







# **RADIAL DRY COOLER**

The reliable, efficient, and sustainable cooling solution for industrial and commercial applications, with radial fans for indoor use

# DRC

Cooling capacity from 50 kW to 350 kW





ENEX TECHNOLOGIES presents the **Radial Dry Cooler** range for industrial and commercial applications. This product line is designed to meet or exceed customer needs including energy efficiency, ergonomics, space, etc.

All ENEX TECHNOLOGIES products are designed and conceived with levels of excellence in food preservation, robustly built to withstand every weather condition including heavy snow and wind, ensuring long life.

**Ready to use in Industrial Refrigeration, Energy & Process Cooling, IT Cooling and HVAC applica-tions**, our Radial Dry Cooler line consists of more than 30 models of axial dry coolers for commercial and industrial applications, available in cooling capacities between 50 and 350 KW.

All ENEX TECHNOLOGIES Radial dry coolers offer low noise levels and minimum energy consumption. All models are fitted with EC fan motors as standard. Fan speed can be controlled electronically to increase energy savings.

Our complete portfolio offers a large range of configurations and accessories to meet any specification and can be customized according to the application.

## LEADING PROFESSIONAL SOLUTIONS IN HEAT REJECTION

ENEX TECHNOLOGIES' assessment of Radial Dry Cooler performance parameters under different conditions and control strategies is essential to designing and optimizing the units for specific applications.

Our RADIAL DRY COOLERS are offered in the following range:

DRC

Standard Conditions SC15: Fluid: Water, Fluid Inlet T<sup>a</sup> 40°C, Fluid Outlet T<sup>a</sup> 35°C, Air inlet T<sup>a</sup> 25, Available air pressure 150Pa

## **MAIN FEATURES**

With more than 400 years of combined experience in design, production and distribution and doing business in over 125 countries, ENEX TECHNOLOGIES radial dry cooler line offers customers a wide spectrum of benefits including, but not limited to:

#### HIGH PERFORMANCE FOR INNDOR USE

• With RADIAL EC fans up to 200PA available pressure.

• Optional EC fans adapt to the needs of the application with minimal energy consumption (30% savings compared to an AC fan).

• Copper tubes are staggered across self-spaced louvered fins to achieve high performance.

### LONG PRODUCT LIFE

• Strong and robust design includes high quality components to meet all thermodynamic and product life cycle requirements.

• 10 surface treatments available to increase product life cycle in challenging environments.

#### **SAVING FOOTPRINT**

• V-shaped configuration of coils delivers high performance while minimizing footprint in the machinery room.

#### **CUSTOMIZATION ON DEMAND**

• Highest level of customization available to meet application requirements.

#### SELECTION SOFTWARE

• Our proprietary selection software gives customers flexibility in adjusting settings as parameters of the application change.

#### STANDARD CONDITIONS SC25 (kW)

50 - 350

#### **SAFETY & RELIABILITY**

- Resistance and leaks tests up to 23 bar
- Burst tests up to 48 bar
- · Equipment pressurized with nitrogen at 2bar

#### SUSTAINABILITY

• With a GWP of 0





## **TECHNICAL FEATURES**

NOMENCLATURE	D	R	C	5	7	4	EC	<b>C66</b>	VS
G = Dry cooler									
Typology		_/							
<b>R</b> = Radial/Radial fan									
N° of fans									
<b>1</b> = 1 fan									
<b>5</b> = 5 fans									
Size of coil + airflow									
Fan technology									
No of circuits									
Type of air outlet									
VS = Vertical Simple									
<b>VD</b> = Vertical Double									
H = Horizontal									

#### **FINNED COILS**

• All of our Ø 12mm copper tubes are built in compliance with CUPROCLIMA specifications.

• The staggered arrangement of copper tubes across self-spaced, louvered fins accurately links tubes and fins for higher coil performance.

• FLOATING PACK SYSTEM allows coils to levitate to avoid leaks.

• All coils are subjected to resistance and leakage testing under a rated pressure of 43 bar and pressurized using nitrogen at 2bar to prevent corrosion of the inner surface of the copper tubes. Also, for customer verification, to ensure that the coil is in perfect condition, with no leaks.

• Welding Neck Flanges - Nominal Pressure 16 - DIN2633.

#### CASING

• Manufactured in galvanized steel (painted as optional).

• Interchangeable air outlet panels.

• Internal separators avoid the "by-pass" effect during sequential operation of fans.

• Metallic protection on connections and return bends.

#### **FAN MOTORS**

- Available fans' diameters: Ø 630 mm.
- Standard EC fan motors that modulate rotation speed according to unit requirements, delivering excellent acoustic performance and peak operation.
  Radial fans: 400V III @ 50/60Hz.

• All motors have class B insulation, grade IP-55 protection, thermal protection device and working on a temperature range from  $-25^{\circ}$ C up to  $+55^{\circ}$ C.

• Up to 200 Pa available air pressure.

• Motors are housed inside an easy-access metallic support.





# **OPTIONS & ACCESORIES**

#### COIL

- Copper Fins
- Coated Fins
- AquaAero treatment
- Blygold treatment
- Other material

#### CASING

- Painted casing
- Excessive Pressure Dampers
- Acoustic Isolation
- Silent blocks

#### **ELECTRICAL OPTIONS**

- Shielded Wiring
- Individual service switch by fan

#### OTHER

Adiabatic spray system



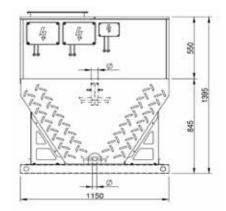




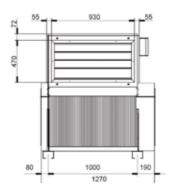


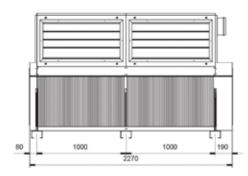
## **PRODUCT RANGE OVERVIEW**

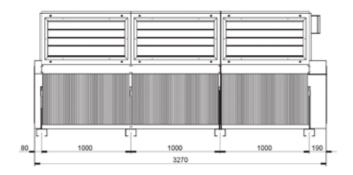
#### Lateral view

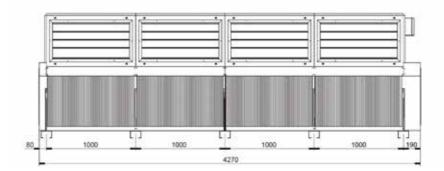


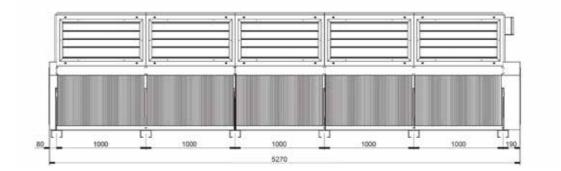
#### Frontal view



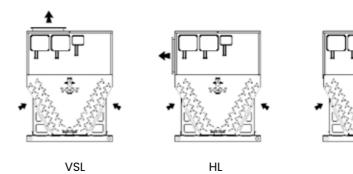








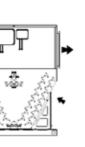
# **AIR DIRECTION POSSIBILITIES**

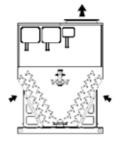


HL

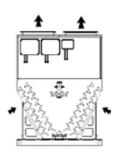
HR

## DRY COOLERS RADIAL DRY COOLER - DRC





VSR



VD





## **TECHNICAL DATA**

## Fan ø= 630 mm

#### Fin pitch = 2,1 mm, Rpm = 1.330, water

Model	Capacity (kW)	Pressure Drop	Surface	Internal Volume	Air Flow	Noise Fans Data			Weight	
	SC15	KPa	m²	dm³	m³/h	dBA (10m)	N°	kW	Α	kg
DRC-161 EC	68,8	57,0	209,6	25,0	16.300	54	1	2,9	4,5	270
DRC-163 EC	70,9	60,0	209,6	25,0	16.950	55	1	2,8	4,3	270
DRC-166 EC	71,9	61,0	209,6	25,0	17.200	55	1	2,7	4,2	270
DRC-167 EC	62,2	37,0	214,0	40,0	15.450	53	1	3,1	4,7	280
DRC-171 EC	65,2	40,0	214,0	40,0	16.400	54	1	2,9	4,4	280
DRC-174 EC	66,4	41,0	214,0	40,0	16.700	55	1	3,0	4,4	280
DRC-261 EC	137,2	44,0	419,2	44,7	32.600	57	2	5,8	9,0	470
DRC-263 EC	141,7	46,0	419,2	44,7	33.900	58	2	5,6	8,6	470
DRC-266 EC	143,5	47,0	419,2	44,7	34.400	58	2	5,5	8,4	470
DRC-267 EC	124,2	32,0	428,0	66,3	30.900	56	2	6,1	9,4	490
DRC-271 EC	130,3	35,0	428,0	66,3	32.800	57	2	5,8	8,8	490
DRC-274 EC	129,6	35,0	428,0	66,3	33.400	58	2	5,9	8,8	490
DRC-361 EC	202,4	18,0	628,8	64,4	48.900	59	3	8,8	13,5	670
DRC-363 EC	208,9	19,0	628,8	64,4	50.850	60	3	8,4	12,9	670
DRC-366 EC	211,5	20,0	628,8	64,4	51.600	60	3	8,2	12,6	670
DRC-367 EC	180,2	29,0	642,0	96,6	46.350	58	3	9,2	14,1	700
DRC-371 EC	189,1	32,0	642,0	96,6	49.200	59	3	8,7	13,2	700
DRC-374 EC	192,0	32,0	642,0	96,6	50.100	60	3	8,9	13,2	700
DRC-461 EC	272,1	40,0	838,5	84,0	65.200	60	4	11,7	18,0	880
DRC-463 EC	280,9	42,0	838,5	84,0	67.800	61	4	11,2	17,2	880
DRC-466 EC	284,5	43,0	838,5	84,0	68.800	61	4	10,9	16,8	880
DRC-467 EC	252,2	68,0	856,0	126,9	61.800	59	4	12,2	18,8	920
DRC-471 EC	264,8	74,0	856,0	126,9	65.600	60	4	11,6	17,6	920
DRC-474 EC	268,9	76,0	856,0	126,9	66.800	61	4	11,9	17,6	920
DRC-486 EC	271,3	47,0	1143,0	161,1	60.800	59	4	12,4	18,8	1.015
DRC-492 EC	285,3	51,0	1143,0	161,1	64.400	60	4	11,8	18,0	1.015
DRC-498 EC	290,1	53,0	1143,0	161,1	65.600	60	4	11,6	17,6	1.015
DRC-567 EC	307,1	18,0	993,6	146,3	77.250	60	5	15,3	23,5	1.150
DRC-571 EC	322,2	19,0	993,6	146,3	82.000	61	5	14,5	22,0	1.150
DRC-574 EC	326,9	20,0	993,6	146,3	83.500	62	5	14,9	22,0	1.150

For cooling connection please see our selection software. In this table are included the most representative models. For other selection please see our selection software. Technical data calculated with 150Pa available air pressure. For other available air pressure, please see our selection software.





## **DISTINCTIVE TECHNOLOGICAL CHOICES OF THE RANGE**

Internal panel to avoid by-pass effect Interchangeable air outlet panels EC Fans as standard

#### **Standard EC Fan**





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# Interchangeable air outlet panels by-pass effect