



intarCUBE

Footprint condensing units



Plug & Play
installation



Low investment
cost



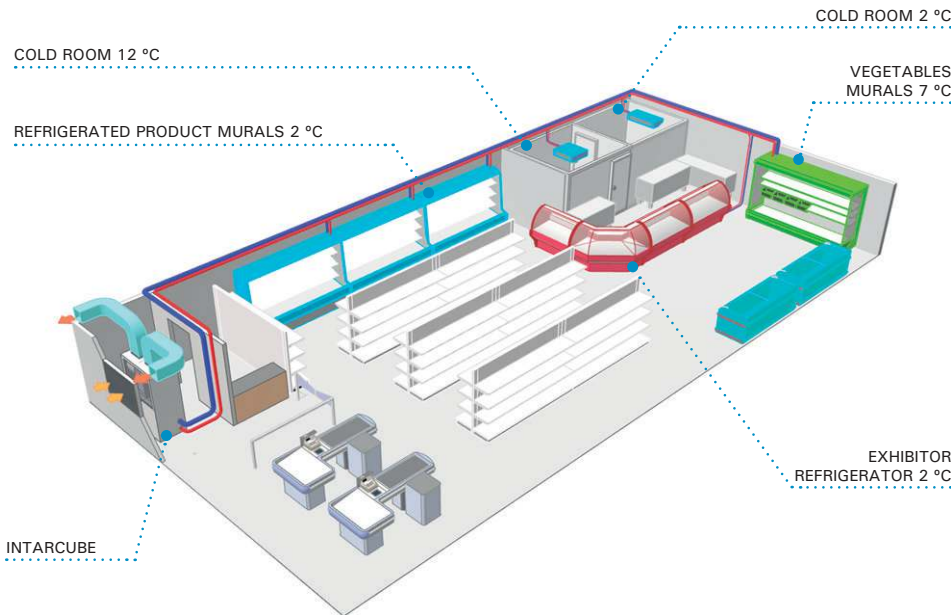
Compact
design



Footprint condensing units with one to three compressors, with axial or centrifugal condensation, for medium and low temperature.

Applications

intarCUBE footprint condensing units are designed to centralise the refrigeration production of a set of evaporator units.



intarCUBE condensing units in centrifugal version are designed for installation in a machine room with ducted air discharge.

- ❄ Very compact refrigeration condensing units.
- ❄ Low investment and maintenance costs.
- ❄ Quick Plug & Play installation in new or retrofit installations.
- ❄ F-Gas 2022 and Ecodesign compliant.

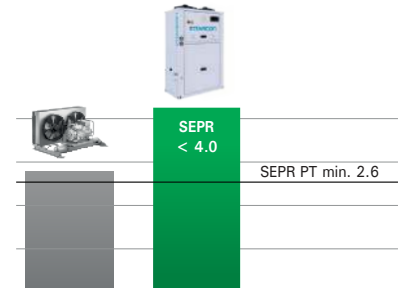
Plug & Play

INTARCON units are specifically designed and dimensioned for each R-134a or R-449A refrigerant.

They are delivered factory tested and adjusted with CE conformity certificate as a whole (pressure equipment, Ecodesign, etc.).

Ecodesign

The Ecodesign Regulation (EU) 2015/1095 applicable to condensing and mini condensing units with built-in condenser sets minimum SEPR seasonal efficiency requirements.



intarCUBE condensing units are characterised by an excellent Ecodesign efficiency even higher than 4.0.

Operational reliability

The duplication of components and back-up systems is an important design criterion. Wherever possible, intarCUBE condensing units are equipped with two or more fans, tandem or trio compressors, and emergency operation.

Highly reliable compressors

Maneurop hermetic reciprocating compressors and Copeland scroll compressors are characterised by their robustness and operational reliability. As they are cooled by the refrigerant gas, they provide effective sound insulation.



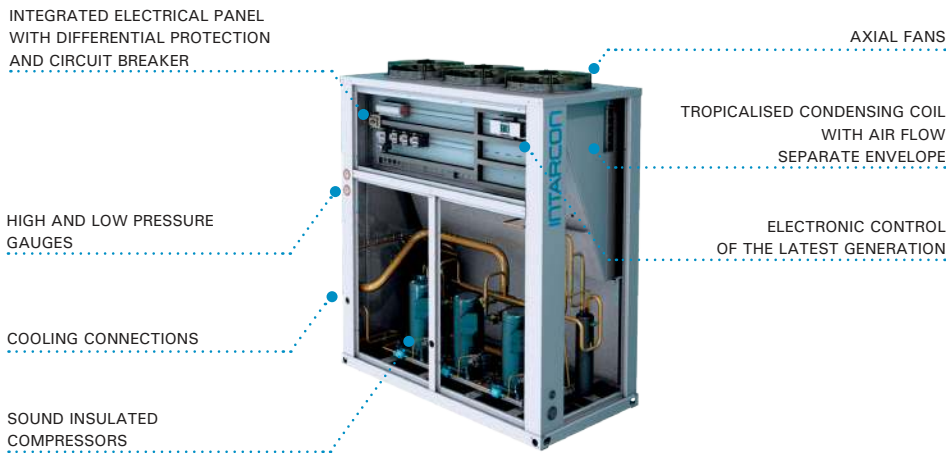
F-Gas regulation

At INTARCON we anticipate the environmental regulations of the European Union with low greenhouse solutions. Our condensing units comply with the future scenarios of the EU regulation 517/2014 (F-Gas Regulation).

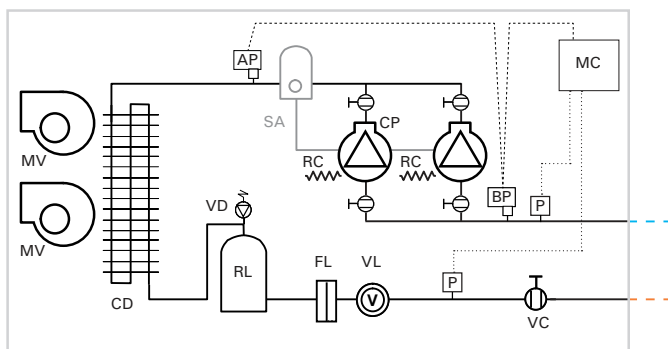
From 1 January 2022, the marketing of compact multi-compressor condensing units with HFC refrigerants for commercial use will be limited to less than 40 kW of cooling capacity.

Features

- ▶ 400 V-III-50 Hz power supply. Available in 60 Hz. Others voltages by request.
- ▶ Hermetic alternative or scroll compressors, acoustically insulated, with discharge silencer, in a soundproofed compartment independent of the air flow.
- ▶ Sound insulation of compressors, silentblocks, internal clixon and crankcase heater.
- ▶ Axial variable speed fan or centrifugal fan.
- ▶ Refrigeration circuit equipped with high and low pressure switches, ceramic dryer filter, liquid receiver and sight gauge.
- ▶ Full control and power panel, with differential switch protection and MCB switch.
- ▶ Liquid injection system for negative temperature models.



MDV-C-6 refrigeration scheme



- | | |
|----------------------|--------------------------------|
| CP: COMPRESSOR | VC: SERVICE VALVE |
| RC: CRANKCASE HEATER | MC: ELECTRONIC MICROCONTROLLER |
| MV: AXIAL MOTOR FAN | P: PRESSURE TRANSDUCER |
| CD: CONDENSER | AP: HIGH PRESSURE SWITCH |
| FL: DRYING FILTER | BP: LOW PRESSURE SWITCH |
| VL: SIGHT GAUGE | SA: OIL SEPARATOR (OPTIONAL) |
| RL: LIQUID RECEIVER | |
| VD: SECURITY VALVE | |

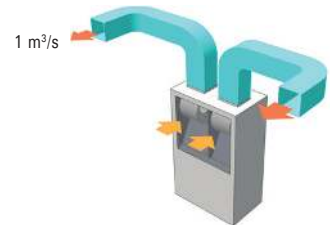
Axial condensation

intarCUBE units are designed for outdoor installation with minimum floor space footprint. The compressors are located in a soundproofed compartment separated from the air flow, and the fans have independent air volumes to avoid air recirculation in case of fan failure.

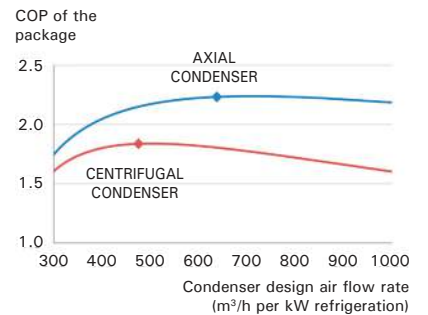


Centrifugal condensation

intarCUBE version can be equipped with medium-pressure centrifugal turbines, which allow the condensing units to be installed in the machine room and the air to be discharged to the outside via ducts.



Our centrifugal condensers are specifically designed to maximise the performance of the unit, while adjusting the air flow to the limitations of municipal regulations.



Dimensioning of air ducts

Recommended dimensions for discharge duct in sheet metal, or fibreglass panel, depending on the equivalent length:

Series	Flow m³/h	Equivalent length (mm)	
		20 - 30 m	40 - 60 m
5 series	3 600	400 x 300	400 x 400
6 series	2 x 3 600	500 x 400	600 x 400
7 series	3 x 3 600	750 x 400	800 x 500
8 series	2 x 10 000	1 000 x 500	1 000 x 600

Each 90° circular elbow is equivalent to 5 m in length.

It is recommended to select the air intake and discharge grilles according to the following indications:

Series	Discharge		Air intake	
	Volume (m/s)	Area (m²)	Volume (m/s)	Area (m²)
5 series		0.2		0.3
6 series	< 5	0.4	< 3	0.7
7 series		0.6		1.0
8 series		1.0		2.0

400 V-III-50 Hz | Positive temperature | Hermetic compressor | R-134a / R-449A

Refrigerant	Compressor	Axial version		Compressor		Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Centrifugal version		
		Series / Model	HP	Model	Average evaporating temperature				Fan Ø (mm)				Air flow (m³/h)	Series / Model				Air flow (m³/h)	ASP (Pa) ⁽⁴⁾	
					0 °C	-5 °C	-10 °C	-15 °C												
R-134a	1x Hermetic	MDV-NY-5 0136	6.5	MTZ80	10.5	8.4	6.5	4.9	3.1	3.0	21	1x Ø 450	4 300	3/8"-1 1/8"	167	35	MDV-CY-5 0136	3 600	120	
		MDV-NY-5 0171	8	MTZ100	12.2	9.8	7.6	5.7	3.9	2.7	24	1x Ø 450	4 300	3/8"-1 1/8"	189	41	MDV-CY-5 0171	3 600	120	
		MDV-NY-5 0215	10	MTZ125	14.4	11.7	9.2	6.9	4.6	2.6	29	1x Ø 450	4 300	3/8"-1 1/8"	193	40	MDV-CY-5 0215	3 600	120	
		MDV-NY-5 0271	13	MTZ160	18.1	15.0	12.3	9.7	6.5	2.4	38	1x Ø 450	4 300	1/2"-1 3/8"	198	39	MDV-CY-5 0271	3 600	120	
	2x Hermetic	MDV-NY-5 0137	7	2x MTZ40	11.0	8.9	7.0	5.5	3.5	3.7	21	1x Ø 450	4 300	3/8"-1 1/8"	179	31	MDV-CY-5 0137	3 600	120	
		MDV-NY-5 0172	8	2x MTZ50	12.3	9.9	7.7	5.8	3.9	3.6	25	1x Ø 450	4 300	3/8"-1 1/8"	199	42	MDV-CY-5 0172	3 600	120	
		MDV-NY-5 0216	10	2x MTZ64	14.4	11.7	9.3	6.9	4.7	3.5	30	1x Ø 450	4 300	3/8"-1 1/8"	203	39	MDV-CY-5 0216	3 600	120	
		MDV-NY-5 0272	13	2x MTZ80	17.0	14.1	11.4	8.8	6.2	3.2	40	1x Ø 450	4 300	1/2"-1 3/8"	209	38	MDV-CY-5 0272	3 600	120	
	3x Herm.	MDV-NY-6 0320	16	2x MTZ100	24.7	19.8	15.3	11.4	7.7	3.6	47	2x Ø 450	2x 3 600	1/2"-1 3/8"	318	44	MDV-CY-6 0320	2x 3 600	160	
		MDV-NY-6 0430	20	2x MTZ125	29.3	23.7	18.6	13.9	8.9	3.7	57	2x Ø 450	2x 3 600	1/2"-1 5/8"	326	43	MDV-CY-6 0430	2x 3 600	160	
		MDV-NY-6 0542	26	2x MTZ160	36.9	30.7	24.9	19.7	12.7	3.4	75	2x Ø 450	2x 3 600	5/8"-2 1/8"	336	42	MDV-CY-6 0542	2x 3 600	160	
		MDV-NY-7 0513	24	3x MTZ100	38.2	30.3	23.4	17.4	11.8	3.9	73	3x Ø 450	3x 4 750	5/8"-2 1/8"	477	46	MDV-CY-7 0513	3x 3 600	160	
R-449A	1x Hermetic	MDV-NY-7 0645	30	3x MTZ125	45.6	36.7	28.5	21.3	13.6	4.1	88	3x Ø 450	3x 4 750	5/8"-2 1/8"	489	45	MDV-CY-7 0645	3x 3 600	160	
		MDV-NY-7 0813	39	3x MTZ160	57.8	47.8	38.6	30.1	19.5	3.8	115	3x Ø 450	3x 4 750	7/8"-2 1/8"	504	44	MDV-CY-7 0813	3x 3 600	160	
		MDV-NG-5 0086	4	MTZ50	11.6	9.5	7.6	6.0	3.3	3.2	13	1x Ø 450	4 300	1/2"-7/8"	162	39	MDV-CG-5 0086	3 600	120	
		MDV-NG-5 0108	5	MTZ64	14.0	11.6	9.4	7.5	4.4	2.9	16	1x Ø 450	4 300	1/2"-7/8"	164	37	MDV-CG-5 0108	3 600	120	
	2x Hermetic	MDV-NG-5 0136	6.5	MTZ80	16.8	14.2	11.7	9.5	5.8	2.6	21	1x Ø 450	4 300	1/2"-1 1/8"	167	35	MDV-CG-5 0136	3 600	120	
		MDV-NG-6 0160	8	MTZ100	23.2	18.9	15.2	12.0	6.8	3.1	25	2x Ø 450	2x 3 600	5/8"-1 1/8"	254	41	MDV-CG-6 0160	2x 3 600	160	
		MDV-NG-6 0215	10	MTZ125	28.1	23.3	18.8	14.9	8.6	2.9	30	2x Ø 450	2x 3 600	5/8"-1 3/8"	258	40	MDV-CG-6 0215	2x 3 600	160	
		MDV-NG-7 0271	13	MTZ160	38.0	31.2	25.3	20.0	11.8	2.8	43	3x Ø 450	3x 4 750	5/8"-1 3/8"	358	40	MDV-CG-7 0271	2x 3 600	160	
	3x Hermetic	MDV-NG-5 0097	4	2x MTZ28	12.5	10.3	8.3	6.5	4.0	3.6	17	1x Ø 450	4 300	1/2"-7/8"	173	32	MDV-CG-5 0097	3 600	120	
		MDV-NG-5 0109	5	2x MTZ32	13.9	11.6	9.4	7.5	4.5	3.7	18	1x Ø 450	4 300	1/2"-7/8"	175	32	MDV-CG-5 0109	3 600	120	
		MDV-NG-5 0120	6	2x MTZ36	15.5	13.0	10.7	8.6	5.4	3.5	20	1x Ø 450	4 300	1/2"-1 1/8"	177	31	MDV-CG-5 0120	3 600	120	
		MDV-NG-5 0137	7	2x MTZ40	17.0	14.4	11.9	9.7	6.1	3.4	21	1x Ø 450	4 300	1/2"-1 1/8"	179	31	MDV-CG-5 0137	3 600	120	
MDV-NG-6 0172		8	2x MTZ50	23.5	19.2	15.4	12.2	6.5	4.2	26	2x Ø 450	2x 3 600	5/8"-1 1/8"	264	42	MDV-CG-6 0172	2x 3 600	160		
MDV-NG-6 0216		10	2x MTZ64	28.3	23.5	19.0	15.1	8.5	3.9	31	2x Ø 450	2x 3 600	5/8"-1 3/8"	268	40	MDV-CG-6 0216	2x 3 600	160		
MDV-NG-6 0272		13	2x MTZ80	34.3	28.8	23.8	19.1	11.5	3.6	41	2x Ø 450	2x 3 600	5/8"-1 3/8"	274	38	MDV-CG-6 0272	2x 3 600	160		
MDV-NG-7 0320		16	2x MTZ100	45.0	37.1	29.7	23.5	13.9	3.8	51	3x Ø 450	3x 4 750	7/8"-1 5/8"	462	44	MDV-CG-7 0320	3x 3 600	160		
3x Hermetic	MDV-NG-7 0430	20	2x MTZ125	54.0	45.0	36.6	29.1	17.5	3.7	61	3x Ø 450	3x 4 750	7/8"-1 5/8"	470	43	MDV-CG-7 0430	3x 3 600	160		
	MDV-NG-7 0542	26	2x MTZ160	64.2	54.2	39.9	36.3	23.0	3.3	79	3x Ø 450	3x 4 750	7/8"-2 1/8"	480	42	MDV-CG-7 0542	3x 3 600	160		
	MDV-NG-7 0258	12	3x MTZ50	35.8	29.2	23.4	18.5	9.9	4.2	42	3x Ø 450	3x 4 750	5/8"-1 3/8"	445	44	MDV-CG-7 0258	3x 3 600	160		
	MDV-NG-7 0324	15	3x MTZ64	43.7	36.0	29.0	23.0	12.9	4.0	49	3x Ø 450	3x 4 750	7/8"-1 5/8"	451	41	MDV-CG-7 0324	3x 3 600	160		
		MDV-NG-7 0408	18	3x MTZ80	53.3	44.6	36.4	29.2	17.3	3.8	64	3x Ø 450	3x 4 750	7/8"-1 5/8"	460	40	MDV-CG-7 0408	3x 3 600	160	
		MDV-NG-7 0480	24	3x MTZ100	60.6	50.8	39.9	33.2	21.2	3.6	73	3x Ø 450	3x 4 750	7/8"-2 1/8"	526	46	MDV-CG-7 0480	3x 3 600	160	

400 V-III-50 Hz | Negative temperature | Hermetic compressor | R-449A

Refrigerant	Compressor	Axial version		Compressor		Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Centrifugal version		
		Series / Model	HP	Model	Average evaporating temperature				Fan Ø (mm)				Air flow (m³/h)	Series / Model				Air flow (m³/h)	ASP (Pa) ⁽⁴⁾	
					-20 °C	-25 °C	-30 °C	-35 °C												
R-449A	1x H.	BDV-NG-5 0215	7.5	NTZ215	11.1	8.7	6.5	4.6	3.8	1.6	24	1x Ø 450	4 300	1/2"-1 1/8"	193	40	BDV-CG-5 0215	3 600	120	
		BDV-NG-5 0271	10	NTZ271	13.7	11.1	8.5	6.2	5.1	1.6	29	1x Ø 450	4 300	1/2"-1 1/8"	193	40	BDV-CG-5 0271	3 600	120	
	2x Hermetic	BDV-NG-5 0192	7	2x NTZ96	9.9	7.5	5.6	3.8	3.2	1.8	22	1x Ø 450	4 300	1/2"-1 1/8"	199	43	BDV-CG-5 0192	3 600	120	
		BDV-NG-5 0216	8	2x NTZ108	11.1	8.7	6.5	4.6	3.9	1.8	26	1x Ø 450	4 300	1/2"-1 1/8"	199	41	BDV-CG-5 0216	3 600	120	
		BDV-NG-5 0272	10	2x NTZ136	13.3	10.6	8.1	5.8	5.1	1.7	30	1x Ø 450	4 300	1/2"-1 1/8"	199	37	BDV-CG-5 0272	3 600	120	
		BDV-NG-6 0430	15	2x NTZ215	22.7	17.6	13.2	9.3	7.5	1.9	48	2x Ø 450	2x 3 600	5/8"-1 5/8"	326	43	BDV-CG-6 0430	2x 3 600	160	
	3x H.	BDV-NG-6 0542	20	2x NTZ271	28.1	22.5	17.3	12.5	10.1	1.9	57	2x Ø 450	2x 3 600	5/8"-2 1/8"	326	43	BDV-CG-6 0542	2x 3 600	160	
		BDV-NG-7 0645	22.5	3x NTZ215	34.9	26.9	20.2	14.0	11.5	1.9	74	3x Ø 450	3x 4 750	5/8"-2 1/8"	489	45	BDV-CG-7 0645	3x 3 600	160	
			BDV-NG-7 0813	30	3x NTZ271	43.7	34.7	26.5	19.1	15.4	1.9	88	3x Ø 450	3x 4 750	5/8"-2 1/8"	489	45	BDV-CG-7 0813	3x 3 600	160

Options

- ▶ VRC system for cooling capacity modulation for hermetic compressors.
- ▶ Oil separator (standard in tandem of two scroll compressors in low temperature, and trios in medium and low temperature).
- ▶ Anti-corrosion coil coating.
- ▶ Automatic emergency manoeuvre.
- ▶ Discharge check valve.
- ▶ Low voltage and phase change protection.
- ▶ Heat recovery.
- ▶ Radial electronic EC fans (6 and 7 series).
- ▶ Centrifugal fans (5, 6 and 7 series).

⁽¹⁾ Conditions according to UNE-EN 13215: Ambient temp. 32 °C, average evaporating temp. of -10 °C (PT) and -35 °C (NT), SH = 10 K, refrigerant R-449A.

⁽²⁾ Seasonal Performance Factor (SEPR) according to ErP directive 2015/1095/EU.

⁽³⁾ Sound pressure level of the condenser referred to dB(A) sound pressure level, measured in the open field at 10 m distance.

⁽⁴⁾ Available static pressure condensation.

400 V-III-50 Hz | Positive temperature | Scroll compressor | R-134a / R-449A

Refrigerant	Compressor	Axial version Series / Model	Compressor HP Model	Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Centrifugal version			
				Average evaporating temperature							Fan Ø (mm)	Air flow (m³/h)				Series / Model	Air flow (m³/h)	ASP (Pa) ⁽⁴⁾	
				0 °C	-5 °C	-10 °C	-15 °C												
R-134a	1x Scroll	MDV-SY-5 0451 ⁽⁵⁾	6	ZB45	9.4	7.8	6.4	5.2	2.8	3.6	15	1x Ø 450	4 300	3/8"-1 1/8"	165	28	MDV-SCY-5 0451	3 600	120
		MDV-SY-5 0571 ⁽⁵⁾	7.5	ZB57	11.6	9.7	8.0	6.4	4.0	3.0	18	1x Ø 450	4 300	3/8"-1 1/8"	169	32	MDV-SCY-5 0571	3 600	120
		MDV-SY-5 0761 ⁽⁵⁾	10	ZB76	14.8	12.5	10.4	8.5	5.3	2.7	22	1x Ø 450	4 300	1/2"-1 3/8"	186	31	MDV-SCY-5 0761	3 600	120
		MDV-SY-6 0951	13	ZB95	20.0	16.5	13.5	10.9	6.1	3.4	31	2x Ø 450	2x 3 600	1/2"-1 3/8"	255	33	MDV-SCY-6 0951	2x 3 600	160
		MDV-SY-6 1141 ⁽⁵⁾	15	ZB114	23.2	19.3	15.9	12.9	7.5	3.1	37	2x Ø 450	2x 3 600	1/2"-1 5/8"	256	35	MDV-SCY-6 1141	2x 3 600	160
	2x Scroll	MDV-SY-5 0422 ⁽⁵⁾	6	2x ZB21	9.4	7.8	6.4	5.1	2.9	4.2	16	1x Ø 450	4 300	3/8"-1 1/8"	181	28	MDV-SCY-5 0422	3 600	120
		MDV-SY-5 0582 ⁽⁵⁾	8	2x ZB29	11.5	9.6	7.9	6.4	4.0	3.8	22	1x Ø 450	4 300	3/8"-1 1/8"	182	28	MDV-SCY-5 0582	3 600	120
		MDV-SY-5 0762 ⁽⁵⁾	10	2x ZB38	14.8	12.4	10.3	8.4	5.2	3.8	27	1x Ø 450	4 300	1/2"-1 3/8"	200	30	MDV-SCY-5 0762	3 600	120
		MDV-SY-6 0902 ⁽⁵⁾	12	2x ZB45	18.9	15.6	12.8	10.3	5.4	4.6	29	2x Ø 450	2x 3 600	1/2"-1 3/8"	269	31	MDV-SCY-6 0902	2x 3 600	160
		MDV-SY-6 1142 ⁽⁵⁾	15	2x ZB57	23.3	19.4	15.9	12.9	7.7	3.9	35	2x Ø 450	2x 3 600	1/2"-1 5/8"	278	35	MDV-SCY-6 1142	2x 3 600	160
		MDV-SY-7 1522 ⁽⁵⁾	20	2x ZB76	31.8	26.3	21.5	17.4	9.8	4.3	48	3x Ø 450	3x 4 750	5/8"-2 1/8"	407	34	MDV-SCY-7 1522	3x 3 600	160
		MDV-SY-7 1902	26	2x ZB95	39.2	32.6	26.7	21.7	12.6	4.1	63	3x Ø 450	3x 4 750	5/8"-2 1/8"	415	35	MDV-SCY-7 1902	3x 3 600	160
		MDV-SY-7 2282 ⁽⁵⁾	30	2x ZB114	45.3	37.9	31.3	25.4	15.5	3.9	74	3x Ø 450	3x 4 750	5/8"-2 1/8"	417	37	MDV-SCY-7 2282	3x 3 600	160
		MDV-SY-6 0633 ⁽⁵⁾	9	3x ZB21	14.4	11.8	9.7	7.8	4.2	4.5	25	2x Ø 450	2x 3 600	3/8"-1 3/8"	274	31	MDV-SCY-6 0633	2x 3 600	160
		MDV-SY-6 0873 ⁽⁵⁾	12	3x ZB29	17.8	14.7	12.0	9.7	5.6	4.2	33	2x Ø 450	2x 3 600	1/2"-1 3/8"	276	31	MDV-SCY-6 0873	2x 3 600	160
	MDV-SY-6 1143 ⁽⁵⁾	15	3x ZB38	23.2	19.3	15.9	12.9	7.2	4.2	42	2x Ø 450	2x 3 600	1/2"-1 5/8"	302	32	MDV-SCY-6 1143	2x 3 600	160	
	MDV-SY-6 1353 ⁽⁵⁾	18	3x ZB45	27.0	22.6	18.7	15.2	8.6	4.2	43	2x Ø 450	2x 3 600	1/2"-1 5/8"	309	32	MDV-SCY-6 1353	2x 3 600	160	
	MDV-SY-6 1713 ⁽⁵⁾	22.5	3x ZB57	32.8	27.6	23.0	18.8	12.2	3.5	51	2x Ø 450	2x 3 600	5/8"-2 1/8"	321	36	MDV-SCY-6 1713	2x 3 600	160	
MDV-SY-7 2283 ⁽⁵⁾	30	3x ZB76	45.6	38.1	31.5	25.6	15.4	4.0	68	3x Ø 450	3x 4 750	5/8"-2 1/8"	469	35	MDV-SCY-7 2283	3x 3 600	160		
MDV-SY-7 2853	39	3x ZB95	55.2	46.4	38.7	31.7	19.9	3.7	92	3x Ø 450	3x 4 750	7/8"-2 1/8"	480	36	MDV-SCY-7 2853	3x 3 600	160		
R-449A	2x Scroll	MDV-SG-5 0422 ⁽⁵⁾	6	2x ZB21	14.8	12.6	10.6	8.8	5.2	3.7	16	1x Ø 450	4 300	1/2"-1 1/8"	181	28	MDV-SCG-5 0422	3 600	120
		MDV-SG-6 0582 ⁽⁵⁾	8	2x ZB29	20.6	17.3	14.5	12.0	6.3	4.1	23	2x Ø 450	2x 3 600	5/8"-1 1/8"	247	31	MDV-SCG-6 0582	2x 3 600	160
		MDV-SG-6 0762 ⁽⁵⁾	10	2x ZB38	25.9	21.9	18.3	15.2	8.3	4.0	29	2x Ø 450	2x 3 600	5/8"-1 3/8"	265	31	MDV-SCG-6 0762	2x 3 600	160
		MDV-SG-6 0902 ⁽⁵⁾	12	2x ZB45	30.2	25.6	21.5	17.8	9.8	4.0	31	2x Ø 450	2x 4 750	5/8"-1 3/8"	269	31	MDV-SCG-6 0902	2x 3 600	160
		MDV-SG-6 1142 ⁽⁵⁾	15	2x ZB57	37.9	32.4	27.5	23.0	12.4	4.0	37	2x Ø 450	2x 4 750	7/8"-1 5/8"	277	35	MDV-SCG-6 1142	2x 3 600	160
	3x Scroll	MDV-SG-7 1142 ⁽⁵⁾	15	2x ZB57	40.9	34.4	28.7	23.7	11.7	4.5	39	3x Ø 450	3x 4 750	7/8"-1 5/8"	372	35	MDV-SCG-7 1142	3x 3 600	160
		MDV-SG-7 1522 ⁽⁵⁾	20	2x ZB76	52.4	44.6	37.7	31.4	16.8	4.1	48	3x Ø 450	3x 4 750	7/8"-2 1/8"	407	34	MDV-SCG-7 1522	3x 3 600	160
		MDV-SG-6 0633 ⁽⁵⁾	9	3x ZB21	23.3	19.6	16.4	13.6	7.3	4.0	25	2x Ø 450	2x 3 600	5/8"-1 1/8"	274	31	MDV-SCG-6 0633	2x 3 600	160
		MDV-SG-6 0873 ⁽⁵⁾	12	3x ZB29	29.8	25.3	21.2	17.6	10.0	3.8	35	2x Ø 450	2x 4 750	5/8"-1 3/8"	276	31	MDV-SCG-6 0873	2x 3 600	160
		MDV-SG-6 1143 ⁽⁵⁾	15	3x ZB38	36.8	31.4	26.6	22.3	13.2	3.7	43	2x Ø 450	2x 4 750	7/8"-1 5/8"	302	32	MDV-SCG-6 1143	2x 3 600	160
		MDV-SG-7 1353 ⁽⁵⁾	18	3x ZB45	45.4	38.5	32.2	26.8	14.5	4.0	46	3x Ø 450	3x 4 750	7/8"-1 5/8"	404	33	MDV-SCG-7 1353	3x 3 600	160
		MDV-SG-7 1713 ⁽⁵⁾	22.5	3x ZB57	57.1	48.8	39.9	34.6	18.4	4.1	55	3x Ø 450	3x 4 750	7/8"-2 1/8"	416	37	MDV-SCG-7 1713	3x 3 600	160

HFC direct expansion

400 V-III-50 Hz | Negative temperature | Scroll compressor | R-449A

Refrigerant	Compressor	Axial version Series / Model	Compressor HP Model	Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Centrifugal version			
				Average evaporating temperature							Fan Ø (mm)	Air flow (m³/h)				Series / Model	Air flow (m³/h)	ASP (Pa) ⁽⁴⁾	
				-20 °C	-25 °C	-30 °C	-35 °C												
R-449A	1x Scroll	BDV-SG-5 0131 ⁽⁵⁾	4	ZF13KVE*	6.4	5.4	4.5	3.7	2.9	1.7	11	1x Ø 450	4 300	3/8"-7/8"	167	29	BDV-SCG-5 0131	3 600	120
		BDV-SG-5 0181 ⁽⁵⁾	6	ZF18KVE*	10.0	8.4	6.9	5.7	4.0	1.9	16	1x Ø 450	4 300	3/8"-1 1/8"	168	31	BDV-SCG-5 0181	3 600	120
		BDV-SG-6 0251 ⁽⁵⁾	8	ZF25K5E*	12.5	10.5	8.7	7.1	4.6	2.1	19	2x Ø 450	2x 3 600	1/2"-1 3/8"	233	34	BDV-SCG-6 0251	2x 3 600	160
		BDV-SG-6 0341	10	ZF34K5E	16.8	14.1	11.7	9.6	6.2	2.0	28	2x Ø 450	2x 3 600	1/2"-1 3/8"	259	33	BDV-SCG-6 0341	2x 3 600	160
		BDV-SG-6 0411 ⁽⁵⁾	13	ZF41K5E*	21.1	17.7	14.7	12.0	7.8	2.1	34	2x Ø 450	2x 4 750	1/2"-1 3/8"	259	33	BDV-SCG-6 0411	2x 3 600	160
	2x Scroll	BDV-SG-6 0491	15	ZF49K5E	22.8	19.2	15.9	13.0	9.0	1.9	35	2x Ø 450	2x 4 750	1/2"-1 5/8"	263	35	BDV-SCG-6 0491	2x 3 600	160
		BDV-SG-6 0262 ⁽⁵⁾	8	2x ZF13KVE*	12.8	10.8	8.9	7.3	5.7	1.8	21	2x Ø 450	2x 3 600	1/2"-1 3/8"	274	32	BDV-SCG-6 0262	2x 3 600	160
		BDV-SG-6 0362 ⁽⁵⁾	12	2x ZF18KVE*	19.8	16.7	13.8	11.3	7.9	2.0	32	2x Ø 450	2x 4 800	1/2"-1 3/8"	277	34	BDV-SCG-6 0362	2x 3 600	160
		BDV-SG-7 0502 ⁽⁵⁾	16	2x ZF25K5E	24.8	20.8	17.2	14.2	9.2	2.0	38	3x Ø 450	3x 4 750	1/2"-1 5/8"	424	35	BDV-SCG-7 0502	3x 3 600	160
		BDV-SG-7 0682	20	2x ZF34K5E	33.5	28.2	23.4	19.0	12.8	2.1	57	3x Ø 450	3x 4 750	5/8"-2 1/8"	424	35	BDV-SCG-7 0682	3x 3 600	160
		BDV-SG-7 0822 ⁽⁵⁾	26	2x ZF41K5E*	41.8	35.2	29.3	23.7	15.8	2.1	65	3x Ø 450	3x 4 750	5/8"-2 1/8"	424	35	BDV-SCG-7 0822	3x 3 600	160
		BDV-SG-7 0982	30	2x ZF49K5E	45.1	38.0	31.6	25.6	18.4	2.0	67	3x Ø 450	3x 4 750	5/8"-2 1/8"	431	38	BDV-SCG-7 0982	3x 3 600	160
		BDV-SG-6 0393 ⁽⁵⁾	12	3x ZF13KVE*	19.3	16.2	13.4	10.9	8.6	1.8	30	2x Ø 450	2x 4 750	1/2"-1 3/8"	315	33	BDV-SCG-6 0393	2x 3 600	160
		BDV-SG-6 0543 ⁽⁵⁾	18	3x ZF18KVE*	29.9	25.1	20.8	17.0	12.2	1.9	46	2x Ø 450	2x 4 750	5/8"-2 1/8"	320	35	BDV-SCG-6 0543	2x 3 600	160
		BDV-SG-7 0753 ⁽⁵⁾	24	3x ZF25K5E*	37.3	31.4	26.1	21.2	14.2	2.1	55	3x Ø 450	3x 4 750	5/8"-2 1/8"	415	38	BDV-SCG-7 0753	3x 3 600	160
	3x Scroll	BDV-SG-7 1023	30	3x ZF34K5E	50.1	42.2	35.1	28.5	19.8	2.0	82	3x Ø 450	3x 4 750	7/8"-2 1/8"	493	37	BDV-SCG-7 1023	3x 3 600	160
		BDV-SG-7 1233 ⁽⁵⁾	39	3x ZF41K5E*	62.4	52.6	43.8	35.6	24.7	2.0	94	3x Ø 450	3x 4 750	7/8"-2 1/8"	493	37	BDV-SCG-7 1233	3x 3 600	160

⁽¹⁾ Conditions according to UNE-EN 13215: Ambient temp. 32 °C, average evaporating temp. of -10 °C (PT) and -35 °C (NT), SH=10 K, refrigerant R-449A.

⁽²⁾ Seasonal Performance Factor (SEPR) according to ErP directive 2015/1095/EU.

⁽³⁾ Sound pressure level of the condenser referred to dB(A) sound pressure level, measured in the open field at 10 m distance.

⁽⁴⁾ Available static pressure condensation.

⁽⁵⁾ Available models with Digital compressor.

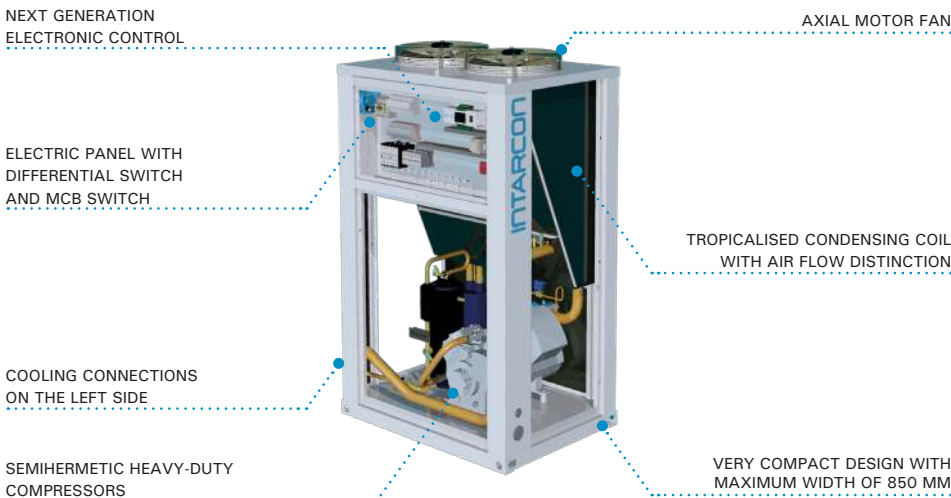


Footprint condensing units with semihermetic compressor, with axial or centrifugal condensation of compact construction, for medium and low temperature, with electrical panel and electronic control (depending on version).

Features

- ▶ 400 V-III-50 Hz power supply. Available in 60 Hz. Other voltages by request.
- ▶ Copeland Stream semihermetic compressor, with rotalock service valves, mounted on shock absorbers, crankcase heater and CoreSense™ electronic compressor diagnostic and protection module.
- ▶ Condenser coil made of copper pipes and aluminium fins.
- ▶ Axial variable speed fan condensation pressure control by voltage variation (6 and 7 series), and condensation pressure control by double speed (star-delta) of the motor fans (8 series).
- ▶ Cooling circuit equipped with oil separator, high and low pressure switches, ceramic filter, liquid receiver and sight glass.
- ▶ Electrical power and control panel, with differential protection and thermal and magneto-thermal protection of compressor/s and motor fan/s.
- ▶ Fan for cooling the electrical panel.

- ❄ Axial fans for outdoor installation.
- ❄ Radial fans for indoor installation in technical rooms.
- ❄ Very compact design.



Highly reliable semihermetic compressors

The new Copeland Stream range of semihermetic compressors provides best-in-class performance with both existing HFC refrigerants and new low-GWP refrigerants.

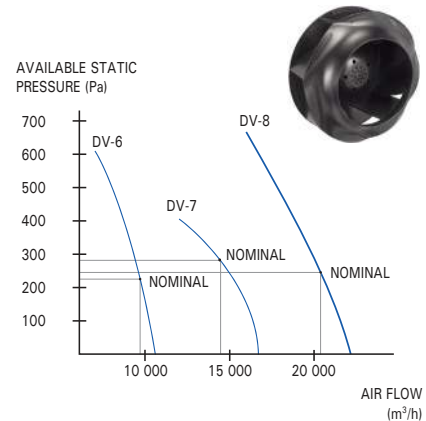
The range consists of four- and six-cylinder semihermetic compressors. They are available to work with variable frequency drives or with Digital modulation, to achieve continuous capacity modulation.



The CoreSense™ technology incorporated in the compressors helps to extend the life of the equipment. This technology provides advanced compressor protection, fault diagnosis, communication and energy consumption measurement.

Radial fan

intarCUBE cooling units are equipped with speed-modulated radial fans to allow hot condensing air to be extracted via air ducts.



400 V-III-50 Hz | Positive temperature | Semihermetic compressor | R-134a / R-449A

Refrigerant	Compressor	Axial version		Compressor		Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Radial version		
		Series / Model		HP	Model	Average evaporating temperature							Fan Ø (mm)	Air flow (m³/h)				Series / Model	Air flow (m³/h)	ASP (Pa) ⁽⁴⁾
						0 °C	-5 °C	-10 °C	-15 °C											
R-134a	1x Semihermetic	MDV-TY-6 0131		13	4MF-13X	29.4	24.2	19.4	15.2	8.2	3.4	36	2x Ø 450	2x 4 750	1/2"-1 5/8"	367	36	MDV-TCY-6 0131	2x 4 800	160
		MDV-TY-6 0151		15	4ML-15X	33.9	28.2	23.0	18.3	9.8	3.3	40	2x Ø 450	2x 4 750	5/8"-1 5/8"	370	37	MDV-TCY-6 0151	2x 4 800	160
		MDV-TY-6 0201		20	4MM-20X	36.5	30.4	25.0	20.0	10.9	3.2	44	2x Ø 450	2x 4 750	5/8"-2 1/8"	372	38	MDV-TCY-6 0201	2x 4 800	160
		MDV-TY-6 0251		25	4MU-25X	43.0	36.2	29.9	24.2	14.1	2.8	57	2x Ø 450	2x 4 750	5/8"-2 1/8"	376	40	MDV-TCY-6 0251	2x 4 800	160
		MDV-TY-7 0301		30	6MM-30X	55.6	46.2	37.8	30.1	16.6	3.1	67	3x Ø 450	3x 4 750	7/8"-2 1/8"	500	40	MDV-TCY-7 0301	2x 7 125	250
		MDV-TY-7 0351		35	6MT-35X	60.7	50.8	41.8	33.6	18.8	3.0	74	3x Ø 450	3x 4 750	7/8"-2 1/8"	506	41	MDV-TCY-7 0351	2x 7 125	250
		MDV-TY-8 0351		35	6MT-35X	64.8	53.7	43.8	34.7	19.5	3.2	72	2x Ø 630	2x 10 000	3/4"-2 5/8"	555	41	MDV-TCY-8 0351	2x 10 000	230
R-449A	1x Semihermetic	MDV-TG-7 0251		25	4MH-25X	56.9	48.3	40.2	32.9	17.0	3.2	49	3x Ø 450	3x 4 750	7/8"-2 1/8"	472	37	MDV-TCG-7 0251	2x 7 125	250
		MDV-TG-7 0301		30	4MI-30X	61.4	52.4	43.9	36.2	18.9	3.1	54	3x Ø 450	3x 4 750	7/8"-2 1/8"	473	38	MDV-TCG-7 0301	2x 7 125	250
		MDV-TG-8 0301		30	4MI-30X	65.1	55.1	45.6	37.3	19.2	3.4	51	2x Ø 630	2x 10 000	1 1/8"-2 1/8"	522	39	MDV-TCG-8 0301	2x 10 000	230
		MDV-TG-8 0351		35	4MK-35X	77.5	66.0	55.1	45.3	25.0	3.0	66	2x Ø 630	2x 10 000	1 1/8"-2 1/8"	536	40	MDV-TCG-8 0351	2x 10 000	230

400 V-III-50 Hz | Negative temperature | Semihermetic compressor | R-449A

Refrigerant	Compressor	Axial version		Compressor		Cooling capacity (kW) ⁽¹⁾				Input power (kW)	SEPR ⁽²⁾	Max. current (A)	Condenser		Liq-Gas Cooling Connection	Weight (kg)	SPL dB(A) ⁽³⁾	Radial version		
		Series / Model		HP	Model	Average evaporating temperature							Fan Ø (mm)	Air flow (m³/h)				Series / Model	Air flow (m³/h)	ASP (Pa) ⁽⁴⁾
						-20 °C	-25 °C	-30 °C	-35 °C											
R-449A	1x Semihermetic	BDV-TG-6 0131		13	4MF-13X	21.1	16.6	12.7	9.1	7.5	2.0	35	2x Ø 450	2x 4 750	5/8"-1 5/8"	367	36	BDV-TCG-6 0131	2x 4 800	160
		BDV-TG-6 0151		15	4ML-15X	25.1	20.1	15.7	11.9	9.0	2.1	40	2x Ø 450	2x 4 750	5/8"-1 5/8"	370	37	BDV-TCG-6 0151	2x 4 800	160
		BDV-TG-6 0201		20	4MM-20X	27.3	22.0	17.3	13.3	10.0	2.1	44	2x Ø 450	2x 4 750	5/8"-2 1/8"	372	38	BDV-TCG-6 0201	2x 4 800	160
		BDV-TG-6 0251		25	4MU-25X	32.1	26.0	20.6	15.8	12.4	2.1	57	2x Ø 450	2x 4 750	5/8"-2 1/8"	376	40	BDV-TCG-6 0251	2x 4 800	160
		BDV-TG-7 0301		30	6MM-30X	41.6	33.4	26.2	19.9	15.4	2.0	67	3x Ø 450	3x 4 750	5/8"-2 1/8"	500	40	BDV-TCG-7 0301	2x 7 125	250
		BDV-TG-7 0351		35	6MT-35X	45.4	36.6	28.8	22.0	17.0	2.0	74	3x Ø 450	3x 4 750	5/8"-2 1/8"	506	41	BDV-TCG-7 0351	2x 7 125	250
		BDV-TG-7 0401		40	6MU-40X	49.4	40.0	31.5	24.1	18.9	2.0	83	3x Ø 450	3x 4 750	7/8"-2 5/8"	510	42	BDV-TCG-7 0401	2x 7 125	250

Options

- ▶ Anti-corrosion coil coating.
- ▶ Automatic emergency manoeuvre.
- ▶ Discharge check valve.
- ▶ Low voltage and phase change protection.
- ▶ Heat recovery.
- ▶ Radial electronic EC fans.
- ▶ Digital compressor control.

⁽¹⁾ Conditions according to UNE-EN 13215: Ambient temp. 32 °C, average evaporating temp. of -10 °C (PT) and -35 °C (NT), SH = 10 K, refrigerant R-449A.

⁽²⁾ Seasonal Performance Factor (SEPR) according to ErP directive 2015/1095/EU.

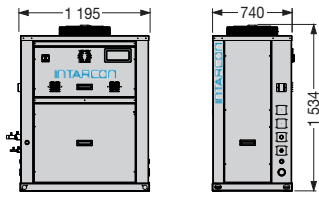
⁽³⁾ Sound pressure level of the condenser referred to dB(A) sound pressure level, measured in the open field at 10 m distance.

⁽⁴⁾ Available static pressure condensation.

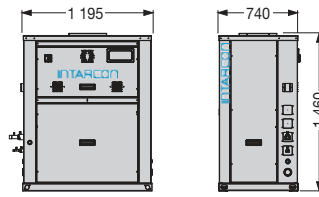
HFC direct expansion

Dimensions

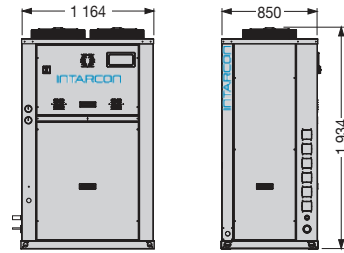
5 series - axial



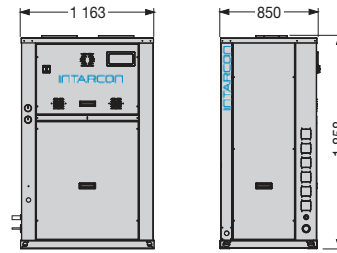
5 series - centrifugal



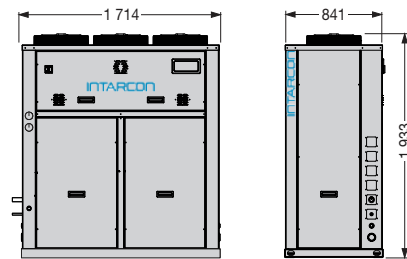
6 series - axial



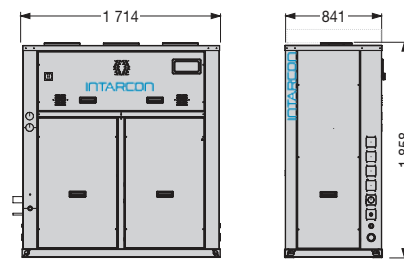
6 series - centrifugal or radial with vertical drive



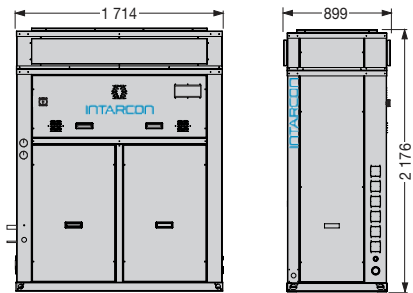
7 series - axial



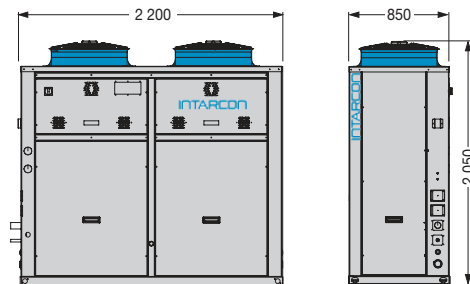
7 series - centrifugal



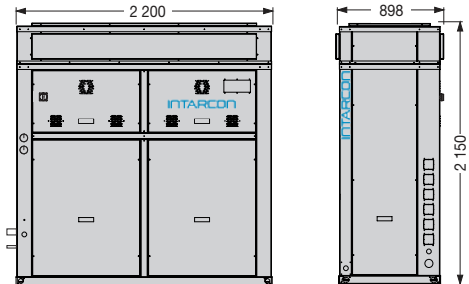
7 series - radial with vertical drive



8 series - axial



8 series - radial with vertical drive



Dimensions in mm.

Electronic control

XM670K Control for cold room: intarCUBE units with one or two compressors can be equipped with joint control of evaporator and condensing unit.

- ▶ Capacity control by temperature, with management of up to 2 compressors or two power stages.
- ▶ Control of up to two independent defrosts for two evaporators in the same cold room.
- ▶ Proportional condensation control.
- ▶ Remote control.



XC control for mini refrigeration units: intarCUBE condensing units are equipped with an electronic controller:

- ▶ Capacity control by suction pressure.
- ▶ Compressor and fan management with proportional condensation control.
- ▶ Low and high pressure transducers.
- ▶ Safety control.
- ▶ Optional emergency manoeuvre by means of adjustable pressure switches with manual or automatic activation.
- ▶ Evaporator solenoid permit.

