

## TARGETED COOLING AND AIRFLOW MANAGEMENT

## **COOLOUT** CONDENSING UNITS



CoolOut-front view



CoolOut—rear view

The **CoolOut** outdoor condensing units are specially designed for conducting heat out of data centers. The units meet all the strict demands on precision, stability and service life required for data centers.

## MAIN BENEFITS

- Advanced communication and cooling regulation based on commands from the data center
- Very low consumption thanks to high-quality EC fans and active regulation of condensing pressure
- Inverter-controlled BLDC compressor
- Wide range of cooling power from 11 % upwards
- Versions for extreme ambient temperatures available
- Robust frame and housing made of high-quality corrosion-resistant materials
- > Ability to communicate with a monitoring system (SNMP, Modbus TCP, Modbus RS485)
- > Ability to monitor and control operating parameters through the indoor unit
- Simple to install and operate
- Option for remote servicing after connecting a PGDx service display
- Specially designed for precision cooling
- Linear electronic expansion valve

## SUITABLE FOR

- > Wide range of ambient conditions
- > Installations emphasizing economical and reliable operation
- > Compatible with CONTEG's CoolTeg DX, CoolTop DX and CoolSeven cooling units

## DESCRIPTION

- CoolOut is an outdoor condensing unit designed for precision compression cooling. The units are fitted with an inverter-controlled rotary DC compressor.
- Thanks to the use of hot gas bypass technology, the unit's cooling power can be adjusted from 11% of total cooling power upwards regardless of outdoor conditions.
- The use of a specially designed condenser, EC fans and a system of dynamic control of condensing pressure allowed minimizing the power consumption and noise emissions of the cooling unit.
- The running of the unit and correct functioning of all its parts is overseen by a built-in regulator with special CONTEG software.
- The regulator also ensures communication with the indoor unit via Fieldbus protocol. Basic information about the running of the outdoor unit can be tracked through the indoor unit.
- The design of the condensing unit allows its mounting onto the floor or a wall.
- CoolOut units are highly userfriendly in their setup and operation. Initialization and operation is very simple.

		AC-ODX-07-XXXXXXX	AC-ODX-07-SXXXXXX	AC-ODX-25-XXXXXXX	
Operating conditions	°C	−20 to +47 °C	−20 to +55 °C	−20 to +47 °C	
Operating conditions <sup>4</sup>	°C	-40 to +47 °C	-	-40 to +47 °C	
Power regulation		Smooth 11–100%	Smooth 11–100 %	Smooth 11–100%	
Rated cooling power	kW	8.1	8.1	26	
Power supply	V/ph/Hz	230/1/50-60	230/1/50-60	400/3/50-60	
Operating current <sup>1</sup>	Α	8.84	10.4	11.28	
Maximum current	Α	12.8	17.5	17	
Rated input power 1	kW	2.03	2.39	8.2	
Compressor control		BLDC inverter	BLDC inverter	BLDC inverter	
Coolant regulation		Linear expansion valve	Linear expansion valve	Linear expansion valve	
R410A coolant capacity <sup>2</sup>	kg	0	0	0	
Acoustic pressure Lp(A) <sup>1</sup>	dBA	44	63	50	
Dimensions/weight					
Width	mm	1200	1200	1400	
Depth	mm	400	400	450	
Height <sup>3</sup>	mm	996	996	1200	
Weight	kg	72	99	130	
Piping connection					
Fluid piping (diameter)	mm	12	12	12	
Gas piping (diameter)	mm	16	16	22	
Max. piping length	m	75	75	85	
Max. difference in elevation	m	50	50	50	

<sup>&</sup>lt;sup>1</sup>Values at stabilized 80 % output. <sup>2</sup> Without coolant, filled in during installation. <sup>3</sup> Including the profile for mounting the condensing unit. <sup>4</sup> If fitted with winter-kit accessories. The values shown may vary depending on the current product innovation.



## Part number on request.

Please contact our sales or technical team www.conteg.com/contacts

## COOLOUT CONDENSING UNITS

# **ACCESSORIES**

#### **DUAL POWER SUPPLY**

- Electrical distributor for two power supply branches.
- The device allows powering a unit from two separate power sources.

#### **RS485 BMS COMMUNICATION CARD**

Optically insulated card allowing communication with a unit via Modbus RTU protocol.



### pCO WEB COMMUNICATION CARD

- Allows further individual communication (monitoring and control).
- Communication via Ethernet network protocols.
- Functions: web server, e-mail, FTP, SNMP, BACNet, ModBus TCP/IP and more.

Comparison	CoolTeg Plus				CoolTop		CoolSeven	CoolRAC			
	CW	DX	ХС	DF	CW	DX		CW	ХС	DF	
Installation											
Between IT racks	✓	✓	✓	✓	-	-	-	-	-	-	
On top of IT racks	-	-	-	-	✓	✓	-	-	-	-	
Inside of 19" racks	-	-	-	-	-	-	✓	-	-	-	
Farther from IT racks	-	-	-	-	-	-	-	✓	✓	✓	
Cooling medium											
Water/glycol	✓	-	-	-	✓	-	-	✓	-	-	
R410A	-	✓	✓	-	-	✓	✓	-	✓	-	
R410A + water/glycol	-	-	-	✓	-	-	-	-	-	✓	
Application											
Smaller	✓	✓	✓	✓	✓	✓	✓	-	-	-	
Medium	✓	-	✓	✓	✓	✓	-	✓	✓	✓	
Bigger	-	-	-	-	-	-	-	✓	✓	✓	
Occupied floor area (in data	a center)										
None	-	-	-	-	✓	✓	✓	-	-	-	
Small	✓	✓	✓	✓	-	-	-	-	-	-	
Large	-	-	-	-	-	-	-	✓	✓	✓	
Nominal cooling capacity  Air temperature in hot zone: 35 °C; water temperature of 6/12 °C (for CW units), no condensation.											
7-19 kW	-	DXSmall DX30	-	-	-	-	CoolSeven	-	-	-	
20-39 kW	CW30 CW30 SuperC	DX30	XC30	DF	CoolTop2	CoolTop2 CoolTop3	-	-	-	-	
40-100 kW	CW60	-	XC40	-	CoolTop3	CoolTop2 CoolTop3	-	CoolRAC CW CoolRAC XC CoolRAC DF			
Suitable for											
Smaller applications – e.g. Modular Closed Loop	-	✓	-	✓	-	-	✓	-	-	-	
High outside temp.	-	-	✓	-	-	-	✓	-	✓	-	
Cooling system with a cold-water source	✓	-	-	-	✓	-	-	✓	-	-	
No water in a data center	-	✓	✓	-	-	✓	-	-	✓	-	
Free-cooling	✓	-	-	✓	✓	-	-	✓	-	✓	

