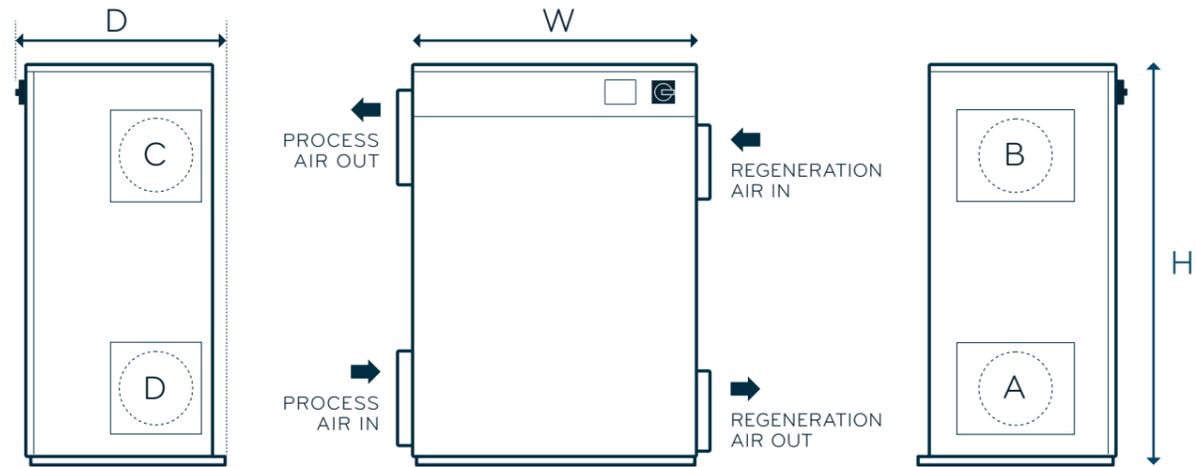
Pre-cooling and post-cooling

Cotes All-Round C35 dehumidifiers can be fitted with a special cooling unit to reduce and/or control the temperature /humidity of the dry air entering and leaving the dehumidifier. A cooling unit fitted before the adsorption rotor is particularly beneficial if the incoming process air is very warm and humid. In such cases, some of the water in the air condenses, thus increasing the efficiency of the adsorption rotor. A cooling unit fitted after the adsorption rotor is also available thus making it possible to control process outlet temperature.

Water condensation

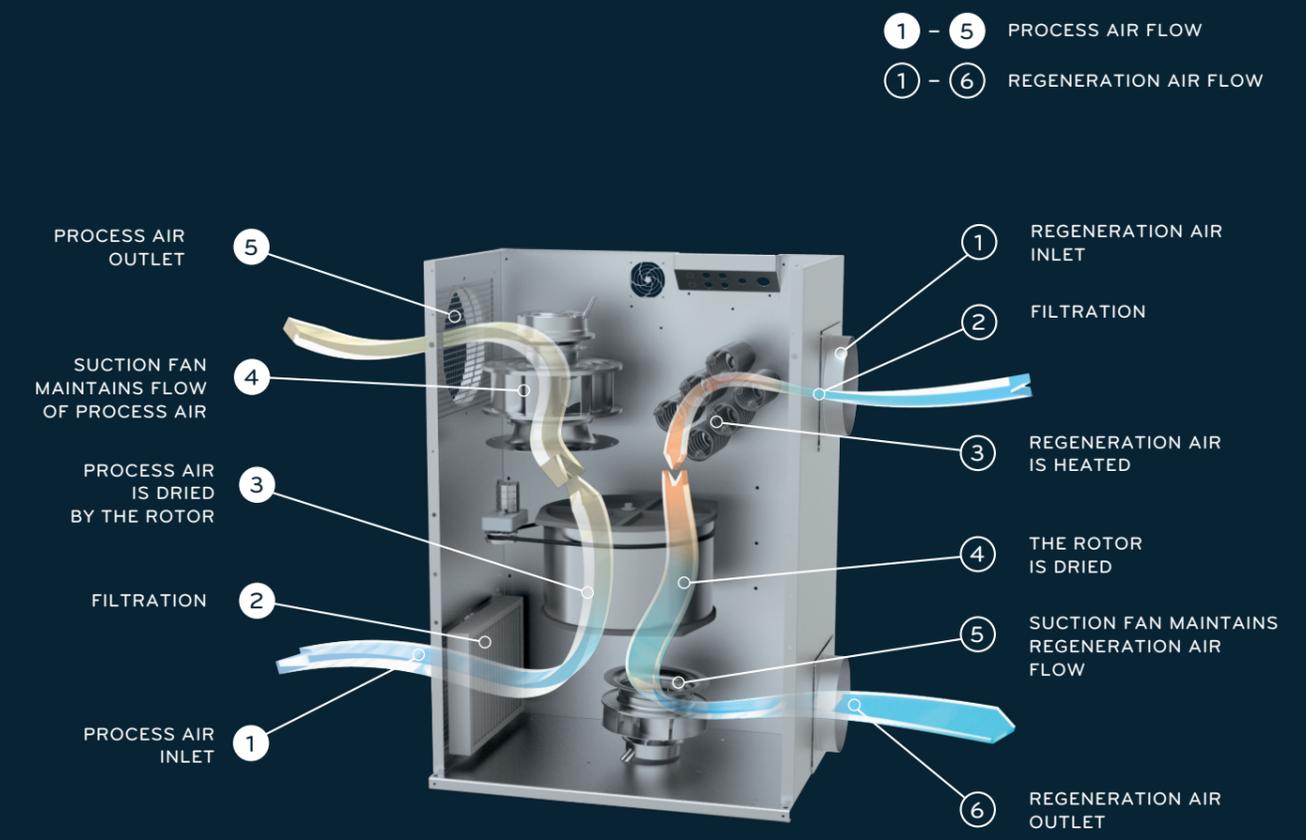
All-Round dehumidifiers can be fitted with an air-cooled condensation unit in order to condense water from the regeneration air leaving the dehumidifier. This is a big benefit when a regeneration air outlet cannot be fitted.

TECHNICAL DATA



| THE C35 RANGE | | C35E | | | | | C35D | |
|--|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 3.3 | 3.8 | 4.5 | 5.1 | 5.6 | 3.2 | 4.5 |
| TECHNICAL DATA | | | | | | | | |
| DRY AIR NOMINAL | m ³ /hour | 750 | 1000 | 1000 | 1000 | 1000 | 405 | 617 |
| REGENERATION AIR NOMINAL | m ³ /hour | 135 | 135 | 168 | 202 | 233 | 135 | 202 |
| VOLTAGE/PHASES * | V/Ph | 400/3PH+N+PE |
| REGENERATION AIR HEATER | kW | 4.6 | 4.6 | 5.7 | 6.9 | 8.0 | 4.6 | 6.9 |
| CONNECTED LOAD | kW | 5.1 | 5.4 | 6.5 | 7.7 | 8.8 | 5.1 | 7.7 |
| EXTERNAL FUSES | A | 10 | 10 | 16 | 16 | 16 | 10 | 16 |
| EXT. PRESSURE PROCESS AIR | Pa | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| EXT. PRESSURE REGENERATION AIR | Pa | 300 | 300 | 300 | 300 | 250 | 300 | 300 |
| CAPACITY AT 20°C, 60%RH | kg/hour | 3.3 | 3.8 | 4.5 | 5.1 | 5.6 | 3.2 | 4.5 |
| SOUND LEVEL (sound pressure) | dB(A) | 53 | 59 | 59 | 59 | 59 | 53 | 53 |
| * Other power connections available by request | | | | | | | | |
| DIMENSIONS AND WEIGHT | | | | | | | | |
| W | WIDTH | mm | 756 | 756 | 756 | 756 | 756 | 756 |
| D | DEPTH | mm | 532 | 532 | 532 | 532 | 532 | 532 |
| H | HEIGHT | mm | 1090 | 1090 | 1090 | 1090 | 1090 | 1090 |
| A | PROCESS AIR INLET | mm | 350x260 | 350x260 | 350x260 | 350x260 | 350x260 | 350x260 |
| B | PROCESS AIR OUTLET | mm | 350x260 | 350x260 | 350x260 | 350x260 | 350x260 | 350x260 |
| A&B | PROCESS AIR DUCT (with ILU adapter) | mm | Ø250 | Ø250 | Ø250 | Ø250 | Ø250 | Ø250 |
| C | REGENERATION AIR INLET | mm | 200x200 | 200x200 | 200x200 | 200x200 | 200x200 | 200x200 |
| D | REGENERATION AIR OUTLET | mm | 200x200 | 200x200 | 200x200 | 200x200 | 200x200 | 200x200 |
| C&D | REG. AIR DUCT (with ILU adapter) | mm | Ø200 | Ø200 | Ø200 | Ø200 | Ø200 | Ø200 |
| WEIGHT | kg | 102 | 110 | 110 | 110 | 110 | 110 | 110 |

HOW IT WORKS



HORIZONTAL ROTOR

In Cotes All-Round units, the silica gel-coated rotor is mounted horizontally. This means all process air enters and leaves on the same side of the casing, while regeneration air enters and leaves on the opposite side.

Any additional heating and cooling units, as well as heat recovery units and other ancillary equipment, can be mounted in an additional module on the side, retaining the sleek appearance of the stainless steel exterior.

MAXIMUM FLEXIBILITY

Cotes All-Round dehumidifiers provide users with an exceptional degree of control over airflow humidity and temperature specifications, via factory-installed control settings.

Standardised, modular configurations are also available for easy integration of a range of heating units, cooling systems, fans, filters, sensors, control set-ups, etc.

EXCEPTIONAL BUILD QUALITY

Like all Cotes dehumidifiers, All-Round units are built of robust, high-quality components and materials that ensure maximum reliability, long service life and rapid return on investment.

CLOSE TO YOU

We have a worldwide network of Cotes experts ready to provide you with solutions to virtually any humidity management requirement.

YOUR LOCAL COTES REPRESENTATIVE

TALK TO US ABOUT WHAT'S POSSIBLE

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