CUBIC COMPACT

The reliable, efficient, and sustainable cooling solution, ideal for small and medium cold rooms for cooling and freezing applications

BC

Cooling capacity from 1 kW to 15 kW

ENEX TECHNOLOGIES presents the **Cubic Compact Brine Cooler** range for 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 ensure long life.

This line of product, consists of more than 25 models, available in cooling capacities between 1 and 15 KW.

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 Cubic Compact performance parameters under different conditions and control strategies is essential to designing and optimizing the units for specific applications.

Our CUBIC COMPACT BRINE COOLERS are segmented into two ranges:

RANGE	*CONDITIONS (kW)
BC	1 - 15

***Conditions**: Air Inlet Temperature 2ºC, Fluid Inlet Temperature -8ºC, Fluid Outlet Temperature -4ºC, Ethylene Glycol 35%.

MAIN FEATURES

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

HIGH PERFORMANCE

• Staggered arrangement of the copper tubes across selfspaced fins, the accurate link between tubes and fins as well as the use of corrugated fins allow our finned coils to reach high performance.
• Optimization of circuits for maximum efficiency.
• The EC fans adapt to the needs of the installation with minimal energy consumption (available as optional).

SELECTION SOFTWARE

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

SAFETY

• Ready up to PS=16bar
• Resistance and leaks tests up to 23 bar
• Burst tests up to 48 bar
• Equipment pressurised with nitrogen at 2 bar

QUALITY: ROBUSTNESS + RELIABILITY

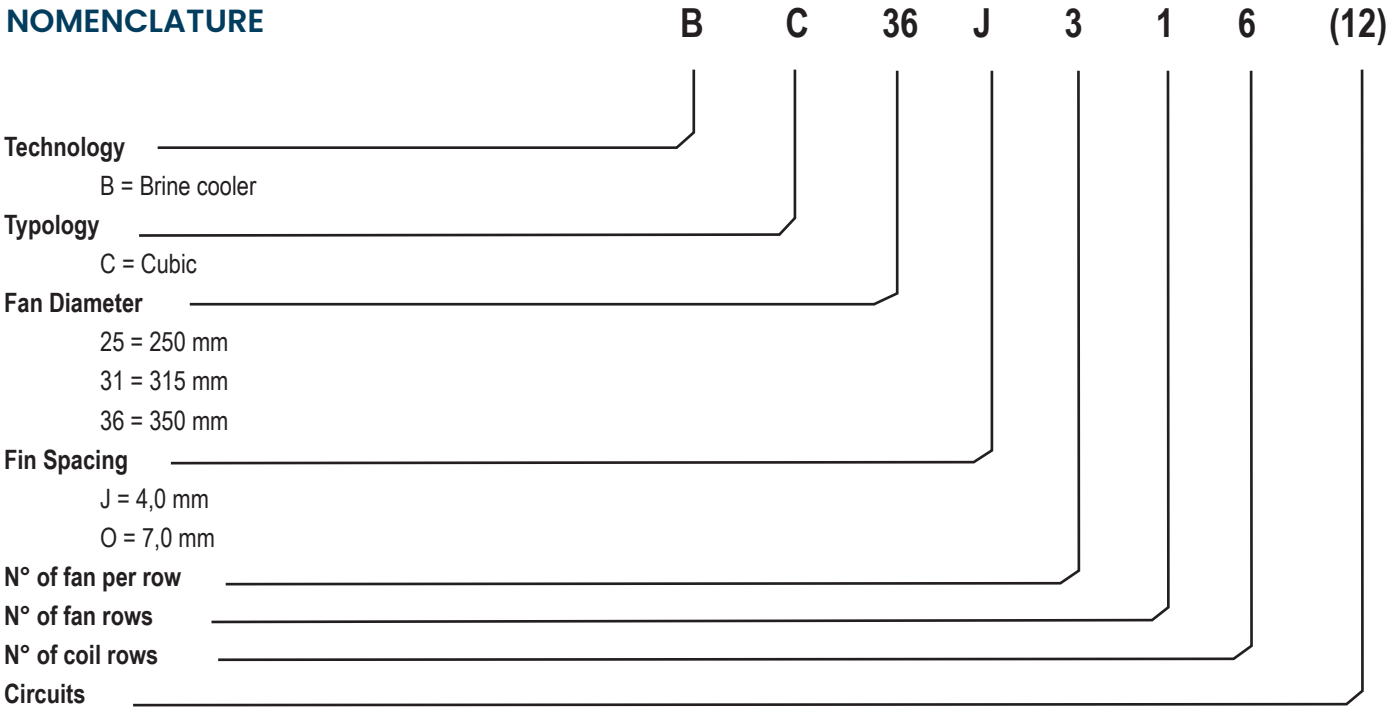
• High-quality components guarantee a long life product. Strong and robust design

SUSTAINABILITY

• With a GWP of 0

TECHNICAL FEATURES

NOMENCLATURE



FINNED COILS

• Built with copper tubes Ø 12mm, manufactured in compliance with the CUPROCLIMA specifications. The staggered arrangement of copper tubes across self-spaced fins, the accurate link between tubes and fins as well as the use of corrugated fins, all this configuration allows our coils to reach the highest performance.
• All coils are subjected to a resistance & leakage test under a rated pressure of 23 bar (PS=16bar), also pressurized using nitrogen at 2 bar to avoid the corrosion of the inner surface of the copper tubes.
• Fin spacings available: 4mm / 7mm

CASING

• The case structure of the unit is manufactured from plate of aluminium-magnesium alloy (97.5% Al-2.5% Mg) , giving it a high protection against corrosion, even in extreme environmental conditions; moreover this casing allows to meet more demanding food hygiene standards.
• Includes double drip tray to make the drainage of the water (resulting from defrost) easier.
• For better maintenance the drip tray and endplates are readily dismounted from the casework giving an easy and fast access to the inside of the unit cooler.

FAN MOTORS

• Fan diameter available: Ø 250/315/350 mm.
• Axial fans with external rotor (230V I @ 50/60Hz).
• Equipped as standard with AC fan motors with excellent acoustic performance.
• All motors have class B insulation, grade IP-44 protection, thermal protection device and working on a temperature range from −40°C up to + 40°C (from −25°C up to + 40°C for EC fan)
• Painted fan guards are made of zinc plated steel wire and support a water tight terminal box where the fans' motors are wired.

ELECTRIC DEFROST

• Electric heaters are optional for all BC series. Recommended for use below 2°C air inlet temperature.
• They are strategically located across the finned coil in order to provide suitable and uniform defrosting.

OPTIONS & ACCESORIES

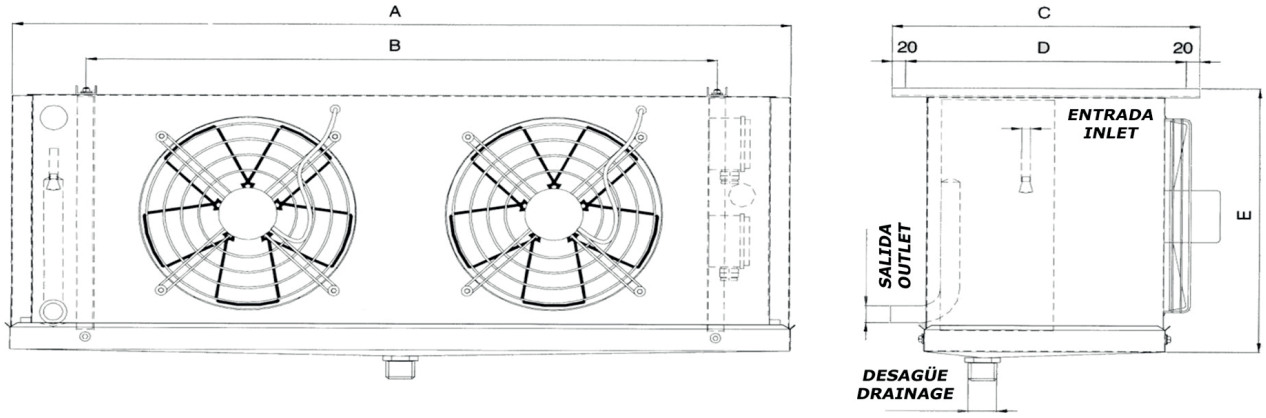
COIL
- Copper Fins
- Coated Fins
- Other material
- AquaAero treatment
- Blygold treatment
- Cataphoresis treatment

CASING
- Aluminium 5052
- White painted
- Stainless-steel casing

DEFROST
- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost (wired)
- Fan ring heaters

OTHER
- High efficiency fans / EC fans

PRODUCT RANGE OVERVIEW



MODEL		Fans		Dimensions				
		Nº	Ø (mm)	A	B	c	D	E
BC25J114	BC25O113	1	250	575	335	410	370	375
BC25J116	BC25O116	1	250	575	335	410	370	375
BC25J213	---	2	250	905	685	410	370	375
BC31J114	BC31O114	1	315	695	475	450	410	440
BC25J314	BC25O313	3	250	1.235	1.015	410	370	375
BC36J114	BC36O114	1	350	905	685	490	450	565
BC31J214	BC31O214	2	315	1.145	925	450	410	440
BC31J216	BC31O216	2	315	1.145	925	450	410	440
BC31J314	BC31O314	3	315	1.595	1.375	450	410	440
BC36J214	BC36O214	2	350	1.565	1.345	490	450	565
BC36J216	BC36O216	2	350	1.565	1.345	490	450	565
BC36J314	BC36O314	3	350	2.225	2.005	490	450	565
BC36J316	BC36O316	3	350	2.225	2.005	490	450	565

TECHNICAL DATA

Fin pitch = 4 mm

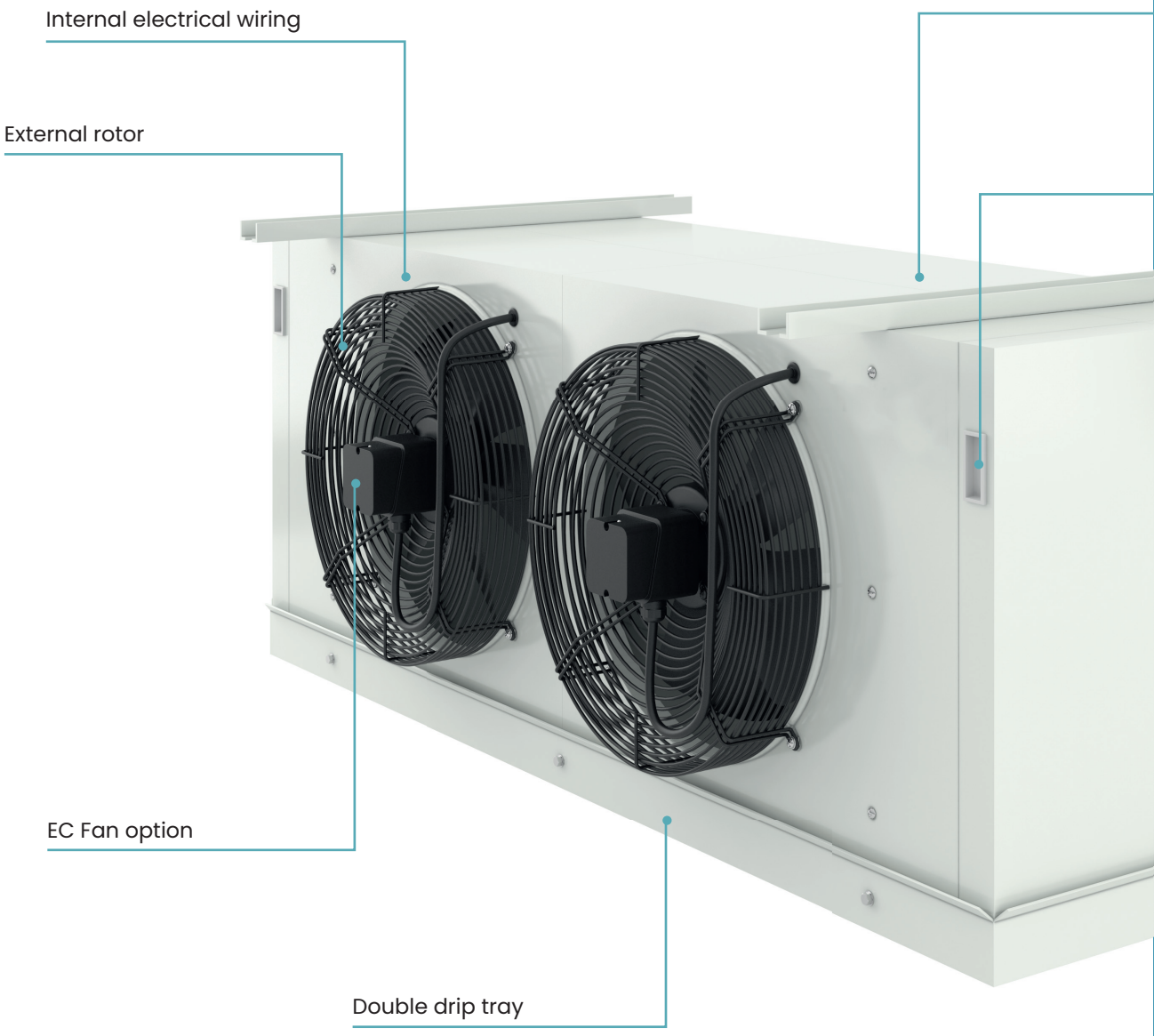
Model	Capacity (kW)	Surface	Internal Volume	Fluid Flow	Air Flow	Air Throw	Fans Data					Electrical defrost		Manifolds	Weight
	SC*	m²	dm³	m³/h	m³/h	m	N°	Ø	RPM	kW	A	kW	A	mm	kg
BC25J114(1)	1,3	5,6	1,5	0,30	503	2	1	250	1.300	0,04	0,3	0,9	1,5	1/2"	10
BC25J116(2)	1,5	8,3	2,2	0,35	452	2	1	250	1.300	0,04	0,3	1,1	1,9	7/8"	12
BC25J213(3)	1,7	8,3	2,2	0,40	1.071	2	2	250	1.300	0,07	0,6	1,5	2,6	7/8"	14
BC31J114(2)	2,7	9,1	2,4	0,65	1.641	6	1	315	1.350	0,11	0,5	1,4	2,3	7/8"	16
BC25J314(4)	3,1	16,6	4,4	0,73	1.508	2	3	250	1.300	0,11	0,9	2,1	3,8	7/8"	21
BC36J114(4)	4,6	17,7	4,7	1,09	2.745	9	1	350	1.340	0,15	0,7	2,4	5,1	7/8"	24
BC31J214(4)	4,7	18,1	4,8	1,11	3.281	6	2	315	1.350	0,21	1,0	2,4	3,9	7/8"	26
BC31J314(6)	6,3	27,1	7,2	1,52	4.921	6	3	315	1.350	0,32	1,5	3,4	5,4	7/8"	36
BC31J216(4)	6,6	27,1	7,2	1,59	2.827	5	2	315	1.350	0,22	1,0	3,2	6,9	7/8"	30
BC36J214(6)	8,0	35,2	8,8	1,91	5.489	9	2	350	1.340	0,30	1,4	4,4	9,3	1 1/8"	41
BC36J314(10)	10,5	52,7	13,2	2,53	8.233	9	3	350	1.340	0,45	2,1	6,4	13,5	1 3/8"	58
BC36J216(8)	11,1	53,0	14,1	2,68	5.078	9	2	350	1.340	0,31	1,4	5,5	9,7	1 1/8"	49
BC36J316(12)	15,4	79,5	21,1	3,71	7.616	9	3	350	1.340	0,46	2,1	8,0	14,2	1 5/8"	71

Fin pitch = 7 mm

Model	Capacity (kW)	Surface	Internal Volume	Fluid Flow	Air Flow	Air Throw	Fans Data					Electrical defrost		Manifolds	Weight
	SC*	m²	dm³	m³/h	m³/h	m	N°	Ø	RPM	kW	A	kW	A	mm	kg
BC25O113(1)	0,9	2,8	1,1	0,2	554	2	1	250	1.300	0,04	0,3	0,9	1,5	1/2"	9
BC25O116(2)	1,3	5,5	2,2	0,31	475	2	1	250	1.300	0,04	0,3	1,1	1,9	7/8"	11
BC25O313(3)	2,2	8,2	3,3	0,51	1.661	2	3	250	1.300	0,11	0,9	2,1	2,3	7/8"	18
BC31O114(2)	2,3	6,0	2,4	0,55	1.732	6	1	315	1.350	0,11	0,5	1,4	5,1	7/8"	15
BC36O114(4)	3,9	11,6	4,7	0,92	2.817	10	1	350	1.340	0,15	0,6	2,4	3,8	7/8"	23
BC31O214(3)	4,3	11,9	4,8	1,02	3.464	6	2	315	1.350	0,21	1,0	2,4	3,9	7/8"	25
BC31O314(6)	5,6	17,8	7,2	1,33	5.196	6	3	315	1.350	0,32	1,5	3,4	5,4	7/8"	34
BC31O216(4)	5,7	17,8	7,2	1,37	3.040	5	2	315	1.350	0,22	1,0	3,2	6,9	7/8"	28
BC36O214(5)	7,1	23,0	8,8	1,71	5.633	10	2	350	1.340	0,29	1,2	4,4	9,3	7/8"	39
BC36O216(8)	9,8	34,7	14,1	2,35	5.276	9	2	350	1.340	0,30	1,4	5,5	9,7	1 1/8"	46
BC36O314(8)	10,1	34,7	14,1	2,42	8.449	10	3	350	1.340	0,44	1,8	6,4	13,5	1 1/8"	55
BC36O316(12)	13,6	52,1	21,1	3,28	7.914	9	3	350	1.340	0,46	2,1	8,0	14,2	1 1/8"	65

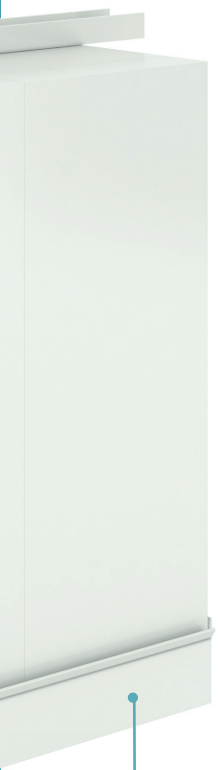
*Conditions: Air Inlet Temperature 2°C, Fluid Inlet Temperature -8°C, Fluid Outlet Temperature -4°C, Ethylene Glycol 35%.
** Sections size can change drastically by fluid used and boundary conditions

DISTINCTIVE TECHNOLOGICAL CHOICES OF THE RANGE



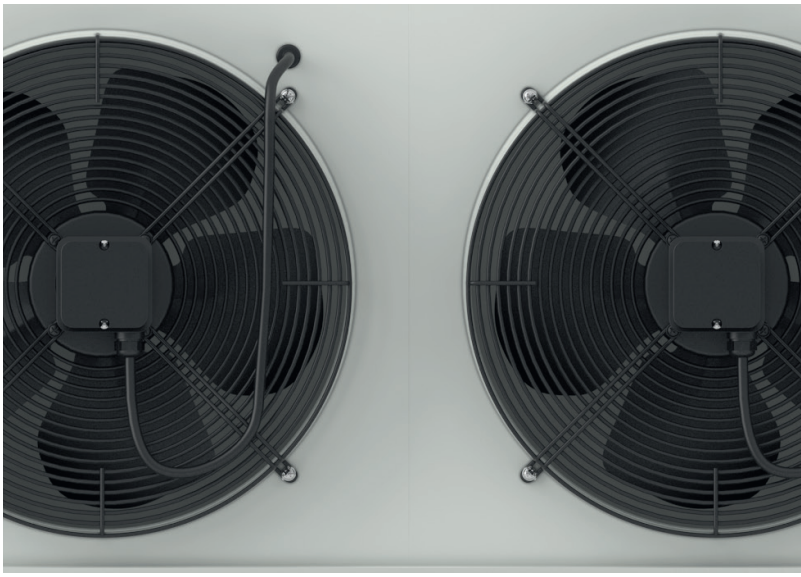
Aluminium-Magnesium casing or painted galvanized for high corrosion protection

End plates with impact fasteners to easy maintenance

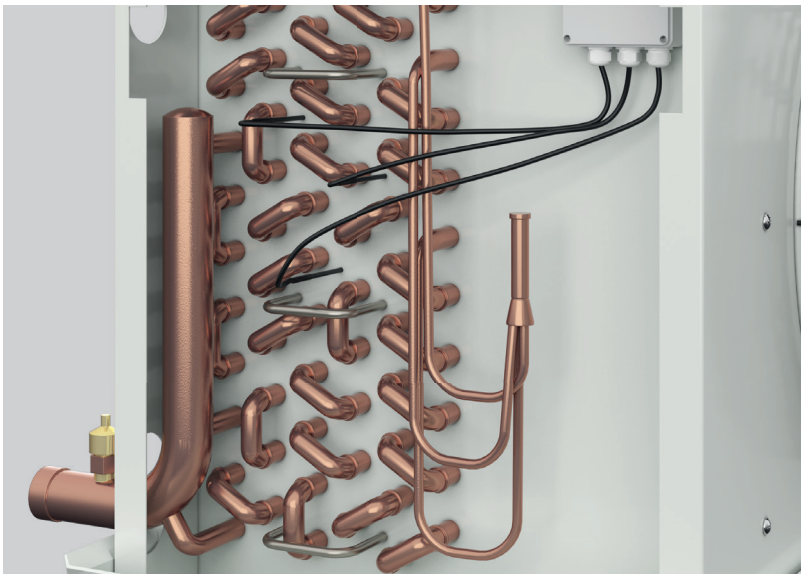


Large choice of configurations and accessories

EC Fan option



PS = 45 bar Coil option



End plates with impact fasteners to easy maintenance