Daikin in Refrigeration

From farm to fork

Daikin is a strong challenger in the refrigeration market. We can create the ideal solution for each customer's specific situation.
As our products contain the latest technologies we ensure the highest energy efficiency. Our units are rigorously tested in order to provide you reliable operation.
With the acquisition of the Zanotti, Tewis and AHT groups, we expand our refrigeration business providing a larger and more diverse product line for all aspects in the cold chain.

Refrigeration

Inverter technology


Scroll compressor


Screw compressor


Reciprocating compressor


Swing compressor

For latest data, please consult my.daikin.eu

Why choose Daikin?

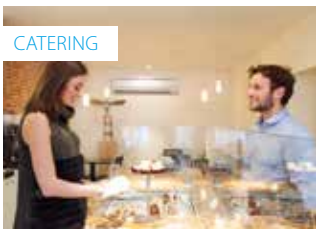
We know refrigeration inside out

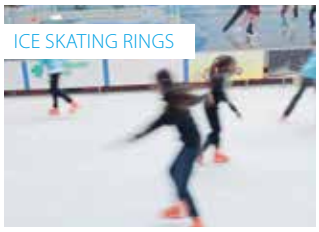
- We have over 100 years of experience in the Refrigeration business.
- We can meet all refrigeration needs from farm to fork, thanks to our wide range of refrigeration products.
- Innovative and Reliable own technology and expertise on Refrigerants, controls and compressors!
- Your advisor for solutions to meet your needs in line with legislation (F-gas regulation, ecodesign,...) and with focus on reliability, safety, Total Equivalent Warming impact and running cost.

Controlled temperatures throughout the whole supply chain

We can meet all refrigeration needs from farm to fork

Our extended product line-up is able to provide solutions for:





...

We can fulfill any refrigeration need

Daikin Refrigeration – United in cold

HUBBARD
a member of DAIKIN group

Hubbard Products Ltd., is one of the UK's leading designers, manufacturers and suppliers of commercial cooling equipment and has earned an enviable Global reputation for innovation and design-led excellence.

DAIKIN

Daikin Europe N.V. is a major European producer of air conditioners, heating systems and refrigeration equipment, with approximately 5,500 employees throughout Europe and major manufacturing facilities based in Belgium, the Czech Republic, Germany, Italy, Turkey and the UK. Globally, Daikin is renowned for its pioneering approach to product development and the unrivalled quality and versatility of its integrated solutions.

AHT
a member of DAIKIN group

AHT develops, manufactures and sells refrigerating and freezing showcases specifically suited for food retailers. Leading the "plug-in" type showcases segment, AHT leads the market by the active launch of new products corresponding to evolving store layouts. Furthermore, utilizing its technological capabilities and business resources, AHT serves large accounts which include major food retail chains worldwide.

Tewis
a member of DAIKIN group

Tewis is a leading company in the design and engineering of refrigeration systems. Along with their expertise in customising controls (including monitoring), Tewis offers total comprehensive solutions for Refrigeration and Climate applications. Over the last few years, Tewis has focused on developing a range of CO_2 based refrigeration systems and has established a long-lasting relationship with key Spanish and Portuguese food retailers. Its mission and philosophy to date has been to achieve high reliability and realise remarkable energy savings for their customer base.

DAIKIN

Daikin Chemicals

Daikin Chemicals is one of the world's foremost manufacturer of fluorochemical products and is a leading expert in that field. We strive to find new possibilities for living and industry by making the most of fluorine characteristics using our own exclusively developed technologies.

ZANOTTI
a member of DAIKIN group

Zanotti is a refrigeration specialist founded in 1962. With over 50 years of experience in food storing services covering the needs of commercial and industrial refrigeration, but also the needs of the transportation of fresh and frozen products. Zanotti changed the refrigeration world from the early days with the introduction of the Uniblock, an all in one plug and play refrigeration unit for cold rooms. Today they employ more than 600 people, with three production facilities and an annual turnover of approx 130 million Euro.

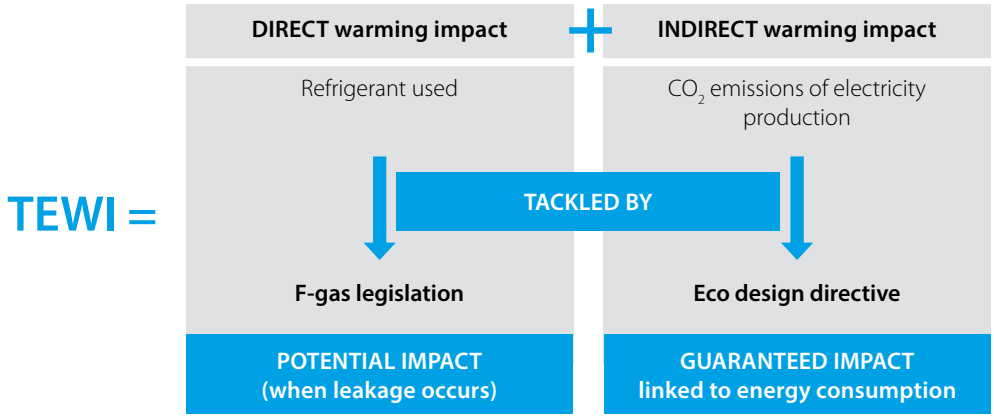
Meeting customer needs!

Depending on type of application, location and customers interest/values, the optimal refrigeration solution for the customer can potentially be different! **Thanks to our wide product portfolio, Daikin can offer what a customer really needs!**

The DNA of our Advice is:

☑ Safety and Reliability

☑ Reducing the Total Equivalent Warming Impact (TEWI)



Reduction of CO_2 emissions is one of the main priorities for the future. A refrigeration plant's global warming effect is the combination of the possible refrigerant losses (Direct warming impact) and the CO_2 emissions caused by electricity production (Indirect warming impact). Country per country situation is different, however on average in Europe CO_2 release at energy production is quite high (average 0,45kg/kwh of Electrical Energy)! Due to this, there is a significant greenhouse effect over the lifetime of the refrigeration plant and efficiency is thus one of the crucial focus points in reducing TEWI!
When various refrigeration solutions are being compared it is thus important to take into account both aspects as in some cases optimizing the direct warming impact (eg: changing refrigerant) will have an opposite effect on the indirect warming impact!

☑ Reducing your running cost

Through focus on reliability & quality, through extensive testing on each product, and energy efficiency our aim is to reduce your operational cost to the absolute minimum!

E. LECLERC, HYPERMARKET

ALCOHOLIC BEVERAGE COOLING FACILITY

EDEKA, SUPERMARKET

COOMBE FISHERIES

ZIGGO DOME, EVENT HALL

SERVICE STATION

Products overview

			Technology compressor	Hermetic			Semi-hermetic		Capacity control			
			Application	Refrigerant	Reciprocating compressor	Rotary	Scroll	Reciprocating compressor	Screw	Variable	External frequency drive	DC control	Digital scroll
Plug & Play solution for cold room & wine room	Monoblock & Uni-block 		MT	R134a	•								
				R404A	•			•					
				R407H	•								
				R449A	•			•					
			LT	R404A	•			•					
				R452A	•								
				R449A	•			•					
	Bi-block 		MT	R134a	•								
				R404A	•			•					
				R407F	•								
				R449A	•			•					
			LT	R404A	•								
				R452A	•								
				R449A	•								
	Wine Units 		HT cooling	R134a	•								
				R404A	•								
Open-Type Condensing Units	ZH 		MT	R404A				•					
				R134a				•					
				R407H				•					
				R449A				•					
			LT	R404A				•					
				R449A				•					
Closed-Type Condensing Units	Single CU(ON/OFF or INVERTER) 		MT	R134A/R404A/ R449A	•		•	•					
			LT	R404A/R449A/ R452A	•		•	•					
	Twin CU 		MT	R134A/R404A/ R449A			•	•					
			LT	R404A/R449A			•	•					
	Multi CM 		MT	R404A/R449A	•		•	•					
			LT	R404A/R449A	•		•	•					
Compressor racks & packs	Racks 		MT	R404A/R449A/ R134A	•		•	•	•				
			LT	R404A/R449A/ R407F	•		•	•	•				
Refrigerated Display Cabinets	Horizontal Cabinets 		MT/LT	R290	•					•			
	Overhead Cabinets 												
	Refrigerated Multideck Cabinets 												
	Ice Cream Cabinets 												
	Promotional Display Cooler 												


Freezing (Low temperature)
(-20° C / +35°C)
Chilling (Medium temperature)
(0° C / +35°C)
Cooling (High Temperature)
(+20° C/+10°C)
Heating
Cooling capacity (kW)
10
100
200
500
0.8-9.8
0.7-63.3
0.7-3.5
4.8-54.5
0.6-51.5
0.6-7.8
3.9-48
0.8-13.4
0.7-63.3
4.3-11.4
4.8-54.5
0.6-51.5
0.6-11.8
3.9-48
0.7-2.3
0.7-2.3
3.3-44.5
2.2-28.3
3.1-41.8
3.1-41.9
1.7-34.2
2.4-47.1
0.8-72.3
0.6-35
8.5-26
7.5-23
10-180
6.5-98
10-330
3-135

NA

NA

NA

NA

NA

Refrigerated Display Cabinets

Plug in, Refrigerate, Sell more!

Daikin proudly presents the newest member of the Daikin Refrigeration family

AHT develops, manufactures and sells refrigerating and freezing showcases specifically suited for food retailers. Leading the "plug-in" type showcases segment, AHT utilizes its technological capabilities and business resources, AHT serves large accounts which include major food retail chains worldwide.

A comprehensive range of plug in products

Offering a lot of selling power in a small space

1. Horizontal chest cabinets

› Redefining economy and lifting product presentation to a new level
› Maximizing your sales space, minimizing maintenance

2. Refrigerated overhead cabinets

› Merchandise presentation at eye level with optimized use of space and exceptionally elegant presentation

3. Refrigerated multideck cabinets

› Flexible all inclusive multideck, state-of-the-art economic chilling

4. Ice cream cabinets

› Excellent product visibility due to low cabinet height

5. Promotional display coolers

› Style and function combined: Elegant design to boost your sales

Montreal & Montreal Slim

The new generation of visual merchandising

Highest freshness standards with efficiency as well as environmental-friendly technology, it promotes your sales through excellent product presentation.

› **VISUAL MERCHANDISING**
Striking design with high customer benefit at the POS: MONTREAL/MONTREAL SLIM guarantees a perfect view with stylish side glazing and LED interior lighting. The smooth-running sliding lid and easy product removal thrill customers thereby motivating them to buy

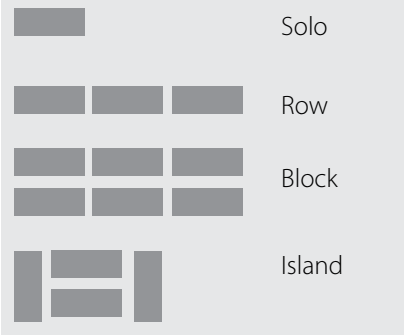
› **HIGH ENERGY SAVING**
With MONTREAL / MONTREAL SLIM, you save investment and operating costs compared to conventional integrated systems through the mature technology and construction with AHT economizer as well as the electronic speed-controlled compressor

› **SEMI-AUTOMATIC DEFROSTING**
Regular defrosting with a constant product temperature – that way you reduce your cleaning costs tremendously. The plastic inner compartment even ensures further optimized product hygiene

› **INTELLIGENT INSTALLATION**
Ready to plug in without any installation work and a completely maintenance-free refrigeration system – hence you profit twice with MONTREAL / MONTREAL SLIM: during the purchase and in ongoing operation

› **ENVIRONMENT AND CLIMATE PROTECTION**
Important for a green conscience: MONTREAL/ MONTREAL SLIM is completely cfc- and hfc free and uses the ecologically safe and natural refrigerant propane (R290).

Setup Variations



› Optionally with an end cabinet on both sides
› Expandable with commercially available shelf units

MONTREAL	175	210	250	210 EC
GROSS CONTENT NET	1002 litres	1233 litres	1497 litres	1215 litres
CONTENT	581 litres	724 litres	886 litres	630 litres
PRODUCT PRESENTATION AREA (TDA)	1.27 m2	1.57 m2	1.82 m2	1.41 m2
RATED POWER CONSUMPTION PER UNIT	430 W	430 W	450 W	430 W
RATED POWER CONSUMPTION FOR LED LIGHT	34 W	39 W	46 W	40 W
RATED CURRENT	2.7 A	2.7 A	2.9 A	2.7 A
ENERGY CONSUMPTION AT 25 °C	7.3 KWh/24h	7.5 KWh/24h	7.7 KWh/24h	7.5 KWh/24h
DIMENSIONS	1754*1027*910	2103*1027*910	2503*1027*910	2173*1024*910
MONTREAL SLIM	**SLIM 175**	**SLIM 210**	**SLIM 250**	**SLIM EC**
GROSS CONTENT NET	837 litres	1030 litres	1250 litres	1062 litres
CONTENT	481 litres	599 litres	734 litres	551 litres
PRODUCT PRESENTATION ARE (TDA)	0.92 m2	1.14 m2	1.4 m2	1.21 m2
RATED POWER CONSUMPTION PER UNIT	430 W	430 W	450 W	430 W
RATED POWER CONSUMPTION FOR LED LIGHT	34 W	39 W	46 W	38 W
RATED CURRENT	2.7 A	2.7 A	2.9 A	2.7 A
ENERGY CONSUMPTION AT 25 °C	4.5 KWh/24h	5.2 KWh/24h	5.5 KWh/24h	4.6 KWh/24h
DIMENSIONS	1754*887*910	2103*887*910	2503*887*910	1923*1027*910

Sydney & Sydney XL

Sales-promoting and attractive

- High energy savings compared to conventional integrated systems
- Maximum energy efficiency thanks to RPM-regulated compressor
- AHT economizer: Additional energy saving potential due to extensive optimization of technology and construction
- Plastic inner lining for optimal hygiene and easy cleaning
- Ecologically sound through use of the natural coolant propane
- Ready to plug-in, no installation work required.
- Elegant glass side panels for perfect visibility
- Smooth-running glass sliding lids
- Low access height for easy loading and removal of products
- Low investment and operating costs
- Maintenance-free refrigeration unit

Temperature display location: in central bar between front glass panes or in AHT standard position at bottom of front casing panel.

SYDNEY		**e conomize ENERGY SAVER PLUS**							
		213 EC		223* EC		230		250	
Technical Data		(-) VS AD IQ LED	(U)** VS AD IQ LED	(-) VS AD IQ LED	(U)** VS AD IQ LED	(-) VS AD IQ LED	(U)** VS AD IQ LED	(-)VS AD IQ LED	(U)**VS AD IQ LED
Gross volume	litre	1038	1038	1095	1095	1225	1225	1343	1343
Net volume acc to EN 23953	litre	677	660/441//632	716	701/468/671	853	838/555/806	938	927/615/891
Total display area	m2	1,36	1,36	1,44	1,44	1,53	1,53	1,69	1,69
Classification acc. to f N 23953		3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient temperature range	°C	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Arrestable interior temp range	°C	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to 23
Sound pressure in 1 m distance	dB(A)	43,6	43,6	43,6	43,6	43,6	43,6	43,6	43,6
Electrical Data									
Nominal voltage/frequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet	W	400	400	400	400	430	430	450	450
Nominal power LED light	W	37	37	39	39	43	43	46	46
Nominal current	A	2,6	2,6	2,6	2,6	2,7	2,7	2,9	2,9
Fuse protection	A	16	16	16	16	16	16	16	16
Energy consumption (at 25 °C)	kWh/24 h	5,3	1,4/2,8/5,3	5,9	1,6/3,3/5,9	5,4	1,5/2,9/5,4	5,9	1,7/3,2/5,9
length of power supply cord	mm	1750	1750	1750	1750	1750	1750	1750	1750
Refrigeration Data									
Refrigerant typo		R290	R290	R290	R290	R290	R290	R29O	R290
Refrigerant charge	g	100	100	100	100	120	120	130	130
Max. operating pressure	bar	30	30	30	30	30	30	30	30
Dimensions									
length outside/Inside	mm	2132/1931	2132/1931	2232/2031	2232/2031	2302/2173	2302/2173	2502/2373	2502/2373
Depth outside/Inside	mm	993/813	993/813	993/813	993/813	993/813	993/813	993/813	993/813
front access height/ height outside	mm	860/860	860/860	860/860	860/860	860/910	860/910	860/910	860/910
Stacking height	mm	510	530/360/510	510	530/360/510	560	580/390/560	560	580/390/560
Weight									
Net weight (exct packaging. incl process related internal accessories)	kg	149	163	157	171	179	193	188	202
Gross weight (Incl packaging and process retated interna accessories)	kg	158	172	166	180	188	202	197	211

* Recommended for optimal block placement of the Sydney XL series.
** Universal unit: The temperature ranges chilling (+3 °C to +15 °C) / meat/ground meat (0 °C to +2 °C) / freezing (-18 °C to -23 °C) can be coverted with this unit.

Temperature ranges

› Chilling +3 °C to +15 °C [1]
› Freezing -18 °C to -23 °C
› Meat and minced meat refrigeration 0 °C to +2 °C [2]

Highly Flexible

› Can be used as a stand alone unit
› Can be used in a line up
› Can be used as an island
› **Freezer Island**
SYDNEY models in block placement can be combined with end units
› Expandable with standard shelf units

Note2: Preset is fixed at 4 °C – possibility to change to another temperature by a service technician.

SYDNEY XL	**e conomize ENERGY SAVER PLUS**					
	XL175		XL210		XL250	
Technical Data	(-)VS AD IQ LED	(U)** VS AD IQ LED	(-)VS AD IQ LED	(U)**VS AD IQ LED	(-)VS AD IQ LED	(U)**VS AD IQ LED
Gross volume	957	957	1178	1178	1430	1430
Net volume acc to EN 23953	658	634/417/608	817	799/528/768	999	88//655/950
Total display area	1,21	1,21	1,49	1,49	1,8	1,8
Classification acc. to f N 23953	3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient temperature range	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Arrestable interior temp range	-18 to -23	+3 to +15 / 0 to +2/-18 to 23	-18 to -23	+3 to +15 / 0 to +2/-18 to 23	-18 to -23	+3 to +15 / 0 to +2/-18 to 23
Sound pressure in 1 m distance	43,6	43,6	43,6	43,6	43,6	43,6
Electrical Data						
Nominal voltage/frequency	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet	430	380	430	430	450	450
Nominal power LED light	34	34	39	39	46	46
Nominal current	2,7	2,3	2,7	2,7	2,9	2,9
Fuse protection	16	16	16	16	16	16
Energy consumption (at 25 °C)	5,3	1,5/3,0/5,3	5,8	1,6/3,2/5,8	6,4	1,8/3,5/6,4
length of power supply cord	1750	1750	1750	1750	1750	1750
Refrigeration Data						
Refrigerant typo	R290	R290	R290	R290	R290	R290
Refrigerant charge	100	100	110	110	140	140
Max. operating pressure	30	30	30	30	30	30
Dimensions						
length outside/Inside	1752/1623	1752/1623	2102/1973	2102/1973	2502/2373	2502/2373
Depth outside/Inside	1043/863	1043/863	1043/863	1043/863	1043/863	1043/863
front access height/ height outside	860/910	860/910	860/910	860/913	860/913	860/913
Stacking height	560	580/390/560	560	580/390/560	560	580/390/560
Weight						
Net weight (exct packaging. incl process related internal accessories)	138	147	181	192	202	216
Gross weight (Incl packaging and process retated interna accessories)	147	156	190	201	211	225

Athen XL Eco

The economical dimension in cooling and freezing equipment. Unbelievably efficient.

- High energy savings compared with conventional open units
- Maximum energy efficiency thanks to electronic speed-controlled compressor
- AHT e-conomize:
  Massive additional power saving potential due to extensive optimization in technology and construction
- New synthetic interior casing for better hygiene and easy cleaning
- Improved viewing of merchandise and optimized capacity
- Ecologically sound thanks to the natural refrigerant propane
- 100% CFC and PFC free
- Constant interior temperature and high power reserves ensure high merchandise quality
- Ready to plug-in - no additional assembly required
- Low costs for investment and operation
- Maintenance-free cooling technology

ATHEN XL ECO		economize POWER SAVER PLUS							
		175		207 EC		210		250	
Technical Data		(-) VS AD IQ	(U)* VS AD LED	(-) VS AD LED	(U)* VS AD LED	(-) VS AD LED	(U)* VS AD LED	(-) VS AD LED	(U)* VS AD LED
Gross content	litre	1009	1009	1167	1167	1243	1243	1507	1507
Not content according to EN 23953	litre	709	684/455/659	868	848/566/817	880	860/575/830	1075	1062/711/1025
Total display area (TDA)	m2	1,22	1,22	1,42	1,42	1,50	1,50	1,82	1,82
Classification according to EN 23953		3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient trmperature range	°C	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Inner temperature range	°C	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23
Sound pressure in 1 m distance	dB(A)	43,6	43,6	43,6	43,6	43,6	43,6	43,6	43,6
Electrical Data									
Nominal voltage/frequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet	W	420	420	470	470	450	450	450	450
Nominal power LED light	W	43	43	41	41	52	52	62	62
Nominal current	A	2,8	2,8	2,9	2,9	2,9	2,9	2,9	2,9
Fuse protection	A	16	16	16	16	16	16	16	16
Energy consumption (at 25 °C)	kWh/24 h	6,2	3,0/3,1/6,2	7,2	3,3/3,6/7,2	6,4	3,1/3,4/6,4	6,9	3,4/3,8/6,9
length of power supply cord	mm	1750	1750	1750	1750	1750	1750	1750	1750
Refrigeration Data									
Refrigerant typo		R290	R290	R290	R290	R290	R290	R290	R290
Refrigerant charge	g	100	100	110	110	110	110	120	120
Max. operating pressure	bar	30	30	30	30	30	30	30	30
Dimensions									
length outside/Inside	mm	1752/1623	1752/1623	2080/1948	2080/1948	2102/1973	2102/1973	2502/2373	2502/2373
Depth outside/Inside	mm	994/863	994/863	994/863	994/863	994/863	994/863	994/863	994/863
front access height/ height outside	mm	803/910	803/910	800/910	800/910	803/910	803/910	803/910	803/910
Stacking height	mm	600	620/420/600	600	620/420/600	600	620/420/609	600	620/420/600
Weight									
Net weight (exct packaging. incl process related internal accessories)	kg	125	136	171	180	139	153	159	173
Gross weight (Incl packaging and process retated interna accessories)	kg	136	147	182	191	150	164	168	182

Miami

The unbelievably economical cooling and freezing unit with optimized merchandise presentation

- High energy savings compared with conventional open units
- Maximum energy efficiency thanks to electronic speed-controlled compressor (VS)
- AHT e-conomize:
  Massive additional power saving potential due to extensive optimizations in technology and construction
- New synthetic interior casing for better hygiene and easy cleaning
- Ecologically sound thanks to the natural refrigerant propane
- 100% CFC and PFC free
- Ready to plug-in - no additional assembly required
- Improved viewing of merchandise and optimized capacity
- Low front access height for convenient merchandise placement and withdrawal
- Low investment and operating costs
- Maintenance-free cooling technology

MIAMI		e-conomize POWER SAVER PLUS							
		145		185		210		250	
Technical Data		(-) VS AD ECO LED	(U)* VS AD ECO LED	(-) VS AD ECO LED	(U)* VS AD ECO LED	(-)VS AD ECO LED	(U)* VS AD ECO LED	(-)VS AD ECO LED	(U)* VS AD ECO LED
Gross content	litre	605	605	927	927	926	926	1125	1125
Net content deforcing to IN 23953	litre	390	367/226/350	595	574 / 342 / 547	612	597/373/572	749	740/465/709
Total display area (TDA)	m2	0,82	0,82	1,24	1,24	1,24	1,24	1,51	1,51
Classification according to EN 23953		3L1	3S/3S/3L1	3L1	3S/3S/3L1	3L 1	3S/3S/3L1	3L 1	3S/3S/3L1
Ambient temperature range	°C	+16 to +25	+16 to +25	+16 a +25	+16 a+25	+16 a+25	+16 a+25	+16 a+25	+16 a+25
Inner temperature range	°C	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23
Sound pressure in 1 m distance	dB(A)	43,6	43,6	43,6	43,6	43,6	43,6	43,6	43,6
Electrical Data									
Nominal voitage/frequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet	W	400	400	500	500	490	490	490	490
Nominal power illumination	W	36	36	39	39	52	52	62	62
Nominal current	A	1,8	1,8	3,0	3,0	2,8	2,8	2,8	2,8
Fuse protection	A	16	16	16	16	16	16	16	16
Energy consumption (at 25 °C)	kWh/24 h	4,5	1,8/2,8/4,5	5,1	2,1/3,3/5,1	4,9	2,2/3,3/4,9	5,3	2,5/3,9/5,3
length of power supply cord	mm	1750	1750	1750	1750	1750	1750	1750	1750
Refrigeration Data					R290	R290	R290	R290	R290
Refrigerant type		R290	R290	R290	100	100	100	110	110
Refrigerant charge	g	80	80	100	30	30	30	30	30
Max operating pressure	bar	30	30	30					
Dimensions					1850/1723	2102/1973	2102/1973	2502/2373	2502/2373
1 ength outsrde/mside	mm	1457/1328	1457/1328	1850/1723	994/863	854/723	854/723	854/723	854/723
Depth outsrcfefinside	mm	854 / 723	854/723	994/863	722/834	727/833	727/833	727/833	727/833
Front access heightAieight outside	mm	727 / 833	727/833	722 / 834	500/310/480	510	530/ 340/510	510	530/340/510
Stacking hermit	mm	510	530 / 340 / 510	480					
Weight					132	139	148	157	166
Net weight (exct packaging. incl process related internal accessories)	kg	97	106	123	142	150	159	168	177
Gross weight (Incl packaging and process retated interna accessories)	kg	103	112	133					

*Universal cabinet The cabinet covers all three temperature ranges of refrigeration +3 °C to +15 °C / meat and minced meat refrigeration 0 °C to +2 °C / freezing -18 °C to -23 °C

Paris

Freezer which combines quality, flexibility and efficiency

The PARIS BASIC - a convincingly efficient freezer cabinet with brilliant LED interior lightning, providing a maximum product visibility for increased sales opportunities. Create a real sales boosting frozen food island in your store!

- High energy saving can be achieved in comparison to conventional open units
- Environmentally friendly with natural refrigerant propane
- 100% CFC and PFC free
- Brilliant LED lighting system which enhances product display, drives sales and reduces maintenance
- Plug-in model requiring no extra installation
- Low investment and operating costs
- Maintenance-free refrigeation system

PARIS		RPM-REGULATED COMPRESSOR WITH REFRIGERANT R290							
Model		PARIS 145		PARIS 185 END CABINET		PARIS 210		PARIS 250	
		(-) AD VS LED	(U) AD VS LED	(-) AD VS LED	(U) AD VS LED	(-) AD VS LED	(U) AD VS LED	(-) AD VS LED	(U) AD VS LED
External Dimensions (WxDxHf/r)	[mm]	1457x853x770/833		1854x853x770/833		2102x853x770/833		2502x853x770/833	
Internal Dimensions (WxDxHf/r)	[mm]	1325x720x655/705		1720x720x655/705		1970x723x655/705		2370x720x655/705	
Volume gross/net (+/S/-)	[l]	608/425	608/ 401/260/383	800/571	800/ 552/361/529	931/664	931/ 648/425/622	1131/812	1131/ 802/527/770
Inner temperature range (+/S/-)	[°C]	-18 to-23	+3 to +15/ 0 to +2/ -18 to-23	-18 to -23	+3 to+15/ 0 to +2/ -18 to-23	-18to-23	+3 to+15/ 0 to +2/ -18 to-23	-18 to -23	+3 to+15/ 0 to +2/ -18 to-23
Refrigerant type		R290		R290		R290		R290	
Nominal voltage/frequency[V/Hz]	[V/Hz	220-240/50		220-240/50		220-240/50		220-240/50	
Nominal power cabinet (ind. internal light)	[W]	348		429		439		496	
Energy consumption at 25 °C (+/$/-)	[kWh/24 h]	5,9	2,0/3,6/5,9	6,7	2,4/3,8/6,7	6,9	2,6/4,1/6,9	7,5	2,9/4,5/7,5
Weight gross/net	[kg]	101/95	110/104	130/120	139/129	147/136	156/145	166/155	174/163

Macao

The all-round visibility booster

Uniting latest technology and brilliant design.

- Extremely low energy consumption due to RPM regulated compressor technology and electronic energy-saving fan
- Ecologically sound refrigerant R290 (propane)
- AHT e-conomize: Additional energy saving potential due to extensive optimization of technology and construction
- Convincingly efficient: the island chest freezer and chiller MACAO impresses with smart, up-to-date technical features, maximum energy efficiency and a new dimension of sales potency
- Sales-boosting product visibility thanks to glass panels on all four sides
- Improved ease of use thanks to semiautomatic defrosting and easy-to-clean plastic bin
- Attractive LED interior lighting
- Robust, smooth-running, single-piece and fully extrusion-coated glass sliding lids (lockable)

MACAO		e conomize POWER SAVER PLUS				
		100	145		210	
Technical Data		(U) VS AD IQ LED	(-) VS AD IQ LED	(U) AD* IQ LED	(-) VS AD IQ LED	(U) VS AD* IQ LED
Gross content	liter	338	500	500	763	763
Net content (+/s/-)	liter	132/97/143	241	234/153/217	362	364/234/338
Total cksplLcy area (IDA)	m2	0,49	0,76	0,76	1,13	1,13
Classlflcationacc to EN 23953 (+/$/-)		3S/3S/3L1	3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient temperature range	°C	+16 to +25	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Inner temperature range** (+/s/)	°C	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23
Sound pressure In 1 m distance	dB(A)	43,6	43,6	43,6	43,6	43,6
Electrical Data						
Nominal voitage/hequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power consumption cabinet	W	400	400	400	400	400
Nominal power iliummation	W	17	25	25	34	34
Nominal current	A	3,7	3,7	3,7	3,7	3,7
Fuse protection	A	16	16	16	16	16
Energy consumption at 25 *C (+/s/)	Kwh/24 h	1,2/2,1/4,1	5,1	1,4/2,5/5,1	5,8	1,6/3,2/5,8
Length of power supply cord	mm	1750	1750	1750	1750	1750
Refrigeration						
Refrigerant type		R290	R290	R290	R290	R290
Refrigerant charge	g	70	100	100	110	110
Max operatrig pressure	bar	30	30	30	30	30
Dimensions						
1 ength outside/Inslde	mm	999/872	1456/1328	1456/1328	2100/1973	2100/1973
Depth outside/Inside	mm	851/723	851/723	851/723	851/723	851/723
front access fieight/lieight outside	mm	900/925	900/925	900/925	900/925	900/925
Height inside frontAear	mm	523	523	523	523	523
Stacking height <+/s/—) (is basket height for meat cooling)	mm	300/187/280	280	300/187/280	280	300/187/280
Weight						
Net weight (cwd packaging. Ind internal accessories necessary tor meat cooling)	kg	105	122	131	167	176
Gross weight <Incl. packaging. nd. internal accessories necessary for meat cooling)	kg	111	130	139	175	184

Malta

Integral freezer and chiller cabinets

Create a greater impact for you customers, as they benefit from all round product disability enhanced with LED lighting.

- Guaranteeing the quality of the frozen goods thanks to constant internal temperature and high-power reserves
- Intelligent fan motor for more energy efficiency – saves approximately 0,5 kWh daily
- Brilliant LED lighting system
- Higher energy-saving
- Improved display area with optimum useful load
- Easy access from both sides
- Low investment and operating costs
- Maintenance-free
- Environmentally friendly with natural refrigerant propane

MALTA		REFRIGERANT R-290			
		145		185	
Technical Data		(-) VS AD IQ LED	(U)* VS AD IQ LED	(-) VS AD IQ LED	(U)* VS AD IQ LED
Gross content	liter	603	603	795	795
Not content according to LN 23953**	liter	371	348/241/331	500	483/336/461
Total display area (TDA)	m2	0,73	0,73	0,99	0,99
Classification according to EN 23953**		3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient temperature range	°C	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Inner temperature range	°C	-18 to -23	+3 to +15 / 0 to +2/-18 to -23	-18 to -23	+3 to +15 / 0 to +2/-18 to -23
Sound pressure in 1 m distance	dB(A)	43,6	43,6	43,6	43,6
Electrical Data					
Nominal voltage/frequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet	W	440	440	450	450
Nominal power illumination	W	24	24	33	33
Nominal current	A	2,8	2,8	2,8	2,8
Fuse protection	A	16	16	16	16
Energy consumption (at 25 °C)	kWh/24 h	6,4	1,4/2,7/6,4	6,9	1,5/3,0/6,9
Length of power supply cord	mm	1750	1750	1750	1750
Refrigeration Data					
Refrigerant type		R-290	R-290	R-290	R-290
Refrigerant charge	g	80	80	90	90
Max. operating pressure	bar	30	30	30	30
Dimensions					
Length outside/inside	mm	1456/1328	1456/1328	1851/1723	1851/1723
Depth outside/inside	mm	855/723	855/723	855/723	855/723
Front access height/height outside	mm	770/833	770/833	770/833	770/833
Stacking height**	mm	490	510/360/490	490	510/360/490
Dimensions					
Net weight (exd packaging. ind process related internal accessories)	Kg	103	117	122	131
Gross weight (incl packaging and process related internal accessories)	Kg	110	125	132	141

Manhattan

A new dimension of plug-in cabinets: Small footprint, big sales promotion

- High energy savings compared with conventional open units
- Maximum energy efficiency thanks to electronic speed-controlled compressor (VS)
- AHT e-conomize: Massive additional power saving potential due to extensive optimizations in technology and construction
- New synthetic interior casing for better hygiene and easy cleaning
- Intelligent fan motor for more energy efficiency – saves approximately 0,5 kWh daily
- Ready to plug in – no additional assembly required
- Low investment and operation costs
- Maintenance-free refrigeration technology
- Brilliant LED lighting system which enhances product display, drives sales and reduces maintenance
- Experience approximately additional 25% energy savings through an electronic speed-controlled compressor (VS)*
- Environmentally friendly with natural refrigerant propane
- Constant interior temperature and high-power reserves ensure high merchandise quality
- Consumers can shop both sides at the same time without interference

MANHATTAN		**e conomize POWER SAVER PLUS**			
		175		**210**	
Technical Data		(-) VS AD ECO LED	(U)* VS AD ECO LED	(-) VS AD ECO LED	(U)* VS AD ECO LED
Gross content	Liter	992	992	1221	1221
Net content accordnq to EN 23953	Liter	643	630/402/605	817	799/513/768
Total display area (TDA)	m2	1,44	1,44	1,75	1,75
Classification according to EN 23953		3L1	3S/3S/3L1	3L1	3S/3S/3L1
Ambient temperature range	°C	+16 to +25	+16 to +25	+16 to +25	+16 to +25
Inner temperature range	°C	-18 to -23	+3 to +15/0 to +2/-18 to -23	-18 to -23	+3 to +15/0 to +2/-18 to -23
Sound pressure m 1 m distance	db(A)	43,8	43,3	43,8	43,6
Electrical Data					
Nominal voltage / frequency	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Nominal power cabinet consumption	W	400	400	420	420
Nominal power LED light	W	34	34	39	39
Nominal current	A	3,0	3,0	3,8	3,8
Fuse protection	A	16	16	16	16
Energy consumption (at 25 °C)	Kwh/24 h	6,2	2,9/3,2/6,2	6,4	3,2/3,5/6,4
Length of power supply cord	mm	1750	1750	1750	1750
Refrigeration Data					
Refrigerant type		R290	R290	R290	R290
Refrigerant charge	g	100	100	110	110
Max operating pressure	bar	30	30	30	30
Dimensions					
Length outside/inside	mm	1753/1623	1753/1623	2103/1973	2103/1973
Depth outside/inside	mm	995/863	995/863	995/863	995/863
Front access height/height outside	mm	804/910	804/910	804/910	804/910
Stacking height	mm	560	580/380/560	560	580/380/560
Weight					
Net weight (excl packaging. Incl. process related internal accessories)	kg	130	139	145	154
Gross weight (Incl. packaging and process related internal accessories)	kg	141	150	156	165

* Universal cabinet: The cabinet covers all three temperature ranges of refrigeration +3 °C to +15 °C / meat and minced meat refrigeration 0 °C to +2 °C / freezing –18 °C to –23 °C.

Lisboa

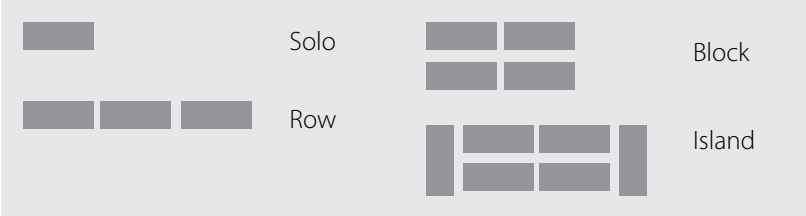
Visual Merchandising

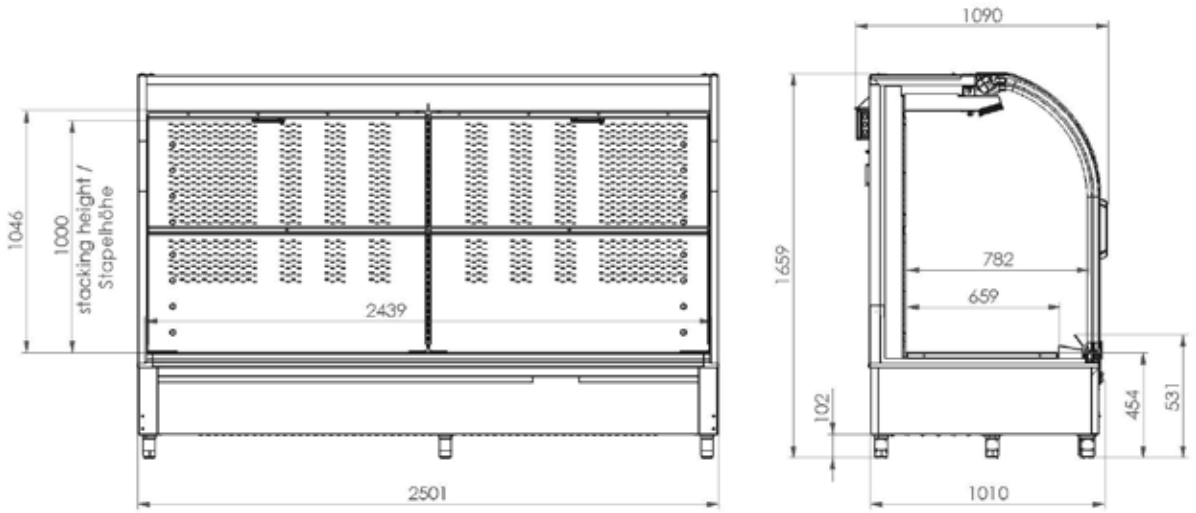
› Unique design
› Sophisticated door concept with Softclose
› Special hygiene concept for meat presentation
› Extremely energy-efficient
› Offers great flexibility in product presentation
› Simple to combine with AHT chest freezers

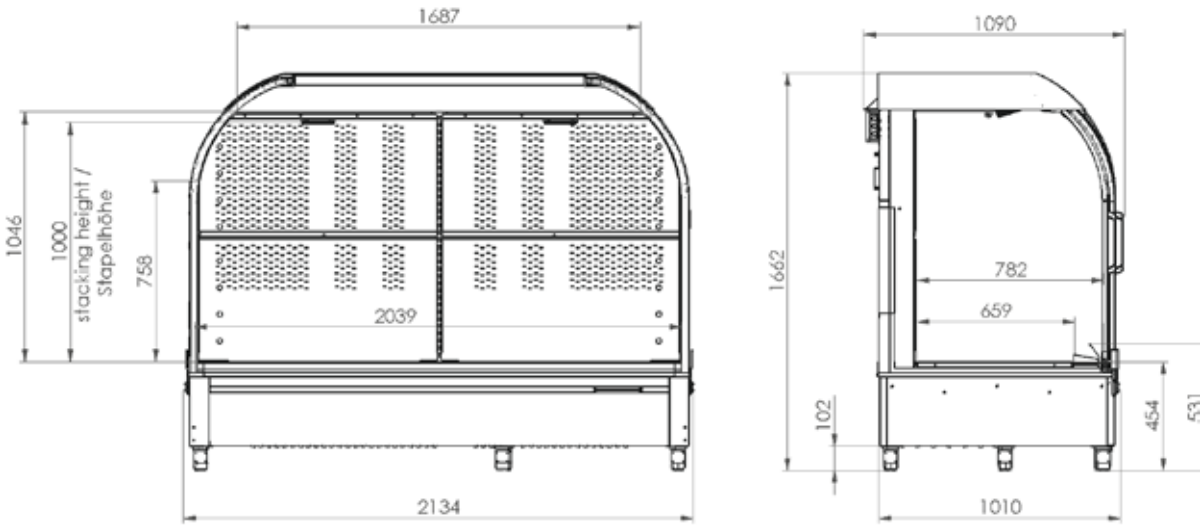
DIMENSIONS
L: 213/250 | H: 166 | D: 109

OPERATING TEMPERATURES
Chiller mode (minced meat) : -1 °C to +2 °C (S1)

SETUP VARIATIONS







Kinley XL

Merchandise presentation at eye level has never been so easy

Visible Turnover Increase

Studies show that frozen goods placed at eye level generate higher hit rates and provide more buying incentive. KINLEY XL also shines with its brilliant LED illumination that effortlessly makes your products appear in the right light

Semi-automatic Defrosting

The technical features of KINLEY XL leave no-one cold — except for the always perfectly chilled merchandise, whose shelf life is maximized thanks to the constant temperatures. Regular defrosting and minimal cleaning effort go without saying. The high-quality plastic interior lining ensures optimal product hygiene

Ideal Addition to AHT Freezer Chests

KINLEY XL can be used universally with all AHT product lines in the supermarket — and especially for retrofitting. In addition, this plug-in overhanging freezer cabinet features maintenance-free refrigeration technology and requires zero installation effort

Green Freezer Footprint

Important for a green conscience and the intactness of nature that provides us with fresh food products: KINLEY XL is entirely free of CFCs and FCs, instead using the environment-friendly and natural refrigerant propane. Our contribution to making the world a little bit better.

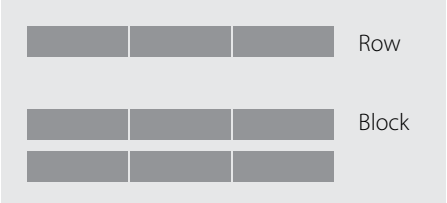
DIMENSIONS
L: 250 | 210 | 140 (EC)

OPERATING TEMPERATURES
Freezer mode: -18 °C (L1)

Temperature ranges

Freezing » minus 18 °C to minus 23 °C

Placement variants



Refrigerated Multi-Deck Chiller - Vento

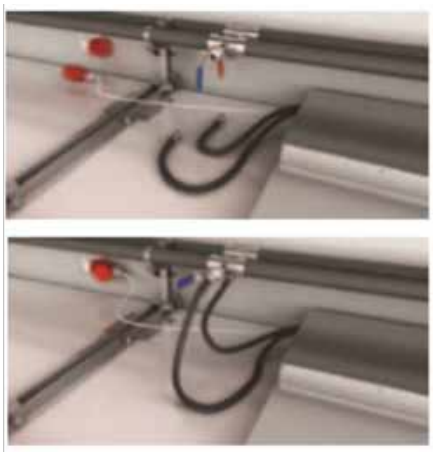
Plug and chill. Simple economical chilling

VENTO WATER
This revolutionary series of plug-in multidecks for meat and dairy products provides impressive flexibility, requires minimal installation and boasts sustainability in operation and investment. The innovative concept of fully integrated refrigeration technology reduces system complexity and installation work to a minimum. Extremely versatile, for open use or equipped with glass doors, VENTO WATER is the ideal up-to-date multideck solution!

Your Advantages

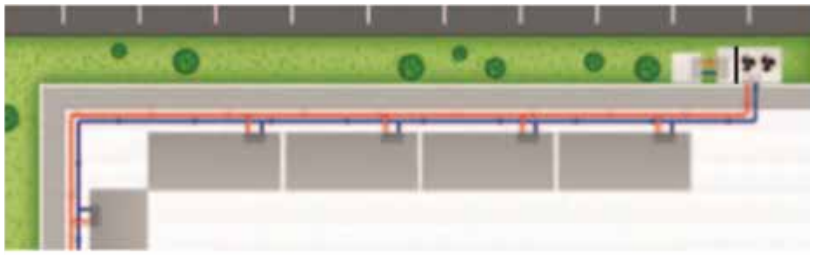
› Completely flexible, connectable plug-in shelf units
› No heat discharge into the store due to efficient and environment-friendly heat removal using water as the only medium; no refrigerants
› Fully hermetical sealed refrigeration system with environment-friendly refrigerants in small amounts
› Full integration of all required refrigeration components into the shelf units prevents refrigerant loss
› Pipe segments for waste heat circuit pre-installed on shelf units
› Fast setup thanks to »Plug and Chill« technology – no substantial installation work required
› Optimized space usage due to standard footprint
› Total freedom of layout in the store as well as simple repositioning and system expansion – even in existing stores
› Minimal maintenance requirements

Patented Plug and Chill technology reduces setup and installation times to an absolute minimum!



Plug and Chill
Intelligent plug-and-socket links for all instal-latioin anad shelf unit connections ensure quick and easy setup

Move it
Shelf modules can be easily added, removed or repositioned at any time. Ideal for rear-ranging or moving the entire system when remodeling or changing your store location.



Environment-friendly waste heat discharge solution using water as the only medium in the waste heat circuit. Simple water piping allows extremely quick installation and reliable, low-maintenance operation over the system's entire life cycle. Optimal technical coordination of all components produces an efficient and economical multi-deck chiller system at a competitive price.

The backcooler and the pump station form the compact and highly efficient waste heat system.

Shelf unit lengths
375cm, 250 cm

Shelf heights
L- LOW 211cm
H – HIGH 231 cm

Shelf depths
Inside: 60cm, outside 106cm
Inside: 70cm, outside 116cm
Inside: 80cm, outside 126cm

Other Multideck Cabinets

VENTO AIR: Quick and easy setup without installation work

VENTO HYBRID: Efficient waste heat discharge via air or water including automatic switching between modes

VENTO ROLL-IN: Extremely fast front-side loading with rolling containers and pallets

VENTO VSV: The flexible all-inclusive multideck. Ready to plug-in and full integrated.

Kalea

The New Upright Freezer

- New KALEA product line comes with impressive and easy inbox technology.
- KALEA sets completely new standards not only visually and technologically, but also in terms of serviceability and safety. MAINTENANCE Boxes are simple to remove and replace, replacing a compressor takes only a few minutes
- LOOK AND FEEL, New modern design with full glass look
- MODULAR & FLEXIBLE, KALEA cabinets can be combined in a modular way and adapted to customer requirements.

Innovative AHT Inbox Technology
- Complete freezer technology installed in the pull-out drawer in the base
- Optimal accessibility for service and maintenance (pull-out drawer)
- Newest generation of controller enables predictive maintenance

Visual Merchandising
- Clean shelf top without technical components
- Optimal footprint thanks to slim depths of 75 and 90 cm
- Can be installed in stores with a low ceiling
- Can be installed in a row without intermediate walls

Easy to Install
- Plug-in solution
- Full flexibility in-store – easy to rearrange
- Open MOD-BUS system

High Energy Savings
- Multi-circuit technology (<150 g per circuit)
- High energy efficiency thanks to integrated compressor management
- In winter, exhaust heat from the base of cabinets contributes directly to in-store heating to prevent cold spots in front of the cabinet
- Vertical LED lighting

Environment-friendly and Robust
- Natural refrigerant R290 (propane)
- Industrially manufactured refrigeration circuits with lowest risk of failure
- All units are VDE approved (highest safety level)

DIMENSIONS
L. 156 mm(2D*) | 234mm (3D) | 312 mm(4D) | 390mm (5D)
H. 2200mm
D. 950mm (bottom shelf D. 600)

OPERATING TEMPERATURES
Freezer mode: -18 °C (L1)

The "heart and brain" of the unit are located in a drawer. The drawer can be removed and replaced within minutes.

Rio H & Rio S

Ice Cream Cabinets - Lean and Green

› Injected one-piece frame – available in different colours
› Brilliant LED interior lighting
› White painted metal inner container

RIO	External Dimensions			Internal Dimensions			Capacity		Temperature Range		Refrigerant Type		Full Container Load
	W [mm]	D [mm]	H f / b [mm]	W [mm]	D [mm]	H f / b [mm]	Net Vol. [l]	Gross Vol. [l]	[°C]	[°F]	R290	R600a	High Cube Container 40ft [pcs]
S 68	680	650	776/880	530	500	610/720	102	132	–14 to –23	6,8 to –9,4		•	149
S 100	1000	650	776/880	850	500	610/720	190	238	–14 to –23	6,8 to –9,4		•	99
S 125	1250	650	776/880	1100	500	610/720	258	322	–14 to –23	6,8 to –9,4		•	81
S 150	1500	650	776/880	1350	500	610/720	327	405	–14 to –23	6,8 to –9,4	•		72
S 175	1750	650	776/880	1600	500	610/720	396	488	–14 to –23	6,8 to –9,4	•		38
H 68 G	680	650	880	530	500	720	117	147	–14 to –23	6,8 to –9,4		•	149
H 100 G	1000	650	880	850	500	720	215	262	–14 to –23	6,8 to –9,4		•	99
H 125 G	1250	650	880	1100	500	720	291	352	–14 to –23	6,8 to –9,4		•	81
H 150 G	1500	650	880	1350	500	720	367	442	–14 to –23	6,8 to –9,4		•	72
H 175 G	1750	650	880	1600	500	720	443	532	–14 to –23	6,8 to –9,4		•	38
H 68 S	680	650	880	530	500	700	123	141	–14 to –23	6,8 to –9,4		•	149
H 100 S	1000	650	880	850	500	700	224	253	–14 to –23	6,8 to –9,4		•	99
H 125 S	1250	650	880	1100	500	700	302	341	–14 to –23	6,8 to –9,4		•	81
H 150 S	1500	650	880	1350	500	700	381	428	–14 to –23	6,8 to –9,4		•	72

Other Accessories

RFD-tag foamed in the plastic frame for the identification of the cabinet

Single Castors
(with or without brake)

Single Rubber Castors
(with or without brake)

Double Castors
(with or without brake)

Sao Paulo & Sao Paulo Low

Ice Cream Cabinets - Lean and Green

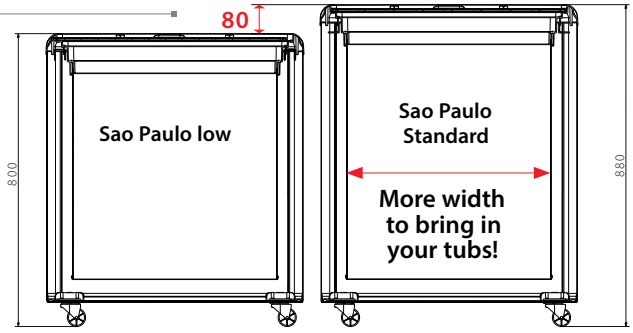
Versatile freezer either for impulse or scooping ice cream – available in four sizes.

› Injected one-piece frame – available in different colours
› Brilliant LED interior lighting
› Scooping baskets to hold Unilever standard tubs

Injected one-piece frame – available in different colours

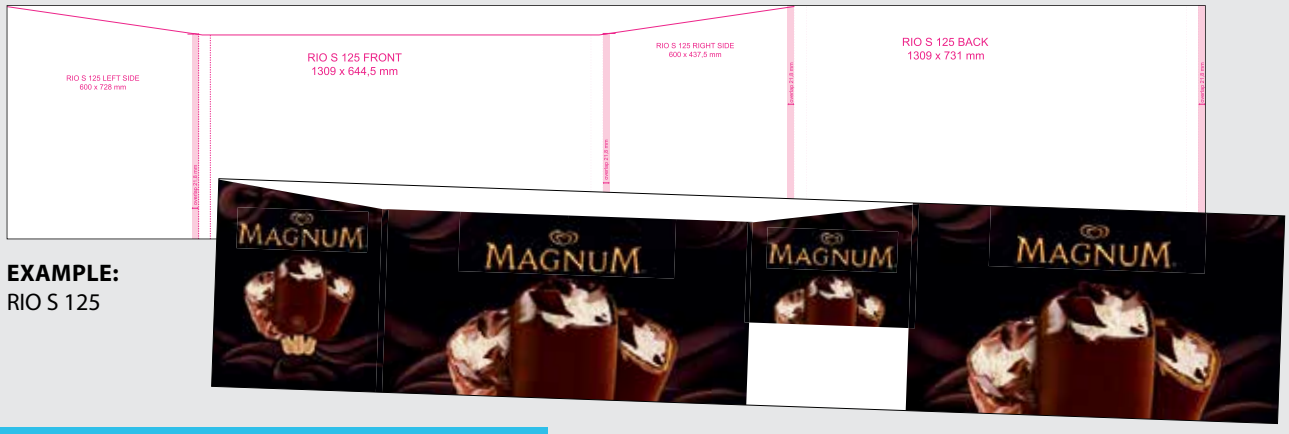
Brilliant LED interior lighting

SAO PAULO LOW
80 mm lower than the standard model



Scooping baskets to hold Unilever standard tubs

SAO PAULO	External Dimensions			Internal Dimensions			Capacity		Temperature Range		Refrigerant Type		Full Container Load
	W [mm]	D [mm]	H [mm]	W [mm]	D [mm]	H [mm]	Net Vol. [l]	Gross Vol. [l]	[°C]	[°F]	R290	R600a	High Cube Container 40ft [pcs]
H 68 G	678	709	880	530	530	720	132	164	–14 to –23	6,8 to –9,4	•		135
H 100 G	998	709	880	850	530	720	241	293	–14 to –23	6,8 to –9,4		•	87
H 125 G	1248	709	880	1100	530	720	327	394	–14 to –23	6,8 to –9,4	•		72
H 150 G	1498	709	880	1350	530	720	412	495	–14 to –23	6,8 to –9,4	•		45
H 175 G	1748	709	880	1600	530	720	498	596	–14 to –23	6,8 to –9,4	•		45
H 68 S	678	709	880	530	530	720	138	157	–14 to –23	6,8 to –9,4		•	135
H 100 S	998	709	880	850	530	720	251	284	–14 to –23	6,8 to –9,4	•		87
H 125 S	1248	709	880	1100	530	720	339	382	–14 to –23	6,8 to –9,4		•	72
H 150 S	1498	709	880	1350	530	720	427	480	–14 to –23	6,8 to –9,4	•	•	45
H 175 S	1748	709	880	1600	530	720	515	578	–14 to –23	6,8 to –9,4	•		45



EXAMPLE:
RIO S 125

Branding

EXAMPLE:
RIO S 150

Improved sales attractivity with high-quality branding

All AHT cabinets can be equipped ex-works with UV-resistant and scratchproof stickers for a higher sales attractivity with an extended resistance against physical impacts. The easy-to-use design templates and the design handbook provided by AHT ensure a best possible graphical design process, monitored and accompanied by the AHT team.

EXAMPLE:
Design in progress rio s 150

Ibiza

Ice Cream Cabinets - Lean and Green

Best in class: highest energy saving performance in this cabinet category due to speed-controlled compressor and semi-automatic defrost system.

Ibiza 100

Ibiza 145

Semi-automatic defrost system

Attractive LED interior lighting

High Impact Animated Electroluminescence Branding (optional)

Glass Logo Illumination (optional)

LED Bottom Light (optional)

	External Dimensions			Internal Dimensions			Temperature Range		Refrigerant Type	Full Container Load
	W [mm]	D [mm]	H f / b [mm]	W [mm]	D [mm]	H [mm]	[°C]	[°F]	R290	High Cube Container 40ft [pcs]
100 (–)	678	709	880	530	530	720	–14 to –23	6,8 to –9,4	•	48
145 (–)	998	709	880	850	530	720	–14 to –23	6,8 to –9,4	•	24
210 (–)	1248	709	880	1100	530	720	–14 to –23	6,8 to –9,4	X	24

Air Curtain Display Coolers

AC series for perfect merchandise presentation

Open marketing refrigerators from AHT: The ideal sales promotion at the POS. Perfect for secondary placement.

› Air curtain for optimum cooling efficiency
› Hot gas evaporation system
› Energy efficient
› Low maintenance condenser
› Cooling cassette system
› Easy service
› Night blind to save energy consumption (reed switch)
› At-front product presentation without door
› Inside light
› Plug-in refrigeration
› Automatic defrost and condensate evaporation
› Shelf supports can be fixedin inclined position
› Ecologically sound thanks to the natural refrigerant propane
› 100 % CFC- and PFC-free
› Sustainable technology Made in Austria
› Cassette replacement within 15 minutes (easy service)

Model		AC S	AC W
External dimensions (W x D x H)	mm	706 x 766 x 1495	914 x 766 x 1495
Internal dimensions (W x D x H)	mm	615 x 565 x 838	820 x 400 x 836
Volume net/gross	liter	190/ 245	250/ 325
Lighting	LED	4x vertical	4x vertical/1x horizontal
"Shelf dimensions (width x depth top/bottom)"	mm	610 x 320/385	818 x 390/418
Capacity	Pcs.	270 Cans (330 ml)	360 Cans (330 ml)
Temperature range	°C	+2 to +7 (3M2)	+2 to +7 (8M2)
Refrigerant type		R404A / R290	R404A / R290
Max. ambient temperature/humidity	°C/RH	25 / 60	24 / 55
Weight net/gross	kg	114/132	125/143
Loadability 20'/40'/13.6m	Pcs.	21 / 45 / 51	18 / 36 / 42

Model		AC M	AC XL
External dimensions (W x D x H)	mm	716 x 771x 1973	1195 x 928 x1973
Internal dimensions (W x D x H)	mm	615 x 565 x 1350	1100 x 700 x1290
Volume net/gross	liter	324 / 463	720 /1060
Lighting	LED	6x vertical/1x Canopy	6x vertical/ 2x horizontal/2x Canopy
"Shelf dimensions (width x depth top/bottom)"	mm	610 x 385	1094 x 510
Capacity	Pcs.	"468 / 225 (330 ml Cans / 500 ml Bottles)"	1224 / 560 (330 ml Cans / 500 ml Bottles)"
Temperature range	°C	+2 to +7 (8M2)	+2 to +7 (3M2)
Refrigerant type		R404A/ R290	R404A
Max. ambient temperature/humidity	°C/RH	24 / 55	25 / 60
Weight net/gross	kg	152 / 165	227 / 255
Loadability 20'/40'/13.6m	Pcs.	21 / 45 / 51	10 / 21 / 24

Plug and Play solutions

for cold rooms and wine rooms

	Cold room size	Product Series	Mounting Method	Picture	Capacity (kW) 0 2 5 10 25 50 75
Plug & Play solution for cold rooms	Small to Medium size cold rooms - Indoor installation	ZN	Straddle mounted		
		GM	Straddle mounted (Optional through-wall)		
		SB	Roof-mounted		
		AS	through-wall		
	Medium to Large cold rooms -Indoor/Outdoor installation	AS-E	through-wall		
		RS	through-wall		
		BX	through-wall (Optional floor-standing)		

Chilling (meduim temperature)(0C/+35C)

Freezing (low temperature)(-20C/+35C)

	Cold room size	Product Series	Capacity (kW)	Refrigeration capacity - kW 0 2 5 10 25 50 75
Bi-Block	Small to Medium size cold rooms - Indoor installation	ZD		
		GS		
		SP-O		
		DB-O		
		DB-S		
	Medium to Large cold rooms - outdoor installation	DB-D		
	Wine rooms	RCV, RDV		

Chilling (meduim temperature)(0C/+35C)

Freezing (low temperature)(-20C/+35C)

Zanotti

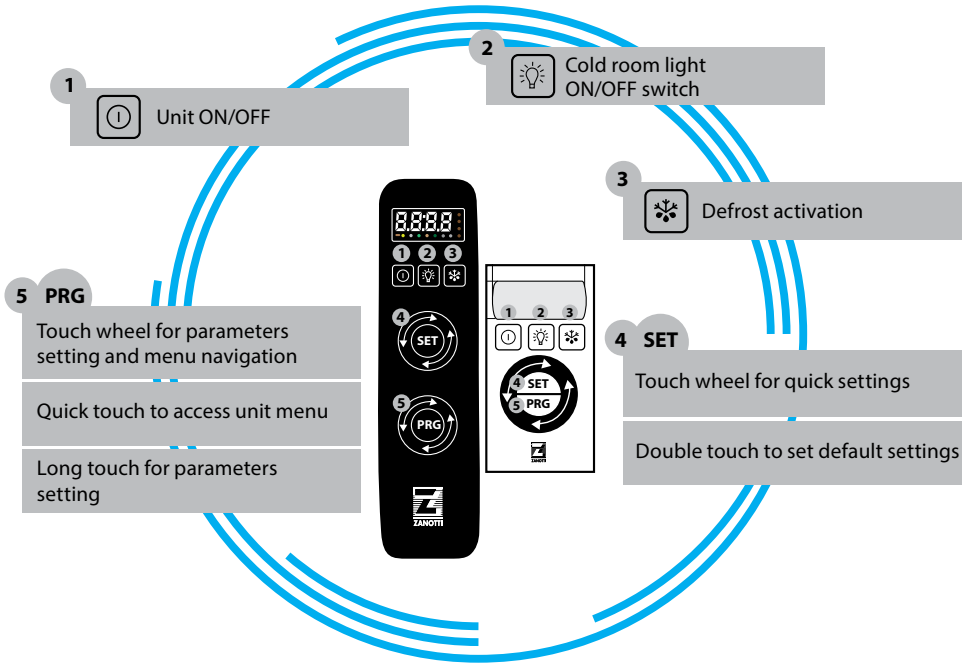
Touch control

Zanotti presents the new "Touch Screen" control panel for GM monobloc units and GS split units. This new one User interface consists of keypad and display and allows easy access to all manual functions of the units.

The control of the refrigeration cycle, switching the unit on and off, the lighting in the cold room, activating the manual defrost process and setting the parameters are the features that are more intuitive with the new keyboard.

GM Monoblock Unit

GS Split Unit



for two units in a cold storage cell
ALTERNATIVE REMOTE CONTROL

› For cold rooms where it is required by law to maintain a certain temperature (Products for hospitals, Pharmaceutical products) for safety and control it is necessary to install 2 units in the same cold room, so that they can always be working in alternate hours - when one is off, the other unit is working.

› If an aggregate in full function gets blocked, the second aggregate starts automatically. When the temperature for remote controls with thermostat is not achieved for a certain period of time (product feed, open cell door for longer period of time,...), the unit changes into the standby function.

› Remote control for two aggregates. Adjustable timer for alternate operation.
› In case of device failure of one the refrigeration units, the control can be switched on the other unit nearby. Alarm message through Lamp and buzzer.
› Thermostat for Safety at high Temperatures in the cold room (only with models with Thermostat).

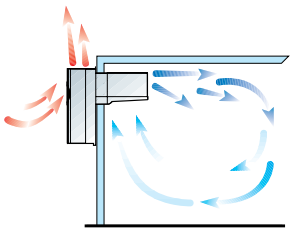
Uni-block system for low and medium temperature refrigeration

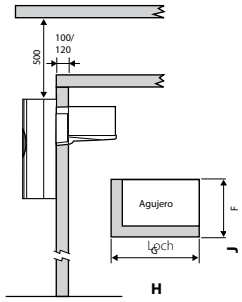
For wall mounted installation in small and medium sized cold rooms

- Rapid mounting on the wall of the cold room by straddle-mounting, which is ideal for both new installations and refurbishment projects
- Metallic grey coloured finish of the outdoor unit
- The white colour of the evaporator blends unobtrusively with the cold room walls
- Compressor compartment insulated with suitable soundproofing material to reduce sound levels
- Microchannel condensers available in order to reduce the refrigerant charge as much as possible and ensuring higher energy efficiency
- The units are provided with a new generation control panel with an easy-to-use interface
- For medium temperature unit, available with refrigerant R134a, R407H, R404A
- For low temperature unit, available with refrigerant R404A, R452A

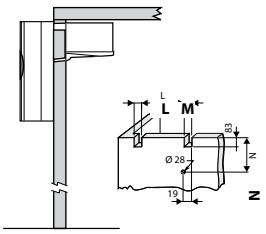
GM

Installation type

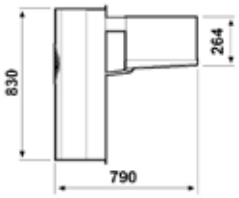


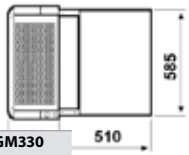


Through- wall model



Straddle model





Low temperature refrigeration				GM	BGM110 DA11XA	BGM112 DA11XA	BGM117 DA11XA	BGM218 DA11XA	BGM220 DB11XA	BGM330 DB11XA
Refrigerating capacity	Low temperature	R-452A	Nom	kW	0.679 (1)	0.889 (1)	1.080 (1)	1.336 (1)	1.688 (1)	2.349 (1)
Dimensions	Unit	HeightxWidthxDepth		mm	735x400x790			830x620x790		830x620x862
	Packed unit	HeightxWidthxDepth		mm	942x450x850			1,050x670x850		1,050x670x940
Weight	Unit			kg	56	64		80		105
	Packed unit			kg	67	75		96		122
Compressor	Type				Hermetic Reciprocating					
	Nominal power			kW	0.74		1.3		1.5	2.2
	Starting method				Direct					
Condenser	Air flow			m^3/h	600	600		1,200		1,500
Defrost					Hot gas					
Evaporator	Air flow			m^3/h	600	600		1,200		1,500
	Air throw			m	4					10
Operation range	Cold room temperature	Min. ~Max.		°C	-25~-15					
Refrigerant	Type/GWP				R-452A/2,141	R-452A/2,141				
	Charge			kg/TCO_2Eq	0.38/0.81	0.34/0.73	0.35/0.75	0.86/1.84	0.84/1.80	0.98/2.10
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230				3N~/50/400	

Medium temperature refrigeration				GM	MGM103 EA11XA	MGM105 EA11XA	MGM106 EA11XA	MGM107 EA11XA	MGM110 EA11XA	MGM211 EA11XA	MGM221 0Y1AA	MGM213 EB11XA	MGM315 EB11XA	MGM320 EB11XA
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	0.855 (2)	0.978 (2)	1.120 (2)	1.315 (2)	1.351 (2)	1.806 (2)	-	2.175 (2)	3.079 (2)	3.351 (2)
Dimensions	Unit	HeightxWidthxDepth		mm	735x400x790					830x620x790			830x620x682	
	Packed unit	HeightxWidthxDepth		mm	942x450x850					1,050x670x850			1,050x670x940	
Weight	Unit			kg	52	53	56		64	80			98	100
	Packed unit			kg	63	64	67		75	96			115	
Compressor	Type				Hermetic Reciprocating									
	Starting method				Direct									
Condenser	Air flow			m^3/h	600					1,200	-		1,500	
Defrost					Hot gas									
Evaporator	Air flow			m^3/h	600					1,200	1,125		1,800	
	Air throw			m	4								10	
Operation range	Cold room temperature	Min. ~Max.		°C	-5~10									
Refrigerant	Type/GWP				R-134a/1,430			R-134a/1,430						
	Charge			kg/TCO_2Eq	0.40/0.57	0.43/0.61	0.33/0.47	0.40/0.57		0.71/1.02		0.75/1.07	0.95/1.36	1.00/1.43
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230							3N~/50/400		

(1) When normally running: -20°C / +30°C

(2) When normally running: 0°C / +30°C

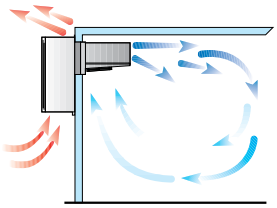
Uni-block system for low and medium temperature refrigeration

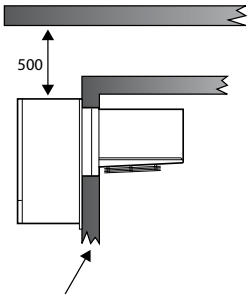
For wall mounted installation in medium sized cold rooms

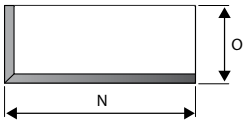
- Rapid mounting on the wall of the cold room by through-wall mounting
- Extremely fast to assemble, reducing installation time and cost
- The white colour of the evaporator blends unobtrusively with the cold room walls
- Very compact and very efficient
- Remote electronic command station with easy-to-use user interface programmable according to various system requirements
- For medium temperature unit, available with refrigerant R134a, R407H, R404A
- For low temperature unit, available with refrigerant R404A, R452A

AS

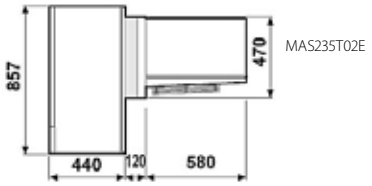
Installation type



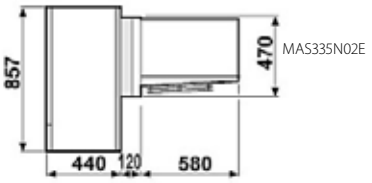




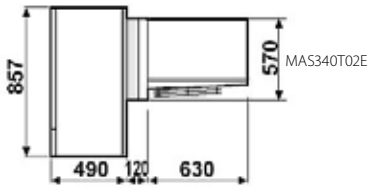
Drain pan connection: Ø 18 (AS235), Ø 22 (AS335-AS340)



MAS235T02E



MAS335N02E



MAS340T02E

Low and medium temperature refrigeration				AS	MAS235T02E	MAS335N02E	MAS335T02E	MAS340T02E
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	4.981 (1)	6.988 (1)	8.290 (1)	10.664 (1)
Dimensions	Unit	Height x Width x Depth		mm	857 x 1,280 x 1,140	857 x 1,750 x 1,140		857 x 1,790 x 1,240
	Packed unit	Height x Width x Depth		mm	1,060 x 1,330 x 1,210	1,065 x 1,850 x 1,300		1,065 x 1,850 x 1,420
Weight	Unit			kg	162	221	222	244
	Packed unit			kg	202	276	277	361
Compressor	Type				Hermetic Reciprocating			
	Nominal power			kW	3.7	4.8	6.3	7.4
	Starting method				Direct			
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10			
Refrigerant	Type				R-134a			
	GWP				1,430			
Evaporator	Air flow			m³/h	3,900	5,600		8,000
	Air throw			m	10 (2)			17 (2)
Condenser	Air flow			m³/h	2,700	4,000		5,600
Defrost					Hot gas			
Power supply	Voltage/Phase/Frequency			V/Hz	400 / 3N~ / 50			

(1) When normally running: 0°C / +30°C

(2) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

SB

Uni-block system for low and medium temperature refrigeration

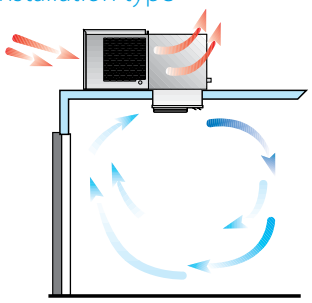
For roof mounted installation in small and medium sized cold rooms

- Rapid mounting on the roof of the cold room
- Ceiling assembly leaves the space inside the cold room completely free
- The white colour of the evaporator blends unobtrusively with the cold room walls
- Extremely fast to assemble, reducing installation time and cost
- Best surface-to-capacity ratio
- Remote electronic command station with easy-to-use user interface programmable according to various system requirements
- For medium temperature unit, available with refrigerant R134a, R407H, R404A
- For low temperature unit, available with refrigerant R404A, R452A

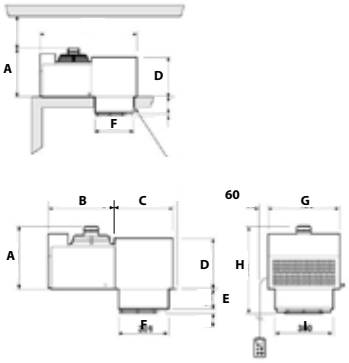
SB

Remote control

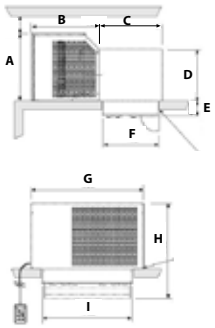
Installation type



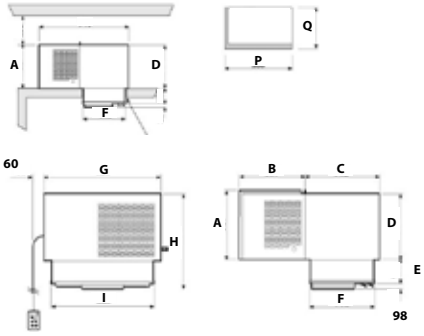
SB120



SB140



SB125-235



Low temperature refrigeration				BSB	010DA11XX	117DA11XX	330DB11XX	220DB11XX	1710Y2AA
Refrigerating capacity Low Temp		R-452A	Nom	kW	0.628 (1)	1.029 (1)	2.472 (1)	1.699 (1)	-
Dimensions	Unit	Height x Width x Depth		mm	525 x 430 x 771	506 x 620 x 719	645 x 820 x 929	540 x 820 x 809	924 x 1075 x 360
	Packed unit	Height x Width x Depth		mm	690 x 540 x830		800x930x1000	690 x 930 x 880	
Weight	Unit			kg	48		102	87	102
	Packed unit			kg	61		124	108	-
Compressor	Type				Hermetic Reciprocating				
	Nominal power			kW	0.6	1.3	2.2	1.5	-
	Starting method				Direct				
Operation range	Cold room temperature	Min. ~Max.		°C	-25 ~-15				
Refrigerant	Type				R-452A	R-452A		R-452A	R290
	GWP				2,141.0	2,141.0		2,141.0	3.0
Evaporator	Air flow			m³/h	500	550	2,300	1,100	1,320
	Air throw			m	3 (3)		10 (3)	4 (3)	
Condenser	Air flow			m³/h	400	750	1,500	1,400	1,200
Defrost					Hot gas				
Power supply	Voltage / Phase /Frequency			V/Hz	230 / 1~ / 50		400 / 3N~ / 50		230 / 1~ / 50

Medium temperature refrigeration				MSB	005EA 11XX	106EA 11XX	107EA 11XX	315EB 11XX	320EB 11XX	425EB 11XX	210EA 11XX	212EB 11XX	530EB 11XX
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	0.857 (2)	1.120 (2)	1.338 (2)	3.282 (2)	3.550 (2)	3.774 (2)	1.799 (2)	2.022 (2)	4.871 (2)
Dimensions	Unit	Height x Width x Depth		mm	525 x 430 x 771	506 x 620 x 719		645 x 820 x 929	645 x 820 x 929	760 x 920 x 1,042	540 x 820 x 809	540 x 820 x 809	785 x 1,075 x 1,046
	Packed unit	Height x Width x Depth		mm	690 x 540 x 830	660 x 750 x 790		800 x 930 x 1,000		880 x 1,100 x1,100	690 x 930 x 880	690 x 930 x 880	920 x 1,200 x 1,120
Weight	Unit			kg	42	59		92	92	110	74	75	151
	Packed unit			kg	55	73		114		139	95		184
Compressor	Type				Hermetic Reciprocating								
	Nominal power			kW	0.5	0.6	0.7	2.2	2.6	2.9	0.9	1.7	3.7
	Starting method				Direct								
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10								
Refrigerant	Type				R-134a			R-134a	R-134a		R-134a	R-134a	
	GWP				1,430.0			1,430.0	1,430.0		1,430.0	1,430.0	
Evaporator	Air flow			m³/h	500	550		2,300	2,300	2,300	1,100	1,100	3,450
	Air throw			m	3 (3)	4 (3)		10 (3)			4 (3)		10 (3)
Condenser	Air flow			m³/h	400	750		1,500	1,500	3,100	1,400	1,400	3,200
Defrost					Hot gas								
Power supply	Voltage / Phase /Frequency			V/Hz	230 / 1~ / 50			400 / 3N~ / 50			230 / 1~ / 50	400 / 3N~ / 50	

(1) When normally running: -20°C / +30°C
(2) When normally running: 0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

Uni-block (Monoblock) system for low and medium temperature refrigeration

These monoblock units have been equipped with hermetic compressor. For small and medium size cold rooms, straddle mounted version on the cold room wall.

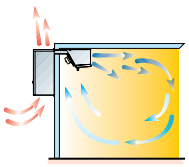
ZN

Working temperature	**+10 ~ -5** ℃	**-15 ~ -25** ℃
Refrigerant	MT - *MT*	R513A / R134a / R404A
	BT - *LT*	R407F / R452A
Defrost	Electric	
Compressor type	Hermetic	

COLD ROOM SIZE

S M L

INSTALLATION



***COOLING CAPACITY**	
Medium Temp. (0° C)	**760 W ~ 3.578 W**
Low Temp. (-20° C)	**655 W ~ 2.382 W**

***REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**4,5 m³ ~ 39 m³**	**4,9 m³ ~ 43 m³**
Low Temp. (-20° C)	**2,3 m³ ~ 20 m³**	**2,7 m³ ~ 23 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Uni-block (Monoblock) system for low and medium temperature refrigeration

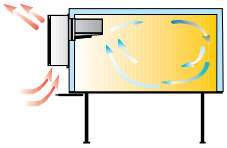
The groups of AS E Hermetic series are monoblock units for the swab application on the cell wall suitable for storing fresh or frozen products. the use of the hermetic compressors mounted on frames specifically designed for outdoor use in the most varied atmospheric conditions without any other need for protection against rain.

AS-E

Working temperature	**+15 ~ 0 °C**	**+10 ~ -5 °C**	**-15 ~ -25 °C**
Refrigerant	MT - *MT*	R513A / R134a / R404A	
	BT - *LT*	R407F / R452A	
Defrost	Hot gas		
Compressor type	Hermetic	Scroll	

COLD ROOM SIZE

INSTALLATION



*** COOLING CAPACITY**	
Medium Temp. (0° C)	**1.080** W ~ **11.872** W
Low Temp. (-20° C)	**720** W ~ **8.755** W

*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**7 m³ ~ 166 m³**	**8 m³ ~ 182 m³**
Low Temp. (-20° C)	**2 m³ ~ 139 m³**	**3 m³ ~ 158 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature version available (+5 ~ - 25 °C)

Uni-block (Monoblock) system for low and medium temperature refrigeration

AS R Rotary groups are monoblock groups for the swab application on the cell wall suitable for storing fresh or frozen products. The special AS-R range has been developed for cold rooms built on trailers and therefore liable to continuous moving. The use of rotary and scroll compressors is necessary to assure the reliability of the unit.

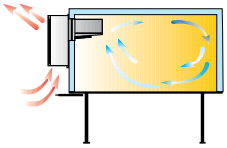
AS-R

Working temperature		**+15 ~ 0 °C**	**+10 ~ -5 °C**	**-15 ~ -25 °C**
Refrigerant	MT - *MT*	R513A / R134a / R407C / R449A / R404A		
	BT - *LT*	R449A / R404A		
Defrost		Hot gas		
Compressor type		Hermetic		Scroll

*** COOLING CAPACITY**	
Medium Temp. (0° C)	**1.080** W ~ **11.872** W
Low Temp. (-20° C)	**720** W ~ **8.755** W

COLD ROOM SIZE

INSTALLATION



*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**7 m³ ~ 166 m³**	**8 m³ ~ 182 m³**
Low Temp. (-20° C)	**2 m³ ~ 139 m³**	**3 m³ ~ 158 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature version available (+5 ~ - 25 °C)

Uni-block (Monoblock) system for low and medium temperature refrigeration

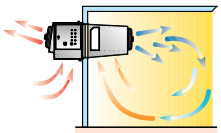
The RS series units are monoblock units featuring extremely versatile use. For medium and large size cold rooms, thru-wall version and for outside installation without any protection.

RS

Working temperature	**+10 ~ -5** °C	**-15 ~ -25** °C
Refrigerant	R449A / R404A	
Defrost	Electric	
Compressor type	Hermetic Semi-hermetic	

COLD ROOM SIZE

INSTALLATION



*** COOLING CAPACITY**	
Medium Temp. (0° C)	**1.914 W ~ 40.157 W**
Low Temp. (-20° C)	**1.447 W ~ 36.025 W**

*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**19 m³ ~ 865 m³**	**21 m³ ~ 951 m³**
Low Temp. (-20° C)	**9,4 m³ ~ 991 m³**	**11 m³ ~ 1.130 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature (+5 ~ - 25 °C) and freezing versions available (-30 ~ - 50 °c)

Uni-block (Monoblock) system for low and medium temperature refrigeration

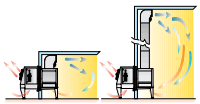
The type of construction of the BX units enables their use outside without any protection against the atmospheric agents. For large cold rooms size, thru-wall version, floor standing for outside installation.

BX

Working temperature	**+10 ~ -5 °C**	**-15 ~ -25 °C**
Refrigerant	R449A / R404A	
Defrost	Electric	
Compressor type	Semi-hermetic	

COLD ROOM SIZE

INSTALLATION



*** COOLING CAPACITY**	
Medium Temp. (0° C)	**42.266 W ~ 63.311 W**
Low Temp. (-20° C)	**28.522 W ~ 51.514 W**

*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**1.137 m³ ~ 1.774 m³**	**1.249 m³ ~ 1.949 m³**
Low Temp. (-20° C)	**838 m³ ~ 1.699 m³**	**956 m³ ~ 1.938 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature (+5 ~ - 25 °C) and freezing versions available (-30 ~ - 50 °c)

GS

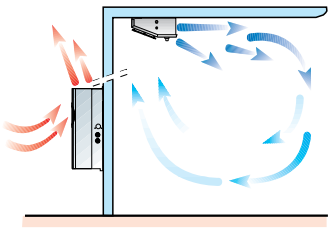
Bi-block system for low and medium temperature refrigeration

Condensing unit for wall mounted installation

- Wall mounted condensing unit and ceiling mounted evaporator
- Extremely rapid mounting
- Best surface-to-capacity ratio
- Low sound levels thanks to optional compressor compartment soundproofing
- New generation control panel: possibility to connect it to classic remote management systems or to a Modbus system
- Winter Kit
- For medium temperature unit, available with refrigerant R134a, R404A
- For low temperature unit, available with refrigerant R404A, R452A

GS

Installation type



Low temperature refrigeration				GS	SB.BGS110P			SB.BGS112P			SB.BGS117P			SB.BGS218P			SB.BGS220P			SB.BGS330P		
					1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D
Refrigerating capacity	Low temperature	R-452A	Nom	kW	0.679 (1)			0.889 (1)			1.080 (1)			1.336 (1)			1.688 (1)			2.349 (1)		
Dimensions	Condensing unit	Height x Width x Depth		mm	735 x 400 x 280									830 x 620 x 280						830 x 620 x 350		
	Evaporator unit	Height x Width x Depth		mm	215 x 654 x 410									215 x 1,074 x 410						215 x 1,654 x 410		
	Packed condensing unit	Height x Width x Depth		mm	955 x 490 x 610									1,050 x 490 x 740						1,050 x 600 x 740		
	Packed evaporator unit	Height x Width x Depth		mm	470 x 260 x 780									470 x 260 x 1,200						470 x 260 x 1,780		
Weight	Condensing unit			kg	46			54						64						84		
	Evaporator unit			kg	13									19						28		
	Packed condensing unit			kg	57			65						76						98		
	Packed evaporator unit			kg	15									21						31		
Compressor	Type				Hermetic Reciprocating																	
	Nominal power			kW	0.74			0.9			1.3						1.5			2.2		
	Starting method				Direct																	
Operation range	Cold room temperature	Min. ~Max.		°C	-25 ~-15																	
Refrigerant	Type				R-452A																	
	GWP				2,141																	
Evaporator	Air flow			m³/h	600									1,200						1,800		
	Air throw			m	4 (3)																	
Condenser	Air flow			m³/h	600									1,200						1,500		
Defrost					Hot gas																	
Piping length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50												400 / 3N~ / 50					

Medium temperature refrigeration				GS	SB.MGS103P			SB.MGS105P			SB.MGS106P			SB.MGS107P			SB.MGS110P			SB.MGS211P			SB.MGS212P			SB.MGS213P			SB.MGS315P			SB.MGS320P		
					1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	0.855 (2)			0.978 (2)			1.120 (2)			1.315 (2)			1.351 (2)			1.806 (2)			2.034 (2)			2.175 (2)			3.079 (2)			3.351 (2)		
Dimensions	Condensing unit	Height x Width x Depth		mm	735 x 400 x 280															830 x 620 x 280									830 x 620 x 350					
	Evaporator unit	Height x Width x Depth		mm	215 x 654 x 410															215 x 1,074 x 410									215 x 1,654 x 410					
	Packed condensing unit	Height x Width x Depth		mm	955 x 490 x 610															1,050 x 490 x 740									1,050 x 600 x 740					
	Packed evaporator unit	Height x Width x Depth		mm	470 x 260 x 780															470 x 260 x 1,200									470 x 260 x 1,780					
Weight	Condensing unit			kg	42			43			46						54			64									77			79		
	Evaporator unit			kg	13															19									28					
	Packed condensing unit			kg	53			54			57						65			76									91			93		
	Packed evaporator unit			kg	15															19									31					
Compressor	Type				Hermetic Reciprocating																														
	Nominal power			kW	0.4			0.5			0.4			0.7			0.9						1.7			2			2.2			2.6		
	Starting method				Direct																														
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10																														
Refrigerant	Type				R-134a																														
	GWP				1,430																														
Evaporator	Air flow			m³/h	600															1,200									1,800					
	Air throw			m	4 (3)																														
Condenser	Air flow			m³/h	600															1,200									1,500					
Defrost					Electric																														
Piping length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50																		400 / 3N~ / 50											

(1) When normally running: -20°C / +30°C
(2) When normally running: 0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

SP-O

Bi-block system for low and medium temperature refrigeration

Condensing unit for floor standing or roof mounted installation

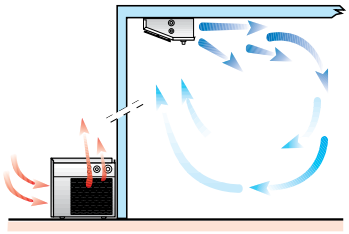
- Condensing unit for floor standing or roof mounted installation and ceiling mounted evaporator
- Extremely fast to assemble thanks to quick connection joints
- Reduced installation time and cost
- Best surface-to-capacity ratio
- For medium temperature unit, available with refrigerant R134a, R404A
- For low temperature unit, available with refrigerant R404A, R452A

Ceiling evaporator

Remote control

Floor standing condenser

Installation type



				SP-O	SB.BSP110P			SB.BSP112P			SB.BSP117P			SB.BSP330P			SB.BSP218P			SB.BSP220P		
					1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D
Refrigerating capacity	Low temperature	R-452A	Nom	kW	0.662 (1)			0.905 (1)			1.088 (1)			2.384 (1)			1.342 (1)			1.719 (1)		
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337									427 x 820 x 427			390 x 820 x 427					
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410									215 x 1,614 x 410			215 x 1,034 x 410					
	Packed condensing unit	Height x Width x Depth		mm	690 x 520 x 780									690 x 620 x 1,010								
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780									260 x 470 x 1,780			260 x 470 x 1,200					
Weight	Condensing unit			kg	45			50						78			61			69		
	Evaporator unit			kg	13									28			19					
	Packed condensing unit			kg	74			79						116			99			107		
	Packed evaporator unit			kg	15									30			21					
Compressor	Type				Hermetic Reciprocating																	
	Nominal power			kW	0.75			1.1			1.3			2.2			1.3			1.5		
	Starting method				Direct																	
Operation range	Cold room temperature	Min. ~Max.		°C	-25 ~-15																	
Refrigerant	GWP				2,141																	
Evaporator	Air flow			m³/h	600									1,800			1,200					
	Air throw			m	4 (3)																	
Condenser	Air flow			m³/h	750									1,500			1,400					
Defrost					Electric																	
Piping Length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50									400 / 3N~ / 50			230 / 1~ / 50			400 / 3N~ / 50		

				SP-O	SB.MSP106P			SB.MSP107P			SB.MSP315P			SB.MSP320P			SB.MSP212P			SB.MSP213P		
					1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	1.140 (2)			1.422 (2)			3.188 (2)			3.492 (2)			1.816 (2)			2.029 (2)		
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337						427 x 820 x 427						390 x 820 x 427					
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410						215 x 1,614 x 410						215 x 1,034 x 410					
	Packed condensing unit	Height x Width x Depth		mm	690 x 520 x 780						690 x 620 x 1,010											
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780						260 x 470 x 1,780						260 x 470 x 1,200					
Weight	Condensing unit			kg	43						69			70			59			61		
	Evaporator unit			kg	13						28						19					
	Packed condensing unit			kg	72						107			108			97			99		
	Packed evaporator unit			kg	15						30						21					
Compressor	Type				Hermetic Reciprocating																	
	Nominal power			kW	0.4			0.7			2.2			2.6			0.9			1.7		
	Starting method				Direct																	
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10																	
Refrigerant	GWP				1,430																	
Evaporator	Air flow			m³/h	600						1,800						1,200					
	Air throw			m	4 (3)																	
Condenser	Air flow			m³/h	750						1,500						1,400					
Defrost					Electric																	
Piping Length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50						400 / 3N~ / 50						230 / 1~ / 50			400 / 3N~ / 50		

(1) When normally running: -20°C / +30°C
(2) When normally running: +0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

DB-O

Bi-block system for low and medium temperature refrigeration

Condensing unit for floor standing or roof mounted installation

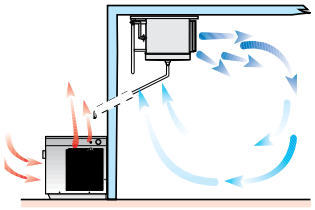
- Condensing unit for floor standing or roof mounted installation and ceiling mounted evaporator
- Thermostatic expansion valve ensuring optimum capacity in accordance with the required load for better energy efficiency
- Extremely fast to assemble thanks to quick connection joints
- Reduced installation time and cost
- Best surface-to-capacity ratio
- For medium temperature unit, available with refrigerant R134a, R404A
- For low temperature unit, available with refrigerant R404A, R452A

Ceiling evaporator

Remote control

Floor standing condenser

Installation type



			DB-O	SB.BDB 110DA12XX	SB.BDB 112DA12XX	SB.BDB 117DA12XX	SB.BDB 320DA13XX	SB.BDB 330DA13XX	SB.BDB 218DA12XX	SB.BDB 220DA12XX
Refrigerating capacity	Low temperature R-452A Nom		kW	0.662 (1)	0.905 (1)	1.088 (1)	2.384 (1)	2.38 (1)	1.342 (1)	1.719 (1)
Dimensions	Condensing unit	Height x Width x Depth	mm	357 x 620 x 337			427 x 820 x 427		390 x 820 x 427	
	Evaporator unit	Height x Width x Depth	mm	215 x 614 x 410			215 x 1,614 x 410		215 x 1,034 x 410	
	Packed condensing unit	Height x Width x Depth	mm	590 x 419 x 810			610 x 520 x 1,010			
	Packed evaporator unit	Height x Width x Depth	mm	260 x 470 x 780			260 x 470 x 1,200			
Weight	Condensing unit		kg	45	50		72	78	61	69
	Evaporator unit		kg	13			28		19	
	Packed condensing unit		kg	55	60		86	92	75	83
	Packed evaporator unit		kg	15			31		21	
Compressor	Type			Hermetic Reciprocating						
	Nominal power		kW	0.75	1.1	1.3	2.2		1.3	1.5
	Starting method			Direct						
Operation range	Cold room temperature	Min. ~Max.	°C	-25 ~-15						
Refrigerant	Type			R-452A						
	GWP			2,142						
Evaporator	Air flow		m³/h	600			1,800		1,200	
	Air throw		m	4 (3)						
Condenser	Air flow		m³/h	750			1,500		1,400	
Defrost				Electric						
Power supply	Voltage/Phase/Frequency		V/Hz	230/1~/50			400/3N~/50		230/1~/50	400/3N~/50

			DB-O	SB.MDB 106A12XX	SB.MDB 107A12XX	SB.MDB 315A13XX	SB.MDB 320A13XX	SB.MDB 425A13XX	SB.MDB 635A13XX	SB.MDB 645A13XX	SB.MDB 706A13XX	SB.MDB 530A13XX	SB.MDB 707A13XX	SB.MDB 212A12XX	SB.MDB 213A12XX
Refrigerating capacity	Medium temperature R-134a Nom		kW	1.140 (2)	1.422 (2)	3.188 (2)	3.492 (2)	3.606 (2)	7.293 (2)	8.779 (2)	11.014 (2)	5.070 (2)	14.069 (2)	1.816 (2)	2.029 (2)
Dimensions	Condensing unit	Height x Width x Depth	mm	357 x 620 x 337		427 x 820 x 427	427 x 820 x 427	540 x 920 x 540	654 x 1,575 x 642		885 x 1,725 x 742	594 x 1,075 x 532	885 x 1,725 x 742	390 x 820 x 427	
	Evaporator unit	Height x Width x Depth	mm	215 x 614 x 410		215 x 1,614 x 410	215 x 1,614 x 410	545 x 805 x 690	600 x 1,690 x 690		620 x 1,840 x 700	530 x 1,220 x 690	620 x 1,840 x 700	215 x 1,034 x 410	
	Packed condensing unit	Height x Width x Depth	mm	590 x 419 x 810		610 x 520 x 1,010	610 x 520 x 1,010	880 x 650 x 1,200	750 x 890 x 1,840		780 x 890 x 1,990	710 x 820 x 1,280	780 x 890 x 1,990	610 x 520 x 1,010	
	Packed evaporator unit	Height x Width x Depth	mm	260 x 470 x 780		260 x 470 x 1,200	260 x 470 x 1,200	702 x 814 x 1,004	865 x 780 x 1,850		1,100 x 880 x 2,000	865 x 780 x 1,850	1,100 x 880 x 2,000	260 x 470 x 1,200	
Weight	Condensing unit		kg	43		69	70	95	158	159	195	104	220	59	61
	Evaporator unit		kg	13		28	28	37	84		102	53	102	19	
	Packed condensing unit		kg	53		83	84	114	247	248	309	193	334	73	75
	Packed evaporator unit		kg	15		30	30	53	140		165	85	165	21	
Compressor	Type			Hermetic Reciprocating											
	Nominal power		kW	0.4	0.7	2.2	2.6	2.94	4.8	6.3	7.4	3.7	9.555	0.9	1.7
	Starting method			Direct											
Operation range	Cold room temperature	Min. ~Max.	°C	-5 ~10											
Refrigerant	Type			R-134a											
	GWP			1,430											
Evaporator	Air flow		m³/h	600		1,800	1,800	2,300	6,800	6,400	8,400	4,600	8,000	1,200	
	Air throw		m	4 (3)				12 (3)	11 (3)		13 (3)	11 (3)	12 (3)	4 (3)	
Condenser	Air flow		m³/h	750		1,500		3,150	5,500	7,000	8,100	3,200	8,100	1,400	
Defrost				Electric											
Power supply	Voltage/Phase/Frequency		V/Hz	230/1~/50		400/3N~/50		400/3N~/50	400/3N~/50					230/1~/50	400/3N~/50

(1) When normally running: -20°C / +30°C
(2) When normally running: 0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.w

Bi-block system for low and medium temperature refrigeration

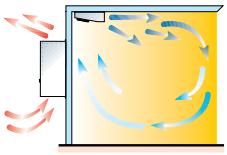
Split system for small and medium size cold rooms, wall mounted condensing unit and ceiling mounted evaporator. Supplied with already installed accessories and pre-charged pipes up to 10 m length. Capillary expansion system and remote-control panel.

ZD

Working temperature	**+10 ~ -5** °C	**-15 ~ -25** °C
Refrigerant	R513A / R134a / R452A / R404A	
Defrost	Electric	
Compressor type	Hermetic	

COLD ROOM SIZE

INSTALLATION



*** COOLING CAPACITY**	
Medium Temp. (0° C)	**785 W ~ 3.578 W**
Low Temp. (-20° C)	**655 W ~ 2.382 W**

*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**4,6 m³ ~ 39 m³**	**5,1 m³ ~ 43 m³**
Low Temp. (-20° C)	**2,3 m³ ~ 20 m³**	**2,7 m³ ~ 23 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Bi-block system for low and medium temperature refrigeration

DB-S Series units are characterized by a particular configuration reducing noise to the minimum values possible. Split system for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use

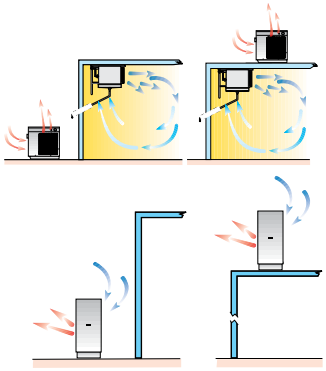
DB-S

Working temperature	**+10 ~ -5 °C**	**-15 ~ -25 °C**
Refrigerant	R513A / R134a / R407F / R452A / R404A	
Defrost	Electric	
Compressor type	Hermetic	

*** COOLING CAPACITY**	
Medium Temp. (0° C)	**1.088 W ~ 12.973 W**
Low Temp. (-20° C)	**720 W ~ 11.841 W**

COLD ROOM SIZE

INSTALLATION



*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**7,6 m³ ~ 233 m³**	**8,3 m³ ~256 m³**
Low Temp. (-20° C)	**2,8 m³ ~ 236 m³**	**3,2 m³ ~ 270 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature (+5 ~ - 25 °C) version available

Bi-block system for low and medium temperature refrigeration

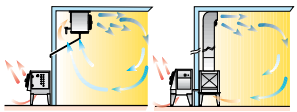
The DB-D series units are split system for medium and big size cold rooms, condensing unit and evaporator supplied with accessories, suitable for outdoor installation without any protection.

DB-D

Working temperature	**+10 ~ -5** °C	**-15 ~ -25** °C
Refrigerant	R449A / R404A	
Defrost	Electric	
Compressor type	Hermetic Semi-hermetic	

COLD ROOM SIZE

INSTALLATION



*** COOLING CAPACITY**	
Medium Temp. (0° C)	**1.914 W ~ 63.311 W**
Low Temp. (-20° C)	**1.447 W ~ 51.514 W**

*** REFRIGERATED VOLUME**		
	V80	**V100**
Medium Temp. (0° C)	**19 m³ ~ 1.774 m³**	**21 m³ ~ 1.949 m³**
Low Temp. (-20° C)	**9,4 m³ ~ 1.699 m³**	**11 m³ ~ 1.938 m³**

* External reference temperature: 35°C
* Referring refrigerant: R404A

Multitemperature (+5 ~ - 25 °C) and freezing versions available (-30 ~ - 50 °C)

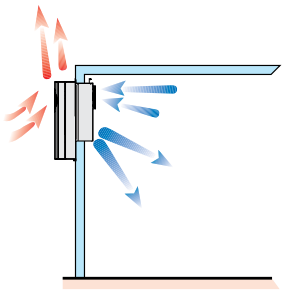
Monoblock units for high temperature refrigeration

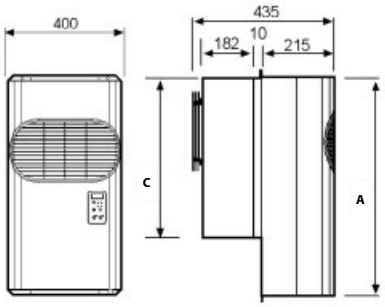
Monoblock system suitable for through-wall installation

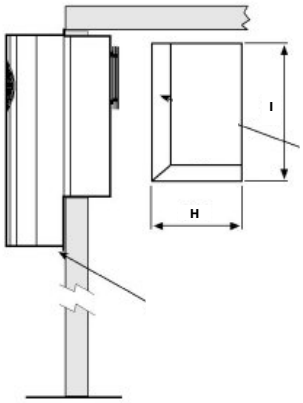
› Accurate humidity and temperature control to guarantee the quality of products (e.g. wines)
› Integrated humidifier available depending on model to have one unit which covers it all: perfect humidity & temperature control
› Electronic controller managing both temperature and humidity of the cold room

RCV

Installation type







				RCV	RCV101527E	RCV101528E	RCV102527E	RCV102528E	RCV201527E	RCV201528E	RCV202527E	RCV202528E
Refrigerating capacity	High temperature	R-134a	Nom	kW	0.6(1)		1(1)		1.4(1)		2.3(1)	
Heating capacity	R-134a	Nom		kW	0.7(1)		1.05(1)		1.4(1)		1.75(1)	
Dimensions	Unit	Height x Width x Depth		mm	735 x 400 x 435				735 x 620 x 435			
	Packed unit	Height x Width x Depth		mm	955 x 435 x 495				955 x 655 x 495			
Weight	Unit			kg	49	50	52	53	77	78	79	80
	Packed unit			kg	59	60	62	63	89	90	91	92
Compressor	Type				Hermetic Reciprocating							
	Nominal power			kW	0.25		0.37		0.46		0.55	
Operation range	Cold room temperature	Min. ~Max.		°C	10 ~20							
Refrigerant	Type				R-134a							
	GWP				1,430							
Evaporator	Air flow			m^3/h	600				1,200			
	Air throw			m	4 (2)							
Condenser	Air flow			m^3/h	600				1,200			
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50							

(1) When normally running: +10°C / +30°C

(2) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

Split units for high temperature refrigeration

Compact condensing unit and small-sized wall or ceiling mounted evaporators

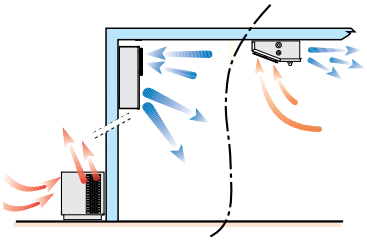
- Accurate humidity and temperature control to guarantee the quality of products (e.g. wines)
- Thermostatic expansion valve ensuring optimum capacity in accordance with the required load for better energy efficiency
- Integrated humidifier available depending on model to have one unit which covers it all: perfect humidity & temperature control
- Electronic controller managing both temperature and humidity of the cold room

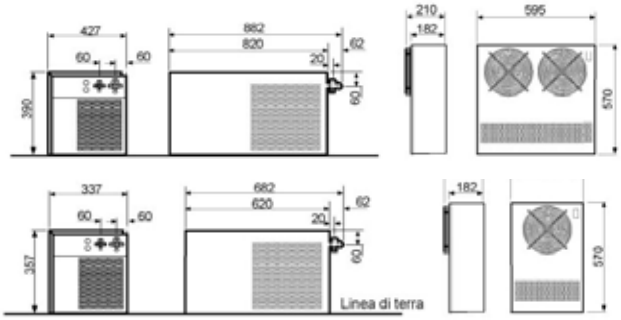
Ceiling evaporator

Wall evaporator

RDV

Installation type

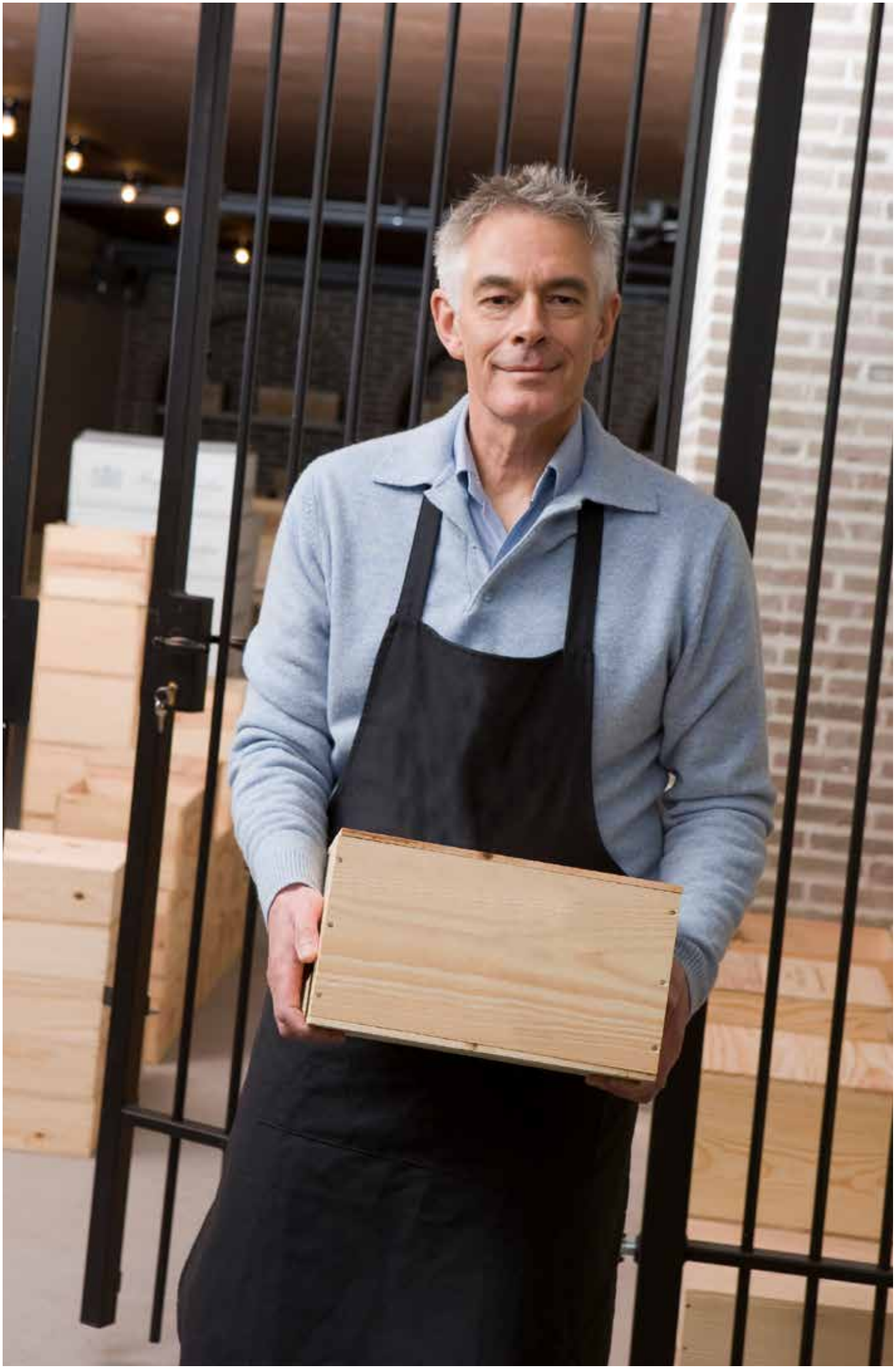




				RDV	SB.RDV101529E	SB.RDV101523E	SB.RDV101524E	SB.RDV101525E	SB.RDV102529E	SB.RDV102523E	SB.RDV102524E	SB.RDV102525E
Refrigerating capacity	High temperature	R-134a	Nom	kW	0.600 (1)				1.000 (1)			
Heating capacity	R-134a	Nom		kW	0.700		0.900		1.050		0.900	
Dimensions	Condensing unit	Height x Width x Depth		mm	357/682/337							
	Evaporator unit	Height x Width x Depth		mm	570 x 375 x 210		215 x 669 x 490		570 x 375 x 210		215 x 669 x 490	
	Packed condensing unit	Height x Width x Depth		mm	590 x 800 x 400							
	Packed evaporator unit	Height x Width x Depth		mm	610 x 250 x 525		540 x 250 x 1,190		610 x 250 x 525		540 x 250 x 1,190	
Weight	Condensing unit			kg	32	33	32	35	36	35		
	Evaporator unit			kg	12	13	12		13	12		
	Packed condensing unit			kg	37	38	37	40	41	40		
	Packed evaporator unit			kg	14	15	14		15	14		
Compressor	Type				Hermetic Reciprocating							
	Nominal power			kW	0.25				0.37			
	Starting method				Direct							
Operation range	Cold room temperature	Min. ~Max.		°C	10 ~20							
Refrigerant	Type				R-134a							
	GWP				1,430							
Evaporator	Air flow			m^3/h	500		400		500		400	
	Air throw			m	4 (2)							
Condenser	Air flow			m^3/h	600							
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50							

				RDV	SB.RDV201529E	SB.RDV201523E	SB.RDV201524E	SB.RDV201525E	SB.RDV202529E	SB.RDV202523E	SB.RDV202524E	SB.RDV202525E
Refrigerating capacity	High temperature	R-134a	Nom	kW	1.400 (1)				2.300 (1)			
Heating capacity	R-134a	Nom		kW	1.400		1.600		1.750 (1)		1.600	
Dimensions	Condensing unit	Height x Width x Depth		mm	390/882/427							
	Evaporator unit	Height x Width x Depth		mm	570 x 595 x 210		215 x 1,089 x 490		570 x 595 x 210		215 x 195 x 490	215 x 1,089 x 490
	Packed condensing unit	Height x Width x Depth		mm	610 x 510 x 1,000							
	Packed evaporator unit	Height x Width x Depth		mm	610 x 250 x 745		540 x 250 x 1,190		610 x 250 x 745		540 x 1,089 x 1,190	540 x 250 x 1,190
Weight	Condensing unit			kg	60	61	60	62	63	68	62	
	Evaporator unit			kg	18	19	18		19	18		
	Packed condensing unit			kg	67	68	67	69	70	75	69	
	Packed evaporator unit			kg	20	21	22	20	21	22	20	
Compressor	Type				Hermetic Reciprocating							
	Nominal power			kW	0.46				0.55			
	Starting method				Direct							
Operation range	Cold room temperature	Min. ~Max.		°C	10 ~20							
Refrigerant	Type				R-134a							
	GWP				1,430							
Evaporator	Air flow			m^3/h	1,000		800		1,000		800	
	Air throw			m	4 (2)							
Condenser	Air flow			m^3/h	1,200		1,100		1,200		1,100	
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50							

(1) When normally running: +10°C / +30°C
(2) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.



Condensing units

Products Overview

Product Category	Product Series	Product Picture	Refrigeration capacity - kW
Open Type Condensing unit	ZH		
Closed Type Condensing unit	CU		
Condensing unit - Multi Compressor	CM		

0 10 20 30 50 70 100 150 200 250 300

Freezing (Low temperature) (-20°C / +35°C)

Chilling (Medium temperature) (0°C / +35°C)

Open type condensing unit

Open type condensing units, floor mounting, built on robust base in welded open frame, semi-hermetic compressor, functioning with various refrigerants, for MT with R407H,R449A R134a ,R404A, for LT with R449A,R404A, available in two versions, basic and full, delivered under nitrogen pressure.

ZH

Medium Temperature Refrigeration

Condensing unit	GZH *		007	009	011	013	016	018	026	032	034	041	048	056	063	073	084
Refrigerating Capacity (1)	R134a	kw	2.34	2.82	3.38	4.6	5.61	5.81	8.77	10.86	11.14	13.25	15.6	18.43	20.71	24.15	29.47
	R404A	kw	3.55	4.9	6.35	7.74	9.26	9.86	14.54	17.58	18.8	20.97	25.63	29.66	32.49	36.33	46.83
Power input (1)	R134a	kw	1.15	1.43	2.03	2.26	2.64	2.73	4.00	4.71	4.74	5.58	6.58	7.69	8.51	10.05	13.73
	R404A	kw	2	2.47	3.14	3.61	4.35	4.69	7.02	8.36	8.2	10.08	11.38	13.58	15.14	18.03	22.37
Power supply	Voltage/Phase/ Frequency	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
Max absorbed power	kw		2.9	3.6	4.5	5.3	6.3	6.5	9.8	12.2	12.9	14.9	17.4	20.4	22.4	26.4	32
Max absorbed current	A		5.73	6.83	10.5	11.6	13	13.8	20.7	24.4	24.1	29.3	34.2	39.2	43.2	50	57.2
Peak current	A		23.2	26.2	40	40	47.2	65.2	86.6	86.6	103.2	117.2	87	103	103	131	147
Compressor	Type		Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic
	Model		2GES-2Y	2FES-3Y	2EES-3Y	2DES-3Y	2CES-4Y	4FES-5Y	4DES-7Y	4CES-9Y	4VES-10Y	4TES-12Y	4PES-15Y	4NES-20Y	4JE-22Y	4HE-25Y	4GE-30Y
Condenser	Fan No.		1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	Fan ø	mm	400	400	500	500	500	500	450	450	450	450	500	500	500	500	630
	air flow	m^3/h	3800	3800	8300	7900	7900	7900	11700	11200	11200	11200	15300	15300	15300	15300	29600
Piping Connections	Suction line connection	Ø mm	16	16	18	22	22	22	28	28	35	35	35	42	42	54	54
	Liquid line connection	Ø mm	12	12	16	16	16	16	22	22	22	22	28	28	28	28	28
Dimension	Length mm		1045	1045	1045	1045	1045	1045	1350	1350	1350	1350	1740	1740	1740	1740	1740
	Width mm		905	905	905	905	905	905	1050	1050	1050	1050	1050	1050	1050	1050	1050
	Height mm		570	570	745	745	745	745	720	720	720	860	910	910	910	910	1310
Weight	kg		81	81	130	130	130	152	200	217	257	270	331	334	371	384	414
Unit Package type			Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet

Low Temperature Refrigeration

Condensing unit	HZH **		009	011	013	016	018	022	026	032	041	048	056	063	073	084	101	110	127	152
	R404A		1.43	1.81	2.39	2.98	3.21	4.03	4.9	5.87	6.91	7.61	9.24	10.85	12.68	15.98	18.59	19.01	24.84	28.57
Power input (2)	R404A		1.34	1.44	1.85	2.28	2.51	3.38	3.96	4.74	5.32	5.65	6.92	8.18	9.64	11.71	13.79	14.09		
Power supply	Voltage/Phase/Frequency		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Max absorbed power	kw		3.06	3.46	4.68	5.68	5.98	7.58	8.78	10.6	13.9	14.9	17.9	19.9	22.9	28.36	32.36	34.36	44	50
Max absorbed current	A		6.03	6.73	10.5	12.1	12.5	15.2	17.5	21.9	24.1	26.9	30.8	35	40.9	49.9	58.8	59.2	71.5	89.2
Peak current	A		23.2	26.7	33.7	40	47.2	56.5	65.2	86.6	85.2	103.2	117.2	101.2	101.2	103	147	147	147	225
Compressor	Type		Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic	Semi-hermetic
	Model		2FES-2Y	2EES-2Y	2DES-2Y	2CES-3Y	4FES-3Y	4EES-4Y	4DES-5Y	4CES-6Y	4TES-9Y	4PES-12Y	4NES-14Y	4JE-15Y	4HE-18Y	4GE-23Y	4FE-28Y	6HE-28Y	6GE-34Y	6FE-44Y
Condenser	Fan No.		1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	Fan ø	mm	400	400	500	500	500	500	500	450	450	450	450	450	500	500	500	500	630	630
	air flow	m^3/h	3800	3800	8300	8300	8300	8300	7900	11700	11700	11200	11200	11200	15300	15300	15300	15300	29600	29600
Piping Connections	Suction line connection	Ø mm	16	18	22	22	22	28	28	28	35	35	42	42	42	54	54	54	64	64
	Liquid line connection	Ø mm	12	12	12	12	16	16	16	22	22	28	22	22	22	28	28	28	28	28
Dimension	Length mm		1045	1045	1045	1045	1045	1045	1045	1350	1350	1350	1350	1350	1740	1740	1740	1740	1740	1740
	Width mm		905	905	905	905	905	905	905	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
	Height mm		570	570	745	745	745	745	745	720	720	720	720	720	910	910	910	910	1310	1310
Weight	kg		80	98	130	130	140	142	153	177	248	268	307	360	364	373	385	405	435	445
Unit Package type			Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet	Pallet

(1) refer to condition: Outside ambient temperature =32C, Evaporation temperature=-10C and suction gas temperature 20K, liquid subcooling 3K.

(2) refer to condition: Outside ambient temperature =32C, Evaporation temperature=-35C and suction gas temperature 20K, liquid subcooling 3K.

* also available with refrigerant R407H, R449A

* also available with refrigerant R449A

Condensing unit for outdoor installation with hermetic compressors

General features:

› Capacity for MT cooling: 0,9 kW to 26,7 kW
› Capacity for LT cooling: 0,6 kW to 12 kW
› R404A, R134A a, R 449A, R448A, R452A R407F, depending on the compressor
› Tecumseh, Maneurop, Copeland scroll
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C


CU1
CU3

General Description:

Compact air cooled condensing unit floor mounting, low noise, with hermetic compressors. Designed specifically for small capacity refrigeration applications in small food stores (eg. in bakeries and butchers), cold rooms, bottle coolers and display cabinets. All components can be accessed, allowing for quick and easy maintenance.
The optimized compressor range and increased condenser surface deliver high levels of energy efficiency and reliability is ensured by using high quality components and production processes.

Standard characteristics:

› Hermetic compressor with integral protection
› Dual HP/LP fixed switch with auto reset
› Liquid line filter dryer, liquid line sight glass
› Curved condenser with 6-pole fan motor
› Liquid receiver with safety pressure relief valve for PED units (depending on the model & PED class)
› Electrical box with capacity controller (only for digital scroll)
› Crankcase heater (only scroll type)

Normal cooling

Condensing unit		GCU-E	1006U01	107U01	1010U01	1012U01	1015U01	2025U01	2028U01	2035U01	2040U01E
Refrigeration capacity	0° C	W	1,428	1,704	2,097	2,470	3,162	5,186	6,102	7,350	7,557
	-10° C	W	974	1,177	1,498	1,710	2,075	3,013	3,848	4,628	5,173
Power input		kW	0.61	0.7	0.83	0.88	1.2	1.53	1.82	2.17	2.67
COP 32°C (1)			1.59	1.67	1.8	1.93	1.72	1.96	2.11	2.13	1.94
COP 25°C (1)			1.84	1.93	2.07	2.23	1.98	2.23	2.4	2.42	2.2
COP 43°C (1)			1.23	1.31	1.5	1.53	1.35	1.55	1.66	1.68	1.55
SEPR(1)			-	-	-	-	-	-	-	-	2.4
Annual Electricity Consumption(1)		Kwh/a	-	-	-	-	-	-	-	-	13,257
Dimensions Unit	Height	mm	625	625	625	625	625	800	800	800	800
	Width	mm	1150	1150	1150	1150	1150	1400	1400	1400	1400
	Depth	mm	500	500	500	500	500	550	550	550	550
Condenser air flow		m^3/h	1,840	1,840	1,840	1,830	1,830	3,600	3,600	3,600	3,370
Compressor			Tecumseh reciprocating hermetic compressor								
Refrigerant		Type/GWP	R-134A/1430/ R404A								
Power supply		V/~/ Hz	230/1~/50					400/3~/50			

Deep freezing

Condensing unit		HCU-D	1010U01	1012U01	1015U01	1017U01	1020U01	2025U01	2035U01
Refrigeration capacity	-25° C	W	673	778	1,058	1,323	1,790	2,597	(2)
	-35° C	W	377	449	626	802	1,021	1,481	(2)
Power input		kW	0.45	0.53	0.62	0.85	1.2	1.41	(2)
COP 32°C (1)			0.83	0.85	1	0.94	0.85	1.05	(2)
COP 25°C (1)			0.98	0.99	1.16	1.09	1	1.22	(2)
COP 43°C (1)			0.62	0.64	0.76	0.73	0.59	0.79	(2)
SEPR(1)			-	-	-	-	-	-	(2)
Annual Electricity Consumption(1)		Kwh/a	-	-	-	-	-	-	(2)
Dimensions Unit	Height	mm	625	625	625	625	625	800	800
	Width	mm	1150	1150	1150	1150	1150	1400	1400
	Depth	mm	500	500	500	500	500	550	550
Condenser air flow		m^3/h	1,840	1,840	1,840	1,840	1,830	3,600	(2)
Compressor			Tecumseh reciprocating hermetic compressor						
Refrigerant		Type/GWP	R-452A/2141/R404A						
Power supply		V/~/ Hz	230/1~/50					400/3~/50	

Other refrigerants, compressors and options available on request (1) Nominal operating conditions according to Ecodesign EN 13215: Evaporation temperature -10°C -35°C, 20°C suction gas temperature, Sub cooling 0K; (2) Not existing at the moment

Condensing unit for outdoor installation with semi hermetic compressors

General features:

› Capacity for MT cooling: 1,37 kW to 72,3 kW
› Capacity for LT cooling: 0,77 kW to 35,2 kW
› R134A a, R 449A, R448A, R452A R407F, R 407A. R404A
› Reciprocating: Bitzer, Dorin, Frascold
› Copeland Digital scroll and Stream reciprocation compressors
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C


CU1


CU3_4

General Description:

Compact air cooled condensing unit floor mounting, low noise, with semi hermetic compressors. Designed specifically for small capacity refrigeration applications in small and medium sized food stores (e.g. in bakeries and butchers), cold rooms, bottle coolers and display cabinets. All components can be accessed, allowing for quick and easy maintenance. The optimized compressor range and increased condenser surface deliver high levels of energy efficiency and reliability is ensured by using high quality components and production processes.

Standard characteristics:

› Semi-hermetic compressors
› Crankcase heater - Kriwan
› Curved condenser with 6-pole fan motor
› Electrical box with terminal strip
› Liquid receiver with safety pressure relief valve for PED units
› Liquid line filter dryer, liquid line sight glass
› Dual HP/LP adjustable switch with auto reset
› Suction vibration eliminator
› Frequency driver (only with Inverter option)
› Bitzer Varispeed compressor (only for Inverter option)
› Electrical box with running processor (only for Inverter)

Normal cooling

Condensing unit			**GCU-E**	**1010B01**	**10150B01**	**2020B01**	**2022B01**	**2025B01**	**2030B01**	**2040B01**	**3050B01**	**3060B01**	**4090B01**
Refrigeration capacity	0° C		W	2,786	3,189	4,248	5,133	5,943	7,334	9,596	1,1711	13,899	17,574
	-10° C		W	1,929	2,335	2,957	3,550	4,161	5,155	6,897	8,270	9,885	12,520
Power input			kW	0.98	1.15	1.5	1.5	1.5	2.15	2.87	3.4	4.2	5
COP 32°C (1)				2.14	2.09	2.36	2.43	2.35	2.4	2.39	2.42	2.35	2.48
COP 25°C (1)				2.51	2.43	2.83	2.84	2.75	2.8	2.81	2.83	2.74	2.89
COP 43°C (1)				1.66	1.66	1.81	1.92	1.86	1.89	1.87	1.9	1.85	1.94
SEPR(1)				-	-	-	-	-	3.37	3.39	3.32	3014	3.38
Annual Electricity Consumption(1)			Kwh/a	-	-	-	-	-	9,407	12,520	15,180	19,331	22,788
Dimensions	**Unit**	**Height**	**mm**	625	625	800	800	800	800	800	1480	1480	1480
		Width	**mm**	1150	1150	1400	1400	1400	1400	1400	1400	1400	1680
		Depth	**mm**	500	500	550	550	550	550	550	550	550	750
Condenser air flow			m^3/h	1,830	1,830	3,600	3,600	3,370	3,050	3,050	6,740	6,740	6,740
Compressor				Bitzer reciprocating compressor									
Refrigerant			Type/GWP	R-134a/1430/R404A									
Power supply			V/~/ Hz	400/3~/50									

Deep freezing

Condensing unit			**HCU-B**	**1007B01**	**1010B01**	**1015B01**	**1020B01**	**2020B01**	**2030B01**	**2050B01**	**3060B01**	**4090B01**	**4120B01**
Refrigeration capacity	-25° C		W	971	1,193	1,562	1,875	3,099	4,025	5,657	7,563	8,823	9,358
	-35° C		W	536	690	886	1,097	1,854	2,478	3,497	4,677	5,394	5,641
Power input			kW	0,54	0,68	0,8	1	1,39	1,88	2,62	3,47	3,81	3,92
COP 32°C (1)				0.98	1.02	1.09	1.1	1.33	1.32	1.33	1.35	1.42	1.44
COP 25°C (1)				1.15	1.2	1.27	1.29	1.53	1.52	1.53	1.55	1.61	1.62
COP 43°C (1)				0.68	0.68	0.75	0.74	1.05	1.04	1.07	1.07	1.16	1.04
SEPR(1)				-	-	-	-	-	1.73	1.75	1.8	1.83	1.79
Annual Electricity Consumption(1)			Kwh/a	-	-	-	-	-	10,695	14,882	19,427	21,964	23,562
Dimensions	**Unit**	**Height**	**mm**	625	625	625	625	800	800	800	1480	1480	1480
		Width	**mm**	1150	1150	1150	1150	1400	1400	1400	1400	1680	1680
		Depth	**mm**	500	500	500	500	550	550	550	550	750	750
Condenser air flow			m^3/h	1,830	1,830	1,830	1,830	3,600	3,600	3,050	7,200	6,740	6,740
Compressor				Bitzer reciprocating compressor									
Refrigerant			Type/GWP	R-449A/1397/R404A									
Power supply			V/~/ Hz	400/3~/50									

Other refrigerants, compressors and options available on request (1)Nominal operating conditions according to Ecodesign EN 13215: Evaporation temperature -10°C -35°C, 20°C suction gas temperature, Sub cooling 0K

Twin condensing unit for outdoor installation with twin-semi hermetic compressors

General features:

› Capacity for MT cooling: 8,5 kW to 26 kW
› Capacity for LT cooling: 7,5 kW to 12 kW
› R134A a, R 449A, R448A, R452A R407F, R404A
› Reciprocating: Bitzer, Dorin, Frascold
› Copeland Digital scroll and Stream reciprocation compressors
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

General Description:

Compact air cooled condensing unit floor mounting, low noise, with hermetic compressors. Designed specifically for small capacity refrigeration applications in small food stores (eg. in bakeries and butchers), cold rooms, bottle coolers and display cabinets. All components can be accessed, making maintenance quick and easy.
The optimized compressor range and increased condenser surface deliver high levels of energy efficiency and reliability is ensured by using high quality components and production processes.

CU3

CU5

Standard characteristics:

› Two compressors parallel connected
› Level control oil system
› Curved condenser with 6-pole fan motor
› Electrical box with terminal strip
› Liquid receiver with safety pressure relief valve for PED units
› Liquid line filter dryer, liquid line sight glass
› Dual HP/LP adjustable switch with auto reset
› Suction vibration eliminator
› Electrical box with Running processor (only for Inverter)

Normal cooling

Condensing unit		GCU-E	4040L01	4060L01	4080L01	5120L01	5140L01	5180L01
Refrigeration capacity	0° C	W	11,900	15,200	19,200	27,800	30,400	36,400
	-10° C	W	8,328	10,596	13,800	19,783	21,249	25,694
Power input		kW	3.53	4.4	5.7	8.42	8.3	10
COP/EER (1)			2.4	2.4	2.4	2.3	2.6	2.6
SEPR(1)			3.52	3.6	3.71	3.55	3.75	3.8
Annual Electricity Consumption(1)		Kwh/a	14,526	18,098	22,905	24,299	34,808	41,562
Dimensions Unit	Height	mm	1480	1480	1480	1480	1480	1480
	Width	mm	1680	1680	1680	2405	2405	2405
	Depth	mm	750	750	750	750	750	750
Condenser air flow		m^3/h	7,800	7,800	7,300	15,600	15,600	14,600
Compressor			Bitzer reciprocating compressor					
Refrigerant		Type/GWP	R-134A/1430/R404A					
Power supply		V/~/ Hz	400/3~/50					

Deep freezing

Condensing unit		HCU-J	4080L01	4100L01	412L01
Refrigeration capacity	-25° C	W	9,400	11,100	13,600
	-35° C	W	5,732	6,725	8,904
Power input		kW	4.5	5.3	6.7
COP/EER (1)			1.3	1.3	1.3
SEPR(1)			1.78	1.8	1.83
Annual Electricity Consumption(1)		Kwh/a	23,949	27,806	36,214
Dimensions Unit	Height	mm	1480	1480	1480
	Width	mm	1680	1680	1680
	Depth	mm	750	750	750
Condenser air flow		m^3/h	7,600	7,900	7,300
Refrigerant		Type/GWP	R 407F/1825/R404A		
Power supply		V/~/ Hz	400/3~/50		

Other refrigerants, compressors and options available on request. (1)Nominal operating conditions according to Ecodesign EN 13215: Evaporation temperature -10°C/ -35°C, 20°C suction gas temperature, Sub cooling 0K

Multi compressor condensing unit with scroll/digital scroll compressors

General features:

› Capacity for MT cooling: 10,5 kW to 102 kW
› Capacity for LT cooling: 7,5 kW to 48,5 kW
› R134A a, R 449A, R448A, R452A R407F, R404A
› Copeland scroll and digital scroll compressors
Other types, brands and capacities are possible on request
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

Standard configuration:

Basic Frame Version:
Basic frame made from pre-painted steel sheet, with vertical condenser placed on 1 or 2 sides of the unit and fans (2, 3, 4, or 5) placed on frame top covering sheet.
The compressors are installed in a soundproof compartment separate from the condenser side, but allowing ventilation.
The compartment is simple soundproofing insulated (SMP).

Basic Refrigerating System:
The compressors (3 or 4) are connected in parallel, with one suction and discharge header. Each compressor is fitted with shut-off valves on suction line and discharge line.
The compressors are fixed to the frame through rubber anti-vibration supports.
The oil equalization system is composed of an oil separator and an equalization header, which are mounted on the compressor oil sight glass connection.
According to the number of compressors fitted, there are one or two oil level indicator/s, fitted onto the equalization header.
The refrigerating system is equipped with liquid receivers, if there is more than one receiver, the installation is made in parallel with a safety valve, a dehydration cartridge filter, interchangeable, liquid level alarm, liquid sight glass and shut-off valves.
On suction line there is a mechanical cartridge filter, interchangeable.

CM Scroll

The refrigeration system is fitted with:

› General high pressure switch, adjustable and autoresetting
› General low pressure switch, adjustable and autoresetting
› Emergency low pressure switch, adjustable and autoresetting
› Low pressure switches for each compressor emergency, adjustable and autoresetting
› Low pressure probe, placed on suction header for capacity control
› High pressure gauge
› Low pressure gauge

Standard electrical panel:

Standard power distribution
Disconnecting switch
Compressors protection, with overload cut-out motor protector; fuses for fans protection, thermo- contacts for each single fan.
Auxiliary circuit 230 volt through transformer 400V/230V
Electronic card XC440C
Four alarm signals: emergency (button + lamp, fans block, high pressure switch block, low pressure switch block.
Electronic speed regulator for condenser fan with pressure probe for three phase fans and with temperature probe for mono phase fans + bypass
The electrical panel is placed horizontally on the top front side of the unit, inside the panel sheets for frame 1, 2 and 3; grid, ventilation fan and double door for frames 4, 5, 6 and 7.

Multi compressor condensing unit with semi hermetic compressors

General features:

› Capacity for MT cooling: 48 kW to 180 kW
› Capacity for LT cooling: 20 kW to 85 kW
› R134A a, R 449A, R448A, R452A R407F, R404A
› Reciprocating semi hermetic compressors: Bitzer, Dorin, Frascold, Copeland stream
Other types, brands and capacities are possible on request
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

CM Semi hermetic

General description:

Basic Frame Version:
Basic frame made from folded and painted steel sheet, screwed with bolts to make a basic structure to fix the components on it.

Basic Refrigerating System:
The compressors (3 or 4) are connected in parallel, with only one suction and discharge header. Each compressor is fitted with shut-off valves on suction line and discharge line.
The compressors are fixed to the frame through rubber anti-vibration supports.
Compressors used for low temperature are complete with fan heads.
The oil equalization system is composed of an oil separator and an equalization header, which are mounted on the compressor oil sight glass connection.
According to the number of compressors fitted, there is one or two oil level indicator/s, fitted onto the equalization header.
The refrigerating system is equipped with liquid receivers, if there is more than one receiver, the installation is made in parallel with a safety valve, a dehydration cartridge filter, interchangeable, liquid level alarm, liquid sight glass and shut-off valves.
On suction line there is a mechanical cartridge filter, interchangeable.

The refrigeration system is fitted with:

› General high pressure switch, adjustable and autoresetting
› General low pressure switch, adjustable and autoresetting
› Oil pressure switch for each compressor
› Emergency low pressure switch, adjustable and autoresetting
› Low pressure switches for each compressor emergency, adjustable and autoresetting
› Electronic speed regulator for condenser fan with pressure probe for three phase fans and with temperature probe for mono phase fans + bypass
› Low pressure probe, placed on suction header for capacity control
› High pressure gauge
› Low pressure gauge

Electrical panel:

Standard power distribution
Disconnecting switch
Compressors protection, with overload cut-out motor protector; fuses for fans protection, thermal contacts for each single fan
Auxiliary circuit 230 volt through transformer 400V/230V
Electronic card XC440C
IP55 with grid and ventilation fan
On the door there is the electronic card and 4 lamps: emergency (button + lamp), fans block, high pressure switch block, low pressure switch block, and selector for on/off compressors

Compressor racks & packs

Compressor packs & racks

Freezing (Low temperature) (-20° C)

Chilling (Medium temperature) (0° C)

Model	Product name	Capacity (kW)	0	2	5	10	25	50	100	150	300	450	500
Racks	CC Series												

Multicompressor Racks CC Series

CC Series multicompressor racks satisfy the needs for any application in refrigeration with positive and negative range of temperatures and for Freezing. Compressor racks on welded or bolted frames, available in different configurations, for indoor or outdoor installation. Hermetic, scroll, reciprocating semi-hermetic or screw in parallel compressors and two-stage. Design adaptable to any project solution. The semi-hermetic compressors can be equipped with an inverter.

HERMETIC COMPRESSOR

Working temperature	**+0 ~ -15** °C	**-25 ~ -40** °C
Refrigerant	R513A / R134a / R404A	
Nr of compressors	3	
*** COOLING CAPACITY**		
Medium Temp.	**7.000 W ~ 150.000 W**	
Low Temp.	**5.900 W ~ 42.000 W**	

External reference temperature: 35°C
Referring refrigerant: R404A

HERMETIC SCROLL COMPRESSOR

Working temperature	**+0 ~ -15** °C	**-25 ~ -40** °C
Refrigerant	R513A / R134a / R407F / R449A / R404A	
Nr of compressors	3 - 4	
*** COOLING CAPACITY**		
Medium Temp.	**12.000 W ~ 150.000 W**	
Low Temp.	**4.300 W ~ 60.000 W**	

External reference temperature: 35°C
Referring refrigerant: R404A

SEMI-HERMETIC COMPRESSOR

Working temperature	**+0 ~ -15** °C	**-25 ~ -40** °C
Refrigerant	R513A / R134a / R407F / R449A / R404A	
Nr of compressors	3 - 4	
*** COOLING CAPACITY**		
Medium Temp.	**21.100 W ~ 450.000 W**	
Low Temp.	**6.200 W ~ 160.000 W**	

External reference temperature: 35°C
Referring refrigerant: R404A

SCREW COMPRESSOR

Working temperature	**-20 ~ +5** °C	**-50 ~ -20** °C
Refrigerant	R513A / R134a / R407A-F / R449A / R404A	
Nr of compressors	2 - 4	
*** COOLING CAPACITY**		
-10° C / 14° F	**116.000 W ~ 1.280.000 W**	
-30° C / -22° F	**55.000 W ~ 608.000 W**	

External reference temperature: 35°C
Referring refrigerant: R404A

Compressor racks & packs

Multi compressor units

- ☑ Open frame for multi-compressors racks
- ☑ Three or four compressors on parallel
- ☑ Many different compressor types
  - › Hermetic
  - › Hermetic Scroll (Brand : Copeland)
  - › Semihermetic reciprocating (Brand: Bitzer, Dorin, Copeland Stream & Frascold)
  - › Screw (Brand: J&E Hall (single screw) and Bitzer (twin screw)
    - • Larger Refrigeration capacities or solution with screw compressors has to be selected from our technical department.
    - • Consist in many models for medium and low temperature, with a refrigeration capacity up to 900,000 Watt.
- ☑ Compatible with latest refrigerants*

Standard features

- › Metal open frame with electrical switchboard
- › Compressor parallel with discharge and suction header
- › Liquid receiver
- › Liquid line
- › High and low pressure switch
- › Electrical switchboard complete with electronic control

Most common used options:

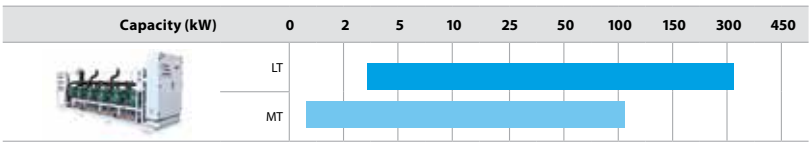
- › Panels to close the frame and put it outside
- › Oil equalization through mechanical floating valve
- › Oil equalization through electronic valve
- › Oversized liquid receiver
- › Refrigerant charge

Other options available on request

*Note: Selection from Selection software based on R404A, R134a and R407F

Single Screw compressor

The single screw compressor consists of a main single screw and two gate rotors. They are designed for high capacities and optimal performances through the step less capacity control.



Multi compressors rack unit with Scroll/Digital scroll and hermetic reciprocating compressors

General features:

› Capacity for MT cooling: 7,2 kW to 26 kW
› Capacity for LT cooling: 6,6 kW to 12 kW
› R134A a, R 449A, R448A, R452A R407F, R404A depending on the used compressor
› Copeland scroll/digital scroll, Tecumseh and Maneurop reciprocation hermetic compressors
Other types, brands and capacities are possible upon request
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

CC scroll

CC hermetic

Standard configuration:

Basic Frame Version:
Basic frame made from folded and pre-painted steel sheet, with complete closed frame with simple sound proof material and anti-vibration
Supports (CC Standard)

Basic Refrigerating System:
The compressors (3 or 4) are connected in parallel, with one suction and discharge header. Each compressor is fitted with shut-off valves on suction line and discharge line.
The compressors are fixed to the frame through rubber anti-vibration supports.
The oil equalization system is composed of an oil separator and an equalization header, which are mounted on the compressor oil sight glass connection.
According to the number of compressors fitted, there is one or two oil level indicator/s, fitted onto the equalization header.
The refrigerating system is equipped with liquid receivers, if there is more than one receiver, the installation is made in parallel with a safety valve, a dehydration cartridge filter, interchangeable, liquid level alarm, liquid sight glass and shut-off valves.
On suction line there is a mechanical cartridge filter, interchangeable.

The refrigerating system is fitted with:

› General high pressure switch, adjustable and auto-resetting
› General low pressure switch, adjustable and auto-resetting
› Emergency low pressure switch, adjustable and auto-resetting
› Low pressure switches for each compressor emergency, adjustable and auto-resetting
› High pressure switches to control condenser fans, adjustable and auto-resetting
› Low pressure probe, placed on suction header for capacity control
› High pressure gauge
› Low pressure gauge
› With or without integrated condenser

Electrical panel:

Standard power distribution
Disconnecting switch
Compressors protection, with overload cut-out motor protector; fuses for fans protection, thermo contacts for each single fan
Auxiliary circuit 230 volt through transformer 400V/230V
Electronic card XC440C
IP55 with grid and ventilation fan
On the door there is the electronic card and 4 lamps: emergency (button + lamp), fans block, high pressure switch block, low pressure switch block, and selector for on/off compressors.
Condensation control through pressure switches: 1 pressure switch every 2 fans, standard 2 pressures

Accessories:

INSRD	Closed frame with double layer sound proofing material
AC&R	Mechanical oil equalization system with oil reserve, oil line filter, pressure reduction valve onto oil reserve
TRAXOIL	Electronic oil distribution system
INSRD	Closed frame with double layer sound proofing material

RIC. LIQ.	Oversized liquid receiver
CFF	Compressors sound shell
ELC.C	Electronic card EWCM4180 - XC1000D – EWCM9100
FQD	Frequency driver

Other additional equipment and special requirements on request

Multi compressor rack unit with semi hermetic compressors

General features:

› Capacity for MT cooling: 25 kW to 320 kW
› Capacity for LT cooling: 13 kW to 133 kW
› R134A a, R 449A, R448A, R452A R407F, R404A
› Reciprocating semi hermetic compressors: Bitzer, Dorin, Frascold, Copeland stream
Other types, brands and capacities are possible on request
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

CC Semi hermetic

Standard configuration:

Basic Frame Version:
Basic frame made from folded and painted steel sheet, screwed with bolts to make a basic structure to fix the components on it.

Basic Refrigerating System:
The compressors (3 or 4) are connected in parallel, with only one suction and discharge header. Each compressor is fitted with shut-off valves on suction line and discharge line.
The compressors are fixed to the frame through rubber anti-vibration supports.
Compressors used for low temperature are complete with fan heads.
The oil equalization system is composed of an oil separator and an equalization header, which are mounted on the compressor oil sight glass connection.
According to the number of compressors fitted, there is one or two oil level indicator/s, fitted onto the equalization header.
The refrigerating system is equipped with liquid receivers, if there is more than one receiver, the installation is made in parallel with a safety valve, a dehydration cartridge filter, interchangeable, liquid level alarm, liquid sight glass and shut-off valves.
On suction line there is a mechanical cartridge filter, interchangeable.

The refrigerating system is fitted with:

› General high pressure switch, adjustable and auto-resetting
› General low pressure switch, adjustable and auto-resetting
› Oil pressure switch for each compressor
› Emergency low pressure switch, adjustable and auto-resetting
› Low pressure switches for each compressor emergency, adjustable and auto-resetting
› High pressure switches to control condenser fans, adjustable and auto-resetting (the pressure switches control 2 fans; if there are more than 4 condenser fans, the quantity of pressure switches installed increases to a maximum of 4)
› Low pressure probe, placed on suction header for capacity control
› High pressure gauge
› Low pressure gauge

Electrical panel:

Standard power distribution
Disconnecting switch
Compressors protection, with overload cut-out motor protector, fuses for fans protection, thermal contacts for each single fan
Auxiliary circuit 230 volt through transformer 400V/230V
Electronic card XC440C
IP55 with grid and ventilation fan
On the door there is the electronic card and 4 lamps : emergency (button + lamp), fans block, high pressure switch block, low pressure switch block, and selector for on/off compressors
Condensation control through pressure switches: 1 pressure switch every 2 fans, standard

Accessories:

INSRD	Closed frame with double layer sound proofing material
AC&R	Mechanical oil equalization system with oil reserve, oil line filter, pressure reduction valve onto oil reserve
TRAXOIL	Electronic oil distribution system
INSRD	Closed frame with double layer sound proofing material
CFF	Compressors sound shell
FQD	Frequency driver

RIC. LIQ.	Oversized liquid receiver
FREON	Refrigerant charge
ELC.C	Electronic card EWCM4180 - XC1000D – EWCM9100
CR1	CR1 Capacity controller
CR2	CR2 Capacity controller
CAP	Capacity step controled compressors

Other additional equipment and special requirements on request

Other products

Evaporators with or without TEV for different operations and refrigerants

Full range of unit coolers ceiling or wall mounted, double discharge, with axial or centrifugal fans, with air, electric, water or warm gas defrost. The series is available with floor evaporators for lower temperatures (to freeze).

General features:

› Capacity for LT/MT cooling: 0,5 to 213 kW
› Ambient/cooling room temperature range: - 40°C - +25°C
› Refrigerants: R134A a, R 449A, R448A, R452A R407F, R 407A
› Fin distance: from 3 mm to 11 mm
› Fin materials: Al
› Tube materials: Cu
› Conditions:
MT: Ambient temperature: 35°C Evp. Temperature: -10°C
LT: Ambient temperature: 35°C Evp. Temperature: -35°C

Options:

› Electric defrost heating
› Hot gas defrost
› Drain pan heating
› Fan ring heater
› High efficient EC fans
› Wiring on terminal box
› Included valves and regulation
› Fin materials AISI 304, AISI 316
› Tube materials AISI 304, AISI 316
› Casing in stainless steel (Inox)

Flat

Double flow

Cubic

Types:

› flat evaporator
› double flow
› cubic design
› Evaporator only
› Evaporator + EEV/TEV
› Evaporator + EEV/TEV + electronic controller

For technical selection, prices, accessories and delivery time please contact our technical department. We are happy to help you.

Condenser Units

Full range of air cooled condensers with axial, centrifugal fans and ec motors.

Other Products

Transport refrigeration

Zanotti and Hubbard offer various systems for the refrigerated transport of fresh and frozen foods in small and medium sized vehicles.

For refrigerated transport with large vehicles Zanotti manufactures monoblock and panel-mounted diesel units (Un0° series).

Industrial range

Zanotti's core business in the industrial sector includes large cooling systems for logistics centers and cold storage solutions in the food, catering and petrochemical industries.

Many sports and leisure facilities, such as ice skating rinks or indoor winter sports halls use Zanotti freezing technology.

Made to Order

Made to Order

We build units according to customer requirements.

Our refrigeration experts are able to give the best advice, personalised to each situation.

We can provide complete solutions, entirely tailored to the customer needs.

Contact us to find the best solution for your business.

Options

Zanotti Uniblock

			GM	SB	AS		
					Standard	Transport coldroom	Container
Options which need to be ordered with the unit	Winter kit 1: Condenser fan pressure switch + Crankcase heater + Double defrost solenoid valve	PRS VNT + RES CAR + SOL SBR	•	•			
	Winter kit 2: Condenser fan speed regulator with temperature control+ Double defrost solenoid valve	VVE TER + RES CAR + SOL SBR	•	• (Std on 235)	•	Std on 135	Std on 121, 123, 221, 135
	Winter kit 3: Condenser fan speed regulator with pressure control + Crankcase heater + Double defrost solenoid valve	VVE PRS + RES CAR + SOL SBR	•	•	Std	Std on 235, 335, 340	Std on 235, 335, 340
	Winter kit 4: BEST COP condenser fan speed regulator + Crankcase heater + Double defrost solenoid valve	VVEBCO + RES CAR + SOL SBR	•	•	•	•	•
	Simple low noise housing	INS SEM	•				
	Evaporator cataphoresis treatment	FRS EVP	•	•	•	•	•
	Condensor cataphoresis treatment	FRS CND	•	•	•	•	•
	Zanotti remote control panel with 5 m cable	PAN SNG	•				
	Watercooled condenser	CON ACQ	•	•	•	•	•
	Voltage monitor	MON TEN	•	•	•	•	•
	Phase sequence control	CTR FAS				Only for scroll	
	3 m cable for door heater (for MT only, standard for LT)	RES POR	•	•	•	•	•
	Remote control panel for 2-3-4 units	PAN MUL	•		•		Only for 235, 335, 340
	Audible and visual alarm	ALR SNV	•		•		Only for 235, 335, 340
	Prearrangement for supervising system	KIT SUP	•	•	•	•	•
	Kit long distance (more than 10 meters)	KIT DIS	•				
Option where afterwards installation is possible	Kit for through wall construction	KIT PAN	•	Std	Std	Std	Std

Zanotti Bi-block

			GS	SPO	DBO
Options which need to be ordered with the unit	Simple low noise housing	FRS CND	•		
	Condensate drain electrical heater	RES SCC	X (Std LT)	X (Std LT)	X (Std LT)
	Evaporator cataphoresis treatment	FRS EVP	•	•	•
	Condensor cataphoresis treatment	FRS CND	•	•	•
	Water-cooled condenser	CON ACQ	•	•	•
	Voltage monitor	MON TEN	•	•	•
	3 m micro-switch door cable	MIC POR	•	•	•
	1 m cold room lightning cable	CAV LCE			•
	3 m cable for door heater	RES POR	•	•	•
	Remote control panel for 2-3-4 units	PAN MUL	•	•	•
	Audible and visual alarm	ALR SNV	•	•	•
	Prearrangement for supervising system	KIT SUP	•	•	•
	Kit long distance (more than 10 meters)	KIT DIS	•		
	cold room lamp	KIT LCE	•	•	•

Zanotti Wineblock

			RCV	RDV
Options (Mandatory to be ordered with the unit)	Winter kit 1: Condenser fan pressure switch + Crankcase heater	PRS VNT + RES CAR	•	
	Winter kit 3: Condenser fan speed regulator with pressure control + Crankcase heater	VVE PRS + RES CAR	•	•
	Winterkit 4: BEST COP condenser fan speed regulator + Crankcase heater	VVEBCO + RES CAR	•	•
	Evaporator cataphoresis treatment	FRS EVP	•	•
	Condensor cataphoresis treatment	FRS CND	•	•
	Watercooled condenser	CON ACQ	•	•
	Voltage monitor	MON TEN	•	•
Options (Installation afterwards possible)	Prearrangement for supervising system	KIT SUP	•	•

Zanotti condensing units

		Condensing unit for outdoor installation		Twin condensing unit for outdoor installation with twin-semi hermetic compressors
		with hermetic compressors	with semi hermetic compressors	
RES CAR	Crankcase heater	•	•	•
PRO TRM	Thermal overload protection	•	•	•
VVE BCO	BESTCOP Condenser fan speed controller	•	•	•
VVE PRS	Pressure condenser fan speed controller	•	•	•
VVE TER	Temperature condenser fan speed controller	•	•	•
PRS LPF	LP switch (fixed calibration)	•	•	•
SEP ASP	Suction liquid separator	•	•	•
SEP OIL	Oil separator	•	•	•
VEN RAD	Radial type condenser fans	•	•	•
REG POT	Compressors capacity controller	•	•	•
SOL LIQ	Liquid line solenoid valve	•	•	•
CON ACQ	Watercooled condensation	•	•	•
VLT DIF	Different voltage	•		
FRS CND	Anti-corrosion protection on condenser coil	•	•	•
FRS EVP	Anti-corrosion protection on evaporator coil	•	•	•
IMB FUM	Fumigation according to ISPM15	•	•	•
PRS VNT	Condenser fan pressure switch	•	•	•
PRS HPR	HP switch with auto reset	•	•	•
MON TEN	Voltage monitor	•	•	•
INS SEM	Simple low noise housing	•	•	•
INS DOP	Enhanced low noise housing	•	•	•
QUA ELE	Power control box with magneto thermic switches	•	•	•
RES CAR	Crankcase heater	•	•	•
FQD	Frequency driver		•	•

		Multi compressor condensing unit	
		with scroll/digital scroll compressors	with semi hermectic compressors
INSRD	Closed frame with double layer sound proofing material	•	•
AC&R	Mechanical oil equalization system with oil reserve, oil line filter, pressure reduction valve onto oil reserve	•	•
TRAXOIL	Electronic oil distribution system	•	•
RIC.LIQ.	Oversized liquid receiver	•	•
CFF	Compressors sound shell	•	•
ELC.C	Electronic card EWCM4180 - XC1000D - EWCM9100	•	•

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