

# COTES ALL-ROUND THE C35 RANGE



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### IDEAL FOR USE IN

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

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

# DEHUMIDIFICATION THE WAY YOU WANT IT

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 C35 units are ideal for controlling air conditions where either temperature and air flow are crucial, or where the focus is on temperature, air flow and relative humidity. They are approved for use in facilities with stringent hygiene requirements, including food processing and pharmaceutical production.

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.

## **Want to know more?**

Contact Cotes experts at  
T +45 5819 6322  
or [sales@cotes.com](mailto: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
CONSTANT PROCESS FLOW ON/OFF	X	X	X	X
HUMIDITY CONTROLLER INCLUDING SENSOR (RH% 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.

### C35E E FOR ENERGY OPTIMISATION

### C35D D FOR DEEP DRYING

# 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 C35 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

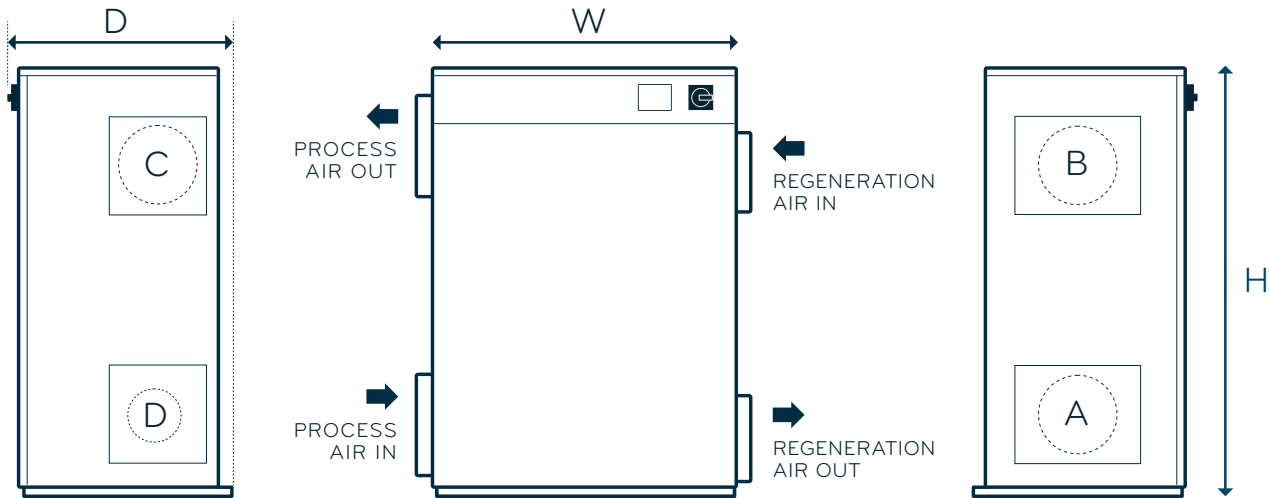
Cotes All-Round C35 dehumidifiers can be fitted with a special cooling unit to reduce and/or control the temperature /humidity of the dry air entering and leaving the dehumidifier. A cooling unit fitted before the adsorption rotor is particularly beneficial if the incoming process air is very warm and 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

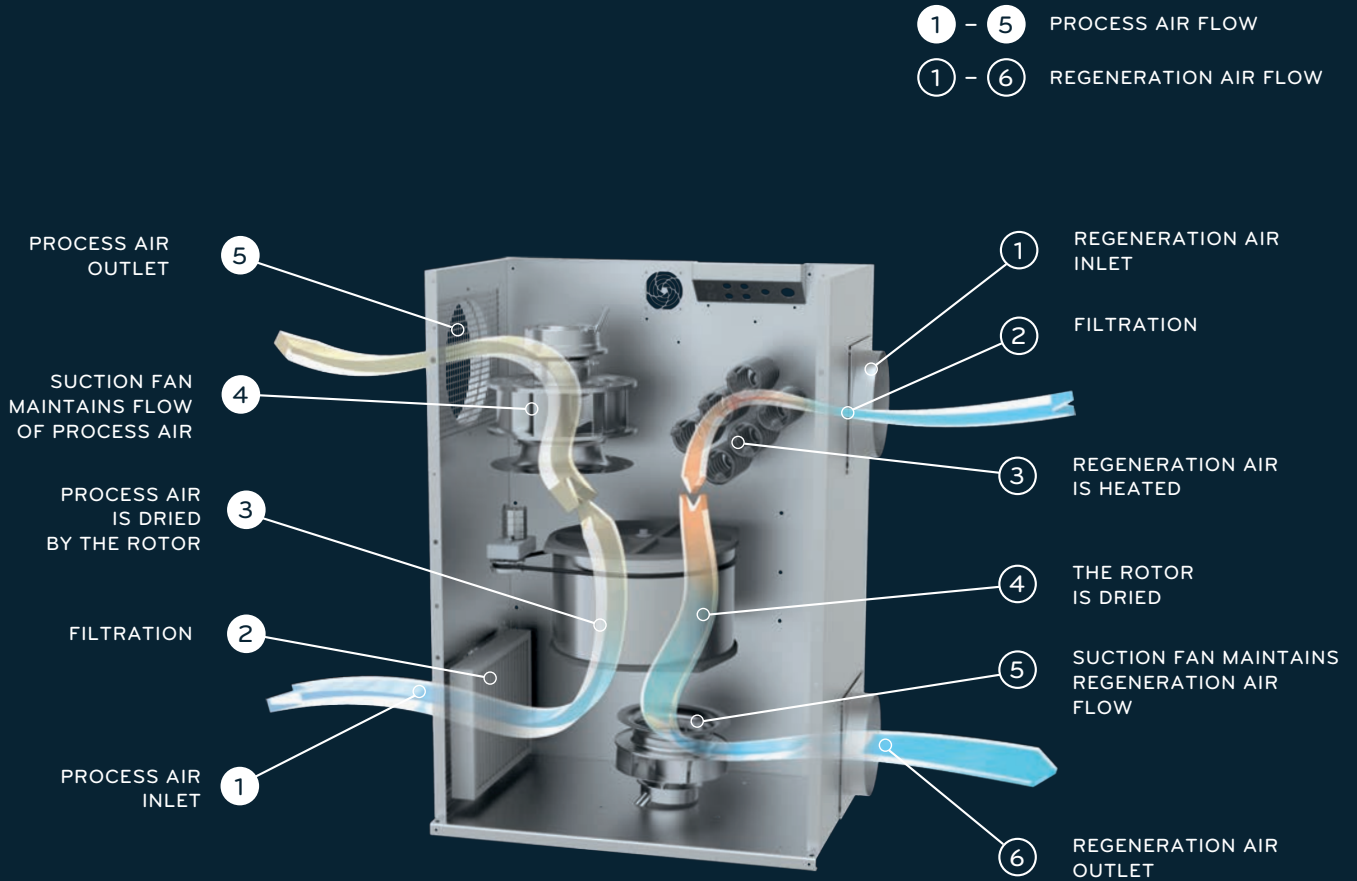
Cotes C35 All-Round dehumidifier can be fitted with an air-cooled condensation unit in order to condense water from the regeneration air leaving the dehumidifier. This is a big benefit when a regeneration air outlet cannot be fitted.

# TECHNICAL DATA



THE C35 RANGE		C35E					C35D	
		3.3	3.8	4.5	5.1	5.6	3.2	4.5
<b>TECHNICAL DATA</b>								
DRY AIR NOMINAL	m <sup>3</sup> /hour	750	1000	1000	1000	1000	405	617
REGENERATION AIR NOMINAL	m <sup>3</sup> /hour	135	135	168	202	233	135	202
VOLTAGE/PHASES *	V/Ph	400/3PH+N+PE	400/3PH+N+PE	400/3PH+N+PE	400/3PH+N+PE	400/3PH+N+PE	400/3PH+N+PE	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
NOMINAL CURRENT CONSUMPTION	A	7.4	7.8	9.4	11.1	12.7	7.4	11.1
MAXIMUM FUSE SIZE	A	10	10	16	16	16	10	16
EXTERNAL PRESSURE PROCESS AIR	Pa	210	210	210	210	210	210	210
EXTERNAL 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								
<b>DIMENSIONS AND WEIGHT</b>								
D DEPTH	mm	532	532	532	532	532	532	532
W WIDTH	mm	756	756	756	756	756	756	756
H HEIGHT	mm	1090	1090	1090	1090	1090	1090	1090
A PROCESS AIR INLET	mm	350x260	350x260	350x260	350x260	350x260	350x260	350x260
B PROCESS AIR OUTLET	mm	350x260	350x260	350x260	350x260	350x260	350x260	350x260
A&B PROCESS AIR DUCT (with ILU adapter)	mm	Ø250	Ø250	Ø250	Ø250	Ø250	Ø250	Ø250
C REGENERATION AIR INLET	mm	200x200	200x200	200x200	200x200	200x200	200x200	200x200
D REGENERATION AIR OUTLET	mm	125x125	125x125	125x125	125x125	125x125	125x125	125x125
C&D REGENERATION AIR DUCT (with ILU adapter)	mm	Ø200	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 setups, 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.



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TALK TO US ABOUT WHAT'S POSSIBLE

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