

COOLTEG PLUS XC



COLOR SAMPLER:

■ RAL 9005

■ RAL 7035

➤ **CoolTeg Plus XC** in-row units are based on the direct expansion principal. A compressor is integrated into the indoor unit, which is connected to its outdoor condenser.

MAIN ADVANTAGES

- Keeps data center free of water
- Compressor safely positioned inside data center
- Very high energy efficiency and stepless capacity control
- Low noise of outdoor unit
- Variable design and size of outdoor unit
- Operation in wide range of outdoor temperatures
- Perfect oil management for piping system
- Ecological refrigerant R410A

CoolTeg Plus XC		
Indoor unit type	Unit	AC-TXC-42-40/XX-XXX
Connected outdoor unit		AC-COND2-xx-xx/EcoCool
BASIC DATA		
Cooling system	-	Direct expansion
Architecture ¹	-	Open or closed
Nominal cooling capacity ²	kW	42.2
Nominal net cooling capacity ³	kW	39.1
Power supply	V/f/Hz	400/3/50
Running current	A	22.7
Maximum current	A	25.3
Fan power consumption (maximum)	kW	3.1
Compressor power consumption (maximum)	kW	12.3
Nominal airflow ⁴	m ³ /h	9000
Number of radial fans	Pcs	3
Motor fan technology	-	EC
Refrigerant type	-	R410A
Filter class ⁵	-	G4
DIMENSIONS		
Height	mm (U)	1978 (42U), 2111 (45U), 2245 (48U)
Width	mm	400
Depth ⁶	mm	1000 or 1200
Weight – depth 1000 mm, height 42/45/48U	kg	262/270/278
Weight – depth 1200 mm, height 42/45/48U	kg	274/284/294
CONNECTION DIMENSION		
Piping diameter – liquid line	mm	16
Piping diameter – gas line	mm	22

DESCRIPTION:

- The most efficient compressor to date
- Inverter-driven compressor built into internal unit
- Environmentally-friendly refrigerant R410a
- Electronic expansion valve and advanced steering logic
- Stepless capacity control from 20 to 100%
- Oil separator and Trax-oil inside
- Low- and high-pressure safety switches
- Refrigerant valves for easy maintenance

- Operation in outdoor temperatures between -40 °C and +55 °C
 - Distance between indoor and outdoor unit up to 60 m
- Outdoor unit**
- Internal CoolTeg Plus XC unit compatible with any outdoor condenser with variable airflow
 - Outdoor unit for heat rejection should be designed based on the condensing

- temperature of the refrigerant, plus typical max. regional ambient temperatures
- For correct design of outdoor unit, please use our Cool Tool selection software or contact our team of technical specialists
- Local conditions determine which of Conteg's wet or dry (adiabatic) coolers can be deployed
- Conteg is currently developing a new adiabatic cooling unit, EcoCool (compatible with CoolTeg Plus XC), to reduce overall cooling system power consumption

FOLLOW THE STEPS TO SET UP THE DESIRED COOLTEG PLUS UNIT CODE!

AC - 1. - 2. - 3. / 4. 5. - 6. 7. 8.

An example of a correct Code:

AC - TCW - 42 - 30 / 12 A - T O D

1. CoolTeg Plus COOLING SYSTEM	
Code	Options
TCW	Chilled water
TDX	Direct expansion
TDS	DXSmall direct expansion
TXC	Integrated compressor

2. HEIGHT*		
Code	Height (in U)	External height (mm)
42	42	1978
45	45	2111
48	48	2245

* Without plinth and transport trolley

3. WIDTH	
Code	Width (mm)
30	300
40	400*
60	600**

* For XC unit only
** For CW unit only

4. DEPTH	
Code	Depth (mm)
10	1000 mm
12	1200 mm

5. GENERATION	
Code	Options
O	First generation
A	Second generation

6. CONNECTION	
Code	Options
T	Top
B	Bottom

7. ARCHITECTURE	
Code	Options
O	Open architecture
C	Closed architecture – MCL

8. DISPLAY	
Code	Options
D	Door display
W	Without display

BASIC ACCESSORIES FOR COOLTEG PLUS AND COOLTOP COOLING UNITS

PRESSURE CONTROL

- Each unit can control airflow based on temperatures in hot and cold zones
- For better airflow control in contained DC layouts (Contained Hot Aisle, Contained Cold Aisle or Modular Closed Loop), grouped CoolTeg Plus and CoolTop units should be equipped with a Pressure Control accessory, consisting of an Electrical cabinet (with controller, differential pressure meter and power supply)
- Airflow control ensures a perfect environment for servers (no risk of server damage caused by over- or under-pressure)
- Pressure control minimizes power consumption of the entire cooling system due to precision-dispensed conditioned air

TCP2SNMP CONVERTER

- All Conteg precision cooling units can be controlled and monitored individually via free contacts
- Additionally, each unit can be equipped with a special communication card for ModBus RTU, SNMP, BacNet or other protocols
- Typically, the most direct method of communication is via group controller (multifunctional touch-screen display). Mod Bus TCP is the standard communication protocol
- Our specially developed TCP2SNMP converter enables the entire group of units to be maintained via group controller with SNMP protocol. It also offers a special web interface for easy group overview

CONDENSATE PUMP

- All Conteg precision cooling units can be connected to a standard gravity drainage system
- If such a system is not available under the cooling units, it is necessary to drain the condensate to a piping system located at the top
- Each CoolTeg or CoolTop unit can be equipped with a condensate pump to displace the water from the condensate pan to the drainage pipe network
- Each unit includes a water level sensor to signal drainage problems or to start the pump (exact function depends on specific setting)

DUAL POWER SUPPLY

- Electrical switchboard for two power supply systems

HUMIDIFIER (FOR COOLTEG PLUS)

- Each CoolTeg Plus unit includes two humidity sensors, enabling control of the environment
- Dehumidification mode standard for all units
- For increasing air humidity, unit must be equipped with humidifier
- Electrode steam humidifier with maximal capacity 2 kg/hour
- Precise control of steam production, from 0–100%
- Suitable for standard tap water
- Humidifier available in all CoolTeg Plus types and sizes

“PCO WEB” COMMUNICATION CARD

- Accessory compatible with CoolTeg Plus and CoolTop controllers
- Enables additional individual communication (monitoring and control)
- Communication via Ethernet network protocols
- Functions: Web server, E-mail, FTP, SNMP, BACNet, ModBus TCP/IP and others

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