

# COTES ALL-ROUND THE C65 RANGE



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### IDEAL FOR USE IN

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



COTES ALL-ROUND C65 DEHUMIDIFIER  
(model shown with PLC)

## FLEXIBILITY AND ENERGY-EFFICIENCY

Cotes All-Round C65 is an innovative range of elegant, versatile dehumidifiers, with moisture removal capacities of 7-19 kg per hour.

### 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, approved for high-hygiene use
- 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
- Easy to install in small spaces and crowded locations
- Long service life and low maintenance /repair costs
- Easy, rapid servicing
- Easy to clean and keep clean
- Low operating costs
- Savings on manpower and maintenance
- Accurate control of all aspects of ingoing and outgoing air flows

### OPTIONAL EQUIPMENT

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

### ANCILLARY EQUIPMENT

- Different filter configurations, as required
- Brackets for wall mounting
- Brackets for floor mounting
- Rain covers for process air /regeneration air intakes, when installed outdoors

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 C65 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.

### Choice of dehumidification priorities

Cotes All-Round dehumidifiers are designed for three main types of use. C65D units are configured with particular focus on high  $\Delta X$  values (the driest air possible) in industrial processes where it is essential to keep the levels of moisture in the air under stringent control.

C65E 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 C65C design is also available, specially configured and designed for use in a wide range of cold stores and freezer facilities.

### Want to know more?

Contact Cotes experts at  
T +45 5819 6322  
or [sales@cotes.com](mailto:sales@cotes.com)

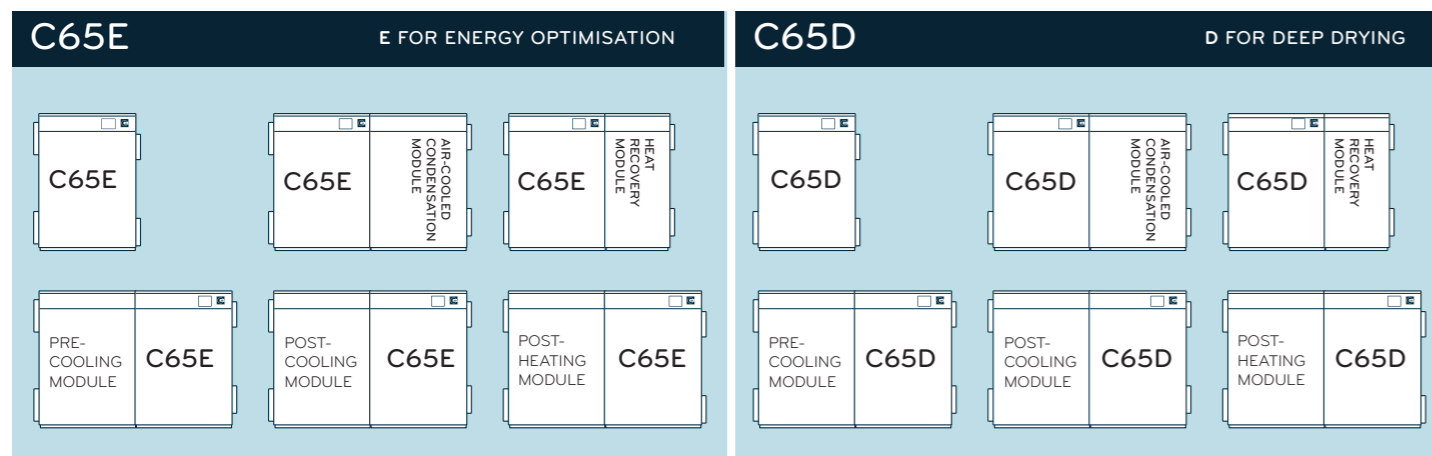
## CONTROL CONFIGURATIONS – YOUR DECISION

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
HOUR 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
5.7-INCH TOUCH DISPLAY		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 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 C65 RANGE

### Choice of control configurations

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

An easy-to-read 5.7-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 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 C65 dehumidifiers.

### Post-heating

Cotes All-Round C65 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 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 particularly hot 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.

### Choice of heating source

Using C65 dehumidifiers, you can use virtually any kind of thermal input – electricity, steam and gas – to heat the flow of regeneration air.

### Maximum flexibility

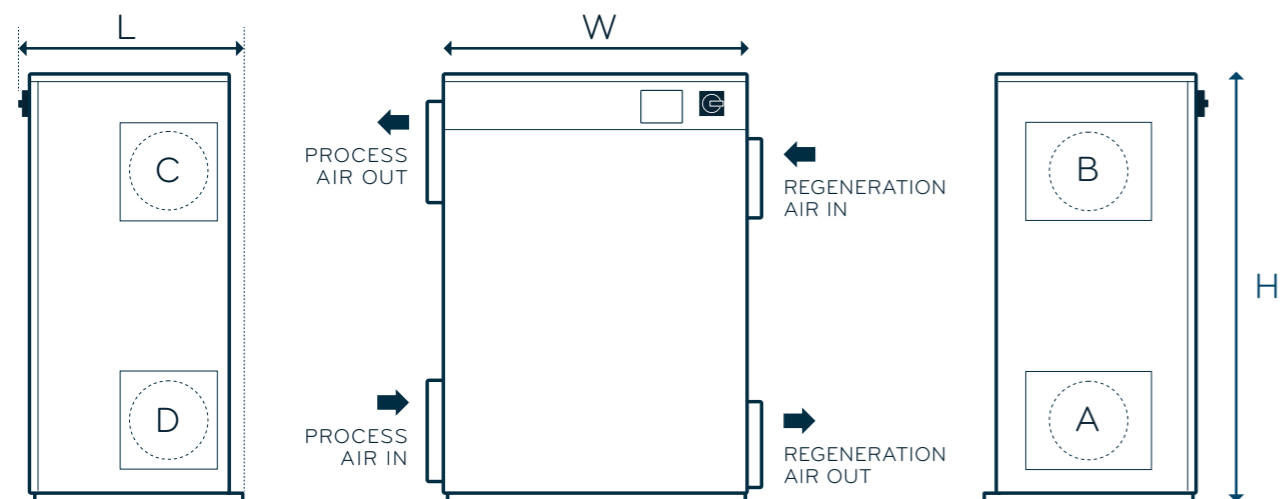
Cotes All-Round dehumidifiers provide users with an exceptional degree of control over airflow humidity and temperature specifications, via factory-installed control settings.

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

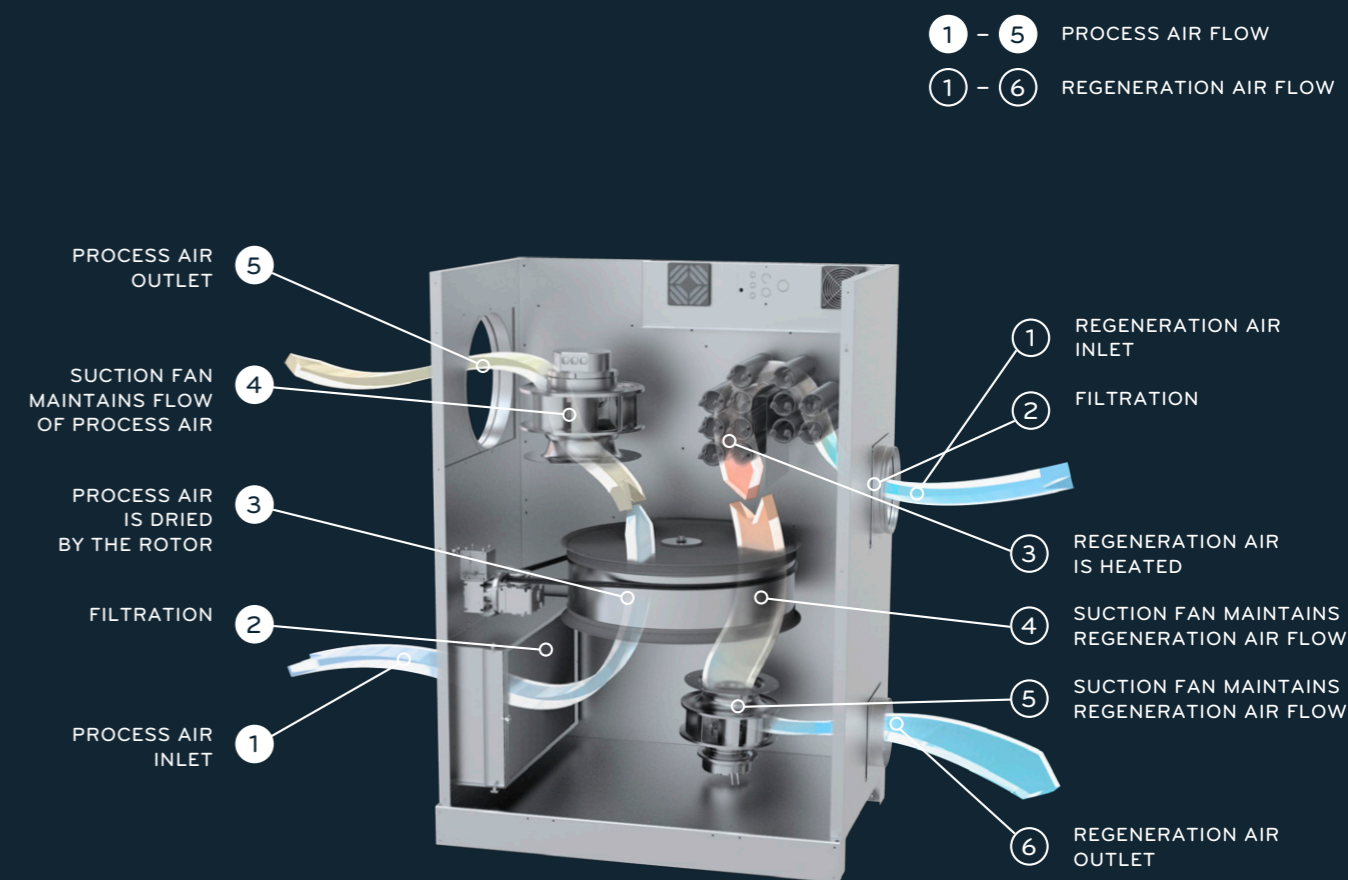
Like all Cotes dehumidifiers, All-Round C65 units are built of robust, high-quality components and materials that ensure maximum reliability, long service life and rapid return on investment.

## TECHNICAL DATA



THE C65 RANGE		C65E				C65D		
		7.8	11.1	15.4	19.1	7.1	10.1	14.0
<b>TECHNICAL DATA</b>								
DRY AIR NOMINAL	m <sup>3</sup> /hour	1900	2600	3700	3700	1100	1500	2200
REGENERATION AIR NOMINAL	m <sup>3</sup> /hour	340	460	670	940	340	460	670
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	10.2	14.4	20.4	28.8	10.2	14.4	20.4
ANCILLARY LOAD	kW	1.18	1.75	3.15	3.55	0.88	1.25	2.05
CONNECTED LOAD	kW	11.4	16.2	23.6	32.4	11.1	15.7	22.5
EXTERNAL FUSES	A	35	35	50	50	20	35	50
EXT. PRESSURE PROCESS AIR	Pa	400	400	500	500	400	400	400
EXT. PRESSURE REGENERATION AIR	Pa	300	400	400	400	300	400	400
CAPACITY AT 20°C, 60%RH	kg/hour	7.8	11.1	15.4	19.1	7.1	10.1	14.0
* Other power connections available by request								
<b>DIMENSIONS AND WEIGHT</b>								
W	WIDTH	mm	1165	1165	1165	1165	1165	1165
L	LENGTH	mm	820	820	820	820	820	820
H	HEIGHT	mm	1615	1615	1615	1615	1615	1615
A	PROCESS AIR INLET	mm	650x400	650x400	650x400	650x400	650x400	650x400
B	PROCESS AIR OUTLET	mm	650x400	650x400	650x400	650x400	650x400	650x400
A&B	PROCESS AIR DUCT (with ILU adaptor)	mm	Ø315	Ø400	Ø400	Ø400	Ø315	Ø400
C	REGENERATION AIR INLET	mm	250x250	250x250	250x250	250x250	250x250	250x250
	REG. AIR INLET DUCT (with ILU adaptor)	mm	Ø250	Ø250	Ø250	Ø250	Ø250	Ø250
D	REGENERATION AIR OUTLET	mm	200x200	200x200	200x200	200x200	200x200	200x200
	REG. AIR OUTLET DUCT (with ILU adaptor)	kg	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200
WEIGHT	kg	200	250	250	250	200	250	250

## 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.

### SAFETY AND HYGIENE

All-Round C65 dehumidifiers are ideal for use wherever high hygiene standards are important. All key components and surface panels are made of high-grade AISI 304 stainless steel for easy cleaning, and there are no awkward corners where dirt can accumulate.

## 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

COTES A/S

DENMARK

+45 5819 6322

SALES@COTES.COM

COTES.COM