Carrier

Compact Line 2019/20

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Compact Line

APPLICATION

- Beverages
- Fruits & vegetables
- Prepacked cheese
- Dairy products
- Pastry
- Prepacked sandwiches
- Delicatessen
- Prepacked fresh meat
- Prepacked poultry
- Prepacked fish
- Minced meat prepacked
- Frozen food
- Ice cream

The development and testing of refrigeration equipment are conducted in a climate room, in accordance with ISO 23953 test methods. Actual storage temperatures in installed equipment may differ due to factors out of the manufacturer's control, and may have an impact on the energy consumption and efficiency of the equipment. The actual data may therefore differ from the data presented in this brochure. Application recommendations are based on German requirements; legislation may differ in other countries and should be taken into consideration.

Ambient conditions: 25 °C / 60 r. h. The technical data refer to a standard cabinet equipment (cross section). The installed electrical loads are referring to 230 V (electrical consumers).

Compact Line

Reliable products built on 60 years of development experience

The development center in Mainz is the birthplace of the new Compact Line cabinet. By concentrating development on one site, Carrier benefits from exchange and innovation across departments, which is reflected in robust, reliable products.

Flexible production from raw materials through to finished cabinets

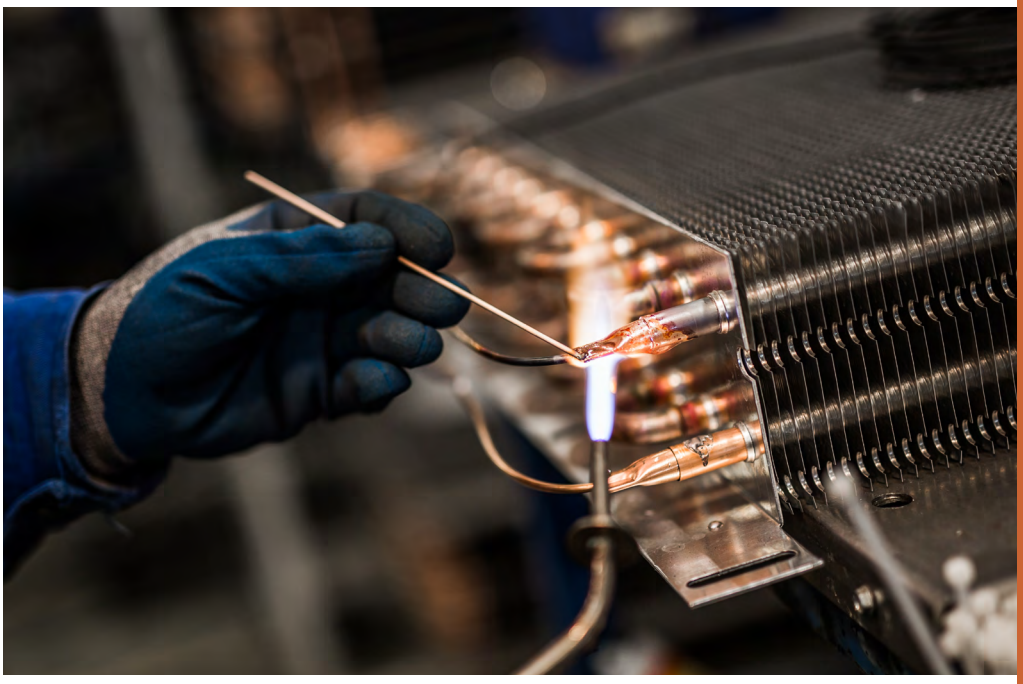
Production in Hungary is very flexible and thanks to the state-of-the-art laser processing center, we are able to produce an enormous range of variants. In the factory's own powder coating facility the cabinets can be painted in a variety of colors. This means you always get the cabinet that precisely meets your requirements.

Safe refrigeration tested in the test laboratory

At the Germany and Hungary sites, Carrier has over fourteen testing rooms which are equipped with the latest technology. The cabinets are put through their paces and tested according to the standard DIN EN ISO 23953 to ensure optimum temperature performance. We also measure the energy consumption under strict test conditions according to climate class 3.

Future-proof with an environmentally sustainable design

Carrier has a large portfolio of plug-in refrigeration cabinets that are run with natural refrigerants propane (R290) or butane (R600a). These refrigerants have a thousand times lower CO_2 equivalent than conventional FC refrigerants and are beneficial for the environment.



Your safety is our concern

The CE mark is self-declared and does not require a third party expert opinion. For Carrier safety is the main priority. Every one of our cabinets with flammable refrigerant is therefore approved again by an independent institute and CE certified. This means we guarantee the highest safety standard according to the “two-person rule”.

Areor® Total Transparency

Highly transparent, plug-in counter-island

Benefits at a glance

- Full product view through high-transparent cabinet design
- Robust and durable for daily use through scratchresistant glass superstucture
- Simplified maintenance and service by slidable condensing unit
- Classy design and cladding options for seamless integration into store layout

Standard configuration

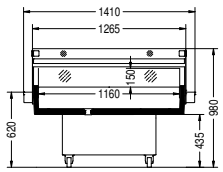
- Elegant, highly transparent glass superstructure
- Plinth of galvanized steel with powder coated finish, body internal and external PVC, outside and inside color black (RAL 9005)
- Stainless steel bumper
- Temperature-assured forced-air cooling
- Solar-thermometer
- Electronic controller
- EC-fans
- Slidable condensing unit
- Natural refrigerant R290 (propane)

Areor TT 1241

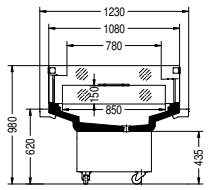
Areor TT 1251 G

Basic models

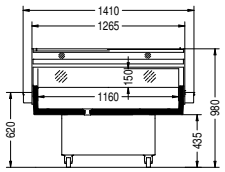
Areor TT (Front view)



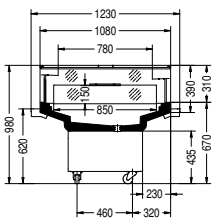
Areor TT (Side view)



Areor TT G (Front view)



Areor TT G (Side view)



	units	TT 1241	TT 1251 G
Temperature	[°C]	+2…+4	-1…+1
Refrigerant		R290	
Width (without / with bumper)	[mm]	1265 / 1410	
Depth (without / with bumper)	[mm]	1080 / 1230	
Height	[mm]	980	980
Volume	[l]	148	
Shelf area	[m²]	0.99	
Power consumption refrigeration	[W]	842	854
Power consumption defrost	[W]	29	
Energy consumption*	[kWh/d]	8.9	4.9
Heat dispatch*	[W]	370	205
Temperature Class		3H2	3M1
Application			

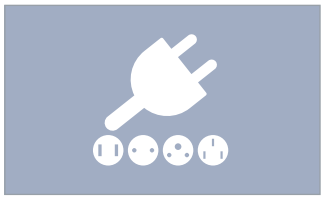
* at climate class 3 according to ISO 23953

Areor® Total Transparency customization

Colors

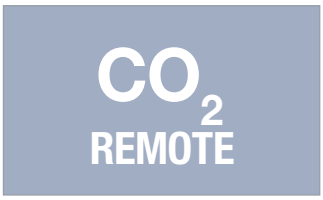
Paintable area		Color options
F/M01	EXTERIOR	RAL9005 (JET BLACK) RAL7042 (TRAFFIC GREY)
F/M11	PLINTH PANEL	Carrier approved colors
F/M35	INTERIOR EQUIPMENT	
F/M60	HANDRAIL	RAL9005 (JET BLACK)

Cooling unit



Power cable

Modbus interface with RJ45 socket

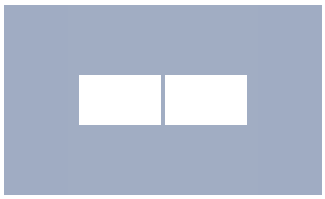


CO_2 remote

Castors, factory installed

Owner plate

External fittings

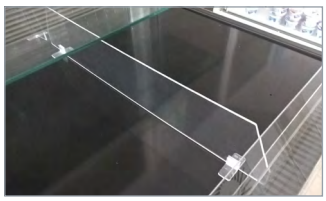


Installation kit: Side-by-side

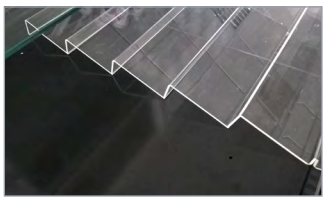
Bottom bumper stainless steel, tube

Bottom bumper stainless steel, squared*

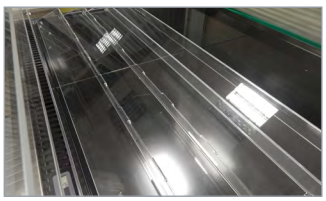
Internal fittings



Transparent divider: front back



Transparent divider: Z-shape

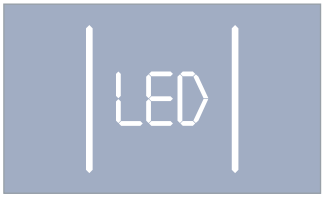


Transparent divider: V-shape

Price rail: shelf length

Lighting

Solar thermometer (factory installed)



Smart LED handrail lighting (Areor 1250 G)

Cladding possiblities*

* in preparation

Areor®

Energy-efficient plug-in counter-island with modern styling

Benefits at a glance

- Outstanding flexibility
- High product visibility with easy access
- Improved energy efficiency
- Simplified maintenance

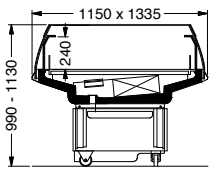
Standard configuration

- Plinth of galvanized steel with powdercoated finish, sidewalls and front air deflectors of PVC
- Temperature-assured forced-air cooling
- EC condenser fan
- Sliding glass lid (1250 G)
- Electronic controller
- Digital thermometer
- Natural refrigerant R290 (propane)

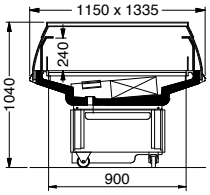
Areor 1240

Basic models

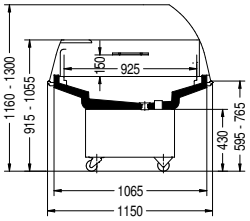
Areor® 1240



Areor® 1250 G



Areor® serve over



	Units	1240	1250 G
Temperature	[°C]	+2…+4	-1…+1
Refrigerant		R290	
Width	[mm]	1335	
Depth	[mm]	1150	
Height	[mm]	990	1040
Volume	[l]	158	
TDA	[m²]	1.05	
Power consumption refrigeration	[W]	690	
Power consumption defrost	[W]	36	
Energy consumption*	[kWh/d]	8.2	4.5
Heat dispatch*	[W]	340	190
Temperature Class		3H8	3M1
Application			

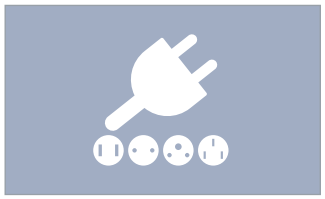
* at climate class 3 according to ISO 23953

Areor® customization

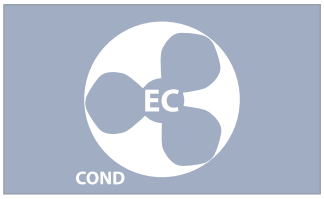
Colors

Paintable area		Color options
F/M01	EXTERIOR	RAL9005 (JET BLACK) RAL7042 (TRAFFIC GREY)
F/M50	FRONT BUMPER	
F/M63	CORNER OUTSIDE	
F/M11	PLINTH PANEL	Carrier approved colors
F/M35	INTERIOR EQUIPMENT	
F/M60	HANDRAIL	RAL9005 (JET BLACK)

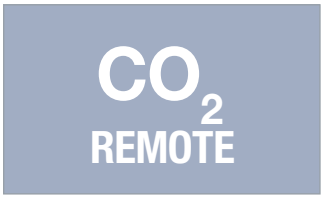
Cooling unit



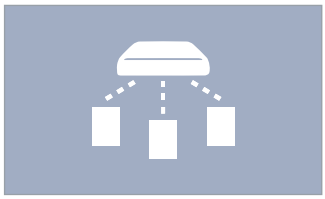
Power cable



Energy saving fan, condenser



CO_2 remote

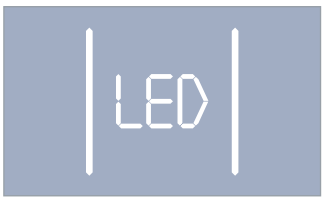


Modbus interface with RJ45 socket

Internal fittings

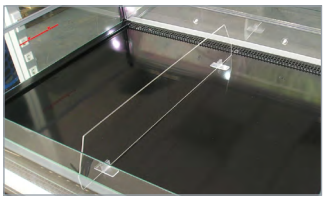
Digital thermometer

Lighting

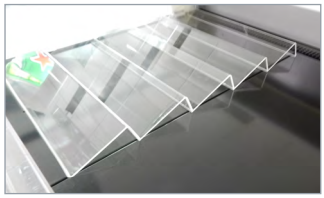


Smart LED handrail lighting

Internal fittings

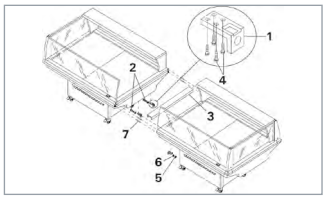


Transparent divider front / back

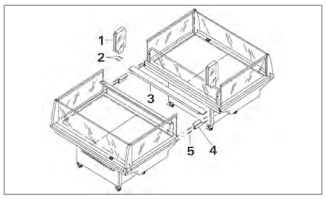


Transparent divider: Z-shape

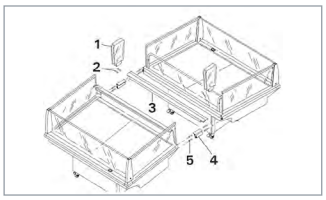
External fittings



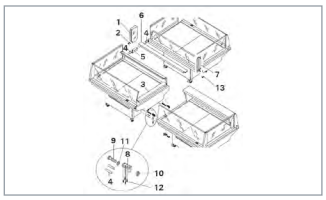
Fitting kit for installation Side-by-side



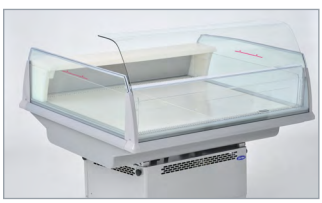
Fitting kit for installation back-to-back



Fitting kit for installation back-to-back counter union



Fitting kit for installation shape left / right union



Serve-over counter with worktop

Self-service counter with worktop

Castors, factory installed

Bottom bumper stainless steel, tube

Areor® Stepped

Plug-in counter-island in modern design

Benefits at a glance

- Outstanding design and product visibility
- Actively chilled bottom deck (Areor ST/SD 1241)
- Extended product presentation on all levels
- Block grouping possibilities
- Sliding condensing unit for easy service & maintenance

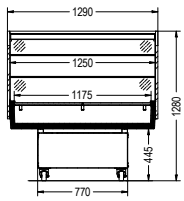
Standard configuration

- Stepped superstructure with two acrylic sidewalls and adjustable glass shelves
- Temperature-assured forced-air cooling with air outlet
- Plinth of galvanized steel with powder-coated finish, sidewalls and front air deflectors of PVC, outside and inside color black (RAL 9005)
- Sliding condensing unit
- Energy saving condenser fan
- Electronic controller
- Factory installed castors
- Digital thermometer (solar)
- Air cooled bottom shelf (ST/SD 1241)
- Natural refrigerant R290 (propane)

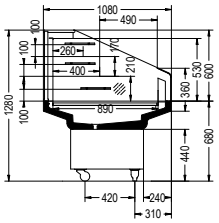
SD 1241 ST 1232 ST 1241

Basic models

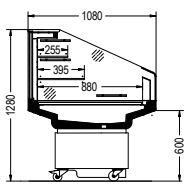
Areor® ST (Front view)



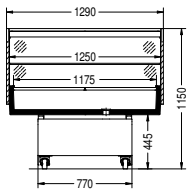
Areor® ST 1232 (Side view)



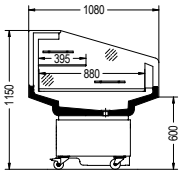
Areor® ST 1241 (Side view)



Areor SD (Front view)



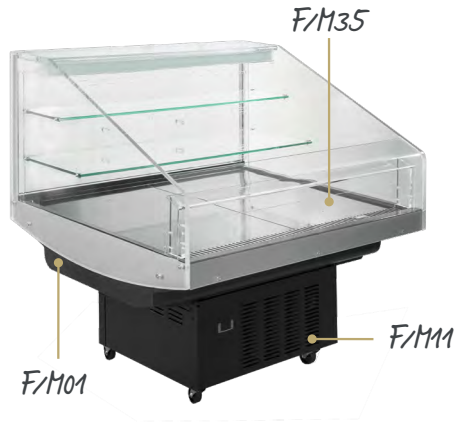
Areor SD (Side view)



	Units	SQ 1231	ST 1232**	ST 1241	SD 1241
Temperature	[°C]	+2…+4		0…+2	0…+2
Refrigerant		R290			
Width (without / with bumper)	[mm]	1290 / 1410			
Depth (without / with bumper)	[mm]	1080 / 1150			
Height	[mm]	1500	1280		1150
Volume	[l]		269	133	100
Shelf area	[m²]		1.83		1.52
Power consumption refrigeration	[W]	982	950	950	890
Power consumtion defrost	[W]	285	186.4	186.4	285
Energy consumption*	[kWh/d]	21.7	13.8	14.8	13.4
Heat dispatch*	[W]	905	575	620	560
Temperature Class		3H2	> 3H2	3M2	3M2
Application					

* at climate class 3 according to ISO 23953 | ** Areor ST 1232: without honey comb

Areor® Stepped customization



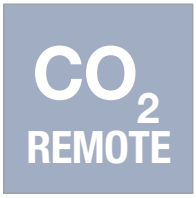
Colors

Paintable area		Color options
F/M01	EXTERIOR	RAL9005 (JET BLACK) RAL7042 (TRAFFIC GREY)
F/M11	PLINTH PANEL	Carrier approved colors
F/M35	INTERIOR EQUIPMENT	

Cooling unit

Power cable

Modbus interface with RJ45 socket



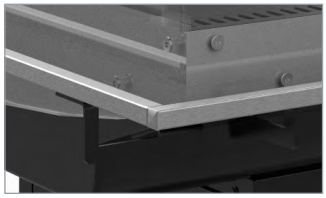
CO_2 remote

Water level sensor

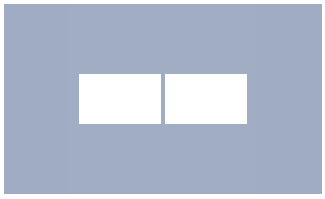
External fittings

Castors, factory installed

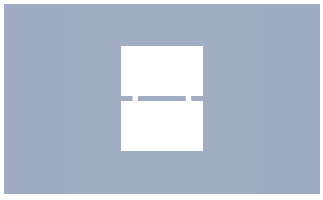
Bottom bumper stainless steel, tube



Bottom bumper stainless steel, squared*

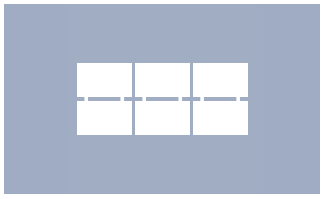


Installation kit: Side-by-side



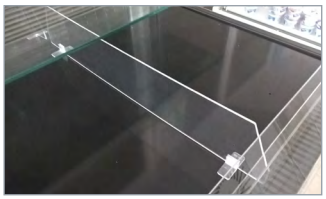
Installation kit: Back-to-back

Internal fittings

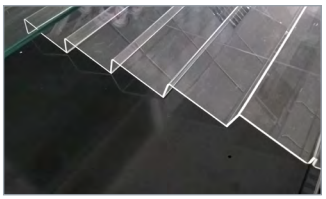


Installation kit: Block grouping

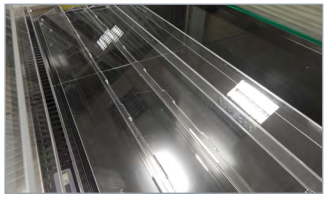
Air cooled bottom deck (Areor ST/SD 1241), factory installed



Transparent divider: front back



Transparent divider: Z-shape



Transparent divider: V-shape

Price rail: short

Price rail: shelf length

Solar thermometer (factory installed)

* under preparation

Areor® 10

Small plug-in counter-island in transparent design

Benefits at a glance

- Outstanding design and product visibility
- Small size fits in each corner for cross-selling of products
- Block grouping possibilities

Standard configuration

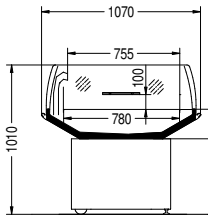
- Transparent superstructure with acrylic sidewalls
- Two glass shelves (Areor ST)
- Temperature-assured forced-air cooling with air outlet
- Powder coated finish in black
- Stainless steel bumper
- Energy saving condenser fan
- Electronic controller
- Factory installed castors on back-side
- Natural refrigerant R290 (propane)

Areor 1040

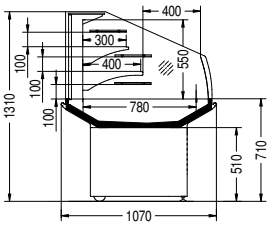
Areor ST 1040

Basic models

Areor® 1040 (Side view)



Areor® ST 1040 (Side view)



	Units	1040	ST 1040
Temperature	[°C]	0…+2	0…+2
Refrigerant		R290	
Width (with bumper)	[mm]	1030	
Depth	[mm]	1050	
Height	[mm]	1000	1300
Volume	[l]	73	138.7
Shelf area	[m²]	0.83	1.12
Power consumption refrigeration	[W]	550	610
Power consumtion defrost	[W]	50	60
Energy consumption*	[kWh/d]	9.1	9.14
Heat dispatch*	[W]	379	379
Temperature Class		3M2	3M2
Application			

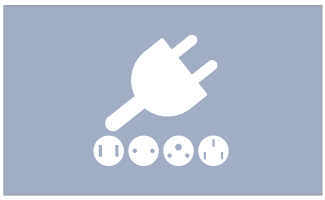
* at climate class 3 according to ISO 23953

Areor® 10 customization

Colors

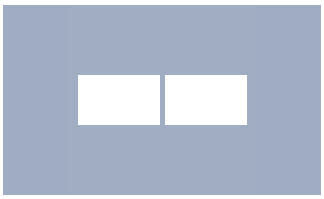
Paintable area		Color options
F/M01	EXTERIOR	RAL9005 (JET BLACK)
F/M11	PLINTH PANEL	RAL9005 (JET BLACK) (Other colors on request with a MOQ)
F/M35	INTERIOR EQUIPMENT	

Cooling unit

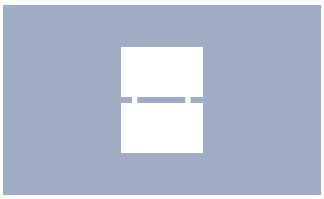


Power cable

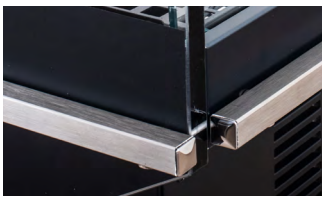
External fittings



Installation kit: Side-by-side



Installation kit: Back-to-back (Only Areor 1040)



Bottom bumper stainless steel, squared

Optimer® Low Front

Refrigerated plug-in multideck with maximized display area

Benefits at a glance

- Harmonized design with Velando CS and Mendos for a consistent store layout
- Best merchandising with enlarged product facing area and fully transparent doors
- Multiplexing for improved floor space productivity

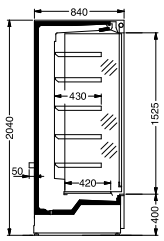
Standard configuration

- Painted panels galvanized steel with hard-wearing powder coated finish, FA0605 white interior, FA0633 nimbus grey exterior
- Panorama endwalls
- Integrated front bumper
- Temperature-assured forced-air cooling with honeycomb air outlet
- Energy saving fans
- 5 Display shelves with 40 mm scanner price rails
- LED (R290)
- Manual nightblind or double glass door, tempered
- Electronic controller
- Slideable condensing unit for easy service

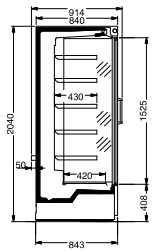
Optimer 2548 LG

Basic models

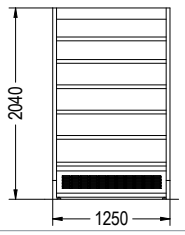
Optimer® Low Front (Side view)



Optimer® Low Front Glass Door (Side view)



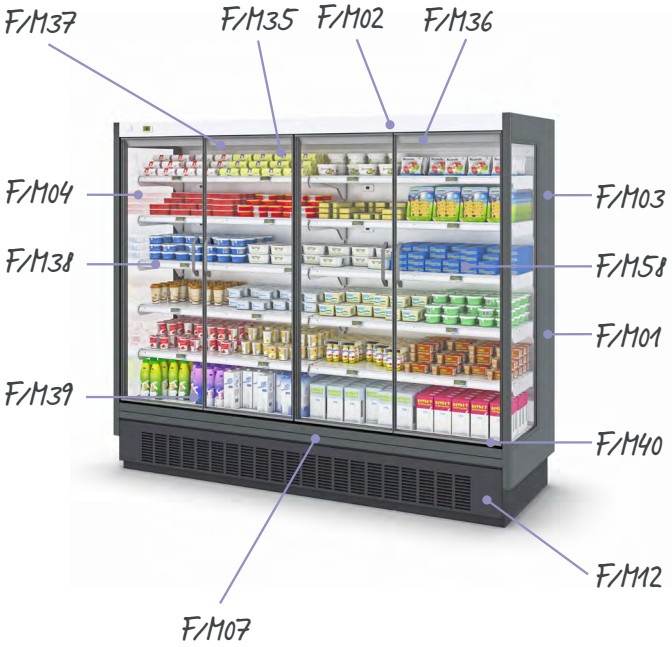
Optimer® 13 L (Front view)



	Units	0948 L**	1348 L	1948 L	2548 L ***	0948 LG	1348 LG	1948 LG	2548 LG
Temperature	[°C]	0...+2				-1…+1			
Refrigerant		R290							
Width	[mm]	885	1250	1875	2420	885	1250	1875	2420
Depth	[mm]	840							
Height	[mm]	2040							
Volume	[l]	485	716	1102	1436	570	716	1102	1436
Power consumption ref.	[W]	–	1265	2177	–	485	679	1238	1358
Power consumption def.	[W]	–	508	673	–	452	512	704	1024
Energy cons.* (12 h light and blind)	[kWh/d]	–	22.0	25.6	–	8.3	12.0	16.9	24
Heat dispatch*	[W]	–	920	1067	–	346	500	704	1000
Temperature class		3M2				3M1			
Application									

* at climate class 3 according to ISO 23953 | ** under preparation | *** 2x1348 L cabinets multiplexed

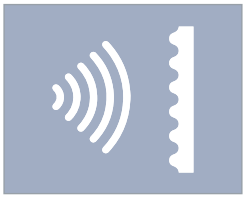
Optimer® Low Front customization



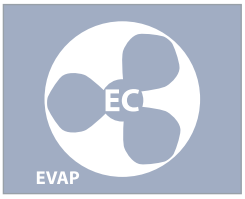
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M02	CANOPY PANEL	
F/M03	ENDWALL EXTERNAL	
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	
F/M36	CEILING PANELLING	
F/M37	AIR BAFFLE PLATE	
F/M38	DISPLAY SHELVES	
F/M39	BOTTOM DECK	
F/M40	RETURN AIR GRILLE	RAL9003 (SIGNAL WHITE) RAL9005 (JET BLACK) RAL9006 (WHITE ALUMINIUM)
F/M04	ENDWALL INTERNAL	FA0369 (HERLIT GREY) RAL9005 (JET BLACK) RAL9003 (SIGNAL WHITE)
F/M58	PRICE RAIL FOR DISPLAY SHELF	RAL9003 (SIGNAL WHITE) RAL9005 (JET BLACK) RAL9006 (WHITE ALUMINIUM)
F/M90	GRID/WIRE/DIVIDER/ BASKET	
F/M07	DECOR FRONT PANEL	FA0632 (STRATUS GREY) FA9005 (JET BLACK)

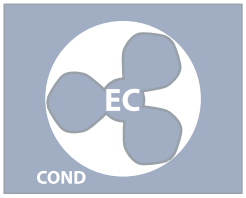
Cooling unit



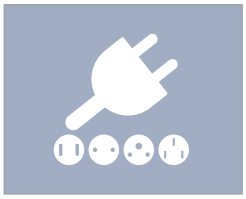
Sound absorbing package (only LG)



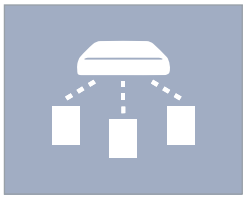
Energy saving fans evaporator



Energy saving fans condenser

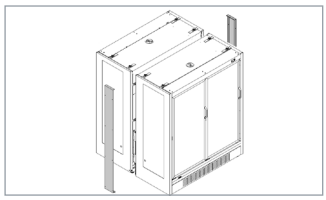


Power cable

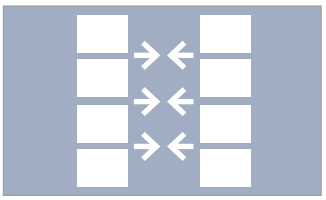


Modbus interface with RJ45 socket

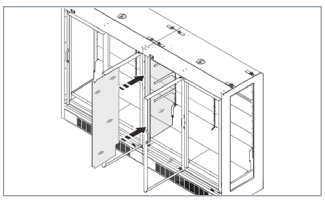
External fittings



Gap cover



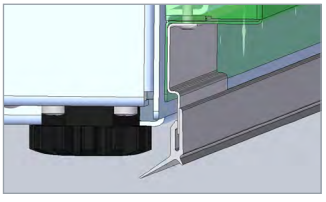
Multiplex kit



Partition transparent on cabinet joint

Glass doors

Castors, swivel-parking with frame



Floor close off seal

Rear wall panelling

Fully transparent double-glass doors (anti-reflex coating optional)

Optimer® Low Front customization

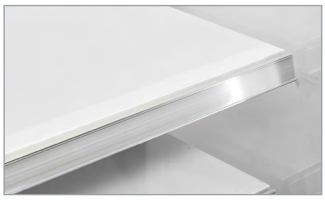
External fittings

Night blind manual / motorized

Panorama endwall

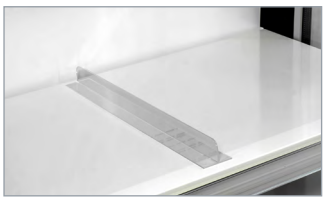
Endwall, internally mirrored

Internal fittings



Display shelf 430 mm

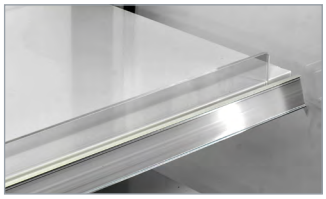
Wire divider for shelves and baskets, height 165 mm



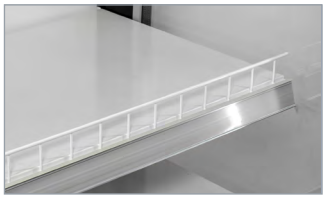
Shelf divider 35 mm high

Wire shelf with wire fence

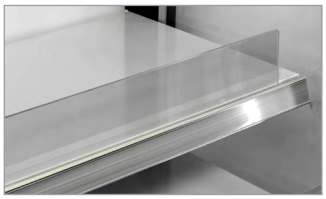
Set of baskets



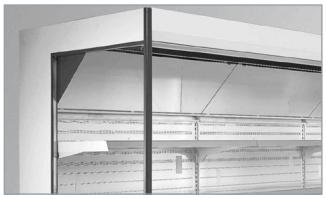
Acrylic glass fence 50 mm



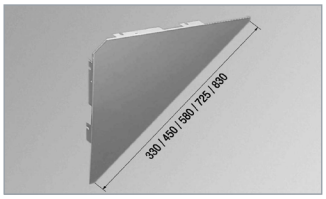
Wire fence 50 mm



Acrylic glass fence 100 mm

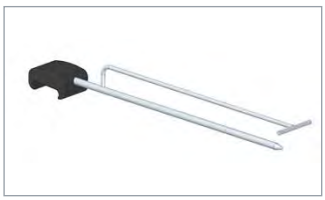


Top mirror 330 mm



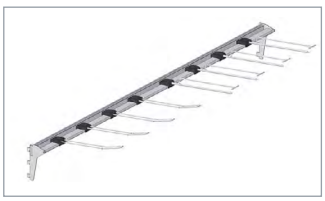
Lateral mirror trim 330 mm (Cover for panorama side-wall)

Scanner price rail for shelves and bottom deck 40 mm

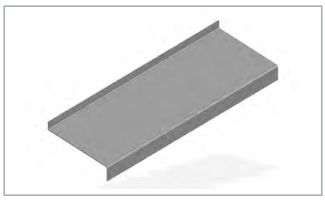


Scan hook 400 mm

Euro hook 400 mm

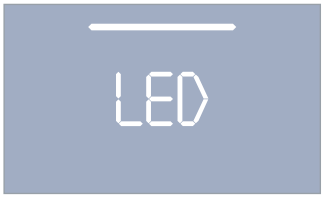


Hook support rail

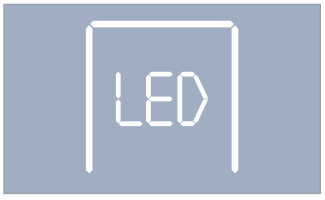


Air baffle acrylic (air guidance needed for hooks)

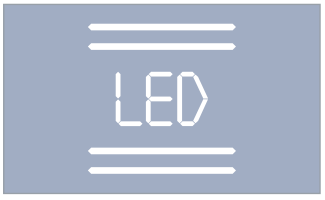
Lighting



Premium LED horizontal lighting



Premium LED horizontal and vertical lighting



Premium LED horizontal and shelf lighting

Maxima MC6

Compact and bright eye catching multideck chiller

Benefits at a glance

- Eye catching due to canopy and shelf illumination
- Positionable at ease, two dedicated handles at the back
- Compact design, fits to all store formats
- Easily accessible machine compartment
- Large external surface is customizable with stickers

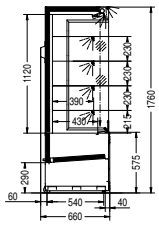
Standard configuration

- Painted panels galvanized steel with hard-wearing powder coated finish, FA0605 white interior, FA0633 nimbus grey exterior
- Panorama endwalls
- Temperature-assured forced-air cooling with honeycomb air outlet
- 4 rows of wire shelves with 40 mm scanner price rails
- 40 mm scanner price rail for bottom shelf
- Horizontal and shelf LED lighting
- Electronic controller Dixell
- Slideable condensing unit for easy service

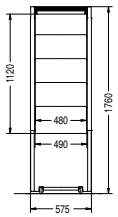
Maxima MC 6

Basic models

Maxima MC6 (Side view)



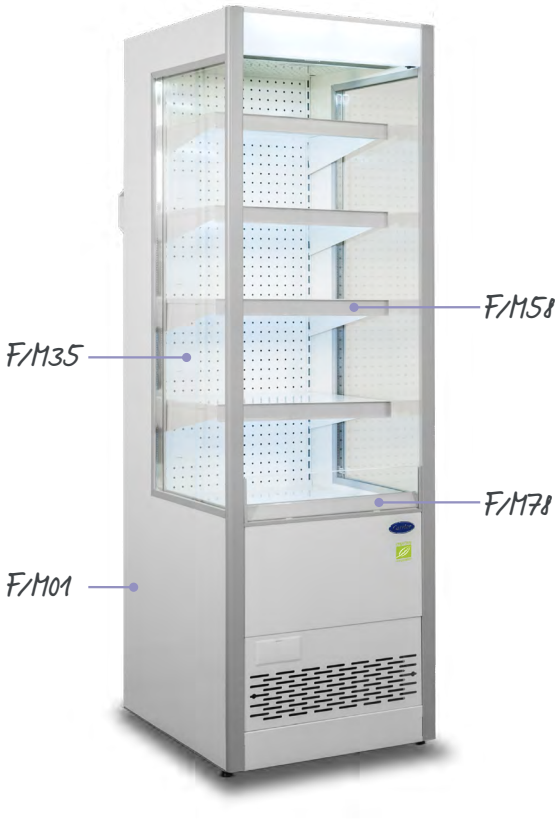
Maxima MC6 (Front view)



	Units	Maxima MC6
Temperature	[°C]	+2…+4
Refrigerant R134a		R290
Width	[mm]	661
Depth	[mm]	565
Height	[mm]	1761
Volume	[l]	227
TDA	[m²]	0.37
Power consumption ref.	[W]	1000
Power consumption def.	[W]	413
Energy consumption	[kWh/d]	14.6
Heat dispatch	[W]	610
Temperature class		3H2
Application		

* at climate class 3 according to ISO 23953

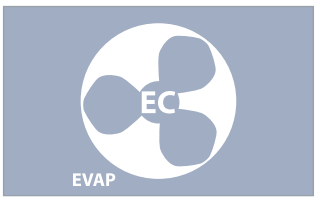
Maxima MC6 customization



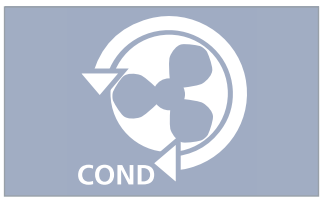
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M35	INTERIOR EQUIPMENT	Carrier approved colors
F/M58	PRICE RAIL DISPLAY SHELF	RAL9003 SIGNAL WHITE
F/M78	PRICE RAIL BOTTOM DECK	RAL9003 SIGNAL WHITE

Cooling unit

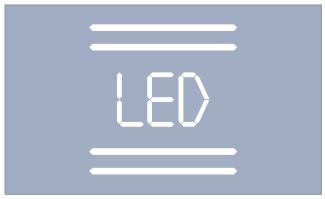


Energy saving fans evaporator



Fan motor condenser, reversible*

Lighting



Smart LED horizontal and shelf lighting

Presenter® 06

Small refrigerated semi-vertical – promoting impulse sales

Benefits at a glance

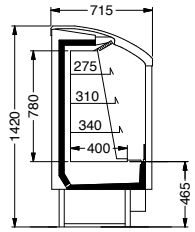
- Small and flexible to boost sales everywhere in the shop
- Ergonomic design for products easy to grab and go
- Ideal for sandwiches, drinks and convenience food
- Perfectly fitting to small shop areas

Standard configuration

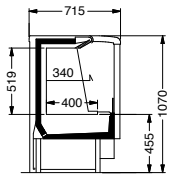
- Energy saving fans
- Temperature-assured forced-air cooling with honeycomb air outlet
- Electronic controller
- Painted panels galvanized steel with hard-wearing powder coated finish, FA0605 white interior, FA0633 nimbus grey exterior
- Part glazed endwalls
- Glass shelves with 40 mm scanner price rails
- 40 mm scanner price rails for bottom deck
- Vertical lighting LED
- Natural refrigerant R290

Basic models

Presenter® 06



Presenter® 06 S



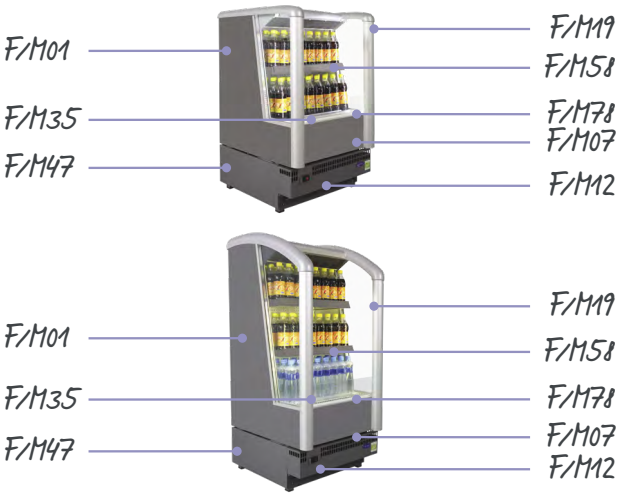
Presenter 0647

Presenter 0647 S

	Units	0647	0647 S
Temperature	[°C]	0…+2	
Refrigerant		R290	
Width	[mm]	625	
Depth	[mm]	715	
Height	[mm]	1420	1070
Volume	[l]	130	93
Power consumption ref.	[W]	573	627
Power consumption def.	[W]	38	98
Energy consumption* (12 h light on)	[kWh/d]	8.4	7.8
Heat dispatch*	[W]	350	325
Temperature class		3M2	
Application			

* at climate class 3 according to ISO 23953

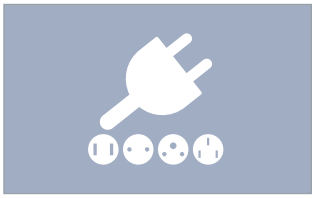
Presenter® 06 customization



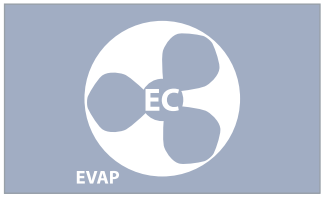
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M07	DECOR FRONT PANEL	
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	
F/M19	VERTICAL LIGHTING	RAL9006 (WHITE ALUMINIUM)
F/M58	PRICE RAIL F. DISPLAY SHELF	FA0166 (CRYSTAL GREY)
F/M78	PRICE RAIL BOTTOM DECK	FA0166 (CRYSTAL GREY)
F/M47	CONDENSER	UNVARNISHED, NANO PROTECTION

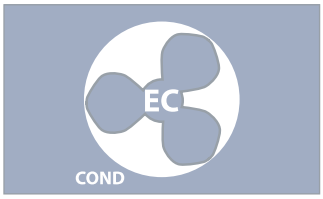
Cooling unit



Power cable



Energy saving fan evaporator



Energy saving fan condenser

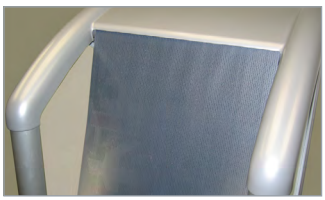
External fittings

Basket with price rail

Protector package for vertical lighting

Castors, factory installed

Stickers



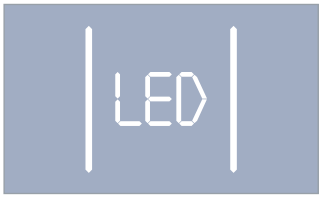
Manual night blind

Internal fittings

Scanner price rail 40 mm

Scanner price rail for bottom shelf 40 mm

Lighting



Smart LED vertical lighting

Crystal COC90, COC95

Small plug-in semi-vertical for promotional sales

Benefits at a glance

- High product visibility and good promotion for increased impulse sales
- Ideal for beverages and convenience food
- Products are accessible at the ideal grab level
- Shelves or tiered steps allow flexible promotion

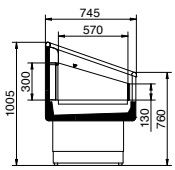
Standard configuration

- Temperature-assured forced-air cooling with honeycomb air outlet
- Mechanical thermostat (COC90), electronic controller (COC95)
- Painted panels galvanized steel with hard-wearing powder coated finish, FA0605 white interior, FA0633 nimbus grey exterior
- Full glazed endwalls
- Metal shelves
- Horizontal lighting T8 for COC95

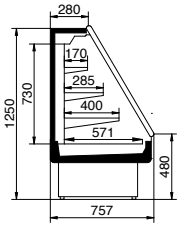
Crystal COC90

Basic models

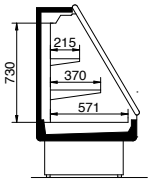
Crystal COC90



Crystal COC95



Crystal COC95



Crystal COC95

	Units	COC90	COC95
Temperature	[°C]	+2…+4	
Refrigerant		R134a	
Width	[mm]	897	
Depth	[mm]	745	757
Height	[mm]	1005	1250
Volume	[l]	98	175
Power consumption ref.	[W]	325	720
Power consumption def.	[W]	350	225
Energy consumption*	[kWh/d]	7.0	11.0
Heat dispatch*	[W]	290	460
Temperature class		3H2	
Application			

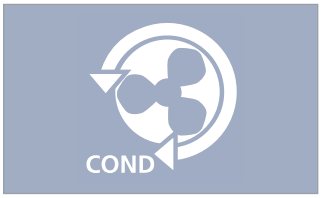
* at climate class 3 according to ISO 23953

Crystal customization

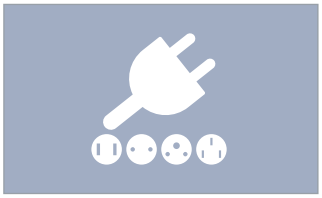
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	

Cooling unit



Fan motor condenser, reversible*

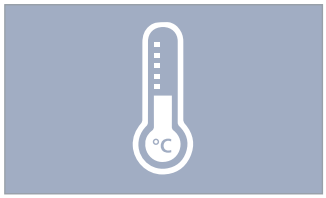


Power cable

External fittings

Castors, factory installed

Internal fittings

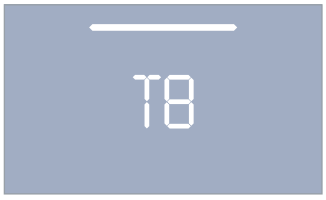


Analog thermometer

Display steps (COC90)

2 or 3 rows of shelves (COC95)

Lighting



Horizontal lighting

* standard fitting at COC95

Velando® Compact Space

Advanced freezer solution for small supermarkets and C-stores

Benefits at a glance

- Consistent store layout
- Environmentally sustainable design using natural refrigerant
- Energy efficient
- Large display area and product visibility
- Multiplexible

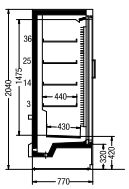
Standard configuration

- Painted panels galvanized steel with hard-wearing powder coated finish, FA0605 white interior, FA0633 nimbus grey exterior
- Non-glazed endwalls, triple glass door, tempered
- Integrated front bumper
- Temperature-assured forced-air cooling with honeycomb air outlet
- Energy saving fans
- 4 rows of wire shelves, top 2 rows are with wire shelf covers, 40 mm scanner price rails
- 40 mm scanner price rail for bottom shelf
- Vertical lighting T5 or LED
- Electronic controller
- Slideable condensing unit for easy service

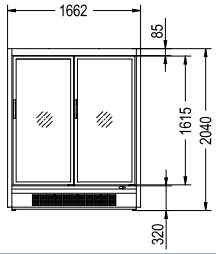
Velando CS 2580 LG

Basic models

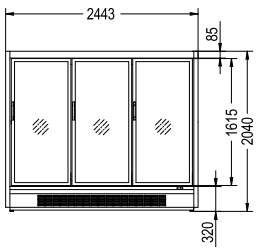
Velando® CS (Side view)



Velando® CS 1780 LG (Front view)



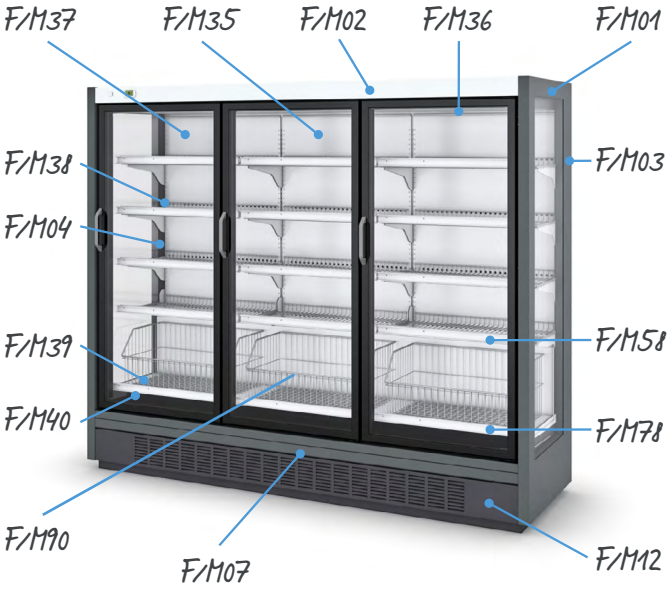
Velando® CS 2580 LG (Front view)



	Units	1780 LG	2580 LG
Temperature	[°C]	-22…-24	
Refrigerant		R290	
Width	[mm]	1662	2443
Depth	[mm]	770	
Height	[mm]	2040	
Volume	[l]	995	1493
TDA	[m²]	2.03	3.07
Power consumption ref.	[W]	2126	2990
Power consumption def.	[W]	2223	3211
Energy consumption* (12 h LED light)	[kWh/d]	37.8 / 25.5**	57.1 / 37.7**
Heat dispatch*	[W]	1575	2380
Temperature class		3L1	
Application			

* at climate class 3 according to ISO 23953 | **in case of passive door and LED

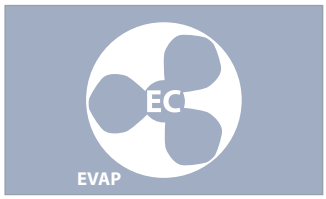
Velando® Compact Space customization



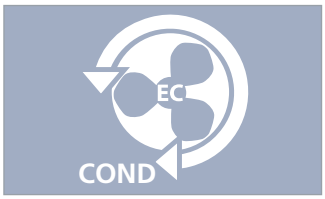
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M02	CANOPY PANEL	
F/M03	ENDWALL EXTERNAL	
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	
F/M36	CEILING PANELLING	
F/M37	AIR BAFFLE PLATE	
F/M38	DISPLAY SHELVES	
F/M39	BOTTOM DECK	
F/M40	RETURN AIR GRILLE	
F/M04	ENDWALL INTERNAL	FA9005 (JET BLACK) FA0605 (WHITE)
F/M58	PRICE RAIL FOR DISPLAY SHELF	FA6005 (SIGNAL WHITE) FA9005 (JET BLACK) FA9006 (WHITE ALUMINIUM)
F/M78	PRICE RAIL BOTTOM DECK	
F/M90	GRID/WIRE/DIVIDER/ BASKET	
F/M07	DECOR FRONT PANEL	FA0632 (STRATUS GREY) FA9005 (JET BLACK)

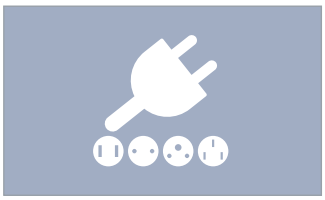
Cooling unit



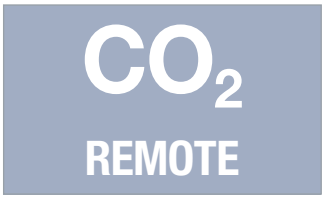
Energy saving fans evaporator



Energy saving fans condenser, reversible

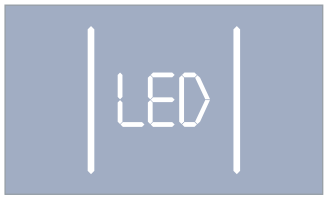


Power cable



CO_2 remote

Lighting



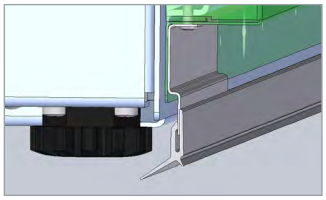
Premium LED vertical lighting

Velando® Compact Space customization

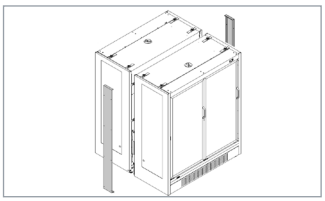
External fittings

Panorama and solid endwall

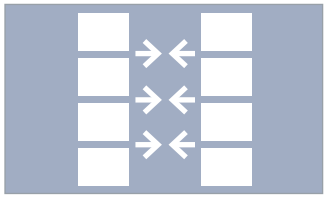
Rear wall panelling



Floor close off seal, front



Gap cover



Multiplex kit

Internal fittings

Wire shelf

Wire shelf for bottom position

Wire shelf cover

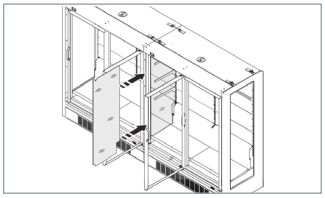
Wire divider

Wire basket

Wire basket for bottom

Scanner price rail for shelves

Scanner price rail
for bottom shelf



Partition transparent on
cabinet joint

Scanner price rail for baskets
40 mm

Top Freezer

Advanced solution to extend the chest freezers

Benefits at a glance

- Environmentally sustainable design using natural refrigerant
- Two available lengths
- Energy efficient
- Large display area and product visibility
- Optimized floorspace productivity

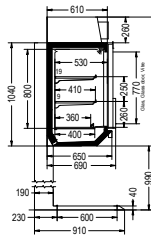
Standard configuration

- Internal panels galvanized steel with hard-wearing RAL 9003 white powder-coated finish.
- External panels galvanized steel with hard-wearing RAL 7045 grey powder-coated finish
- Triple glass doors, tempered
- Temperature-assured air-forced cooling with honeycomb air outlet
- Energy saving fans
- 1 row of wire shelves
- Vertical and horizontal lighting LED
- Electronic controller
- Telescopic rack for easy installation

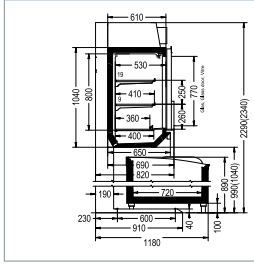
Top Freezer 2585 G

Basic models

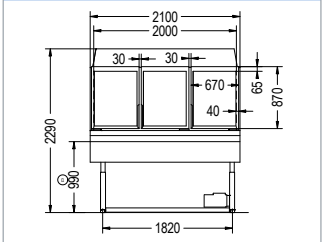
Top Freezer™ (Side view)



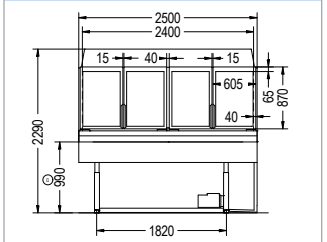
Top Freezer™ with Visor (Side view)



Top Freezer™ 2185 (Front view)



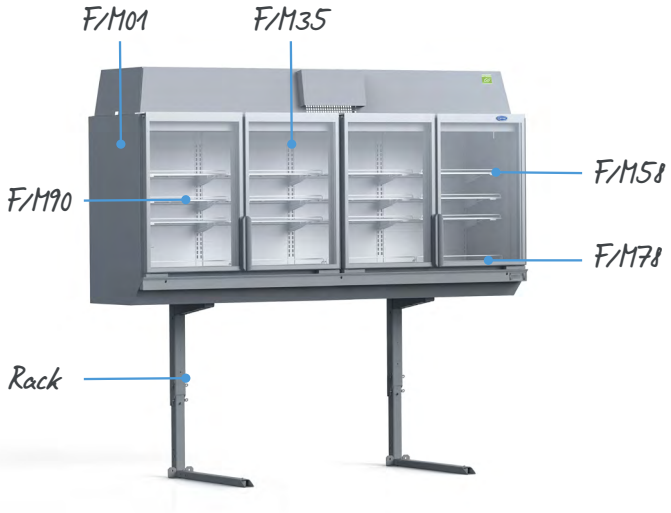
Top Freezer™ 2585 (Front view)



	Units	2185 G	2585 G
Temperature	[°C]	-22…-24	
Refrigerant		R290	
Width	[mm]	2100	2500
Depth	[mm]	800	
Height	[mm]	2350	
Volume	[l]	632	750
Power consumption ref.	[W]	580	580
Power consumption def.	[W]	1185	1200
Energy consumption* (12 h LED light)	[kWh/d]	9.0	11.2
Heat dispatch*	[W]	475	496
Temperature class		3L1	
Application			

* at climate class 3 according to ISO 23953

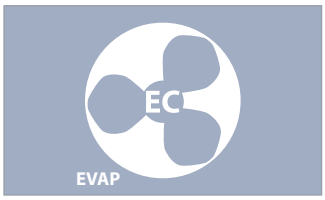
Top Freezer customization



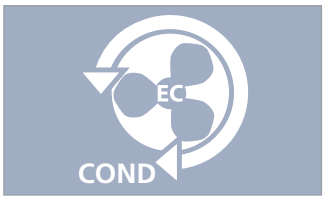
Colors

Paintable area		Color options
F/M01	EXTERIOR	FA0588 (TELEGREY 1) FA0666 (ANTHRACITE)
F/M35	INTERIOR EQUIPMENT	Carrier essential and smart colours
F/M58	PRICE RAIL FOR DISPLAY SHELF	FA0605 (SIGNAL WHITE)
F/M78	PRICE RAIL FOR BOTTOM DECK	FA0605 (SIGNAL WHITE)
F/M90	GRID/WIRE/ DIVIDER/ BASKET	FA0605 (SIGNAL WHITE) FA9005 (JET BLACK) FA9006 (WHITE ALUMINIUM)
Rack		FA0588 (TELEGREY 1) FA0666 (ANTHRACITE)

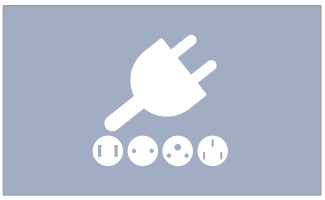
Cooling unit



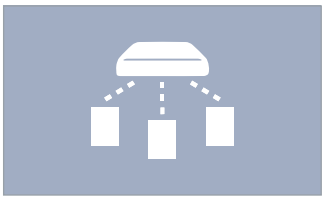
Energy saving fans evaporator



Energy saving fans condenser, reversible



Power cable



Modbus interface with RJ45 socket

Internal fittings

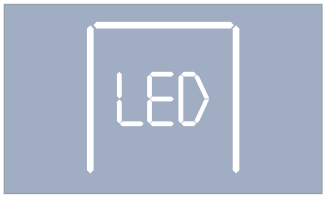
Wire shelf

Wire divider

Scanner price rail 52 mm

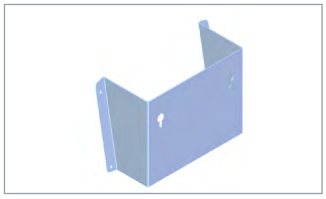
Owner plate

Lighting



Vertical and horizontal lighting

External fittings



Holder for additional top cover

Claddings to cover side and front

EasyCube Chiller

Transparent Plug-in chiller island for promotional sales

Benefits at a glance

- Highly transparent island for attractive promotion presentation
- Modern & ergonomic design
- Improved service and maintenance for improved lifecycle

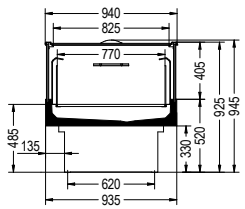
Standard Configuration

- Internal and external panels galvanized steel with hard-wearing powder-coated finish (RAL 7016)
- Electronic controller
- Temperature forced air cooling
- EC fans
- Automatic defrost with drip water evaporation
- Natural refrigerant R290 (propane)

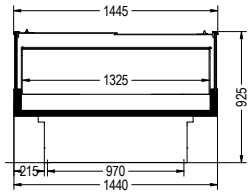
EasyCube 1550 G

Basic models

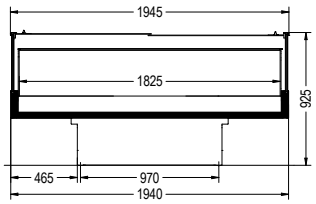
EasyCube (Front view)



EasyCube 15 (Side view)



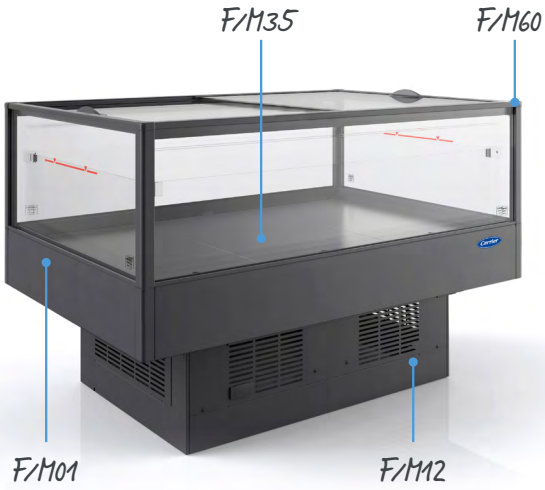
EasyCube 20 (Side view)



	Units	1550 G	2050 G
Temperature	[°C]	-1...+1	
Refrigerant		R290	
Width	[mm]	1445	1945
Depth	[mm]	940	
Height	[mm]	925	
Volume	[l]	280	400
TDA	[m²]	2.8	3.7
Power consumption ref.	[W]	300	510
Power consumption def.	[W]	425	520
Energy consumption*	[kWh/d]	3.81	5.43
Heat dispatch*	[W]	160	230
Temperature class		3M1	
Application			

* at climate class 3 according to ISO 23953

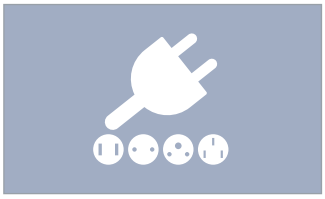
EasyCube Chiller customization



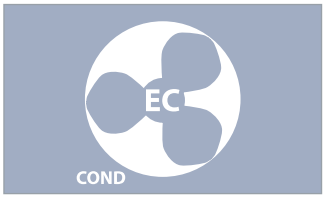
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	
F/M60	HANDRAIL	FA7016 (ANTHRAZITGREY)
F/M90	GRID/WIRE/DIVIDER/ BASKET	FA0117 (WHITE) FA9005 (JET BLACK) FA9006 (WHITE ALUMINIUM)

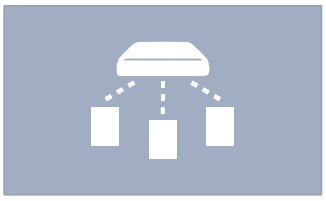
Cooling unit



Power cable



Energy saving fans

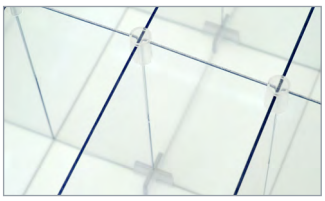


Modbus interface with RJ45 socket

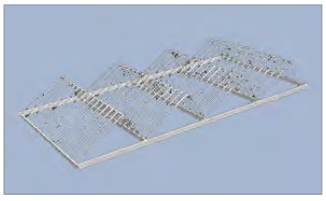
Additional temperature display

Internal fittings

Wire shelves



Product divider



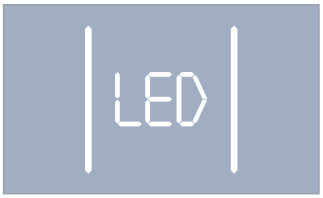
Wire shelf steps

Scanner price rail holder and scanner

Cladding possiblities*

Scanner price rail holder and rails 60 mm*

Lighting



Smart LED handrail lighting

* under preparation

Multinor® Chiller

Plug-in chiller island for promotional sales

Benefits at a glance

- Attractive ergonomic design
- Large branding surfaces for increased customer attention
- Optimal use of floor space provided by four lengths

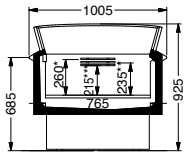
Standard configuration

- Internal and external panels galvanized steel with hard-wearing NCS 0501-B58G white powder-coated finish
- Bumpers all around
- Electronic controller
- Temperature-assured air-forced cooling with honeycomb air outlet
- Automatic defrost with drip water evaporation
- Natural refrigerant R290 (propane)

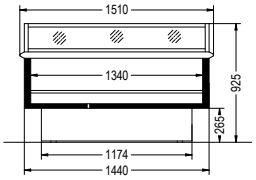
Multinor 2030 G

Basic models

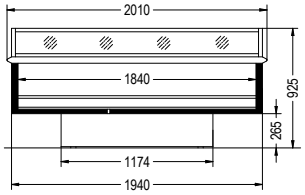
Multinor® (Front view)



Multinor® 15 (Side view)



Multinor® 20 (Side view)



	Units	1540	2040	1531 G	2030 G	1550 G	2050 G
Temperature	[°C]	0...+2		+2…+4		-1…+1	
Refrigerant		R290					
Width	[mm]	1005					
Depth	[mm]	1510	2010	1510	2010	1510	2010
Height	[mm]	925		945		945	
Volume	[l]	242	331	288	366	268	366
Power consumption ref.	[W]	355	419	240	271	276	297
Power consumption def.	[W]	755	815	396	480	785	900
Energy consumption*	[kWh/d]	3.9	4.8	3.3	4.3	4.9	5.4
Heat dispatch*	[W]	163	200	138	179	204	225
Temperature class		3M2		3H2		3M1	
Application							

* at climate class 3 according to ISO 23953

Multinor® Switchable

Plug-in chiller & freezer island for promotional sales

Benefits at a glance

- Two-in-one solution for optimized merchandising flexibility
- Attractive ergonomic design
- Different length for optimized floor space utilization

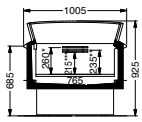
Standard configuration

- Internal and external panels galvanized steel with hard-wearing NCS 0501-B58G white powder-coated finish
- Bumpers all around
- Electronic controller
- Condenser fan with reversing motor
- Temperature-assured air-forced cooling with honeycomb air outlet
- Automatic defrost with drip water evaporation
- Natural refrigerant R290 (propane)

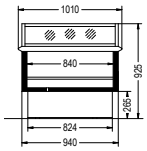
Multinor 2060/80 G

Basic models

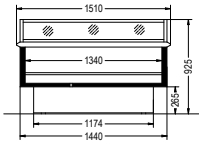
Multinor® (Front view)



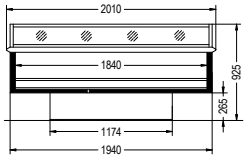
Multinor® 10 (Side view)



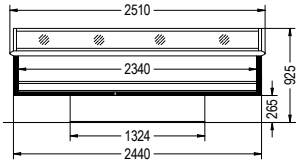
Multinor® 15 (Side view)



Multinor® 20 (Side view)



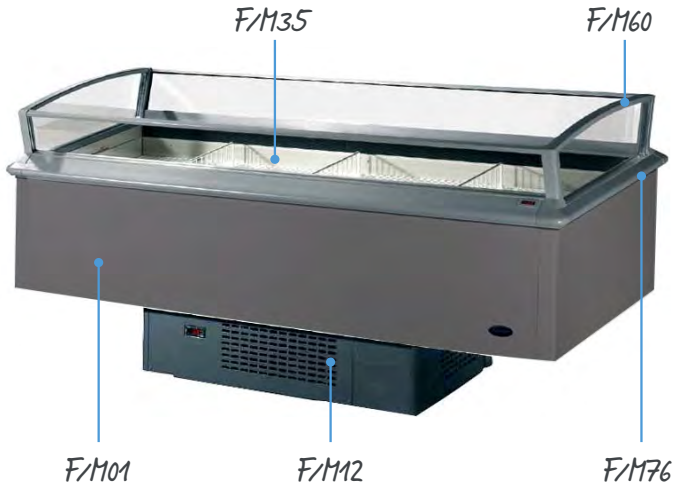
Multinor® 25 (Side view)



	Units	1540/80	1060/80 G	1560/80 G	2060/80 G	2560/80 G
Temperature	[°C]	0…+2 -22…-24	-2…0 -22…-24			
Refrigerant		R290				
Width	[mm]	1005				
Depth	[mm]	1510	1010	1510	2010	2510
Height	[mm]	925	945			
Volume Freezer mode	[l]	220	150	242	331	421
Volume Chiller mode	[l]	242	150	242	331	421
Power consumption ref. Freezer mode Chiller mode	[W]	 850 580	 368 430	 733 481	 1050 758	 1053 760
Power consumption def. Freezer mode Chiller mode	[W]	 1603 1603	 1300 1300	 1546 1546	 1633 1633	 2233 2233
Energy consumption* Freezer mode Chiller mode	[kWh/d]	 19.0 7.3	 7.7 3.2	 13.4 6.5	 17.0 7.3	 19.1 7.5
Heat dispatch* Freezer mode Chiller mode	[W]	 792 304	 321 133	 558 271	 708 304	 706 313
Temperature class		3M2 / 3L1	3S / 3L1			
Application						

* at climate class 3 according to ISO 23953

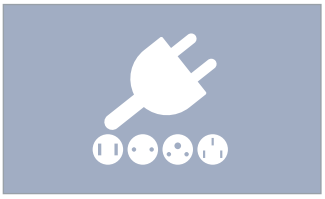
Multinor® customization



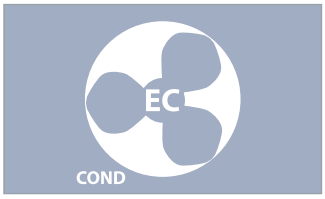
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	
F/M60	HANDRAIL	FA0369 (HERLIT GREY)
F/M90	GRID/WIRE/DIVIDER/ BASKET	FA0117 (WHITE) FA9005 (JET BLACK) FA9006 (WHITE ALUMINIUM)
F/M76	ALL AROUND BUMPER	FA0639 (HERLIT GREY)

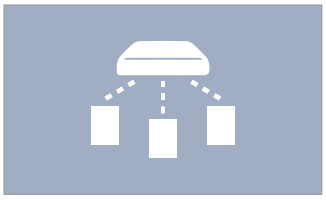
Cooling unit



Power cable



Energy saving fan condenser



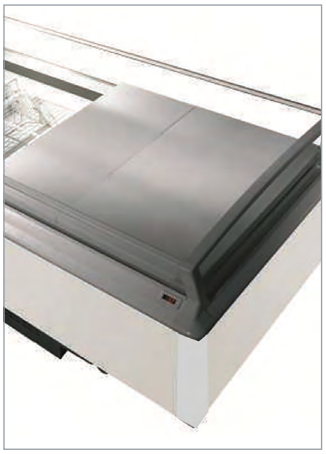
Modbus interface with RJ45 socket

Additional temperature display

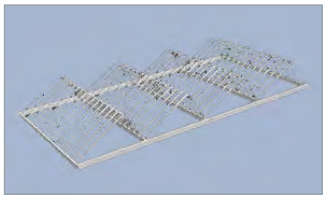
Internal fittings

Wire shelves

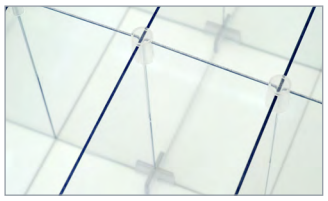
Wire divider / display racks



Night cover



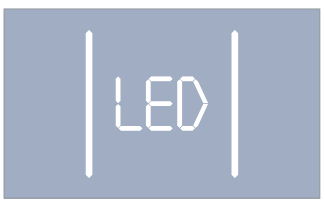
Wire shelf steps



Product divider

Wire shelf cover

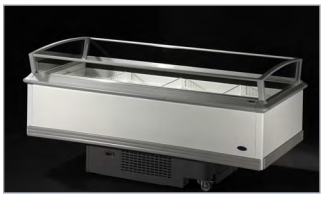
Lighting



Smart LED handrail lighting

Multinor® customization

External fittings



Additional bumper rails (all around)

Castors, factory installed

Stainless steel (outside)

Display frame

Stickers

Scanner price rails 40 mm

Scanner price rails 60 mm

Premor®

Plug-in freezer & switchable island for promotional sales

Benefits at a glance

- Promotion in view
- Excellent product visibility and quick orientation
- High storage capacity for chilled and frozen food
- Attractive and robust design

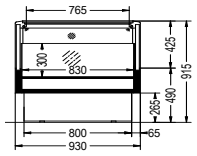
Standard configuration

- Internal and external panels galvanized steel with hard-wearing NCS 0501-B58G white powder coated finish
- Electronic control inclusive temperature readout
- Temperature-assured air-forced cooling with honeycomb air outlet
- Electronic controller
- Automatic defrost with drip water evaporation
- Energy-saving fan with reverse function for condenser
- Energy-saving sliding glass lids
- LED handrail lighting
- Wire shelves (switchable)

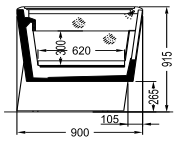
Premor 2060/80 G

Basic models

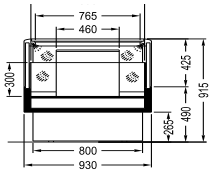
Premor® 10 (Front view)



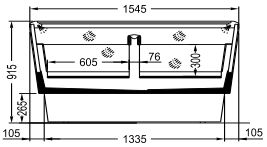
Premor® 10 (Side view)



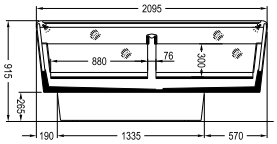
Premor® 15&20 (Front view)



Premor® 15 (Side view)



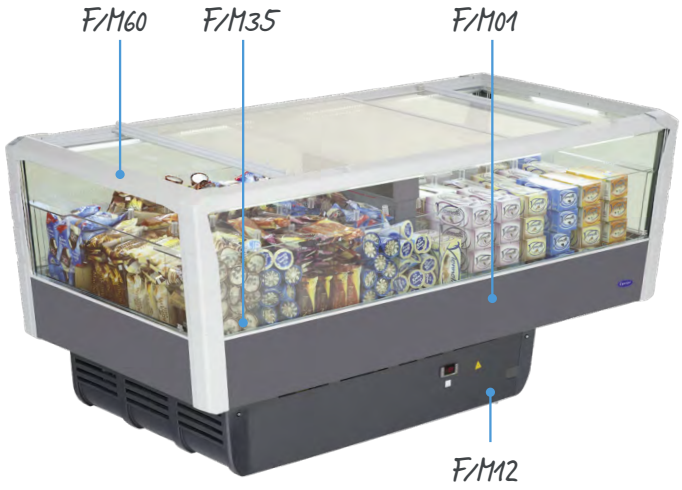
Premor® 20 (Side view)



	Units	1080 G	1580 G	2080 G	1060/80 G	1560/80 G	2060/80 G
Temperature	[°C]	-22…-24			-2…0 -22…-24	-1…+1 -22…-24	0..+2 -22…-24
Refrigerant		R290			R290		
Width	[mm]	930	1545	2095	930	1545	2095
Depth	[mm]	915	930	930	915	930	930
Height	[mm]	915			915		
Volume Freezer mode Chiller mode	[l]	158	317	453	158 52	317 109	453 157
Power consumption ref.	[W]	470	930	1036	470	930	1036
Power consumption def.	[W]	543	1139	1217	543	1139	1282
Energy consumption* Freezer mode Chiller mode	[kWh/d]	9.4	17.4	22.0	9.4 6.3	17.4 10.5	22.0 15.5
Heat dispatch* Freezer mode Chiller mode	[W]	392	725	917	392 263	725 376	917 646
Temperature class		3L1			3S / 3L1	3M1 / 3L1	3M2 / 3L1
Application							

* at climate class 3 according to ISO 23953

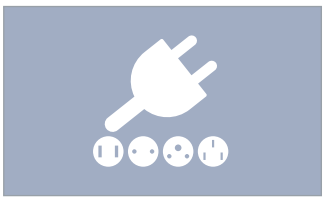
Premor® customization



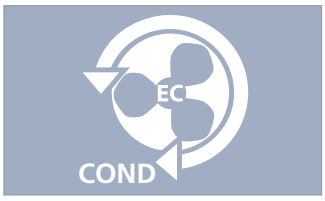
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M12	KICKPLATE	FA0633 (NIMBUS GREY)
F/M35	INTERIOR EQUIPMENT	Carrier approved colors
F/M60	HANDRAIL	FA0631 (CIRRUS GREY)
F/M90	GRID/WIRE/DIVIDER/ BASKET	FA0605 (SIGNAL WHITE) FA0257 (WHITE ALUMINIUM) FA9005 (JET BLACK)

Cooling unit



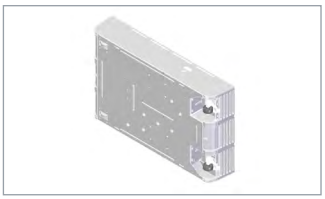
Power cable



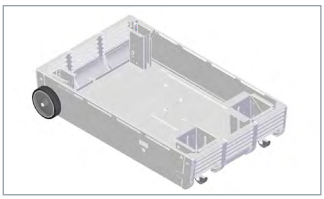
Energy saving fans condenser, reversible

External fittings

Front bumper



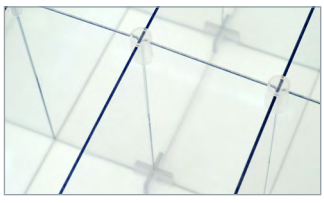
Castors: 4 covered rollers, factory installed



Castors: 2 big & 2 small

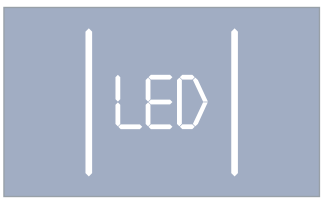
Scanner price rails 40 mm

Internal fittings



Product divider 1x16 partitions

Lighting



Smart LED handrail lighting

Crystal Chiller

Plug-in chiller island for promotional sales

Benefits at a glance

- Transparency is a customer magnet
- Successful staging of seasonal products
- Large product facing area for outstanding product visibility
- Transparent product dividers for quick orientation

Standard configuration

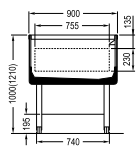
- Internal and external panels galvanized steel with hard-wearing white powder-coated finish
- Electronic controller
- Temperature assured air-forced cooling
- Automatic defrost with drip water evaporation
- Handrail lighting at the front
- Analog thermometer

COC22

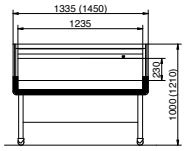
COC33

Basic models

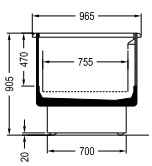
Crystal COC22 (Front view)



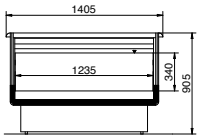
Crystal COC22 (Side view)



Crystal COC33 (Front view)



Crystal COC33 (Side view)



	Units	Natural	Standard
		COC22	COC33
Temperature	[°C]	0...+2	-1…+1
Refrigerant		R290	R134a
Width	[mm]	1335	1405
Depth	[mm]	900	965
Height	[mm]	1000	905
Volume	[l]	215	320
TDA	[m²]	1.9	2.3
Power consumption ref.	[W]	520	900
Power consumption def.	[W]	520	800
Energy consumption*	[kWh/d]	10.5	19
Heat dispatch*	[W]	438	792
Temperature class		3M2	3M1
Application			

* at climate class 3 according to ISO 23953

Crystal Switchable

Plug-in chiller & freezer island for promotional sales

Benefits at a glance

- Transparency is a customer magnet
- Perfectly fitting for small shop areas
- Two-in-one solution for optimized merchandising flexibility
- Big product facing areas draw customers' attention

Standard configuration

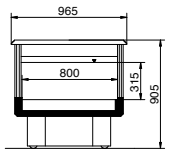
- Internal and external panels galvanized steel with hard-wearing white powder-coated finish
- Temperature assured air-forced cooling
- Automatic defrost with drip water evaporation
- Analog thermometer
- Electronic control
- Reversible fan operation
- LED handrail lighting (COG17, 33)

COG17

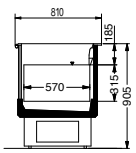
COG33

Basic models

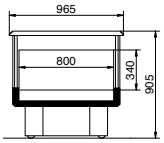
Crystal COG17 (Front view)



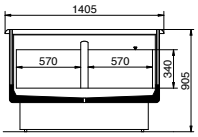
Crystal COG17 (Side view)



Crystal COG33 (Front view)



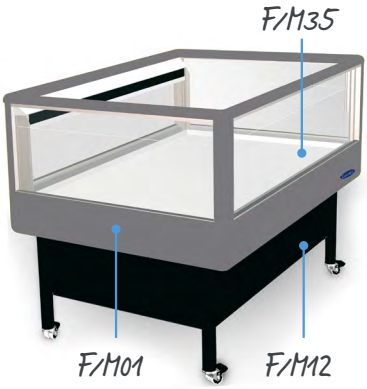
Crystal COG33 (Side view)



	Units	COG17	COG33	COG17 G
Temperature	[°C]	+2...+4 -22…-24	+4…+6 -22...-24	0...+2 -22...-24
Refrigerant			R290	
Width	[mm]	965	1405	965
Depth	[mm]	810	965	810
Height	[mm]	905	905	920
Volume	[l]	144	310	144
Power consumption ref. Freezer mode Chiller mode	[W]	900	 938 682	 900 900
Power consumption def. Freezer mode Chiller mode	[W]	1500	 1213 1213	 1500 1500
Energy consumption* Freezer mode Chiller mode	[kWh/d]	 12.4 5.4	 20.9 10.1	 9.4 4.9
Heat dispatch* Freezer mode Chiller mode	[W]	 517 225	 871 421	 392 204
Temperature class		3H2	> 3H2 / 3L1	3M2 / 3L1
Application		/	/	/

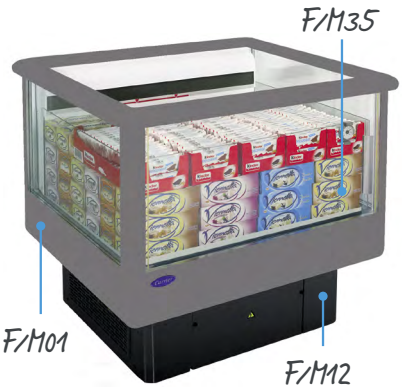
* at climate class 3 according to ISO 23953

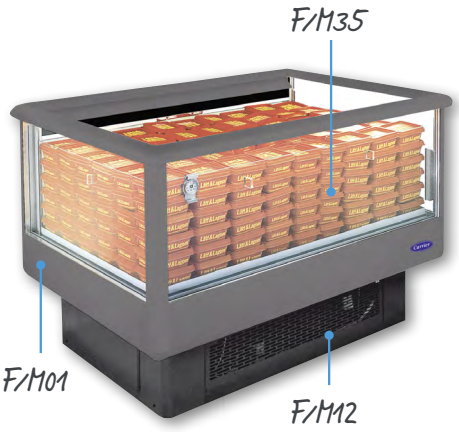
Crystal customization



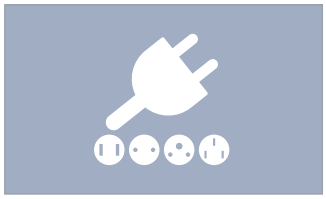
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M12	KICKPLATE	
F/M35	INTERIOR EQUIPMENT	

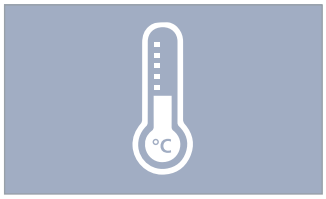




Cooling unit

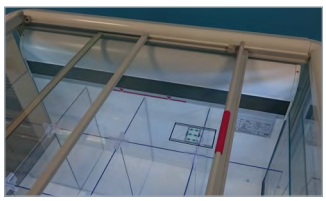


Power cable



Analog thermometer

External fittings

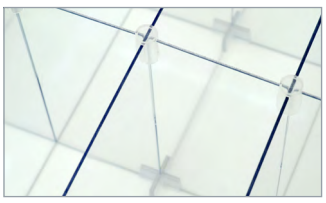


Glass lids

Castors, factory installed

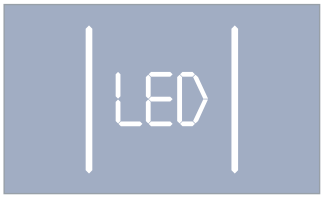
Internal fittings

Product divider



Product divider system

Lighting



Smart LED handrail lighting

Tulip Chiller

Plug-in chiller island for promotional sales

Benefits at a glance

- High product visibility with easy access
- Outstanding & handsome design
- Lots of space for small places
- Big product facing areas draw customers' attention

Standard configuration

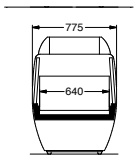
- Internal and external panels galvanized steel with hard-wearing NCS 0501-B58G white powder-coated finish
- Temperature assured air-forced cooling
- Automatic defrost with drip water evaporation
- Analog thermometer
- Electronic controller
- Castors

TC17

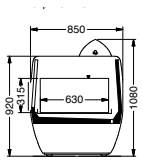
TC33

Basic models

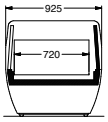
Tulip TC17 (Front view)



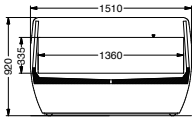
Tulip TC17 (Side view)



Tulip TC33 (Front view)



Tulip TC33 (Side view)



	Units	TC17	TC33
Temperature	[°C]	0…+2	+2…+4
Refrigerant		R290	
Width	[mm]	775	925
Depth	[mm]	850	1510
Height	[mm]	920	
Volume	[l]	125	328
Power consumption ref.	[W]	257	490
Power consumption def.	[W]	53	103
Energy consumption*	[kWh/d]	3.3	10
Heat dispatch*	[W]	138	417
Temperature class		3M2	3H2
Application			

* at climate class 3 according to ISO 23953

Tulip Switchable

Plug-in switchable island for promotional sales

Benefits at a glance

- Enhanced merchandising opportunities
- Panorama sidewalls for customer attention
- Two-in-one solution for optimized merchandising flexibility
- Illuminated display header for additional promotions

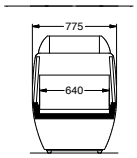
Standard configuration

- Internal and external panels galvanized steel withhard-wearing NCS 0501-B58G white powder-coated finish
- Temperature assured air-forced cooling
- Automatic defrost with drip water evaporation
- Analog thermometer
- Electronic controller
- Illuminated display header
- Castors

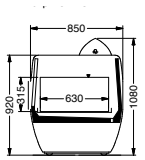
TS17

Basic models

Tulip TS17 (Front view)



Tulip TS17 (Side view)



		TS17
Temperature	[°C]	+4…+6 -15…-18
Refrigerant		R290
Width	[mm]	775
Depth	[mm]	850
Height	[mm]	1080
Volume	[l]	125
Power consumption ref. Freezer mode Chiller mode	[W]	 431 500
Power consumption def. Freezer mode Chiller mode	[W]	 735
Energy consumption* Freezer mode Chiller mode	[kWh/d]	 9.5 4.8
Heat dispatch* Freezer mode Chiller mode	[W]	 396 200
Temperature class		>3H2 / >3L1
Application		/

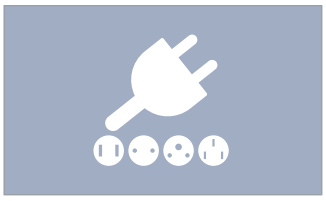
* at climate class 3 according to ISO 23953

Tulip customization

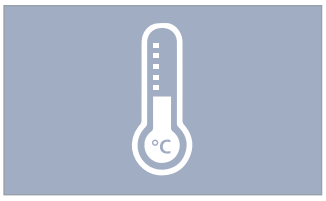
Colors

Paintable area		Color options
F/M01	EXTERIOR	Carrier approved colors
F/M14	SIGNAGE HEADER	FA0406 (RED) FA0490 (CAPRI BLUE), FA0640 (WHITE) FA0369 (HERLIT GREY) FA9005 (JET BLACK)
F/M35	INTERIOR EQUIPMENT	Carrier approved colors
F/M60	HANDRAIL	FA0406 (RED) FA0490 (CAPRI BLUE) FA0640 (WHITE) FA0369 (HERLIT GREY) FA9005 (JET BLACK)

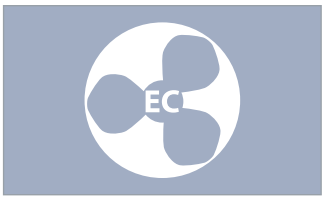
Cooling unit



Power cable



Analog thermometer



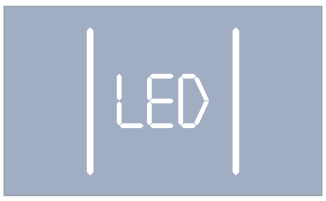
Energy saving fans

External fittings

Glass lids

Display head

Lighting



Smart LED handrail lighting

Visor

Plug-in freezer & switchable island for promotional sales

Benefits at a glance

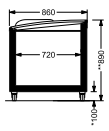
- Large capacity freezer with many layout options
- Modern design with curved sliding lids
- Energy saving components
- Large product facing area

Standard configuration

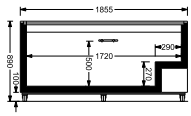
- External and internal panels galvanized steel with hard-wearing white powder-coated finish
- Top and bottom bumper at the front
- Automatic defrost & static cooling
- Second cable for lighting
- Electronic control
- Grille insert for automatic defrost incl. wire dividers & divider set
- Curved sliding glass lids & LED lighting

Basic models

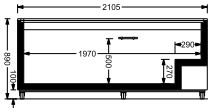
Visor® (Front view)



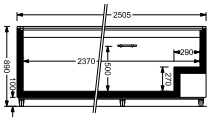
Visor® 1881 G (Side view)



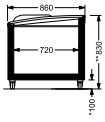
Visor® 2181 G (Side view)



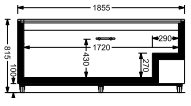
Visor® 2581 G (Side view)



Visor® 1881 CE G (Front view)



Visor® 1881 CE G (Side view)



* max 200 mm adjustable l ** with wheels: 910 mm

	Units	1881 G	2181 G	2581 G	1881 CE G	1851/81 G	2151/81 G	2551/81 G	1851/81 CE G
Temperature	[°C]	-22…-24				-22….-24 / -2…0 / -1 … +1			
Refrigerant		R290				R290			
Width	[mm]	1885	2105	2505	1885	1885	2105	2505	1885
Depth	[mm]	850				880			
Height	[mm]	890	890	890	830	890	890	890	830
Volume	[l]	511	595	729	433	444	518	636	444
Power consumption ref.	[W]	348	532	403	346	339 / 413 / 491	410 / 463 / 467	420 / 549 / 560	339 / 413 / 491
Power consumption def.	[W]	800	810**	926	796	691 / 711 / 708	905 / 935 / 953	881 / 947 / 963	691 / 711 / 708
Energy consumption*	[kWh/d]	7.1	7.2	8.22	6.65	6.1 / 4.5 / 3.9	7.29 / 5.07 / 3.54	8.5 / 6.0 / 5.8	6.1 / 4.5 / 3.9
Heat dispatch*	[W]	295	300	342	277	254 / 188 / 163	296 / 183 / 158	354 / 250 / 242	254 / 188 / 163
Temperature class		3L1				3L1 / 3S / 3M1			
Application						/			

* at climate class 3 according to ISO 23953 | ** without door openings

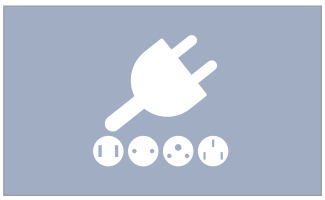
Visor customization

Colors

Other external colors (metal parts) on request
If color is available – minimum order quantity one truck load (13.6)

- VISOR 1881 & 1851/81 G = 28 pcs
- VISOR 2181 & 2151/81 G = 24 pcs
- VISOR 2581 & 2551/81 G = 20 pcs
- VISOR 1881 & 1851/81 CE G = 28 pcs

Cooling unit

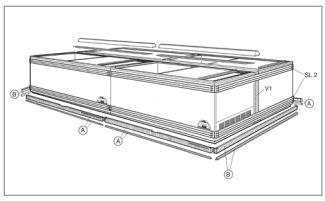


Power cable

Variable speed drive compressor*

External fittings

Endwall bumper (both sides)



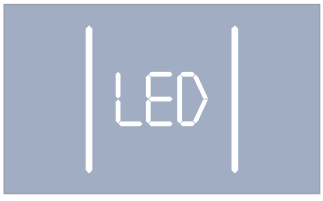
Block grouping sets

Front bumper

Internal fittings

Divider set

Lighting



Smart LED handrail lighting

* in preparation

GD with display

Plug-in glass door cooler with display header in various sizes

Benefits at a glance

- Customization with stickers directly from factory
- Quick cooling of beverages with forced air cooling
- Illuminated display header for better merchandise

Standard configuration

- Temperature-assured forced-air cooling
- Double glass door, tempered, with black frame
- Exterior color white
- Interior color white
- Door lock
- Adjustable leveller feet
- Analog thermometer
- Internal panels in robust plastic
- Display shelves incl. price rails
- T8 fluorescent tubes

GD100

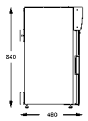
GD380

GD440

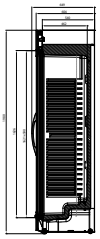
GD880

Basic models

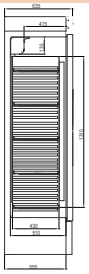
GD100



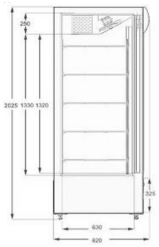
GD380



GD440



GD880



	Units	GD100	GD380	GD440	GD880
Temperature	[°C]	+4…+6			
Refrigerant		R600a			R290
Width	[mm]	480	595	680	1110
Depth	[mm]	520	640**	655**	825
Height	[mm]	840	1980	2105	2010
Volume	[l]	84	372	438	989
Capacity 0.33 l can		60	364	480	1008
Capacity 0.5 l PET bottle		40	~ 245	324	560
Power consumption ref.	[W]	250	350	350	940
Energy consumption* (10 h light on)	[kWh/d]	2.68	3.38	4.69	5.92
Heat dispatch*	[W]	111	140	195	247
Application					

* at climate class 3 according to ISO 23953 | ** including door handle | *** some types only available in full truck loads

GD without display

Plug-in glass door cooler in various sizes

Benefits at a glance

- Customization with stickers directly from factory
- Quick cooling of beverages with forced air cooling
- Minimum dimensions with maximum volume

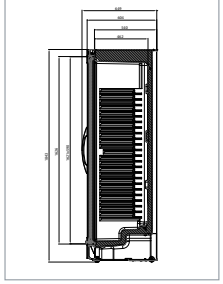
Standard configuration

- Temperature-assured forced-air cooling
- Double glass door, tempered, with black frame
- Exterior color white
- Interior color white
- Door lock
- Adjustable leveller feet
- Analog thermometer
- Internal panels in robust plastic
- Display shelves incl. price rails
- T8 fluorescent tubes

GD381

Basic models

GD381



	Units	GD381
Temperature	[°C]	+4…+6
Refrigerant		R134a
Width	[mm]	595
Depth	[mm]	640**
Height	[mm]	1840
Volume	[l]	372
Capacity 0.33 l can		364
Capacity 0.5 l PET bottle		~ 245
Power consumption ref.	[W]	370
Energy consumption* (10 h light on)	[kWh/d]	4.59
Heat dispatch*	[W]	191
Application		

* at climate class 3 according to ISO 23953 |** including door handle | *** some types only available in full truck loads

GD E

Plug-in glass door cooler with improved design

Benefits at a glance

- Customization with stickers directly from factory
- Quick cooling of beverages with forced air cooling
- Lower operating costs due to low energy consumption

Standard configuration

- Double glass door, tempered, with grey frame
- Exterior color white
- Interior color white
- Door lock
- Adjustable leveller feet
- Analog thermometer
- Internal panels in robust plastic
- Display shelves incl. price rails
- T8 fluorescent tubes
- Power cable
- Temperature-assured forced-air cooling

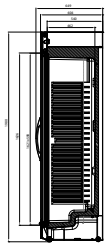
GD380 E

GD381 E

Optimized for stand-alone installation, no line-up possible

Basic models

GD380 E



GD381 E

	Units	GD380 E	GD381 E
Temperature	[°C]	+4…+6	
Refrigerant		R600a	
Width	[mm]	595	
Depth	[mm]	640**	
Height	[mm]	1980	1840
Volume	[l]	372	
Capacity 0.33 l can		364	
Capacity 0.5 l PET bottle		191	
Power consumption ref.	[W]	325	325
Energy consumption* (10 h light on)	[kWh/d]	3.23	2.79
Heat dispatch*	[W]	134	116
Application			

* at climate class 3 according to ISO 23953 |** including door handle | *** some types only available in full truck loads

Impulse cooler

Bottle cooler for promotion and impulse sales

Benefits at a glance

- A point-of-purchase merchandiser and marketing tool like no other
- High product visibility increases impulse sales
- Easy refill of products
- Small footprint ideal for c-stores and kiosks

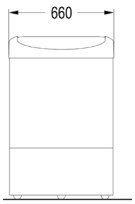
Standard configuration

- Panels galvanized steel grey powder-coated finish
- Robust plastic opening on top
- Automatic drip water evaporation using waste heat of refrigeration system
- Single-row lighting in canopy
- Power cable

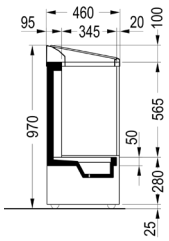
IC100

Basic models

IC100 (Front view)



IC100 (Side view)



	Units	IC100
Temperature	[°C]	+4…+6
Refrigerant		R600a
Width	[mm]	660
Depth	[mm]	460
Height	[mm]	970
Volume	[l]	110
Capacity 0.33 l can		144
Capacity 0.5 l PET bottle		84
Power consumption ref.	[W]	170
Energy consumption*	[kWh/d]	2.5
Heat dispatch*	[W]	104
Application		

* at climate class 3 according to ISO 23953

Powder paint selection guide

When it comes to customization, Carrier offers a wide range of possibilities in the design of each product – from the front aesthetic to the endwalls and pedestals. These are available in a variety of designs, material finishings and colors. Through the creative use of colors, you can illustrate an inviting and pleasant atmosphere that evokes positive emotions. Shades of reds can express passion, enthusiasm, and energy; whereas blue and green express nature and freshness.

Essential colors

Benefit from a nice design at the best price level

S 7502-B (FA 0633)	RAL 9003 (FA 0605)
Nimbus grey	Signal white

Smart colors

Make the cabinet your style at the best value for money

RAL 1013 (FA 0454)	RAL 5002 (FA 0421)	RAL 5010 (FA 0521)	S 2502-B (FA 0631)	S 6502-B (FA 0632)
Oyster white	Ultramarine blue	Gentian blue	Cirrus grey	Stratus grey
RAL 7012 (FA 0457)	RAL 7016 (FA 7016)	RAL 7021 (FA 0429)	7702-G85Y (FA 0602)	RAL 7024 (FA 0516)
Basalt grey	Anthracite	Black grey	Umbergrey	Graphite grey
RAL 7035 (FA 0412)	6500 (FA 0374)	RAL 7039 (FA 0582)	RAL 7040 (FA 0528)	RAL 7043 (FA 0501)
Light grey	Durangrey	Quartz grey	Window grey	Traffic grey B
RAL 7045 (FA 0588)	RAL 7048 (FA 0614)	S 8000 N (FA 0502)	RAL 8019 (FA 0529)	0501-B58G (FA 0117)
Telegrey 1	Pearl mouse grey	Grey	Grey brown	White
RAL 9004 (FA 0534)	RAL 9005 (FA 0654)	RAL 9006 (FA 0257)	RAL 9007 (FA 0453)	S 3500 N (FA 0373)
Signal black	Deep black	White aluminium	Grey aluminium	Herlitgrey
RAL 9010 (FA 0641)	RAL 9011 (FA 0432)	RAL 9016 (FA 0547)		
Pure white	Graphite black	Traffic white		

Exclusive colors

Differentiate your market and customize your cabinet in a wide range of colors.
Contact your local sales representative for more information.

RAL or NCS color codes (Carrier codes in parentheses)

A wide spectrum of colors and shades to set your store's ambiance await you...

The natural way

A promotion world

The premium retailer

Excellence in Tests and Qualification of cabinets

Outstanding technology based on 60 years development experience

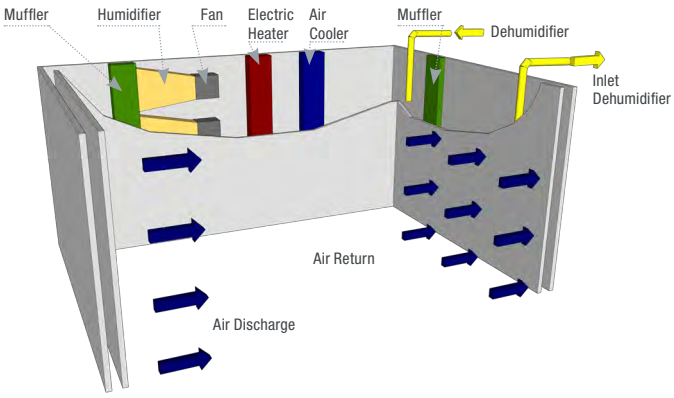
With around twenty testing rooms, Carrier is one of the best-equipped manufacturers in Europe. The most testing rooms are equipped according to ISO 23953 standard (refrigerated display cabinets classification, requirement and test conditions) to ensure comparable and good product performance. Besides fulfilling ISO 23953 requirements Carrier has its own, internal tests, standards and requirements that each cabinet has to pass before going to market. This ensures the right quality and is reflected in robust, reliable products to maximize the lifetime of each refrigerated display cabinets.

Measuring temperature performance

Carrier declares the temperature performance of the cabinet according to the ISO 23953 standard, which defines the refrigerated cabinet requirements and test conditions.

ISO 23953 - Refrigerated display cabinets classification, requirement and test conditions
The refrigerated display cabinets are classified according to the standard ISO 23953. This standard defines the classification, requirement and test conditions for representative refrigerated display cabinets including the minimum size of the test room, side air-flow, light intensity, temperature and humidification control, calibrated measurements etc.
Thanks to ISO 23953 customers can compare temperature classification according to the same testing procedure for all manufacturers in Europe who strictly follow the standard.

Climate room requirements and setup
ISO 23953 defines exactly the requirements and tolerances of a climate room including:
- Size of the room
- Side airflow speed and direction relative to the cabinet
- Calibration of the measurement equipment
- Where to place the cabinet in the climate room
- Color of room and light intensity



Example of Carrier testing room. The above picture illustrates how a climate room for testing the refrigeration equipment looks like.

Climate class – describes the environment outside of the cabinet
The climate class defines the certain ambient test condition (temperature and relative humidity) during the testing period.
The standard describes several climate classes out of which for commercial refrigeration usually climate class 3 is used to measure and declare the temperature performance.

Example: “climate class **3**”
Temperature: 25 °C
Rel. humidity: 60 %

Temperature class – describes the temperature performance inside the cabinet
The temperature performance is tested in a cabinet with product-simulation dummies which are called M-package. The M-package simulates thermal characteristic of meat products.
Cabinet Temperature performance means:
- How good can the cabinet hold the temperature of a chilled or frozen product – simulation dummies at lab climate conditions
- How small is the cabinet storage temperature deviation of product – simulation dummies at lab climate conditions
- Temperature performance is tested by simulating different operation use cases: shop closed (light off, night curtain down, no door opening) shop open and commissioning of cabinet (doors / lids long open) shop open consumer take products (regular door / lid opening)

There are three main temperature class groups: Low, Medium and High temperature. These main groups are split in different temperature classes indicated by a number following the group letter: Example M2. The higher the number the higher the difference between the lowest M-package temperature and highest M-package temperature.

Example: “Temperature Class **M2**”
(**M**edium temperature class **2**)
Warmest M-package: max. +7°C
Coldest M-package: min. -1 °C

Link between climate class and temperature class
Because the temperature inside a cabinet is strongly influenced by the environment’s temperature and humidity, the temperature class is only a meaningful declaration if it is linked to a climate class. For this reason, a full cabinet declaration always consists out of climate class and temperature class.

Example “**3M2**” (At climate class 3, the cabinet reaches temperature performance M2)
3= climate class (certain ambient test condition during testing)
M2= Temperature class (specified highest and lowest M-package temperature)

Laboratory vs. operation in real store environment

According the ISO 23953-2 standard Appendix B are significant different operation conditions between lab and store operation especially for remote cabinets. The following section describes and explains the difference to the application in the field.

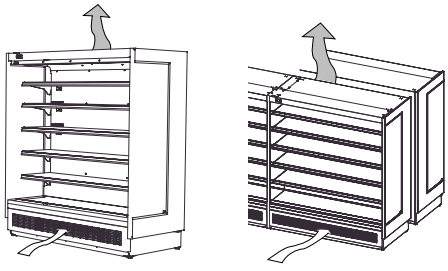
Difference between laboratory and store data for remote cabinets
The conditions of a remote cabinet in the store differ very much from the lab conditions. Usually the cabinets in a store are multiplexed, located against a wall and the ambient conditions are lower. Using directly lab data for remote cabinets would lead to an oversizing of piping and compressor racks. Based on this Carrier provide for E6 remote cabinets in the technical data sheets rack sizing data for the standard configuration at store condition 25 °C / 60 % rel. H. and 22°C / 55 % rel. h. This data are already made for investment and life cycle optimized sizing of rack and piping. Based on the long Carrier expertise in refrigerant system design our general recommendation is:

- Rack design data 25/60 application:
  Stores in warm climates, stores with difficult climate situations, cabinet in a non-ideal place (high humidity, high temperature, close to a door etc…)

- Rack design data 22/55 application:
  Store in middle and north Europe, stores with moderate climate (with air conditions, multiplexing remote cabinets)

Technical data for plug-in cabinets
To have comparable energy consumption within the Carrier range, we specify the energy consumption for the standard configuration of plug-in cabinets according to ISO 23953 and climate class 3 conditions. This makes the data comparable; however, the real energy consumption in a store is usually lower.

Influence of the cabinet installation on the performance
The installation can have major effects on the energy and temperature performance. There are some requirements, which need to be kept to ensure that the cabinets are working properly.
- Do not install the cabinet outside or next to heating radiators or other heat sources.
- Keep a distance from the wall as indicated in the operating manual
- Avoid direct sunlight radiation impact
- Keep free the air intake and outlet area (only plug-in).



Example of a plug-in cabinet which needs free air flow on front and top of cabinet.

Carrier internal testing

To ensure a long life-time and proper operation, Carrier has defined internals standards for robustness and stress tests of cabinet as well as components.

Static robustness test
To test the cabinet and shelf strength, all shelves are loaded with a certain weight for several days. The deflection of brackets and shelves is checked under load and after unloading the cabinet. Only if the cabinet deflection and deformation stays within the small tolerances defined by the Carrier quality department, the cabinet will be released to the market. With high requirements on cabinet stability and strength Carrier ensures a high-quality product, safe and stable for years of operation.

Dynamic testing of doors and lids
With the door opening test it is possible simulate several years of lifetime of our doors, hinges and handles within a few weeks. During the test, the system is continuously monitored and checked in terms of abrasion, break / damage and deformation The system will only pass the internal qualification if it can resist several simulated years in the tough life of a supermarket.
For double glass doors Carrier requires additional tests to ensure that the sealing works properly and the doors do not get condensation between the glasses after some years.

Packaging and shipping test
Before each serial launch, Carrier conducts a special packaging and transportation test. This happens with one or several cabinets in a truck going on a defined road with various road conditions. After the transport, the cabinet and the packaging are checked visually. This ensures that the cabinets will arrive to our customers in the same condition as they were packaged in the factory.

CE (Conformité Européenne) certification

The Carrier cabinets are compliant with the relevant standards or parts of the standards as confirmed with the CE declaration of conformity:
- ISO 23953-1 (Refrigerated display cabinets, general)
- ISO 23953-2 (Refrigerated display cabinets, requirement)
- EN 60335-1 (Household and similar electrical appliances. Safety. General requirements)
- EN 60335-2-89 (safety requirement for household and similar electrical appliances, particularly for commercial refrigerating appliances)

To ensure maximum safety, all plug-in cabinets with flammable refrigerant are additionally CE certified by an independent body.

Factory certifications

All Carrier cabinet factories have a certified quality management and environnemental management systems
- EN ISO 9001 (General quality management system)
- EN ISO 14001 (Environmental management systems)

Plug-in & remote cabinets in comparison

We can split the refrigerated display cabinets in two types. Remote cabinets have a common central condensing system which supplies several units with the refrigerant. The cabinets have a fix location and are connected with pipes and wires to the central compressor rack and controller unit. Plug-in cabinets work like a household fridge and have the compressor, condenser and controller unit built in the cabinet itself. They only need a power supply. Both systems come with several advantages and trade-offs.

PLUG-IN SYSTEM

Advantages:
- No piping / installation needed
- No machinery room
- Very flexible layout changes

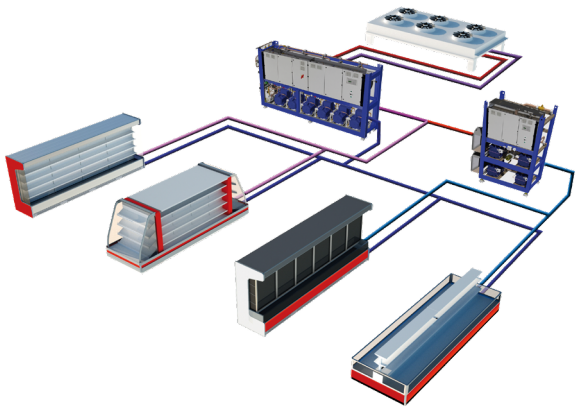
Trade-offs:
- Head rejection in store (bigger air condition needed)
- Less space inside the cabinet
- Regular cleaning of condenser
- Higher energy consumption

Plug-in cabinet with characteristic machine compartment, which includes compressor, drip water evaporation and condenser.

REMOTE SYSTEM

Advantages:
- Lower system energy consumption
- Low-noise
- Large usable volume for products
- Wide range of multiplexing options
- Open Cabinet de-humidify store climate

Trade-offs:
- Installation needed
- Fixed installation, not flexible



Remote cabinets connected to the central rack with the gas cooler

Carrier's small store program

Carrier has developed a program that offers solutions for the specific conditions and requirements of small store formats. The chillers and freezer display cabinets in Carrier's small store program provide optimal presentation of food in limited retail space – small dimensioned and in homogeneous design.

A variety of lengths allow for the ideal adaptation of the cabinets to any given store dimensions (such as wall lengths). The combination of remote and plug-in solutions are suited to the small store concept with building restrictions and are flexible enough to accommodate changes or enlargement of the refrigerated or frozen food range. Carrier's small store program has been designed with forthcoming environmental legislation in mind – both the remote as well as the plug-in cabinets can be operated with natural refrigerants.

Remote and plug-in
(Mendos® XU & Velando® CS)

Pure plug-in
(Optimer® L & Velando® CS)

Pure remote
(Mendos® XU & Velando® CS)

Shop impressions

Shop impressions

Complete & Sustainable **Refrigeration Solutions** for Food Retailers

Project Planning

- Display cabinets to maximize merchandising opportunities
- Energy and environmental impact consulting and analysis
- Optimal refrigeration technology solutions for each store type
- Complete project design and documentation

Product Development & Manufacturing

- Next-generation display cabinets to help increase sales
- Advanced refrigeration technology and integrated systems
- Energy-efficient solutions for the system lifecycle
- Sustainable natural refrigerant technologies

Lifecycle Care

- Preventative maintenance program
- 24/7 call center and service assistance
- Remote monitoring to ensure optimized performance
- System modernization for improved efficiency

Installation

- Approach tailored to unique customer requirements
- Experienced teams with standard work processes
- A focus on quality throughout the process
- Limited on-site time for minimal business disruption

Carrier

Carrier Commercial Refrigeration is a leading supplier of high-efficiency turnkey refrigeration systems and services in the food retail industry.

www.carrier-refrigeration.com
www.carrier.com

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