Refrigeration

Product catalogue 2017
for professionals

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

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Inverter technology

Scroll compressor

Screw compressor

Reciprocating compressor

Swing compressor

For latest data, please consult my.daikin.eu

Leading commercial and industrial refrigeration solutions

We know refrigeration inside out

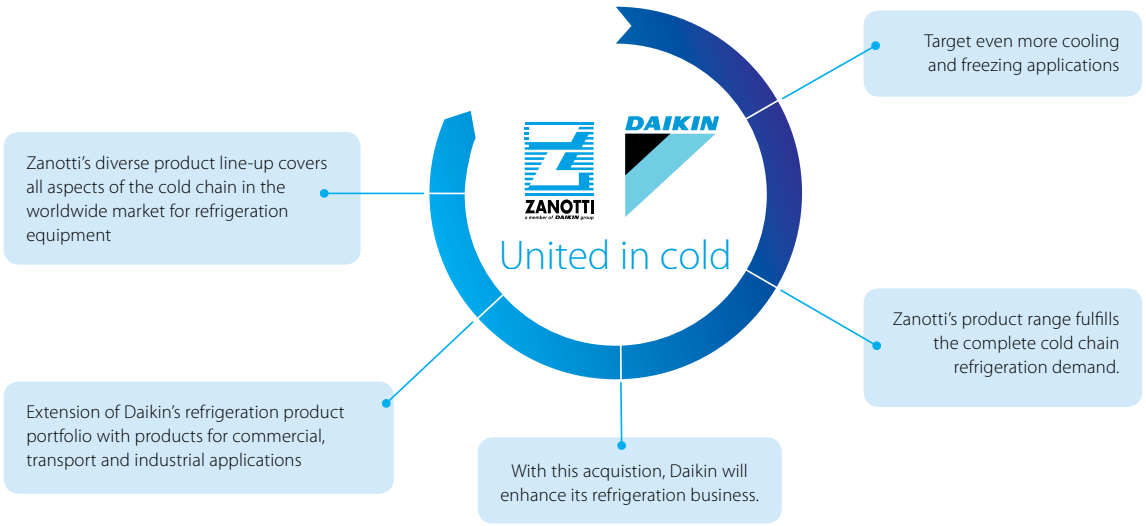
- **High efficient** solutions to match your refrigeration needs
- Innovative and reliable technology including heat recovery solutions:
  proven and tested for ZEAS and CONVENI-PACK
- Compliant with **new F-Gas regulation** (R-410A)
- Urban proof solutions in terms of **compact dimensions** and **low sound levels**
- With the acquisition of Zanotti refrigeration group we will **extend our product range** which allows us to fullfill any refrigeration demand to guarantee the complete cold chain

Benefits for the installer/consultant

› Plug and play solutions through monobloc and bi-bloc systems
› Pre-charged and factory-tested
› Compact design for restricted installation space
› Incorporated inverter technology into the outdoor compressors and fans
› Shorter delivery time for Conveni-Pack and ZEAS as they are manufactured in Europe
› Easy and intuitive selection of outdoor condensing units with Refrigeration Xpress
› Wide range to match most refrigeration needs according to F-gas Regulation

Benefits for the end user

› High efficiency technology for high ROI
› Heat recovery technology on Conveni-Pack
› Proven reliability and high performance
› Ideal for urban applications
› Contributing to better environment thanks to low total equivalent warming impact



References

"We wanted a future-proof, energy efficient and proven technology with high reliability."
Bakery cooperative, Germany

'With Conveni-Pack, we have a complete and totally reliable solution for all our heating and air conditioning needs, as well as for refrigerating all our fresh and frozen products.'
Food store, Austria

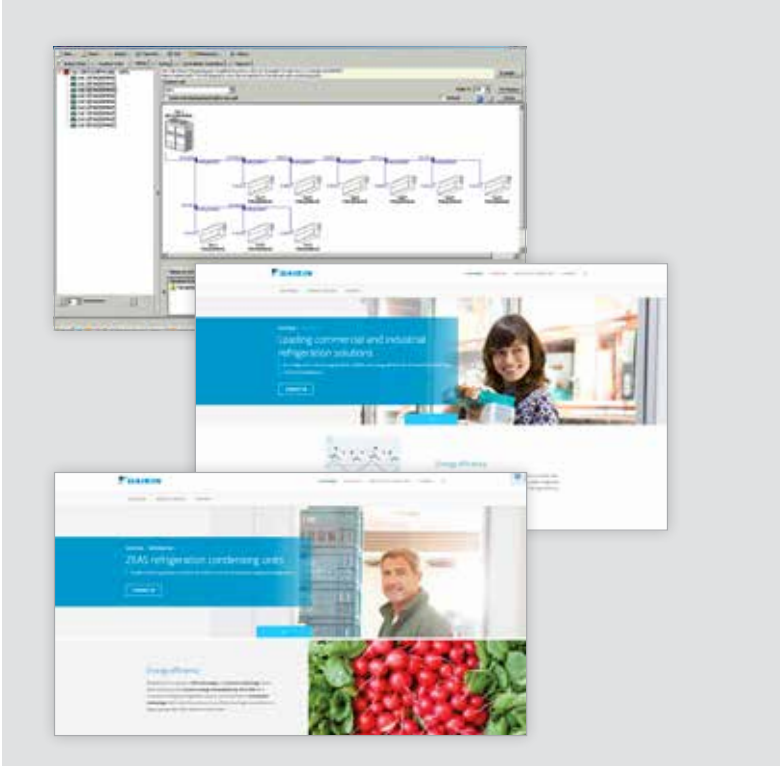
In a German supermarket Conveni-Pack teams up with ZEAS to supply service counters, fridges, an air curtain and indoor A/C units, a cooling storage room and deep-freeze cabinets.

"Freshness and healthy nutrition contribute to patient recovery. The storage of easily perishable goods plays a key role here. That's why Municipal Hospital opted for a special refrigeration technology: ZEAS."
Kiel Municipal Hospital, Germany

"An organic market should not just sell sustainable food products but should also use green energy and as little as possible. It was not just for reasons of conscience and image that Bergfeld's Biomarkt in Bonn decided on ZEAS from Daikin."
Bergfeld's Biomarkt, Germany

"The flexible system optimally accommodates different cooling temperatures for all refrigerating units and can be controlled remotely. The system's near-silent operation guarantees that the noise level is kept at a minimum for residents."
Hotel 47°, Germany

Tools and platforms



Sales supporting apps

We offer a variety of building modelling, selection, simulation and quotation software tools to support your sales.

Refrigeration Xpress selection software
User-friendly design and selection software for Conveni-Pack, CCU/SCU, monoblocks, bi-blocks and ZEAS condensing units. Its detailed report includes a list of materials, piping and wiring diagrams, and device options.

The **Psychrometric Diagram Viewer** helps designers, consultants, students and other professionals to get more insight in our fields of activities: "the air that we condition"

Where to download the software?
Where to find catalogues and data books?

Register and login on
my.daikin.eu
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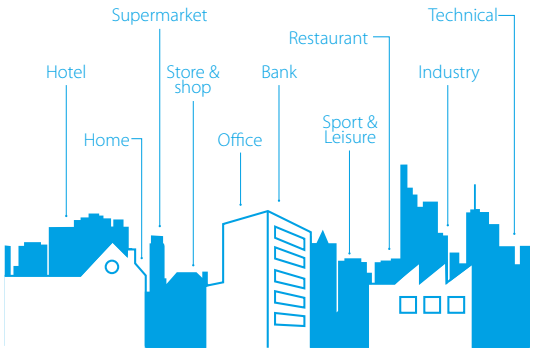


Acting ahead of legislation

TEWI, Total Equivalent Warming Impact

By incorporating advanced technologies, our refrigeration units reduce their Total Equivalent Warming Impact (TEWI) to achieve higher energy efficiency (stimulated by Eco-design) and a lower carbon footprint (stimulated by F-Gas legislation).

Ecodesign Directive - Energy related products

The EU's Ecodesign Directive 2009/125/EC is designed to encourage the market to use more efficient products. It also helps manufacturers to agree a better definition of efficiency for remote condensing units. Since 01/07/2016 refrigeration units also need to comply with this system of minimum efficiency requirements.

In catalogues the seasonal data will be marked with the seasonal flower.

Find more information about the seasonal data in refrigeration on our website: www.daikin.eu
or on the Business Portal my.daikin.eu

Ecodesign EN 13215: Definition of the nominal operating conditions (capacity, COP and power consumption)

Temperature application	Medium	Low
Ambient temperature	32°C	32°C
Evaporation temperature	-10°C	-35°C
Suction gas side	10 K superheat OR 20°C suction gas temperature	
Subcooling degree of the liquid	Depending on the condenser coil used in the refrigeration system	

To define the efficiency of a condensing unit the Ecodesign Directive used the EN13215 regulation.
Both methodologies are allowed to define delivered cooling capacity and efficiency of a unit.

→ This has also an impact on the SEPR AND COP value.

Two methodologies to evaluate the unit performance

Low capacities
Condensing unit installed indoor

COP methodology:

› If the medium temperature cooling capacity is lower than 5 kW and low temperature cooling capacity is lower than 2 KW

› COP given on 25°C ambient temperature

› COP given on 32°C ambient temperature

› COP given on 43°C: mandatory if ambient temperature design is higher or equal to 35°C

Minimum efficiency (COP):

› Medium temperature:
Capacity lower or equal 1 kW = 1.2
Capacity lower or equal 5 kW = 1.4

› Low temperature:
Capacity lower or equal 1 kW = 0.75
Capacity lower or equal 2 kW = 0.85

Higher capacities
Condensing unit installed outdoors (climate depending)

SEPR methodology:

› If the medium temperature cooling capacity is higher than 5 kW and low temperature cooling capacity is higher than 2 KW

› SEPR given on the reference climate zone of Strasbourg

› COP given on 43°C: mandatory if ambient temperature design is higher or equal to 35°C

Minimum efficiency (SEPR):

› Medium temperature:
Capacity lower or equal 20 kW = 2.25
Capacity lower or equal 50 kW = 2.35

› Low temperature:
Capacity lower or equal 8 kW = 1.5
Capacity lower or equal 20 kW = 1.6

Daikin refrigeration product portfolio and Ecodesign Directive

	JEHCCU	JEHSCU	ZEAS	MULTI ZEAS	CONVENI-PACK	BOOSTER
Daikin model						
Medium temperature (Te = -10°C)	in scope	in scope	in scope	out of scope(1)	out of scope(2)	-
Low temperature (Te = -35°C)	in scope	in scope	in scope	out of scope(1)	-	out of scope(3)

(1) Delivered capacity of the multi Zeas units in medium and low temperature application are higher than the upper boundary (MT: Q > 50 kW; LT: Q > 20 kW) mentioned in the Ecodesign Directive

(2) The CVP can only operate when also Daikin indoor units are connected. This means that the CVP can be seen as a condensing unit with multiple condensers which is considered out of scope of the Ecodesign Directive ENTR LOT1

(3) The booster unit is not seen as a condensing unit, because the heat extracted from the evaporator side is (LT –side) discharge in the MT refrigerant line of a CVP or Zeas unit and not to the surrounding air as described in the Ecodesign Directive ENTR LOT1

Zanotti refrigeration product portfolio and Ecodesign Directive

	Condensing units	Twin condensing units	Inverter condensing units	Multi compressors condensing units
	CU	CU-T	CI	CM / CL
Zanotti model				
Medium temperature (Te = -10°C)	In scope*	In scope*	In scope*	In scope*
Low temperature (Te = -35°C)	In scope*	In scope*	In scope*	In scope*

*Note: Only the models which the delivered refrigeration capacity is within the capacity range defined in the Ecodesign directive (LT < 20 kW, MT < 50 kW)

F-gas regulation

What does the F-Gas regulation mean?

GWP < 2500

Common commercial HFC refrigerants:
R-134a, R-407A, R-407C, R-407F, R-410A

GWP 2500

GWP > 2500

Common commercial HFC refrigerants:
R-404A, R-507

Ban from the year 2020 onwards
in new stationary refrigeration equipment

Ban from the year 2030 onwards
in servicing existing stationary refrigeration equipment

Stationary refrigeration equipment

FOLLOW THE DECISION TREE

Stationary refrigeration equipment
(= systems which are not in transit during operation)

From 2020:
use refrigerants with GWP <2500

Is it a domestic refrigerator?

YES → From 2015: **use refrigerants with GWP < 150**

NO → Is it an integral / plug-in?

YES → From 2020: **use refrigerants with GWP < 2500** From 2022: **use refrigerants with GWP < 150**

NO → Is it a multi-pack centralised refrigeration system*?

YES → **Use refigerants with GWP < 2500**

NO → **Use refigerants with GWP < 2500**

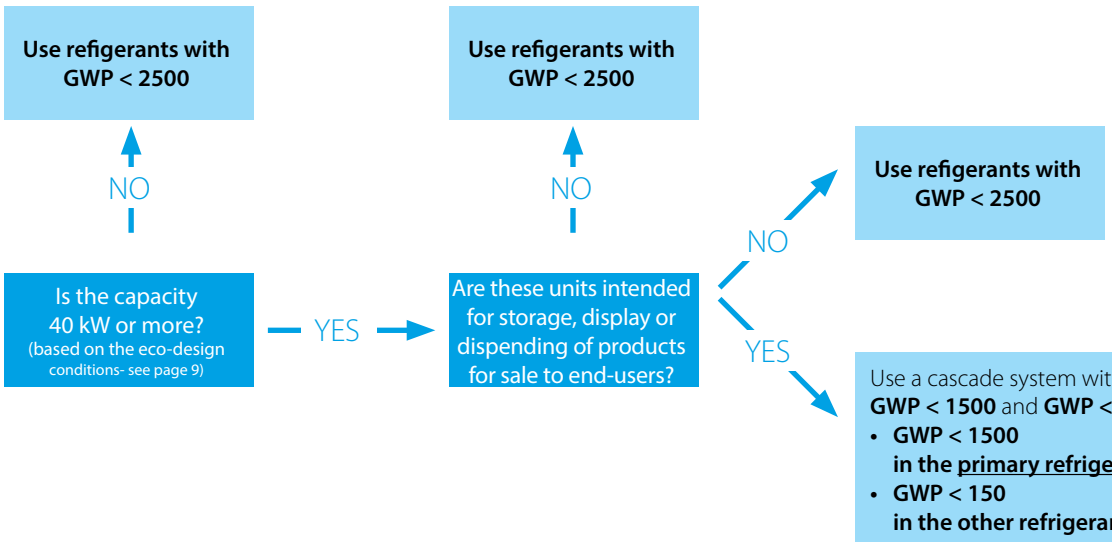
* "Multipack centralised refrigeration systems" = Systems with two or more compressors operated in parallel, which are connected to one or more common condensers and to a number of cooling devices such as display cases, cabinets, freezers or to chilled store rooms.

What about Daikin refrigeration systems?

Daikin offers more innovative and environmentally-friendly refrigeration solutions than others thanks to:

- R-410A high efficiency refrigerant which reduces also the total refrigerant charge of a system (Conveni-Pack/ZEAS)
- The use of innovative technology:
  - DAIKIN scroll or single screw compressor with economizer technology
  - Capacity control through DC (Conveni-Pack/ ZEAS) and DC inverter fan technology (Ecodesign compliant)
  - Efficient floating head pressure control
  - Efficient floating evaporator pressure control
- Factory tested/assembled unit
- Split large refrigeration systems into smaller units and distribute

In this catalogue you will find below logo to recognize the units which are line with the F-Gas regulation:



E. LECLERC, HYPERMARKET
ZEAS

CHILLED WITH ZEAS

EDEKA, SUPERMARKET
CONVENI-PACK (2) AND ZEAS (1)

BÄKO WEST EG, BAKERY CO-OPERATIVE

ZEAS FOR COOLING (6) AND FREEZING (6)

ZIGGO DOME, EVENT HALL

ZEAS FOR COOLING (6) AND FREEZING (2)

Daikin Refrigeration Range

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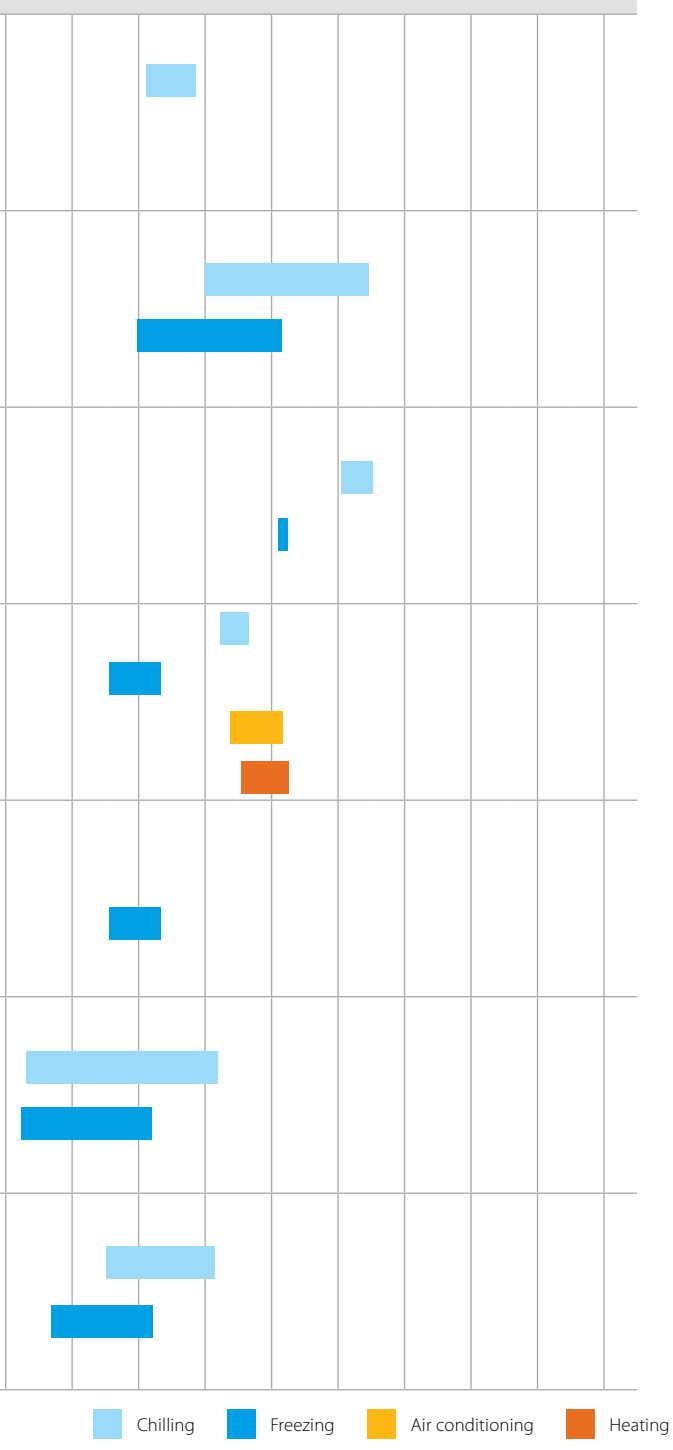
For latest data, please consult my.daikin.eu

Product range overview - Daikin

Model	Product name	Capacity (kW)
Small inverter condensing unit for commercial refrigeration	Mini-ZEAS LRMEQ3-4BY1	
Inverter condensing unit for commercial refrigeration	ZEAS LREQ5-20BY1	
	Multi ZEAS LREQ-BY1R	
Integrated solution for chilling, freezing and comfort cooling and heating	Conveni-Pack LRYEQ-AY	
Booster unit to allow both ZEAS and Conveni-Pack freezing applications	Booster unit LCBKQ-AV1	
Commercial condensing units with reciprocating technology	CCU JEHCCU-M1/M3/L1/L3 JEHCCU-CM1/CM3	
Commercial condensing units with scroll technology	SCU JEHSCU-M1/M3/L3 JEHSCU-CM1/CM3	



ZEAS condensing unit for medium and low temperature refrigeration

Why choose ZEAS?

Whether it is restaurants, supermarkets or event halls - ZEAS from Daikin is as individual as the requirements of the industries where it is used.

High energy efficiency

› Daikin inverter scroll compressor with economizer technology
› DC inverter fan technology
› Eco-design compliant
› F-Gas regulation (R-410A) compliant

Reliable operation

› ZEAS condensing units are rigorously tested on the assembly line
› Proven inverter scroll technology
› Anti-corrosion treatment on the housing ensures long life even in extreme conditions

Small foot print and low weight

› Extremely compact and space-saving design
› Easy to install, even in the smallest spaces
› Indoor installation possible
› Best surface to capacity ratio on the market
› Low weight thanks to the compact design

Comfort

› Quiet operation, unobtrusive for customers and neighbours
- High grade sound insulation on panels and compressors
- Condenser fans designed to limit noise
- 4 low noise operation settings including night mode
› Wide temperature range allows multiple cabinet, freezer and cold room combinations

Intelligent control

› Unit can be connected to a 3rd party monitoring system
› Remote control of target evaporation temperature, reset errors and other functions
› Refrigeration unit can be controlled remotely through a powerful interface

Benefits for installers

› Reduced delivery time thanks to European manufacturing plant
› Suitable for indoor and outdoor installation
› Reduced piping requirements and installation time
› Integrated electrical & control box
› Unit already pre-charged with refrigerant

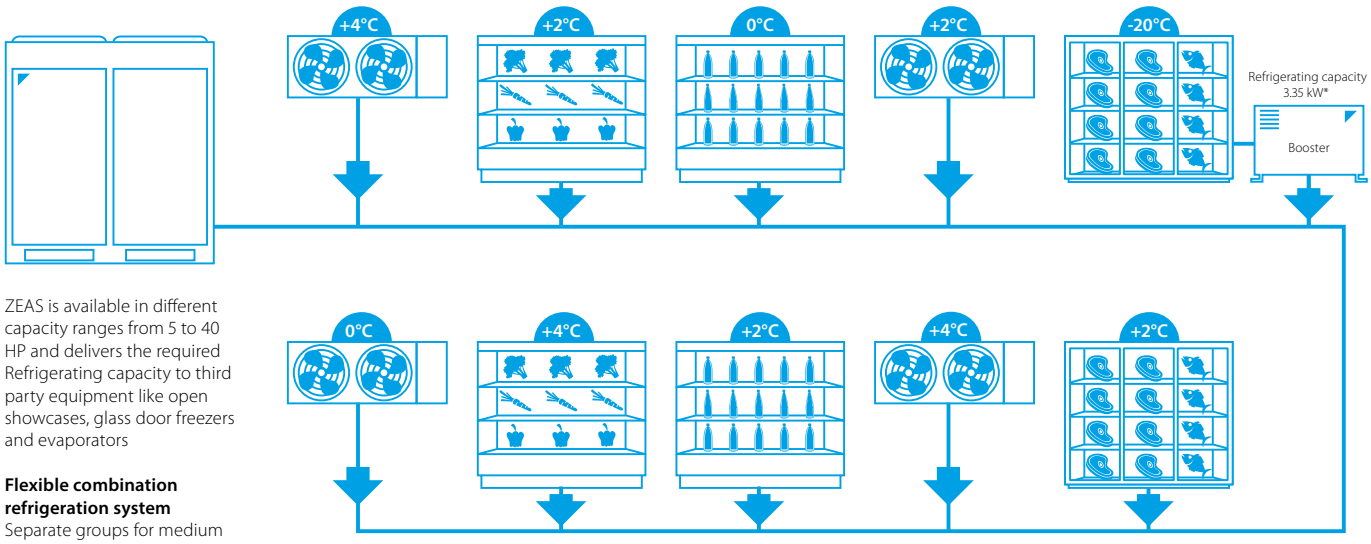
Benefits for consultants

› One model can cover for most refrigeration needs in the market
› Single unit can both cool and freeze, minimising the investment
› Wide capacity range
› High modularity of the refrigeration system
› Suitable to indoor installations through the use of high ESP fans

Benefits for end users

› Energy consumption is cut by 10 to 35% compared to traditional refrigeration equipment
› Small footprint and low weight requiring only light weight supporting structures
› A neighbourhood-friendly choice with its special night operation mode

ZEAS, the smart choice for medium and low temperature refrigeration



ZEAS is available in different capacity ranges from 5 to 40 HP and delivers the required Refrigerating capacity to third party equipment like open showcases, glass door freezers and evaporators

Flexible combination refrigeration system
Separate groups for medium and low temperature cooling, each with multiple cabinets and different temperatures. This flexibility and energy savings of up to 50% are only possible with ZEAS-systems.

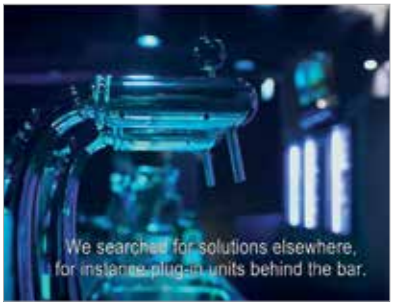
Operating range
Ambient temperatures: -20°C to +43 °C
Evaporating temperatures: -45°C to +10°C

* Te= -35°C, Tc = -10°C, 10 K SH, Tamb = 32°C

Marketing tools

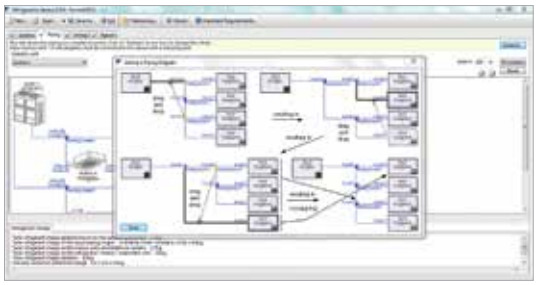
› See how transportation is simulated and vibrations are tested on our shaker (search: vibration ZEAS)

› Watch why a Dutch culture and entertainment venue chose ZEAS for its beverage cooling (search: Energiehuis ZEAS) www.youtube.com/DaikinEurope



Refrigeration Xpress selection software

› User-friendly design and selection software for Conveni-Pack, CCU/SCU, monoblocks, bi-blocks and ZEAS condensing units. Its detailed report includes a list of materials, piping and wiring diagrams, and device options.



ZEAS condensing unit for commercial refrigeration with scroll technology

Refrigeration solution for medium to large capacity applications featuring proven VRV technology

LREQ-BY1(R)

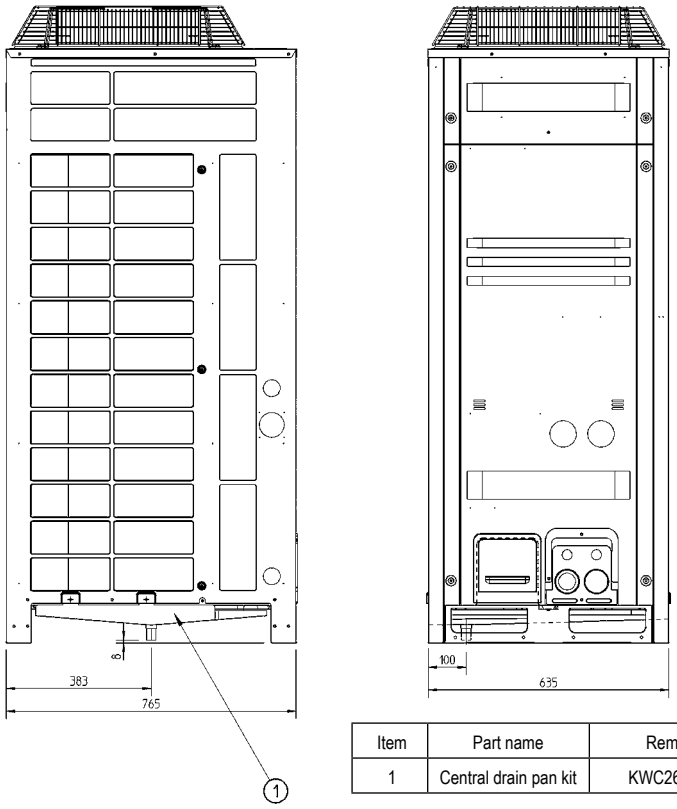
- One model for all applications from -45°C to 10°C evaporating temperature
- Perfect solution for all cooling and freezing applications with variable load conditions and high energy efficiency requirements.In particular used in supermarkets, cold storage, blast coolers and freezers etc.
- DC inverter scroll compressor with economiser function results in high energy efficiency and reliable performance
- Reduced CO2 emissions thanks to the use of R-410A refrigerant and low energy consumption
- Factory tested and pre-programmed for quick and easy installation and commissioning
- VRV (Variable Refrigerant Volume) technology for flexible application range
- Increased installation flexibility thanks to limited dimensions
- Low sound level including „night mode" operation
- For small freezing capacity, single ZEAS units can be connected to a booster unit
- Dedicated unit to allow multi combination of 2 x 15 HP or 2 x 20 HP resulting in less pipework or installation time

				LREQ-BY1	5	6	8	10	12	15	20
Refrigerating capacity	Low temperature	Nom.		kW	5,51 (1)	6,51 (1)	8,33 (1)	10,0 (1)	10,7 (1)	13,9 (1)	15,4 (1)
	Medium temperature	Nom.		kW	12,5 (2)	15,2 (2)	19,8 (2)	23,8 (2)	26,5 (2)	33,9 (2)	37,9 (2)
Power input	Low temperature	Nom.		kW	4,65 (1)	5,88 (1)	7,72 (1)	9,27 (1)	9,89 (1)	12,8 (1)	14,1 (1)
	Medium temperature	Nom.		kW	5,10 (2)	6,56 (2)	8,76 (2)	10,6 (2)	12,0 (2)	15,2 (2)	17,0 (2)
Seasonal energy performance ratio SEPR	R-410A	Te -10°C			3,86	3,79	3,64	3,42	3,51	3,38	3,23
		Te -35°C			1,61	1,65	1,71	1,69	1,67	1,60	1,61
Annual electricity consumption Q	R-410A	Te -10°C		kWh/a	19.907	24.681	33.483	42.794	46.377	61.683	72.030
		Te -35°C		kWh/a	25.547	29.366	36.361	44.054	47.872	64.822	71.162
Parameters at full load and ambient temp. 32°C (Point A)	R-410A	Te -10°C	Rated COP (COPA)		2,45	2,32	2,26	2,25	2,21	2,23	
		Te -35°C	Rated COP (COPA)		1,18	1,11		1,08		1,09	
Parameters at full load and ambient temp. 43°C	R-410A	Te -10°C	Declared COP (COP3)		1,54	1,57	1,40	1,46	1,47	1,46	1,51
		Te -35°C	Declared COP (COP3)		0,76	0,74	0,68	0,70	0,71		0,74
Dimensions	Unit	Height		mm	1.680						
		Width		mm	635		930			1.240	
		Depth		mm	765						
Weight	Unit			kg	166		242			331	337
Heat exchanger	Type				Cross fin coil						
Compressor	Type				Hermetically sealed scroll compressor						
	Output			W	2.600	3.200	2.100	3.000	3.400	2.600	3.400
	Piston displacement			m^3/h	11,18	13,85	19,68	23,36	25,27	32,24	35,8
	Speed			rpm	5.280	6.540	4.320	6.060	6.960	5.280	6.960
	Starting method				Direct on line (inverter driven)						
Compressor 2	Output			W	-		3.600				
	Speed			rpm	-		2.900				
Compressor 3	Output			W	-					3.600	
	Speed			rpm	-					2.900	
Fan	Type				Propeller fan						
	Quantity				1					2	
	Air flow rate	Cooling	Nom.	m^3/min	95	102	171	179	191	230	240
Fan motor	Output			W	350		750			350	750
	Drive				Direct drive						
Fan motor 2	Output			W	-					350	750
Sound pressure level	Nom.			dBA	55,0 (3)	56,0 (3)	57,0 (3)	59,0 (3)	61,0 (3)	62,0 (3)	63,0 (3)
Operation range	Evaporator	Cooling	Max.~Min.	°CDB	10~-45						
Refrigerant	Type / GWP				R-410A / 2.087,5						
	Charge			kg	5,2		7,9			11,5	
				TCO_2eq	10,9		16,5			24,0	
	Control				Electronic expansion valve						
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415						

				LREQ-BY1	30	40
System	Outdoor unit module 1				LREQ15BY1R	LREQ20BY1R
	Outdoor unit module 2				LREQ15BY1R	LREQ20BY1R
Refrigerating capacity	Medium temperature	Nom.		kW	67,8 (1)	75,8 (1)
	Low temperature	Nom.		kW	27,8	29,6
Power input	Medium temperature	Nom.		kW	30,4	34,0
	Low temperature	Nom.		kW	25,6	27,6
Sound pressure level	Nom.			dBA	65,0	66,0
Piping connections	Liquid				ø 19,05	
	Gas				ø 41,28	

(1) Cooling: evaporating temp. -10°C; outdoor temp. 32°C; suction SH10°C (2) Cooling: evaporating temp. -35°C; outdoor temp. 32°C; suction SH10°C (3) Sound pressure data: measured at 1m in front of unit, at 1.5m height | RLA is based on following conditions: outdoor temp. 32°CDB; suction SH 10°C; saturated temperature equivalent to suction pressure -10°C

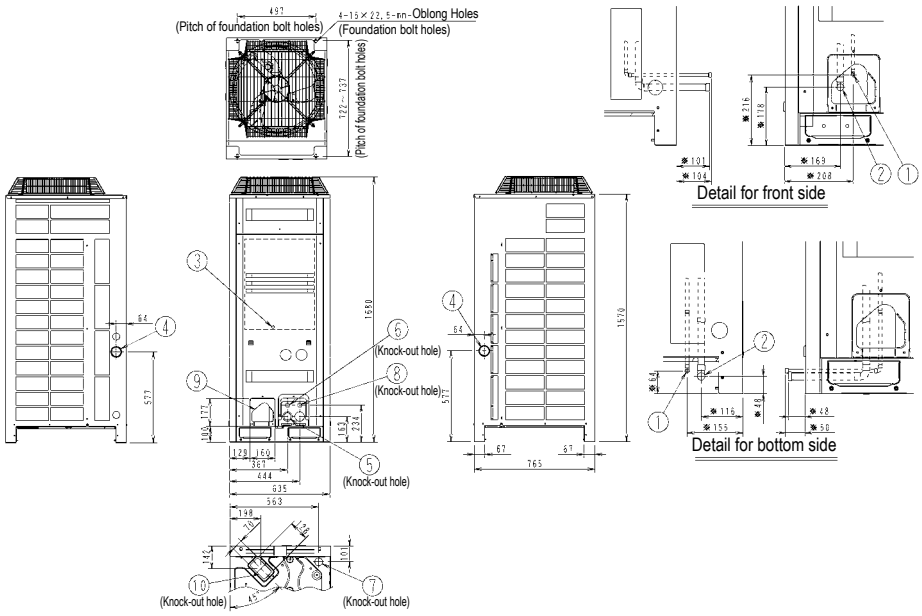
LREQ5,6BY1



Item	Part name	Remark
1	Central drain pan kit	KWC26B160

3TW27234-1

LREQ5,6BY1



MODEL
LREQ5, 6BY1

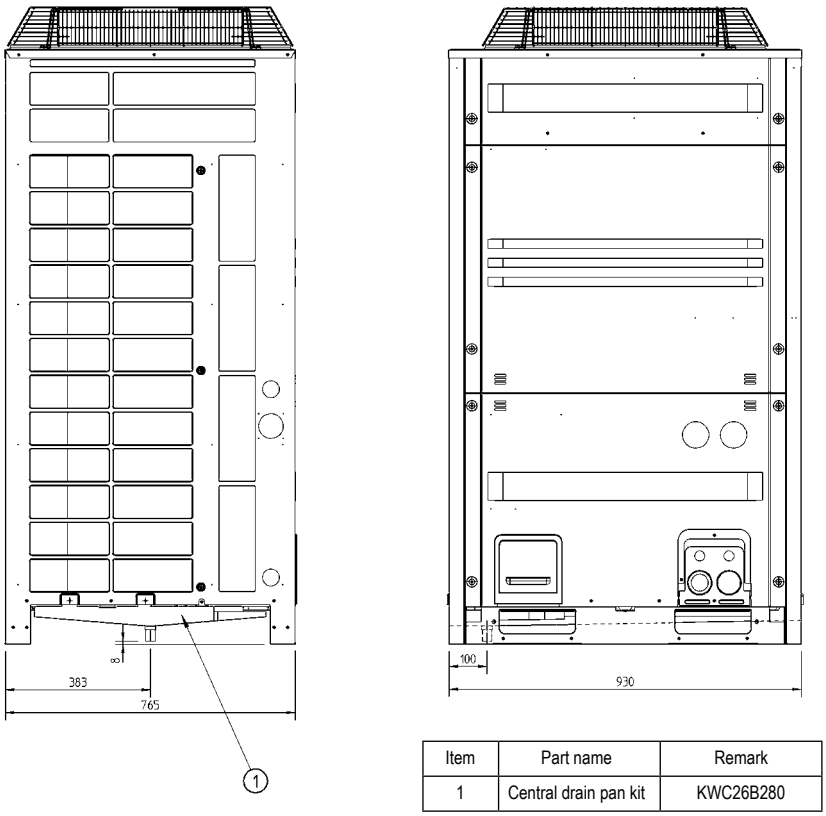
3D076985

No.	Parts name	Remarks
1	Liquid pipe connection port	ø 9.5
2	Gas pipe connection port	ø 22.2
3	Earth terminal	Inside of electric component box (M8)
4	Power cord routing hole (side)	ø 62
5	Power cord routing hole (front)	ø 45
6	Power cord routing hole (front)	ø 27
7	Power cord routing hole (bottom)	ø 50
8	Wire routing hole (front)	ø 27
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	

NOTES

1. Detail for front side and detail for bottom side indicate the dimensions after fixing the attached piping.
2. "※" is a size in the state where accessory piping is connected.

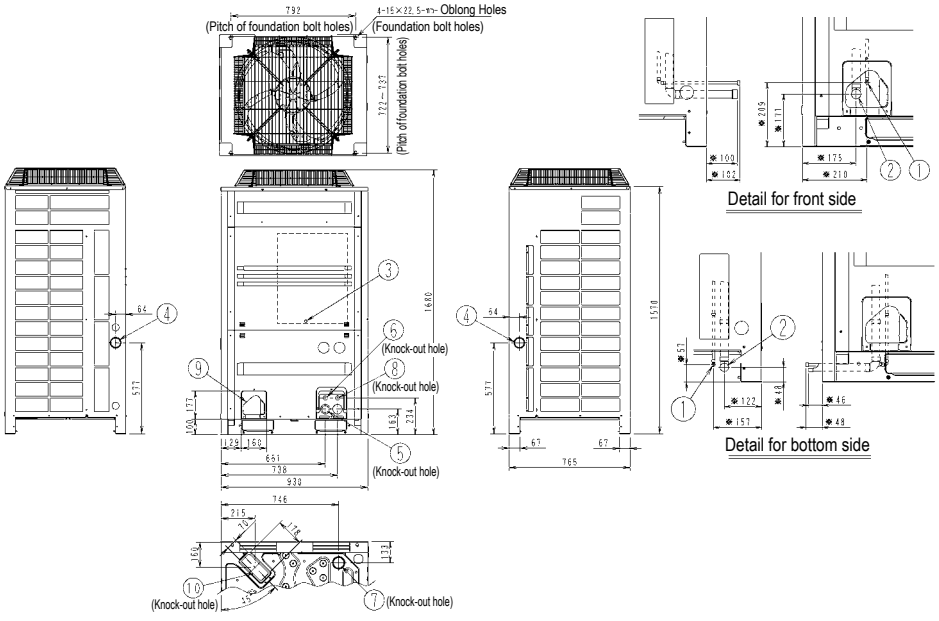
LREQ8-12BY1



Item	Part name	Remark
1	Central drain pan kit	KWC26B280

3TW27244-1

LREQ8-12BY1



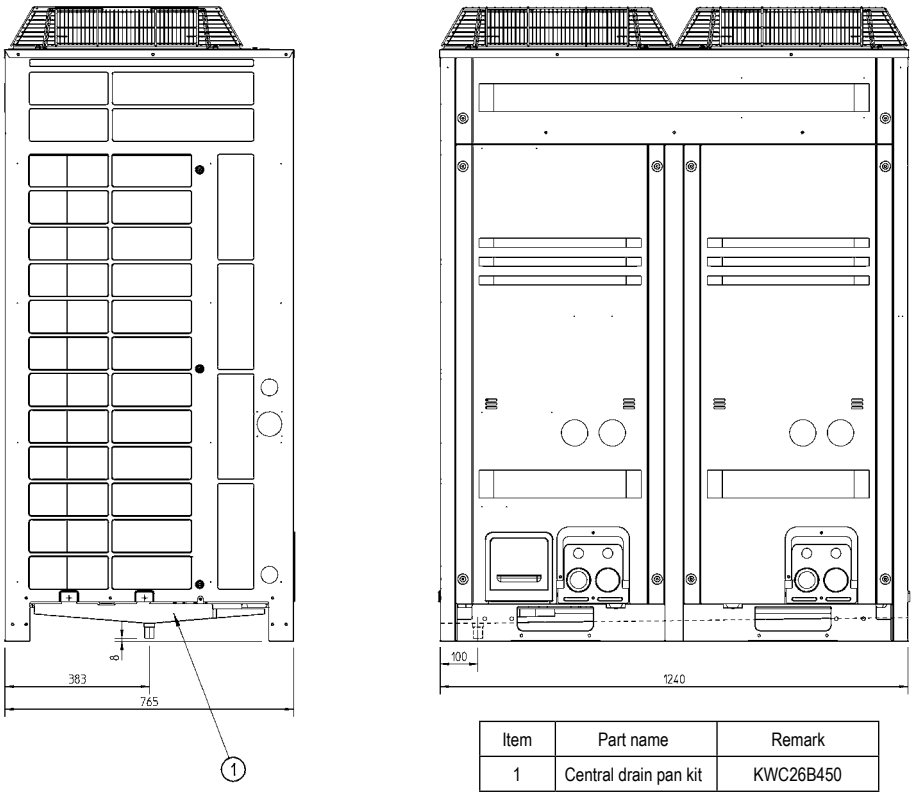
3D076986

No.	Parts name	Remarks
1	Liquid pipe connection port	ø 12.7
2	Gas pipe connection port	ø 28.6
3	Earth terminal	Inside of electric component box (M8)
4	Power cord routing hole (side)	ø 62
5	Power cord routing hole (front)	ø 45
6	Power cord routing hole (front)	ø 27
7	Power cord routing hole (bottom)	ø 65.5
8	Wire routing hole (front)	ø 27
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	

NOTES

1. Detail for front side and detail for bottom side indicate the dimensions after fixing the attached piping.
2. "※" is a size in the state where accessory piping is connected.

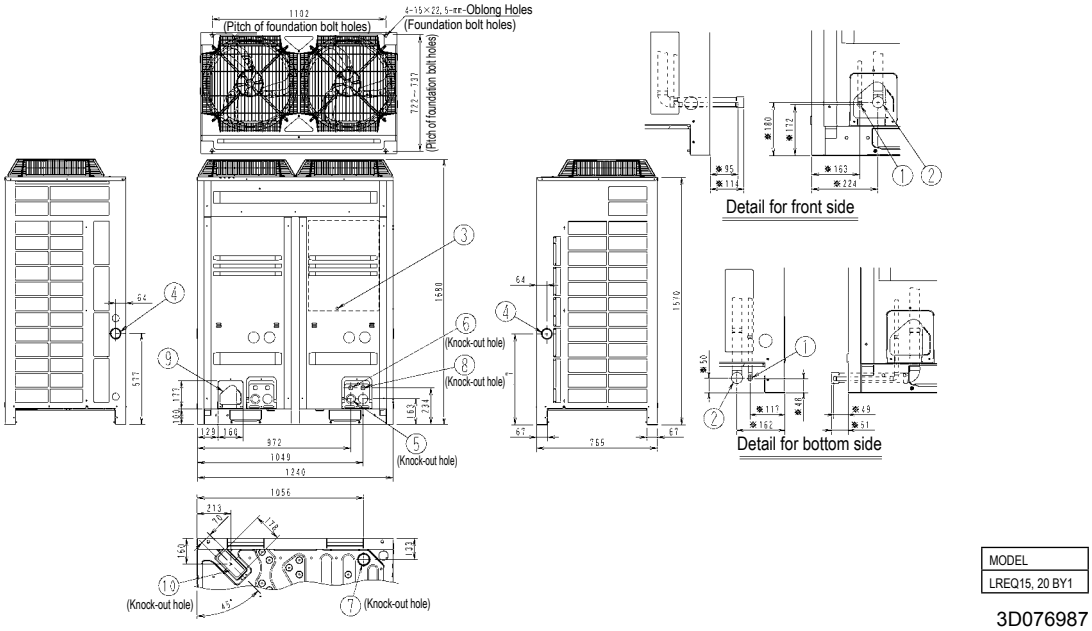
LREQ15-20BY1



Item	Part name	Remark
1	Central drain pan kit	KWC26B450

3TW27274-1

LREQ15-20BY1



MODEL
LREQ15, 20 BY1

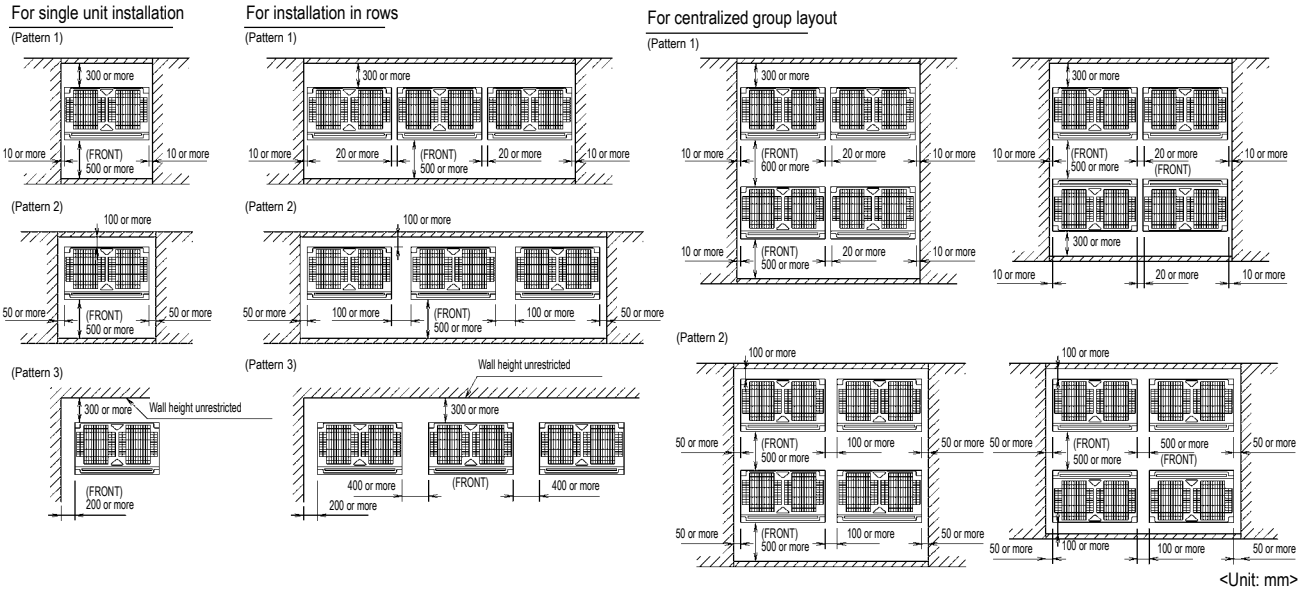
3D076987

No.	Parts name	Remarks
1	Liquid pipe connection port	ø 12.7
2	Gas pipe connection port	ø 34.9
3	Earth terminal	Inside of electric component box (M8)
4	Power cord routing hole (side)	ø 62
5	Power cord routing hole (front)	ø 45
6	Power cord routing hole (front)	ø 27
7	Power cord routing hole (bottom)	ø 65.5
8	Wire routing hole (front)	ø 27
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	

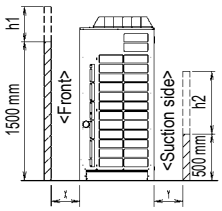
NOTES

1. Detail for front side and detail for bottom side indicate the dimensions after fixing the attached piping.
2. "※" is a size in the state where accessory piping is connected.

LREQ-BY1



MODEL
LREQ5, 6, 8, 10, 12, 15, 20BY1



NOTES

1. Heights of walls in case of patterns 1 and 2:
   Front: 1500mm
   Suction side: 500mm
   Side: Height unrestricted
   Installation space as shown on this drawing is based on the cooling operation at 35 degrees outdoor air temperature.
   When the design outdoor air temperature exceeds 32 degrees or the load exceeds maximum ability because of much generation load of heat in all outdoor unit, take the suction side space more broadly than the space to be shown in this drawing.
2. If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the figure on the right.
   h1=A (Actual height)-1500
   h2=B (Actual height)-500
   X=500+h1/2 or over
   X=300+h2/2 or over
   (Y=100+h2/2 or over)
   [Values in parentheses are for pattern 2]
3. When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough space for a person to pass between units and wall and for the air to circulate freely.
   (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits).
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

3D065029B

Mini-ZEAS
LRMEQ3-4BY1

☑ Two models available

☑ Plug and play system
reduces installation time and cost

☑ F-Gas compliant (R-410A)

☑ Very low operating sound level (in line with the most stringent urban sound legislations)

☑ Small footprint (up to 60% smaller than equivalent products in the market)

Coming:
October
2017

☑ High efficiency
reducing energy costs

☑ Ideal solution
for multiple smaller refrigerati-on applications (butcher shops, bakeries, restaurants,…)

Conveni-Pack,

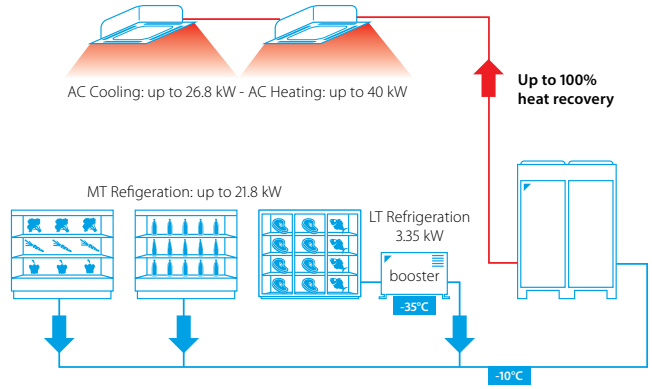
integrated solution for commercial refrigeration, heating and air conditioning

Why choose Conveni-Pack?

Competition in the retail food sector is fierce. This does not just affect the income you can earn from sales - operating costs are also a determing factor for success.

Energy efficient heat recovery system

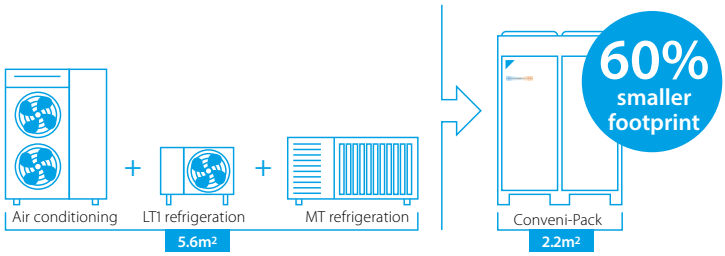
- Conveni-Pack recovers up to 100% of the heat extracted from supermarket refrigeration cases and re-uses it to heat the retail space and improve shop comfort at no additional cost (heat recovery system)
- Savings of up to 50% on energy costs
- Daikin inverter scroll compressor with economizer technology



Above-mentioned scheme is an example of what can be delivered depending on predefined conditions.
For more detailed information, please consult the technical specifications in this catalogue.

Installing a compact solution

- Easy to install, even in small spaces
- Small footprint (up to 60% smaller footprint than conventional systems) and low weight
- Reduced piping requirements
- Minimal planning groundwork and lower assembly costs



Unique combination

- First mass-produced, whole-building system to combine medium and low refrigeration, heating, air conditioning in one circuit

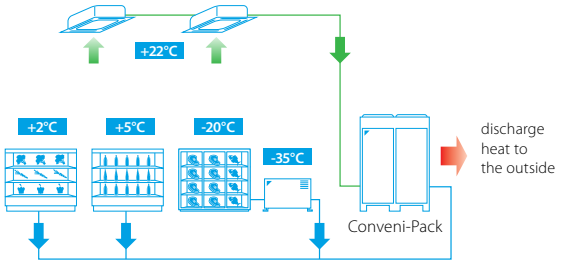
Reliable operation

- Error-proof component selection
- Factory leak-tested and pre-charged

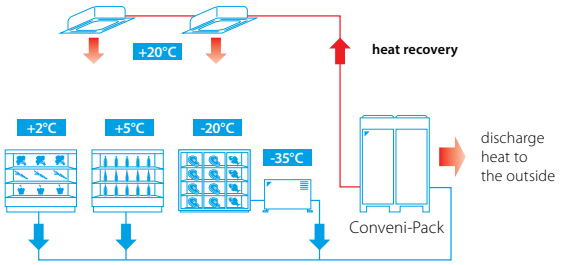
Year-round climate comfort

- Quiet operation : Improved acoustics thanks to night operation mode, inverter control and inverter driven fans with optimised blades and grills
- High grade sound insulation on both panels and compressors
- Specially designed fan blades to limit sound emissions
- 4 low sound operation settings including night mode
- The heat recovered from refrigerated and freezer display cabinets can be used to provide heating for the shop.

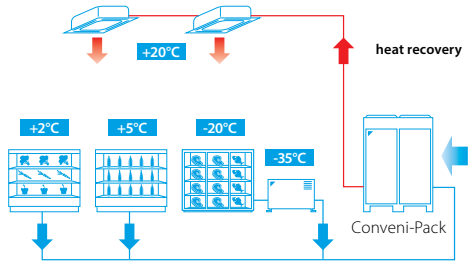
Summer



Spring/Autumn



Winter



If available heat from the cabinet is not sufficient to fulfill the demand from the shop, the outdoor unit will also operate as a heat pump system.

Internationally awarded

Winner of several awards* thanks to the innovating technology used and environmental friendly solution offered:

- Winner of UK Environmental Product of the Year, Cooling Industry Awards - 2006
- Winner of Incentive Prize, German Environment Ministry - 2007
- Winner of the Innovation Trophy, equipmag (exhibition in France) - 2008
- Winner of 2014 Institute of Refrigeration Ireland (IRI) Environmental award
- Environmental Friendliness category of the Top Retail Product Awards 2014 in Germany

Reference

Edeka Buschkühle supermarket (Germany)
2 Conveni-Pack systems supply 32 meters of service counters, 12.5 meters of convenience fridges, one cooling storage room for fruit, an air curtain and 5 indoor units; the ZEAS system supplies two deep-freeze cabinets with a total capacity of 5 kW.

Discover more references on
www.daikineurope.com/references

Benefits for installers/consultants

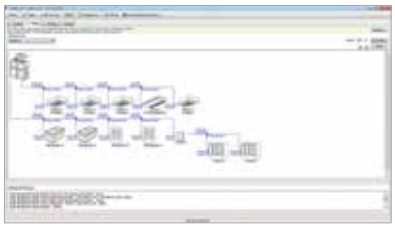
- Integrated electrical & control box
- Unit already pre-charged with refrigerant
- Established VRV technology ensuring optimised installation and maintenance
- Reduced delivery time thanks to European manufacturing plant
- Flexible system for multiple applications
- Connectable to all grocery refrigeration applications and supplied with a wide range of air conditioning indoor units to meet shop requirements
- Outdoor units can be positioned up to 35m above or 10m below the indoor units
- Piping length possible up to 130m
- Suitable for indoor installation through the use of high ESP fans

Benefits for shop owners

- Thought design for supermarkets and smaller retail outlets
- Maximised retail sales space available as Conveni-Pack has a footprint up to 60% smaller than conventional grocery refrigeration systems
- Reduced energy consumption by up to 50% through heat recovery
- Quiet operation, thus ideal for densely populated urban areas

Marketing tools

Refrigeration Xpress
User-friendly design software for Conveni-Pack, CCU, SCU and ZEAS condensing units. Its detailed report includes a list of materials, piping and wiring diagrams, and device options.



Short videos

- Watch a short animation on the unique refrigeration solution Conveni-Pack
- Discover why a Belgian petrol station owner chose Daikin for its shop comfort and refrigeration needs.
  www.youtube.com/DaikinEurope

Indoor units and Biddle air curtains for connection to Conveni-Pack

To respond to all shop requirements for comfort cooling and heating, a wide range of air conditioning indoor units and Biddle air curtains are available.

Capacity class (kW)

Model	Product name		50	63	71	80	100	125	140	200	250
Cooling capacity (kW)[1]			5,6	7,1	8,0	9,0	11,2	14,0	16,0	22,4	28,0
Heating capacity (kW)[2]			6,3	8,0	9,0	10,0	12,5	16,0	18,0	25,0	31,5
Round flow cassette	FXFQ-A		●	●		●	●	●			
2-way blow ceiling mounted cassette	FXCQ-A		●	●		●		●			
Ceiling mounted corner cassette	FXKQ-MA			●							
Concealed ceiling unit with inverter driven fan	FXSQ-A		●	●		●	●	●			
Concealed ceiling unit with inverter driven fan	FXMQ-P7		●	●		●	●	●			
Large concealed ceiling unit	FXMQ-MB									●	●
Ceiling suspended unit	FXHQ-A			●			●				
4-way blow ceiling suspended unit	FXUQ-A				●		●				
Floor standing unit	FXLQ-P		●	●							
Concealed floor standing unit	FXNQ-A		●	●							

Capacity class (kW)

Model	Product Name		80	100	125	140	200	250
Heating capacity (kW)[2]			7,4 - 9,2	11,6 - 13,4	15,6	16,2 - 19,9	29,4	29,4 - 31,1
Biddle air curtain free hanging	CYVS-DK		●	●	●	●	●	●
Biddle air curtain cassette	CYVM-DK		●	●	●	●	●	●
Biddle air curtain recessed	CYVL-DK		●	●	●	●	●	●

[1] Nominal cooling capacities are based on: indoor temperature: 27°CDB / 19°CWB, outdoor temperature: 35°CDB, piping length: 7,5m, level difference: 0m

[2] Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB / 6°CWB, piping length: 7,5m, level difference: 0m

Conveni-Pack refrigeration system with heat recovery

Refrigeration solution for food retailers featuring award winning technology for heat recovery

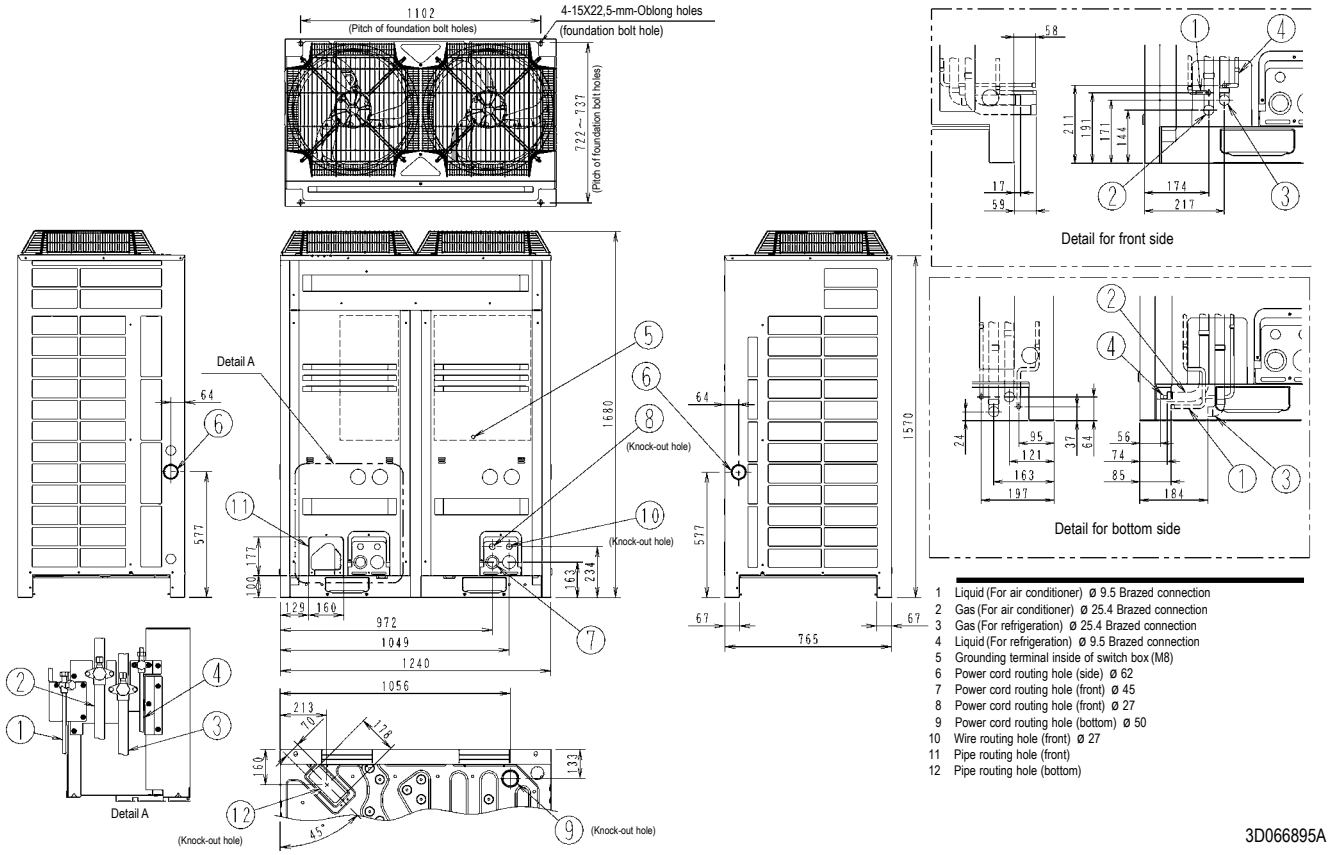
- Integrates high and low temperature refrigeration and air conditioning (including heating) into one system
- By using heat recovery, optimised controls and state of the art compressor technology, Conveni-pack can reduce annual energy consumption up to 50% or more, compared to conventional systems
- Lower associated CO_2 emissions thanks to the heat pump technology
- Conveni-pack's modular design allows it to be used for smaller as well as larger shops
- The modularity of the Conveni-pack system maximises installation flexibility. Outdoor units can be grouped into blocks or rows, or distributed around the building, to meet individual installation constraints
- The heat extracted from the refrigeration showcases or evaporators can be re-used for comfort heating of the shop at no extra cost
- Low sound level including „night mode" operation

LRYEQ16AY

Medium Temperature Refrigeration				LRYEQ-AY	16
Cooling capacity	Air conditioning	Nom.		kW	14,0 (1)
	Refrigeration	Nom.		kW	21,8 (2)
Heating capacity	Air conditioning	Nom.		kW	27,0 (3)
	Refrigeration	Nom.		kW	21,8 (4)
Dimensions	Unit	Height		mm	1.680
		Width		mm	1.240
		Depth		mm	765
Weight	Unit			kg	370
Heat exchanger	Type				Cross fin coil
Compressor	Type				Hermetically sealed scroll compressor
	Piston displacement			m^3/h	13,34
	Speed			rpm	6.300
	Output			W	2.500
	Starting method				Direct on line (inverter driven)
	Frequency ON/OFF				Less than 6 times/hour
Compressor 2	Speed			rpm	2.900
	Output			W	3.600
Compressor 3	Speed			rpm	2.900
	Output			W	4.500
Fan	Type				Propeller fan
	Quantity				2
	Air flow rate	Cooling	Nom.	m^3/min	230
Fan motor	Output			W	750
	Drive				Direct drive
Sound pressure level	Nom.			dBA	62,0
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-20~10
	Cooling	Ambient	Min.~Max.	°CDB	-5~43
	Heating	Ambient	Min.~Max.	°CDB	-15~21
Refrigerant	Type				R-410A
	GWP				2.087,5
	Charge			kg	11,5
				TCO_2eq	24,0
	Control				Electronic expansion valve
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415

(1) Cooling priority mode: indoor temp. 27°CDB, 19°CWB; outdoor temp. 32°CDB; piping length: 7.5m; level difference: 0m (2) Cooling priority mode: evaporating temp. -10°C; outdoor temp. 32°CDB; Suction SH: 10°C (3) Heat recovery 100% mode: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; refrigeration load 18kW; piping length: 7.5m; level difference: 0m (4) Saturated temperature equivalent to suction pressure (refrigeration side): -10°C (under chilled condition); connection capacity for indoor air conditioner: 10HP, when heat recovery is 100%

LRYEQ16AY



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LRYEQ-AY

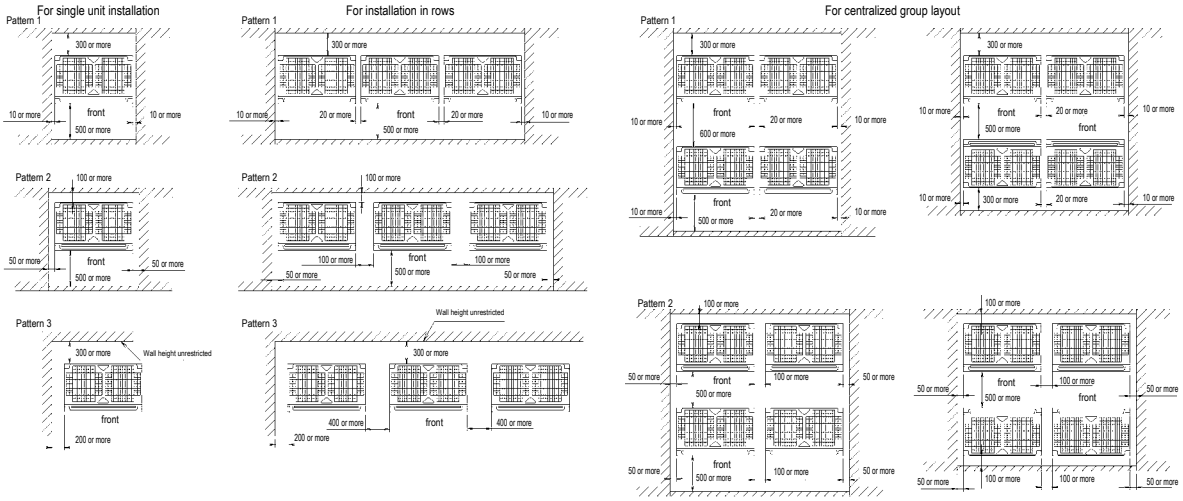
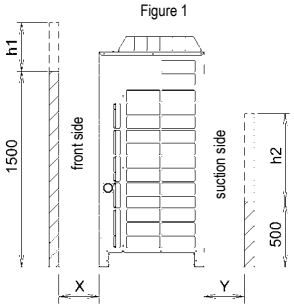


Figure 1

1. Heights of walls in case of patterns 1 and 2:
   Front: 1500
   Suction side: 500mm
   Side: Height unrestricted
   The installation space as shown on this drawing is based on cooling operation at 32°C (outdoor air temperature).
   If the design outdoor air temperature exceeds 32°C degrees, provide a broader suction space than showing on the drawing.
2. If the walls are higher than mentioned above, then additional space is needed.
   Suction side: service space + h2/2
   Front side: service space + h1/2
   See figure 1
3. When installing the units, select the pattern that best fits the available space.
   Always keep in mind to leave sufficient space for a person to pass between unit and wall and for the air to circulate freely.
   If more units are to be installed than are catered for in the above patterns, your layout should take into account of the possibility of short circuits).
4. Provide sufficient space at the front to connect refrigerant piping (comfortably).



3D106211

CRÈME
MAIZENA

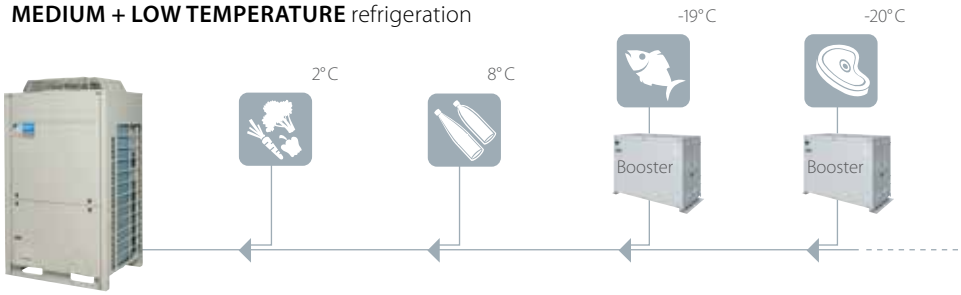
Booster unit

- A booster unit allows to connect freezer showcases / rooms to ZEAS and Conveni-Pack outdoor units
- Reduced piping requirements, from 4 to 2 pipes, compared to a conventional system
- Low sound mode available reducing sound emissions significantly without giving in on Refrigerating capacity

LCBKQ3AV1

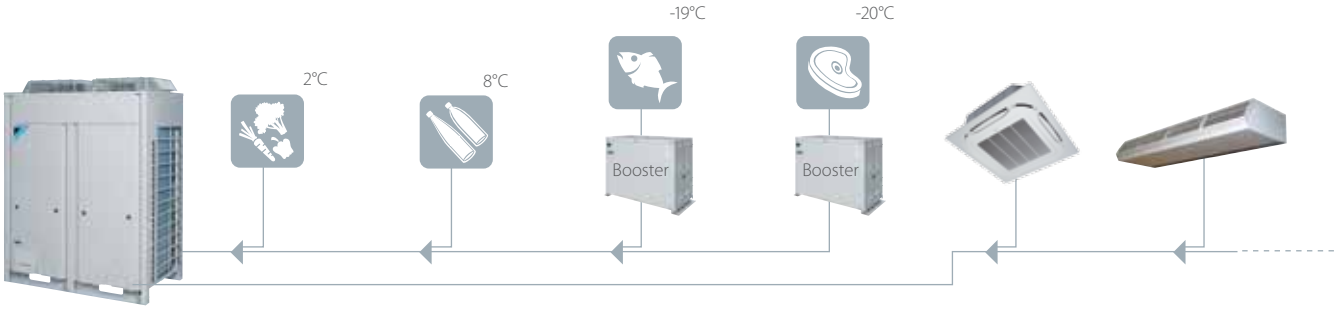
Booster with ZEAS:

MEDIUM + LOW TEMPERATURE refrigeration



Booster with Conveni-Pack:

MEDIUM + LOW TEMPERATURE refrigeration + space air conditioning + Biddle air curtain



Low Temperature Refrigeration					LCBKQ-AV1
Refrigerating capacity	Low temperature		Nom.	kW	3,35 (1)
Dimensions	Unit	Height		mm	480
		Width		mm	680
		Depth		mm	310
Weight	Unit			kg	47
Compressor	Type				Hermetically sealed swing compressor
	Piston displacement			m^3/h	10,16
	Number of revolutions			rpm	6.540
	Output			W	1.300
	Starting method				Direct on line (inverter driven)
	Frequency ON/OFF				Less than 6 times/hour
Fan	Type				Propeller fan
	Air flow rate	Cooling	Nom.	m^3/min	1,6
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-45~-20
	Ambient temperature	Min.~Max.		°C	-15~43
Refrigerant	Type				R-410A
	GWP				2.087,5
	Control				Electronic expansion valve
Piping connections	For outdoor unit	Liquid	OD	mm	6,35
	To indoor unit	Liquid	OD	mm	6,35
	For indoor unit	Gas	OD	mm	15,9
	To outdoor unit	Gas	OD	mm	9,5
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/220-240

(1) Evaporating temp. -35°C; outdoor temp. 32°C; suction SH 10K; saturated temp. to discharge pressure of booster unit -10°C

Options overview

Daikin refrigeration

		Conveni-Pack	ZEAS						Multi-ZEAS	
		LRYEQ16AY	LREQ5BY1	LREQ6BY1	LREQ8BY1	LREQ10BY1	LREQ12BY1	LREQ15BY1	LREQ20BY1	LREQ15BY1Rx2	LREQ20BY1Rx2
SEE NEXT PAGE	Digital pressure gauge kit	BHGP26A1									
Pressure gauge kit		-	KHGP26B140								
Snowbreak hood*	(a+b+c+d) kit	KPS26C504	KPS26C160		KPS26C280			KPS26C504			
	a. Air outlet	KPS26C504T	KPS26C160T		KPS26C280T			KPS26C504T			
	b. Air inlet (left)	KPS26C504L	KPS26C504L								
	c. Air inlet (right)	KPS26C504R	KPS26C504R								
	d. Air inlet (rear)	KPS26C504B	KPS26C160B		KPS26C280B			KPS26C504B			
Central drain pan kit		KWC26C450**	KWC26C160		KPS26C280			KPS26C450		KPS26C450*** x2	
SEE NEXT PAGE	Modbus communication kit	BRR9A1V1								BRR9A1V1****	
Booster unit		LCBKQ3AV19								-	
Suction branch pipe for multi		-	-							EKHRQZM*****	
Refnet header		KHRQM22M29H8									
		KHRQ22M64H8									
		KHRQM22M75H8									
Refnet joint		KHRQ22M20TA8									
		KHRQ22M29T9									
		KHRQ22M64T8									
		KHRQ22M75T8									
intelligent Touch Controller		DSC601C51	-								
intelligent Touch Manager		DCM601A51	-								

* Snowbreak hoods are field-supplied. For technical drawings and more information, contact your dealer. It is recommended to install a snowbreak hood when regular snowfall occurs.
** In cold areas, provide a drain pan heater (field supply) to prevent drained water from freezing up in the drain pan *** required for each module
**** software update required (to be executed during commissioning) ***** mandatory

Options

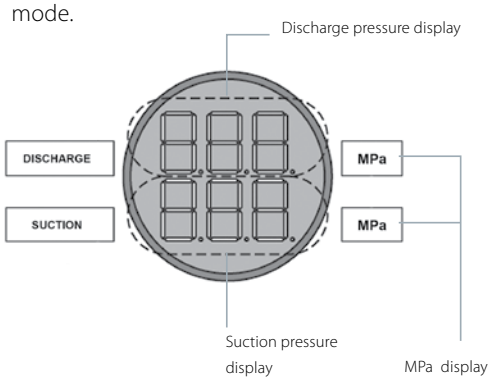
for ZEAS and Conveni-Pack

Digital pressure gauge kit

BHGP26A1

The digital measurement display allows you to diagnose a unit at a glance and it can be used with all ZEAS units and Conveni-Pack systems.

› Digital measurement display for fixed installation or service applications.
› Displays high and low pressure.
› Displays error codes in the event of a fault.
› Displays up to 32 operating parameters.
› Displays error code history (last three).
› Scrolls and stores output values.
› Automatically returns to normal operating display mode.



BHGP26A1

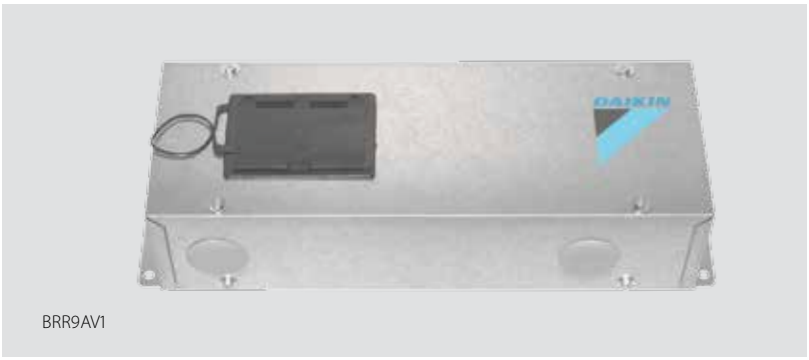
Modbus communication kit

BRR9A1V1

The Daikin Modbus Communication Interface lets you fully integrate Daikin ZEAS and Daikin Conveni-Pack systems with building control automation networks and other monitoring systems.

The interface allows you to read all the operational parameters and control important values using the Modbus protocol. This unifying component transforms ZEAS and Conveni-Pack into a transparent, customisable refrigeration unit and means that you can create object-specific and energy-optimised shop concepts, including remote monitoring application.

Pro interfaces can be used to connect up to 32 ZEAS units, and are also suitable for use with Conveni-Pack systems and the Booster.



BRR9AV1

Control values

› Target evaporation temperature
› Low pressure level for on and off points
› Forced stop
› Error messages can be cancelled remotely

Display values

› Model information and operating status
› Refrigerant operating pressure and temperatures
› Electrical operating data and temperatures for components
› Target values
› Fan stage and compressor frequency, operating hours
› Warning and error messages as well as system safety functions

JEHCCU and JEHSCU
Commercial plug-in condensing units

Why Daikin condensing units?

Daikin's commercial condensing units are ideal for use in cold stores, pubs, hotels, butchers, bakeries and similar locations which need reliable cooling at medium temperature.

› Daikin JEHCCU and JEHSCU series plug-in condensing units are the perfect solution for those looking for compact and economically priced solutions.

› Highly energy-efficient with operating ambient temperatures ranging from -15°C to +43°C.

› Daikin condensing units are suitable for refrigerants R-407F, R-407A, R-404A, R-134a and latest low GWP refrigerants R-448A and R-449A

› Carefully designed details: the whole range utilizes proven and specially optimized components for Daikin.

› Fast assembly, easy handling and an energy-optimized design ensure low investment and operating costs

› Redesigned to be lightweight and compact, with easy access, making installation and maintenance straightforward.

› Improved design and sound insulation make them ideal for urban locations, particularly near residential areas.

	Scroll compressor	Reciprocating compressor	230 V current	400 V current

● = R404A ▲ = R-407F ■ = R-407A ◆ = R-134A × = R-448A ★ = R-449A

NEW

	Refrigeration capacity (kW)															
MT cooling	**<1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
JEHCCU 0040 CM1	◆															
JEHCCU 0051 CM1	◆															
JEHCCU 0063 CM1	◆															
JEHCCU 0077 CM1		◆														
JEHCCU 0095 CM1		◆														
JEHCCU 0050 CM1	● ▲ ■ ★															
JEHCCU 0067 CM1	■	● ▲ ★														
JEHCCU 0100 CM1		● ▲ ■ ★														
JEHCCU 0113 CM1		● ▲ ■ ★														
JEHCCU 0140 CM1/3		■	● ▲ ★													
JEHSCU 0200 CM1/3			◆	● ▲ ■ ★ ×												
JEHSCU 0250 CM1/3			◆	▲ ★ ×	● ■											
JEHSCU 0300 CM1/3				◆	▲ ■ ★ ×	●										
JEHSCU 0350 CM3				◆	▲	● ■ × ★										
JEHSCU 0400 CM3					◆		■ ★ ×	● ▲								
JEHSCU 0500 CM3						◆		★ ×	● ▲ ■							
JEHSCU 0600 CM3							◆			● ■ ★ ×	▲					
JEHSCU 0680 CM3							◆				● ■ × ★	▲				
JEHSCU 0800 CM3								◆					▲ ■ ★ ×	●		
JEHSCU 1000 CM3										◆					■	● ▲ ★ ×

LT cooling	**<1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
JEHCCU 0115 CL1	● ■															
JEHSCU 0200 CL3		● ■ ★ ×														
JEHSCU 0300 CL3		● ■ ★ ×														
JEHSCU 0400 CL3			■ ★ ×	●												
JEHSCU 0500 CL3			■	● ★ ×												
JEHSCU 0600 CL3				■ ★ ×	●											
JEHSCU 0750 CL3					■ ★ ×	●										

MT: Evaporation temperature -10°C, ambient temperature 32°C
LT: Evaporation temperature -35°C, ambient temperature 32°C

Condensing unit for commercial refrigeration with reciprocating technology

Refrigeration solution for small food retailers

- Designed specifically for small capacity refrigeration applications in small food stores (eg. in bakeries and butchers), cold rooms, bottle coolers and display cabinets
- Compact and lightweight for even the smallest of city centre locations
- All components can be accessed, making maintenance quick and easy
- Ideal for urban applications: sound proofing and low operating sound levels mean the unit is quiet
- The optimised compressor range and increased condenser surface deliver high levels of energy efficiency and reliability is ensured by using high quality components and production processes
- Micro channel heat exchanger technology reduces the amount of refrigerant used in the system, lowering environmental impact

JEHCCU-CM1/CM3

Medium Temperature Refrigeration				JEHCCU-CM1/CM3	0040 CM1	0050 CM1	0051 CM1	0063 CM1	0067 CM1	0077 CM1	0095 CM1	0100 CM1	0113 CM1	0140 CM1	0140 CM3
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	0,55 (1)	-	0,83 (1)	0,99 (1)	-	1,20 (1)	1,49 (1)	-			
		R-404A*	Nom	kW	-	0,91 (1)	-		1,23 (1)	-		1,50 (1)	1,76 (1)	2,19 (1)	2,22 (1)
		R-407A	Nom	kW	-	0,72 (1)	-		0,97 (1)	-		1,19 (1)	1,49 (1)	1,73 (1)	1,74 (1)
		R-407F	Nom	kW	-	0,78 (1)	-		1,03 (1)	-		1,26 (1)	1,55 (1)	1,87 (1)	1,88 (1)
Power input	Medium temperature	R-134a	Nom	kW	0,43 (1)	-	0,54 (1)	0,64 (1)	-	0,74 (1)	0,90 (1)	-			
		R-404A*	Nom	kW	-	0,63 (1)	-		0,76 (1)	-		0,93 (1)	1,10 (1)	1,18 (1)	1,24 (1)
		R-407A	Nom	kW	-	0,54 (1)	-		0,70 (1)	-		0,84 (1)	0,98 (1)	1,11 (1)	1,16 (1)
		R-407F	Nom	kW	-	0,53 (1)	-		0,69 (1)	-		0,83 (1)	0,98 (1)	1,07 (1)	1,12 (1)
Parameters at full load and ambient temp. 25°C		R-134a	Te -10°C	Declared COP (COP2)	1,55	-	1,75	1,80	-	1,96	2,05	-			
		R-404A*	Te -10°C	Declared COP (COP2)	-	1,88	-		1,92	-		1,87	1,95	1,96	2,02
		R-407A	Te -10°C	Declared COP (COP2)	-	1,39	-		1,45	-		1,50	1,65		1,58
		R-407F	Te -10°C	Declared COP (COP2)	-	1,62	-		1,66	-		1,68	1,78	1,95	1,87
Parameters at full load and ambient temp. 32°C (Point A)		R-134a	Te -10°C	Rated COP (COPA)	1,28	-	1,53	1,55	-	1,63	1,65	-			
		R-404A*	Te -10°C	Rated COP (COPA)	-	1,45	-		1,61	-		1,61	1,60	1,68	1,80
		R-407A	Te -10°C	Rated COP (COPA)	-	1,33	-		1,37	-		1,42	1,52	1,57	1,50
		R-407F	Te -10°C	Rated COP (COPA)	-	1,47	-		1,49	-		1,51	1,58	1,75	1,67
Parameters at full load and ambient temp. 43°C		R-134a	Te -10°C	Declared COP (COP3)	1,18	-	1,20	1,21	-	1,30	1,32	-			
		R-404A*	Te -10°C	Declared COP (COP3)	-	1,10	-		1,18	-		1,21	1,20	1,26	1,31
		R-407A	Te -10°C	Declared COP (COP3)	-	1,16	-							1,38	1,30
		R-407F	Te -10°C	Declared COP (COP3)	-	1,20	-							1,39	1,32
Dimensions	Unit		Height	mm	607									662	
			Width	mm	876									1.101	
			Depth	mm	420									444	
Weight	Unit			kg	45		53		54				55	68	
Compressor	Type				Reciprocating compressor										
	Model				AE4440Y-FZ1A	AE4460Z-FZ1C	CAJ4461Y	CAJ4476Y	CAJ9480Z	CAJ4492Y	CAJ4511Y	CAJ9510Z	CAJ9513Z	CAJ4517Z	TAJ4517Z
	Oil	Charged volume		l	0,3		0,9							-	
	Oil Type				Uniqema Emkarate RL32CF										
	Piston displacement			m^3/h	1,80		3,18	3,79	2,64	4,51	5,69	3,18	4,21	4,52	
Fan	Type				Axial										
	Air flow rate	Cooling	Nom	m^3/h	1.300									2.700	
Sound pressure level	Nom.			dBA	29 (2)				28 (2)	29 (2)		28 (2)		34 (2)	
Refrigerant	Type				R-134a	R-404A	R-134a		R-404A	R-134a		R-404A			
	Type 2				-	R-407A	-		R-407A	-		R-407A			
	Type 3				-	R-407F	-		R-407F	-		R-407F			
	GWP				1.430,0	3.921,6	1.430,0		3.921,6	1.430,0		3.921,6			
	GWP Type 2				-	2.107	-		2.107	-		2.107			
	GWP Type 3				-	1.825	-		1.825	-		1.825			
Piping connections	Liquid line connection			inch	1/4"				3/8"						
	Suction line connection			inch	3/8"				1/2"					5/8	
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230										3~/50/400

(1) Refer to condition: Outside ambient temperature = 32°C, Evaporation temperature = -10°C and 10K superheat (medium temperature application)
(2) Average sound pressure level is measured at 10m in anechoic room
* R-404A refrigerant is not 2020 F-Gas Compliant

Condensing unit for commercial refrigeration with scroll technology

Refrigeration solution for small food retailers

- Designed specifically for small capacity refrigeration applications in small food stores (eg. in bakeries and butchers), cold rooms, bottle coolers and display cabinets
- Compact and lightweight for even the smallest of city centre locations
- All components can be accessed, making maintenance quick and easy
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- Micro channel heat exchanger technology reduces the amount of refrigerant used in the system, lowering environmental impact

JEHSCU-CM1/CM3

Medium Temperature Refrigeration				JEHSCU-CM1/CM3	0200 CM1	0250 CM1	0300 CM1	0200 CM3	0250 CM3	0300 CM3	0350 CM3	0400 CM3	0500 CM3	0600 CM3	0680 CM3	0800 CM3	1000 CM3
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	2,05 (1)	2,59 (1)	3,09 (1)	2,17 (1)	2,48 (1)	3,06 (1)	3,48 (1)	4,24 (1)	5,24 (1)	6,16 (1)	6,89 (1)	7,95 (1)	10,40 (1)
		R-404A*	Nom	kW	3,54 (1)	3,99 (1)	4,92 (1)	3,49 (1)	4,21 (1)	4,89 (1)	5,50 (1)	6,70 (1)	8,03 (1)	9,45 (1)	10,15 (1)	12,95 (1)	16,45 (1)
		R-407A	Nom	kW	3,39 (1)	3,98 (1)	4,65 (1)	3,36 (1)	3,94 (1)	4,54 (1)	-	6,57 (1)	8,03 (1)	9,24 (1)	10,35 (1)	12,55 (1)	14,75 (1)
		R-407F	Nom	kW	3,26 (1)	3,73 (1)	4,50 (1)	3,22 (1)	3,85 (1)	4,45 (1)	-	6,62 (1)	7,99 (1)	9,36 (1)	10,40 (1)	12,65 (1)	15,95 (1)
Power input	Medium temperature	R-134a	Nom	kW	1,11 (1)	1,21 (1)	1,45 (1)	1,03 (1)	1,17 (1)	1,46 (1)	1,68 (1)	1,85 (1)	2,30 (1)	2,70 (1)	3,15 (1)	3,74 (1)	4,86 (1)
		R-404A*	Nom	kW	1,57 (1)	2,00 (1)	2,62 (1)	1,70 (1)	2,04 (1)	2,52 (1)	3,04 (1)	3,33 (1)	4,39 (1)	4,92 (1)	5,53 (1)	5,96 (1)	8,62 (1)
		R-407A	Nom	kW	1,60 (1)	1,99 (1)	2,47 (1)	1,63 (1)	2,03 (1)	2,45 (1)	-	2,97 (1)	3,93 (1)	4,62 (1)	5,54 (1)	6,24 (1)	8,41 (1)
		R-407F	Nom	kW	1,74 (1)	2,09 (1)	2,66 (1)	1,78 (1)	2,16 (1)	2,71 (1)	-	3,21 (1)	4,36 (1)	5,03 (1)	5,98 (1)	6,13 (1)	8,84 (1)
Seasonal energy performance ratio SEPR		R-134a	Te -10°C		-								2,69	2,63	2,57	2,92	2,88
		R-404A*	Te -10°C		-						2,61	2,77	2,64	2,72	2,65	2,90	2,57
		R-407A	Te -10°C		-							3,09	2,81	2,75	2,65	2,88	2,35
		R-407F	Te -10°C		-							2,83	2,60	2,69	2,59	2,83	2,53
Annual electricity consumption Q		R-134a	Te -10°C	kWh/a	-								11.969	14.381	16.491	16.741	22.226
		R-404A*	Te -10°C	kWh/a	-						12.939	14.881	18.673	21.344	23.536	27.407	39.372
		R-407A	Te -10°C	kWh/a	-							13.054	17.546	20.622	24.031	26.747	38.515
		R-407F	Te -10°C	kWh/a	-							14.365	18.883	21.395	24.655	27.475	38.831
Parameters at full load and ambient temp. 25°C		R-134a	Te -10°C	Declared COP (COP2)	2,15	2,54	2,50	2,55	2,52		2,46	2,83	-				
		R-404A*	Te -10°C	Declared COP (COP2)	2,65	2,54	2,24	2,44	2,41	2,26	-						
		R-407A	Te -10°C	Declared COP (COP2)	2,55	2,38	2,21	2,50	2,32	2,20	-						
		R-407F	Te -10°C	Declared COP (COP2)	2,43	2,31	2,16	2,35	2,25	2,10	-						
Parameters at full load and ambient temp. 32°C (Point A)		R-134a	Te -10°C	Rated COP (COPA)	1,85	2,14	2,13	2,12	2,13	2,10	2,08	2,29	2,28		2,19	2,13	2,14
		R-404A*	Te -10°C	Rated COP (COPA)	2,25	2,00	1,88	2,06	2,07	1,94	1,81	2,01	1,83	1,92	1,84	2,17	1,91
		R-407A	Te -10°C	Rated COP (COPA)	2,13	2,01	1,89	2,07	1,95	1,86	-	2,21	2,04	2,00	1,87	2,01	1,75
		R-407F	Te -10°C	Rated COP (COPA)	1,88	1,79	1,69	1,81	1,79	1,65	-	2,06	1,83	1,86	1,74	2,06	1,80
Parameters at full load and ambient temp. 43°C		R-134a	Te -10°C	Declared COP (COP3)	1,35	1,53			1,57		1,52	1,55	1,56	1,59	1,53	1,52	
		R-404A*	Te -10°C	Declared COP (COP3)	1,53	1,33	1,25		1,36	1,28	1,11	1,28	1,15	1,27	1,22	1,47	1,18
		R-407A	Te -10°C	Declared COP (COP3)	-			1,48	1,45	1,38	-	1,43	1,39	1,43	-	1,38	-
		R-407F	Te -10°C	Declared COP (COP3)	-											1,52	-
Dimensions	Unit		Height	mm	662							872				1.727	
			Width	mm	1.101							1.353				1.348	
			Depth	mm	444							575				641	
Weight	Unit			kg	70	72	74	70	72	74		119	123	125	126	218	
Compressor	Type				Scroll compressor												
	Model				ZB15KQE-PFJ	ZB19KQE-PFJ	ZB21KQE-PFJ	ZB15KQE-TFD	ZB19KQE-TFD	ZB21KQE-TFD	ZB26KQE-TFD	ZB29KQE-TFD	ZB38KQE-TFD	ZB45KQE-TFD	ZB48KQE-TFD	ZB58KCE-TFD	ZB76KCE-TFD
	Oil	Charged volume		l	-							1,36	2,07	1,89	1,80	2,5	3,2
	Oil Type				Polyester oil (Copeland Ultra 22 CC, 32 CC and 32-3MAF, Mobil EAL™ Arctic 22 CC, Uniqem Emkarate RL32CF												
	Piston displacement			m^3/h	5,90	6,80	8,60	5,90	6,80	8,60	9,90	11,40	14,40	17,10	18,80	22,10	29,10
Fan	Type				Axial												
	Air flow rate	Cooling	Nom	m^3/h	2.700							-				8.500	
Sound pressure level	Nom.			dBA	33 (2)	34 (2)	36 (2)	33 (2)	34 (2)	36 (2)	39 (2)	37 (2)	38 (2)	40 (2)		43 (2)	
Refrigerant	Type				R-134a												
	Type 2				R-404A												
	Type 3				R-407A						-	R-407A					
	Type 4				R-407F						-	R-407F					
	GWP				1.430												
	GWP Type 2				3.921,6												
	GWP Type 3				2.107						-	2.107					
	GWP Type 4				1.825						-	1.825					
Piping connections	Liquid line connection			inch	3/8"							1/2"				3/4"	
	Suction line connection			inch	3/4"							7/8"		1 1/8"			3/8"
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230			3~/50/400									

(1) Refer to condition: Outside ambient temperature = 32°C, Evaporation temperature = -10°C and 10K superheat (medium temperature application)
(2) Average sound pressure level is measured at 10m in anechoic room
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JEHCCU/SCU-CL1/CL3

Low Temperature Refrigeration				JEHCCU-CL1/JEHSCU-CL3	JEHCCU0115CL1	JEHSCU0200CL3	JEHSCU0300CL3	JEHSCU0400CL3	JEHSCU0500CL3	JEHSCU0600CL3	JEHSCU0750CL3
Refrigerating capacity	Low temperature	R-404A*	Nom	kW	0,69 (1)	1,42 (1)	1,98 (1)	2,91 (1)	3,53 (1)	4,13 (1)	5,29 (1)
		R-407A	Nom	kW	-	1,16 (1)	1,51 (1)	2,29 (1)	2,77 (1)	3,31 (1)	4,29 (1)
Power input	Low temperature	R-404A*	Nom	kW	0,72 (1)	1,46 (1)	1,81 (1)	2,38 (1)	3,10 (1)	3,69 (1)	3,88 (1)
		R-407A	Nom	kW	-	1,31 (1)	1,77 (1)	2,33 (1)	2,85 (1)	3,57 (1)	4,17 (1)
Seasonal energy performance ratio SEPR		R-404A*	Te -35°C		-			1,88	1,79	1,80	1,82
		R-407A	Te -35°C		-			1,67		1,52	1,51
Annual electricity consumption Q		R-404A*	Te -35°C	kWh/a	-			11.555	14.732	17.107	21.649
		R-407A	Te -35°C	kWh/a	-			10.212	12.364	16.220	21.146
Parameters at full load and ambient temp. 25°C		R-404A*	Te -35°C	Declared COP (COP2)	1,11	1,16	1,40	-			
		R-407A	Te -35°C	Declared COP (COP2)	-	1,12	1,08	-			
Parameters at full load and ambient temp. 32°C (Point A)		R-404A*	Te -35°C	Rated COP (COPA)	0,96	0,97	1,09	1,22	1,14	1,06	1,36
		R-407A	Te -35°C	Rated COP (COPA)	-	0,89	0,85	0,98	0,97	0,93	1,03
Parameters at full load and ambient temp. 43°C		R-404A*	Te -35°C	Declared COP (COP3)	0,69	0,60	0,70	0,86	0,79	0,64	0,98
		R-407A	Te -35°C	Declared COP (COP3)	-	0,55	-	0,67	0,66	0,64	0,73
Dimensions	Unit	Height		mm	607	662		872			1.727
		Width		mm	876	1.101		1.353			1.348
		Depth		mm	420	444		575			605
Weight	Unit			kg	55	76	77	132		133	203
Compressor	Type				Reciprocating compressor	Scroll compressor					
	Model				CAJ2446Z	ZF06K4E-TFD	ZF09K4E-TFD	ZF13K4E-TFD	ZF15K4E-TFD	ZF18K4E-TFD	ZF25K5E-TFD
	Oil	Charged volume		l	0,9	-		1,90			
	Oil Type				Uniqema Emkarate RL32CF	Polyester oil (Copeland Ultra 22 CC, 32 CC and 32-3MAF, Mobil EAL™ Arctic 22 CC, Uniqem Emkarate RL32CF					
	Piston displacement			m^3/h	4,55	5,90	8,00	11,80	14,50	17,10	21,40
Fan	Type				Axial						
	Air flow rate	Cooling	Nom	m^3/h	1.300	2.700		-			5.750
Sound pressure level	Nom.			dBA	31 (2)	32 (2)	33 (2)	37 (2)	39 (2)	41 (2)	
Refrigerant	Type				R-404A						
	Type 2				-	R-407A					
	GWP				3.921,6						
	GWP Type 2				-	2.107,0					
Piping connections	Liquid line connection			inch	3/8"			1/2"			
	Suction line connection			inch	1/2"	3/4"		7/8"			1 1/8"
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230	3~/50/400					

(1) SRG 20°C, Ta=32°C, Te=-35°C (2) Average sound pressure level is measured at 10m in anechoic room
* R-404A refrigerant is not 2020 F-Gas Compliant

and

United in cold

About the Zanotti acquisition

With the acquisition of Zanotti, Daikin can now provide a diverse product line up for all aspects of the cold chain that extend from those used in food production and transportation (overland shipping) to those found at retailers.

About the Zanotti product range

Zanotti's commercial range contains a large range of units used for refrigeration of restaurants, supermarkets and distribution centers.

Special air treatment systems are available for maturing of salamis and cheeses, wine conservation and refinement, silos cooling for grain and seeds.

Next to the commercial product range, Zanotti has a complete range for **transport refrigeration** and **industrial refrigeration** for applications as the food industry, clean rooms, ice skating rinks,...

The largest range of stationary commercial cooling solutions for the food industry

Zanotti manufactures a wide range of stationary refrigeration systems. This includes solutions in monoblock and split designs for any capacity, condensing units and racks for single or multiple users. These systems are used in restaurants, super- and hypermarkets, grocery stores, distribution centers and fresh food processing plants.

Zanotti offers special air treatment systems and temperature control solutions for small scale traditional food processing, such as cheese and salami maturing, and for wine preservation and refinement. The portfolio is completed by refrigeration systems for grain and seed silos.

NEW

Zanotti Refrigeration Range

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Multi compressor condensing units

Condensing units 58
Condensing units
Capacity controlled condensing units 59
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Additional Zanotti range 61
Multi-compressor racks
Transport refrigeration
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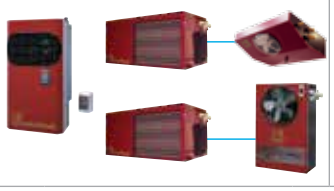
More infomation on ordering Zanotti units?
More Zanotti products (custom made solutions) are available and are not shown in this catalogue.
Please contact the refrigeration department at Daikin Europe (refrigeration@bxl.daikineurope.com) or your local refrigeration product manager.

Product range overview - Zanotti

Standard range

Model	Product name	Capacity (kW)	0	1	2	3,5	5	10	15	25	35
Uni-block system for wall mounted installation (optional through-wall) in small and medium sized cold rooms **R-290** Propane natural refrigerant	(M)GM			**R-290**							
				R-452A							
				R-290							
Uni-block system for roof mounted installation in small and medium sized cold rooms **R-290** Propane natural refrigerant	(M)SB			**R-290**							
				R-452A							
				R-134A							
				R-290							
Uni-block system for wall mounted installation in medium sized cold rooms	AS										
Bi-block system for wall mounted installation	GS										
Bi-block system for floor standing or roof mounted installation with capillary expansion system	SP-O										
Bi-block system for floor standing or roof mounted installation with thermostatic expansion valve	DB-O										
Wineblock	RCV / RDV										

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

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

Cooling (High Temperature) (+20° C / +10° C)

Product range overview - Zanotti

Additional range*

Chilling (Low temperature) (-20°C)

Freezing (Medium temperature) (0°C)

Cooling (High Temperature) (+10°C/+30°C)

Model	Product name		Capacity (kW)	0	1	2	3,5	5	10	15	25	35	45	55	65
Monoblock units for container	AS-R	LT													
		MT													
Monoblock units for transportable cold rooms	AS	LT													
		MT													
Monoblock, wall mounted with CO_2 as refrigerant	MZW / BZW														
Monoblock	BX	LT													
		MT													
Monoblock	RS	LT													
		MT													

* Contact your local refrigeration contact for ordering & information

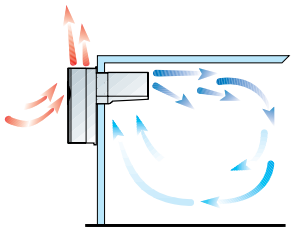
Uni-block system for low and medium temperature refrigeration

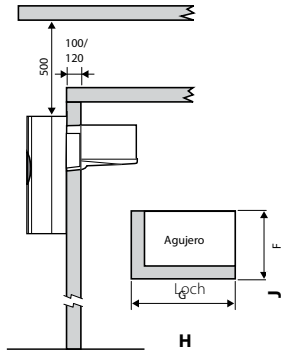
For wall mounted installation in small and medium sized cold rooms

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

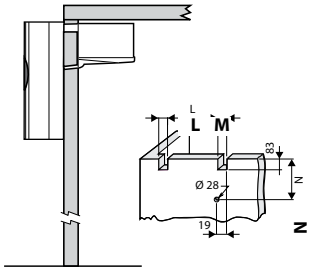
GM

Installation type





Through- wall model



Straddle model

Low temperature refrigeration				GM	BGM11026D	BGM11226D	BGM11226Y	BGM11726D	BGM21826D	BGM22027D	BGM33027D
Refrigerating capacity	Low temperature	R-290	Nom	kW	-		0.871 (1)	-			
		R-452A	Nom	kW	0.679 (1)	0.889 (1)	-	1.080 (1)	1.336 (1)	1.688 (1)	2.349 (1)
	Medium temperature	R-134a	Nom	kW	-						
Dimensions	Unit	Height		mm	735				830		
		Width		mm	400				620		
		Depth		mm	790						862
Weight	Unit			kg	56	64			80		105
Compressor	Type				Hermetic Reciprocating						
	Starting method				Direct		-	Direct			
Refrigerant	Type				R-452A		R-290	R-452A			
	GWP				2,141		3	2,141			
Power supply	Voltage/Phase/Frequency			V/Hz	230/1~/50					400/3N~/50	

Medium temperature refrigeration				GM	MGM 10326E	MGM 10526E	MGM 10626E	MGM 10726E	MGM 10726Y	MGM 11026E	MGM 21126E	MGM 21227E	MGM 21227Y	MGM 21327E	MGM 31527E	MGM 32027E
Refrigerating capacity	Medium temperature	R-290	Nom	kW	0.855 (2)	0.978 (2)	1.120 (2)	1.315 (2)	1.190 (2)	1.351 (2)	1.806 (2)	2.034 (2)	2.092 (2)	2.175 (2)	3.079 (2)	3.351 (2)
Dimensions	Unit	Height		mm	735						830					
		Width		mm	400						620					
		Depth		mm	790										862	
Weight	Unit			kg	52	53	56			64	80				98	100
Compressor	Type				Hermetic Reciprocating											
	Starting method				Direct				-	Direct			-	Direct		
Refrigerant	Type				R-134a				R-290	R-134a			R-290	R-134a		
	GWP				1,430				3	1,430			3	1,430		
Power supply	Voltage/Phase/Frequency			V/Hz	230/1~/50						400/3N~/50	230/1~/50		400/3N~/50		

(1) When normally running: -20°C / +30°C
(2) When normally running: 0°C / +30°C

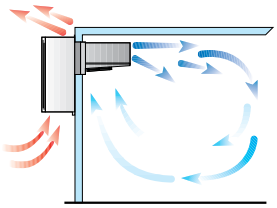
Uni-block system for low and medium temperature refrigeration

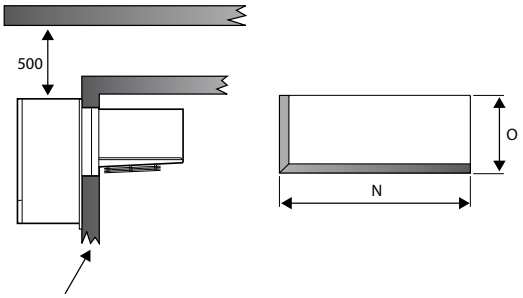
For wall mounted installation in medium sized cold rooms

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

AS

Installation type





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

Low and medium temperature refrigeration				AS	BAS135T02Y	MAS135N02Y	MAS135T02Y	MAS235T02E	MAS335N02E	MAS335T02E	MAS340T02E
Refrigerating capacity	Low temperature	R-290	Nom	kW	2.789 (1)	-					
	Medium temperature	R-134a	Nom	kW		-		4.981 (2)	6.988 (2)	8.290 (2)	10.664 (2)
		R-290	Nom	kW	-	2.614 (2)	3.479 (2)	-			
Dimensions	Unit	Height x Width x Depth		mm	800 x 900 x 1,170			857 x 1,280 x 1,140	857 x 1,750 x 1,140		857 x 1,790 x 1,240
	Packed unit	Height x Width x Depth		mm	1,030 x 960 x1,200			1,060 x 1,330 x 1,210	1,065 x 1,850 x 1,300		1,065 x 1,850 x 1,420
Weight	Unit			kg	106			162	221	222	244
	Packed unit			kg	137			202	276	277	361
Compressor	Type				Hermetic Reciprocating						
	Nominal power			kW	-			3.7	4.8	6.3	7.4
	Starting method				-			Direct			
Operation range	Cold room temperature	Min. ~Max.		°C	- ~-			-5 ~10			
Refrigerant	Type				R-290			R-134a			
	GWP				3.0			1,430			
Evaporator	Air flow			m^3/h	-			3,900	5,600		8,000
	Air throw			m	-			10 (3)			17 (3)
Condenser	Air flow			m^3/h	-			2,700	4,000		5,600
Defrost					-			Hot gas			
Power supply	Voltage/Phase/Frequency			V/Hz	400 / 3N~ / 50						

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

Uni-block system for low and medium temperature refrigeration

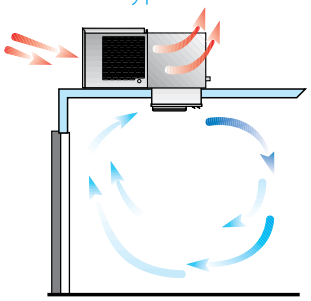
For roof mounted installation in small and medium sized cold rooms

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

SB

Remote control

Installation type



Low temperature refrigeration					SB	BSB120NO261D	BSB125N261Y	BSB125T261D	BSB135T38D	BSB135T38Y	BSB225T38D
Refrigerating capacity	Low temperature	R-290	Nom	kW		-	0.871 (1)	-		2.693 (1)	-
		R-452A	Nom	kW		0.628 (1)	-	1.029 (1)	2.472 (1)	-	1.699 (1)
Dimensions	Unit	Height x Width x Depth		mm		525 x 430 x 771	507 x 620 x 719	506 x 620 x 719	645 x 820 x 929	647 x 820 x 929	540 x 820 x 809
	Packed unit	Height x Width x Depth		mm		690 x 540 x830	660 x 730 x 790		800 x 930 x 1,000		690 x 930 x 880
Weight	Unit			kg		48	68		102	92	87
	Packed unit			kg		61	82		124	114	108
Compressor	Type					Hermetic Reciprocating					
	Nominal power			kW		0.6	-	1.3	2.2	-	1.5
	Starting method					Direct	-	Direct		-	Direct
Operation range	Cold room temperature	Min. ~Max.		°C		-25 ~-15				-5 ~10	-25 ~-15
Refrigerant	Type					R-452A	R-290	R-452A		R-290	R-452A
	GWP					2,141.0	3.0	2,141.0		3.0	2,141.0
Evaporator	Air flow			m^3/h		500	-	550	2,300	-	1,100
	Air throw			m		3 (3)	-	4 (3)	10 (3)	-	4 (3)
Condenser	Air flow			m^3/h		400	-	750	1,500	-	1,400
Defrost						Hot gas	-	Hot gas		-	Hot gas
Power supply	Voltage / Phase /Frequency			V/Hz		230 / 1~ / 50			400 / 3N~ / 50		

Medium temperature refrigeration					SB	MSB 120TO261E	MSB 125N261E	MSB 125T261E	MSB 125T261Y	MSB 135N38E	MSB 135N38Y	MSB 135T38E	MSB 135T38Y	MSB 140T38E	MSB 225N261E	MSB 225T261Y	MSB 225T38E	MSB 235T38E
Refrigerating capacity	Medium temperature	R-134a	Nom	kW		0.857 (2)	1.120 (2)	1.338 (2)	-	3.282 (2)	-	3.550 (2)	-	3.774 (2)	1.799 (2)	-	2.022 (2)	4.871 (2)
		R-290	Nom	kW		-			1.225 (2)	-	2.600 (2)	-	3.428 (2)	-		2.070 (2)	-	
Dimensions	Unit	Height x Width x Depth		mm		525 x 430 x 771	506 x 620 x 719		507 x 620 x 719	645 x 820 x 929	647 x 820 x 929	645 x 820 x 929	647 x 820 x 929	760 x 920 x 1,042	540 x 820 x 809			785 x 1,075 x 1,046
	Packed unit	Height x Width x Depth		mm		690 x 540 x 830	660 x 730 x 790			800 x 930 x 1,000				880 x 1,100 x1,100	690 x 930 x 880			920 x 1,200 x 1,120
Weight	Unit			kg		42	59			92				110	74	75		151
	Packed unit			kg		55	73			114				139	95	96		184
Compressor	Type					Hermetic Reciprocating												
	Nominal power			kW		0.5	0.6	0.7	-	2.2	-	2.6	-	2.9	0.9	-	1.7	3.7
	Starting method					Direct			-	Direct	-	Direct	-	Direct		-	Direct	
Operation range	Cold room temperature	Min. ~Max.		°C		-5 ~10												
Refrigerant	Type					R-134a			R-290	R-134a	R-290	R-134a	R-290	R-134a		R-290	R-134a	
	GWP					1,430.0			3.0	1,430.0	3.0	1,430.0	3.0	1,430.0		3.0	1,430.0	
Evaporator	Air flow			m^3/h		500	550		-	2,300	-	2,300	-	2,300	1,100	-	1,100	3,450
	Air throw			m		3 (3)	4 (3)		-	10 (3)	-	10 (3)	-	10 (3)	4 (3)	-	4 (3)	10 (3)
Condenser	Air flow			m^3/h		400	750		-	1,500	-	1,500	-	3,100	1,400	-	1,400	3,200
Defrost						Hot gas			-	Hot gas	-	Hot gas	-	Hot gas		-	Hot gas	
Power supply	Voltage / Phase /Frequency			V/Hz		230 / 1~ / 50				400 / 3N~ / 50				230 / 1~ / 50			400 / 3N~ / 50	

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

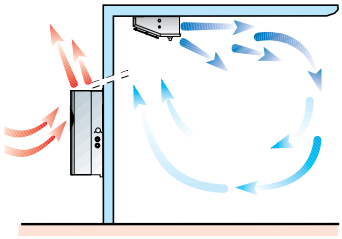
Bi-block system for low and medium temperature refrigeration

Condensing unit for wall mounted installation

- Wall mounted condensing unit and ceiling mounted evaporator
- Extremely rapid mounting
- Best surface-to-capacity ratio
- Low sound levels thanks to optional compressor compartment soundproofing
- New generation control panel: possibility to connect it to classic remote management systems or to a Modbus system
- Winter Kit

GS

Installation type



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

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

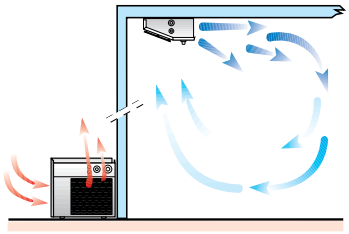
(1) When normally running: -20°C / +30°C
(2) When normally running: 0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

Bi-block system for low and medium temperature refrigeration

Condensing unit for floor standing or roof mounted installation

- Condensing unit for floor standing or roof mounted installation and ceiling mounted evaporator
- Extremely fast to assemble thanks to quick connection joints
- Reduced installation time and cost
- Best surface-to-capacity ratio

Installation type



				SP-O	SB.BSP121NOP			SB.BSP121TOP			SB.BSP123TOP			SB.BSP135TOP			SB.BSP221NOP			SB.BSP221TOP		
					1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D	1D	2D	3D
Refrigerating capacity	Low temperature	R-452A	Nom	kW	0.662 (1)			0.905 (1)			1.088 (1)			2.384 (1)			1.342 (1)			1.719 (1)		
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337									427 x 820 x 427			390 x 820 x 427					
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410									215 x 1,614 x 410			215 x 1,034 x 410					
	Packed condensing unit	Height x Width x Depth		mm	690 x 520 x 780												690 x 620 x 1,010					
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780									260 x 470 x 1,780			260 x 470 x 1,200					
Weight	Condensing unit			kg	45			50						78			61			69		
	Evaporator unit			kg	13									28			19					
	Packed condensing unit			kg	74			79						116			99			107		
	Packed evaporator unit			kg	15									30			21					
Compressor	Type				Hermetic Reciprocating																	
	Nominal power			kW	0.75			1.1			1.3			2.2			1.3			1.5		
	Starting method				Direct																	
Operation range	Cold room temperature	Min. ~Max.		°C	-25 ~-15																	
Refrigerant	GWP				2,141																	
Evaporator	Air flow			m^3/h	600									1,800			1,200					
	Air throw			m	4 (3)																	
Condenser	Air flow			m^3/h	750									1,500			1,400					
Defrost					Electric																	
Piping Length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50									400 / 3N~ / 50			230 / 1~ / 50			400 / 3N~ / 50		

				SP-O	SB.MSP121TOP			SB.MSP123TOP			SB.MSP135NOP			SB.MSP135TOP			SB.MSP221NOP			SB.MSP221TOP		
					1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E	1E	2E	3E
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	1.140 (2)			1.422 (2)			3.188 (2)			3.492 (2)			1.816 (2)			2.029 (2)		
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337						427 x 820 x 427						390 x 820 x 427					
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410						215 x 1,614 x 410						215 x 1,034 x 410					
	Packed condensing unit	Height x Width x Depth		mm	690 x 520 x 780						690 x 620 x 1,010											
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780						260 x 470 x 1,780						260 x 470 x 1,200					
Weight	Condensing unit			kg	43						69			70			59			61		
	Evaporator unit			kg	13						28						19					
	Packed condensing unit			kg	72						107			108			97			99		
	Packed evaporator unit			kg	15						30						21					
Compressor	Type				Hermetic Reciprocating																	
	Nominal power			kW	0.4			0.7			2.2			2.6			0.9			1.7		
	Starting method				Direct																	
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10																	
Refrigerant	GWP				1,430																	
Evaporator	Air flow			m^3/h	600						1,800						1,200					
	Air throw			m	4 (3)																	
Condenser	Air flow			m^3/h	750						1,500						1,400					
Defrost					Electric																	
Piping Length				m	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10	2.5	5	10
Power supply	Voltage / Phase / Frequency			V/Hz	230 / 1~ / 50						400 / 3N~ / 50						230 / 1~ / 50			400 / 3N~ / 50		

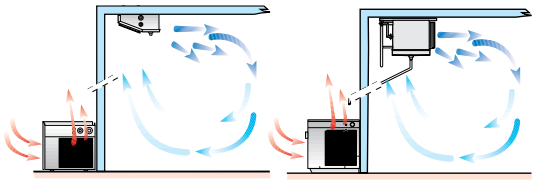
(1) When normally running: -20°C / +30°C
(2) When normally running: +0°C / +30°C
(3) Use air throw as a base. Air throw is affected by many factors such as height of room, product storage, location of evaporator, etc.

Bi-block system for low and medium temperature refrigeration

Condensing unit for floor standing or roof mounted installation

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

Installation type



Ceiling evaporator

Remote control

Outdoor unit

				DB-O	SB.BDB121 NO36D	SB.BDB121 TO36D	SB.BDB123 TO36D	SB.BDB135 NO704D	SB.BDB135 TO704D	SB.BDB221 NO36D	SB.BDB221 TO35D
Refrigerating capacity	Low temperature	R-452A	Nom	kW	0.662 (1)	0.905 (1)	1.088 (1)	2.384 (1)	2.38 (1)	1.342 (1)	1.719 (1)
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337			427 x 820 x 427		390 x 820 x 427	
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410			215 x 1,614 x 410		215 x 1,034 x 410	
	Packed condensing unit	Height x Width x Depth		mm	590 x 419 x 810			610 x 520 x 1,010			
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780			260 x 470 x 1,200			
Weight	Condensing unit			kg	45	50		72	78	61	69
	Evaporator unit			kg	13			28		19	
	Packed condensing unit			kg	55	60		86	92	75	83
	Packed evaporator unit			kg	15			31		21	
Compressor	Type				Hermetic Reciprocating						
	Nominal power			kW	0.75	1.1	1.3	2.2		1.3	1.5
	Starting method				Direct			-	Direct		
Operation range	Cold room temperature	Min. ~Max.		°C	-25 ~-15						
Refrigerant	Type				R-452A						
	GWP				2,142						
Evaporator	Air flow			m^3/h	600			1,800		1,200	
	Air throw			m	4 (3)						
Condenser	Air flow			m^3/h	750			1,500		1,400	
Defrost					Electric						
Power supply	Voltage/Phase/Frequency			V/Hz	230/1~/50			400/3N~/50		230/1~/50	400/3N~/50

				DB-O	SB.MDB121 TO36E	SB.MDB123 TO36E	SB.MDB135 NO704E	SB.MDB135 TO704E	SB.MDB140 TO704E	SB.MDB335 NO376E	SB.MDB335 TO376E	SB.MDB340 NO376E	SB.MDB235 TO376E	SB.MDB340 TO376E	SB.BDB221 NO36D	SB.BDB221 TO35D
Refrigerating capacity	Medium temperature	R-134a	Nom	kW	1.140 (2)	1.422 (2)	3.188 (2)	3.492 (2)	3.606 (2)	7.293 (2)	8.779 (2)	11.014 (2)	5.070 (2)	14.069 (2)	1.816 (2)	2.029 (2)
Dimensions	Condensing unit	Height x Width x Depth		mm	357 x 620 x 337		427 x 820 x 427	427 x 820 x 427	540 x 920 x 540	654 x 1,575 x 642		885 x 1,725 x 742	594 x 1,075 x 532	885 x 1,725 x 742	390 x 820 x 427	
	Evaporator unit	Height x Width x Depth		mm	215 x 614 x 410		215 x 1,614 x 410	215 x 1,614 x 410	545 x 805 x 690	600 x 1,690 x 690		620 x 1,840 x 700	530 x 1,220 x 690	620 x 1,840 x 700	215 x 1,034 x 410	
	Packed condensing unit	Height x Width x Depth		mm	590 x 419 x 810		610 x 520 x 1,010	610 x 520 x 1,010	880 x 650 x 1,200	750 x 890 x 1,840		780 x 890 x 1,990	710 x 820 x 1,280	780 x 890 x 1,990	610 x 520 x 1,010	
	Packed evaporator unit	Height x Width x Depth		mm	260 x 470 x 780		260 x 470 x 1,200	260 x 470 x 1,200	702 x 814 x 1,004	865 x 780 x 1,850		1,100 x 880 x 2,000	865 x 780 x 1,850	1,100 x 880 x 2,000	260 x 470 x 1,200	
Weight	Condensing unit			kg	43		69	70	95	158	159	195	104	220	59	61
	Evaporator unit			kg	13		28	28	37	84		102	53	102	19	
	Packed condensing unit			kg	53		83	84	114	247	248	309	193	334	73	75
	Packed evaporator unit			kg	15		30	30	53	140		165	85	165	21	
Compressor	Type				Hermetic Reciprocating											
	Nominal power			kW	0.4	0.7	2.2	2.6	2.94	4.8	6.3	7.4	3.7	9.555	0.9	1.7
	Starting method				Direct											
Operation range	Cold room temperature	Min. ~Max.		°C	-5 ~10											
Refrigerant	Type				R-134a											
	GWP				1,430											
Evaporator	Air flow			m^3/h	600		1,800	1,800	2,300	6,800	6,400	8,400	4,600	8,000	1,200	
	Air throw			m	4 (3)				12 (3)	11 (3)		13 (3)	11 (3)	12 (3)	4 (3)	
Condenser	Air flow			m^3/h	750		1,500		3,150	5,500	7,000	8,100	3,200	8,100	1,400	
Defrost					Electric											
Power supply	Voltage/Phase/Frequency			V/Hz	230/1~/50		400/3N~/50	400/3N~/50		400/3N~/50					230/1~/50	400/3N~/50

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

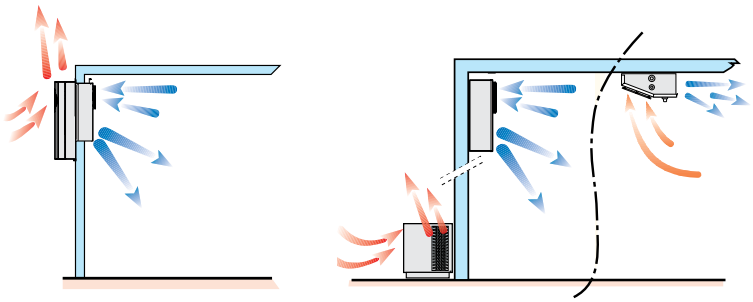
Wineblock - Monoblock units for high temperature refrigeration

Monoblock system suitable for through-wall installation

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

RCV

Installation type



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

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

Wineblock - Split units for high temperature refrigeration

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

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

RCV-E

Ceiling evaporator

Wall evaporator

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

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

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

Options overview

Zanotti refrigeration

Zanotti Uniblock

			GM	SB	AS		
					Standard	Transport coldroom	Container
Options which need to be ordered with the unit	Winter kit 1: Condenser fan pressure switch + Crankcase heater + Double defrost solenoid valve	PRS VNT + RES CAR + SOL SBR	•	•	No	No	No
	Winter kit 2: Condenser fan speed regulator with temperature control+ Double defrost solenoid valve	VVE TER + RES CAR + SOL SBR	•	• (Std on 235)	•	Std on 135	Std on 121, 123, 221, 135
	Winter kit 3: Condenser fan speed regulator with pressure control + Crankcase heater + Double defrost solenoid valve	VVE PRS + RES CAR + SOL SBR	•	•	Std	Std on 235, 335, 340	Std on 235, 335, 340
	Winter kit 4: BEST COP condenser fan speed regulator + Crankcase heater + Double defrost solenoid valve	VVEBCO + RES CAR + SOL SBR	•	•	•	•	•
	Simple low noise housing	INS SEM	•	No	No	No	No
	Evaporator cataphoresis treatment	FRS EVP	•	•	•	•	•
	Condensor cataphoresis treatment	FRS CND	•	•	•	•	•
	Zanotti remote control panel with 5 m cable	PAN SNG	•	No	No	No	No
	Watercooled condenser	CON ACQ	•	•	•	•	•
	Voltage monitor	MON TEN	•	•	•	•	•
	Phase sequence control	CTR FAS	No	No	No	Only for scroll	No
	3 m cable for door heater (for MT only, standard for LT)	RES POR	•	•	•	•	•
	Remote control panel for 2-3-4 units	PAN MUL	•	No	•	No	Only for 235, 335, 340
	Audible and visual alarm	ALR SNV	•	No	•	No	Only for 235, 335, 340
	Prearrangement for supervising system	KIT SUP	•	•	•	•	•
	Kit long distance (more than 10 meters)	KIT DIS	•	No	No	No	No
Option where afterwards installation is possible	Kit for through wall construction	KIT PAN	•	Std	Std	Std	Std

Zanotti Bi-block

			GS	SPO	DBO
Options which need to be ordered with the unit	Simple low noise housing	FRS CND	•	No	No
	Condensate drain electrical heater	RES SCC	X (Std LT)	X (Std LT)	X (Std LT)
	Evaporator cataphoresis treatment	FRS EVP	•	•	•
	Condensor cataphoresis treatment	FRS CND	•	•	•
	Water-cooled condenser	CON ACQ	•	•	•
	Voltage monitor	MON TEN	•	•	•
	3 m micro-switch door cable	MIC POR	•	•	•
	1 m cold room lightning cable	CAV LCE			•
	3 m cable for door heater	RES POR	•	•	•
	Remote control panel for 2-3-4 units	PAN MUL	•	•	•
	Audible and visual alarm	ALR SNV	•	•	•
	Prearrangement for supervising system	KIT SUP	•	•	•
	Kit long distance (more than 10 meters)	KIT DIS	•		
	cold room lamp	KIT LCE	•	•	•

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

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

Product range overview - Zanotti

Model	Product name	Capacity (kW)	0	2	5	10	25	50	100	150	300	450
Compressor pack & racks	Multi compressor units											
Zanotti large condensing units	Multi compressor condensing units											
Zanotti condensing units	Condensing unit											
	Inverter condensing unit											
	Twin condensing unit											

Chilling (Low temperature) (-20° C)

Freezing (Medium temperature) (0° C)

Zanotti

Compressor packs & racks

Multi compressor units

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

Standard features

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

Most common used options:

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

Other options available on request

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

Large condensing units

Multi compressor condensing units

- ☑ Low noise units (max 63 dB(A)@10m*)
- ☑ Six poles condenser fan
- ☑ Three or four compressors on parallel
- ☑ Many different compressor types
  - › Scroll Copeland compressor
  - › JEH Single Screw compressors
  - › Semihermetic reciprocating compressor (Bitzer, Dorin, Copeland Stream, Frascold)
- ☑ Applications (depending on used refrigerant):
  - › High: 0°C ~ +5°C
  - › Medium: -20°C ~ 0°C
  - › Low temperature: -20°C ~ -40°C
- ☑ Compatible with latest refrigerants*
- ☑ Capacity overview of standard large condensing unit range

Standard features

- › Metal frame single or double condenser with electrical switchboard, condenser fans on top, panel for easy access for the refrigerating plant
- › Many different main frames with 2, 3 (630 mm) or 2/3/4/5 (800 mm) fans
- › Compressor parallel with discharge and suction header
- › Liquid receiver
- › Liquid line
- › High and low pressure switch
- › Electrical switchboard complete with electronic control

Most common used options:

- › Residential soundproof insulation (double layer)
- › Oil equalization through mechanical floating valve
- › Oil equalization through electronic valve
- › Oversized liquid receiver
- › Refrigerant charge

Other options available on request

Important note: Larger refrigeration capacities or solutions are possible but have to be selected by our technical department. This will be handled case by case.

* Note: Selection from Selection software based on R404A

Zanotti

Condensing units

1. Condensing units

- ☑ Low noise units
- ☑ Six poles condenser fan
- ☑ New condenser, minichannel type
- ☑ Single compressor
- ☑ Many different compressors types
  - › Hermetic reciprocating compressors (Tecumseh and Manuerop)
  - › Scroll compressor (Copeland)
  - › Semihermetic reciprocating compressor (Bizer, Dorin, Copeland Stream, Frascold)
- ☑ Applications (depending on used refrigerant):
  - › Medium: -20°C ~ 0°C
  - › Low temperature: -20°C ~ -40°C
- ☑ Compatible with latest refrigerants*

Standard features

- › Metal frame with doors to enhance the access to electrical box, condenser fan, refrigerating plant
- › Many different main frames with 1 (360/450 mm) , 2, 4 (450 mm) fans and other bigger with 2,3 (630 mm) or 2/3 (800 mm) fans
- › Liquid receiver
- › Filter drier
- › Sight glass
- › High and low pressure switch
- › Electrical box connection

Most common used options:

- › Simple soundproof insulation
- › Residential soundproof insulation (double layer)
- › Electrical power box
- › Oil separator
- › Liquid separator
- › Thermal overload
- › Condenser pressure fan
- › Radial condenser fan
- › Electronic speed regulator
- › Condenser corrosion protection (cataphoresis)
- › Crankcase heater

Other options available on request

* Note: Depending on model, selection from Selection software based on R404A, R134a, R407F

Zanotti

Condensing units

2. Inverter condensing unit

- ☑ Low noise units
- ☑ Six poles condenser fan
- ☑ New condenser, minichannel type
- ☑ Twin compressor one of the inverter controlled
- ☑ Many different compressors types
  - › Scroll compressor (Copeland)
  - › Semihermetic reciprocating compressor (Bizer, Dorin and Frascold)
- ☑ Capacity control:
  - › Scroll: Use of digital scroll
  - › Bitzer: Varispeed
  - › Other: external built-in frequency drive
- ☑ Applications (depending on used refrigerant):
  - › Medium: -20°C ~ 0°C
  - › Low temperature: -20°C ~ -40°C
- ☑ Compatible with latest refrigerants*

Standard features

- › Metal frame with doors to hace the access for electrical box, condenser fan, refrigerating plant
- › Many different main frames with 2, 4 (450 mm) fans
- › Liquid receiver
- › Filter drier
- › Sight glass
- › High and low pressure switch
- › Electrical switchboard complete with electronic control

Most common used options:

- › Simple soundproof insulation
- › Residential soundproof insulation (double layer)
- › Electrical power box
- › Oil separator
- › Liquid separator
- › Thermal overload
- › Condenser pressure fan
- › Radial condenser fan
- › Electronic speed regulator
- › Condenser corrosion protection (cataphoresis)
- › Crankcase heater

* Note: Depending on model, selection from Selection software based on R404A, R134a, R407F

Zanotti

Condensing units

3. Twin condensing unit

- ☑ Low noise units
- ☑ Six poles condenser fan
- ☑ New condenser, minichannel type
- ☑ Twin compressor (as a small rack)
- ☑ Many different compressors types
  - › Scroll compressor (Copeland)
  - › Semihermetic reciprocating compressor (Bizer and Dorin)
- ☑ Applications (depending on used refrigerant):
  - › Medium: -20°C ~ 0°C
  - › Low temperature: -20°C ~ -40°C
- ☑ Compatible with latest refrigerants*

Standard features

- › Metal frame with doors to hace the access for electrical box, condenser fan, refrigerating plant
- › Many different main frames with 2, 4 (450 mm) fans
- › Liquid receiver
- › Filter drier
- › Sight glass
- › High and low pressure switch
- › Electrical switchboard complete with electronic control

Most common used options:

- › Simple soundproof insulation
- › Residential soundproof insulation (double layer)
- › Electrical power box
- › Oil separator
- › Liquid separator
- › Thermal overload
- › Condenser pressure fan
- › Radial condenser fan
- › Electronic speed regulator
- › Condenser corrosion protection (cataphoresis)
- › Crankcase heater

* Note: Depending on model, selection from Selection software based on R404A, R134a, R407F

Zanotti's additional range

Transportation refrigeration

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

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

Industrial range

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

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

Please contact the refrigeration department at Daikin Europe (refrigeration@bxl.daikineurope.com) or your local refrigeration product manager.

F-Gas Regulation

For fully/partially charged equipment: contains fluorinated greenhouse gases. Actual refrigerant charge depends on the final unit construction, details can be found on the unit labels.

For non pre-charged equipment (LCBKQ-AV1, JEHCCU/JEHSCU): Its functioning relies on fluorinated greenhouse gases.

Ice bar

Cabinet
cooling

Multi ZEAS
condensing units

Supermarket

Cold storage

KEEP COOL, SAVE MONEY

Daikin refrigeration products are designed to reduce environmental impact. That's why Daikin ZEAS and Conveni-Pack already comply with the latest F-gas regulation. This secures your investments and enables you to plan ahead for long-term projects, already complying with all the regulations.

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FSC

ECPEN17-800_1 05/17

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Printed on non-chlorinated paper.