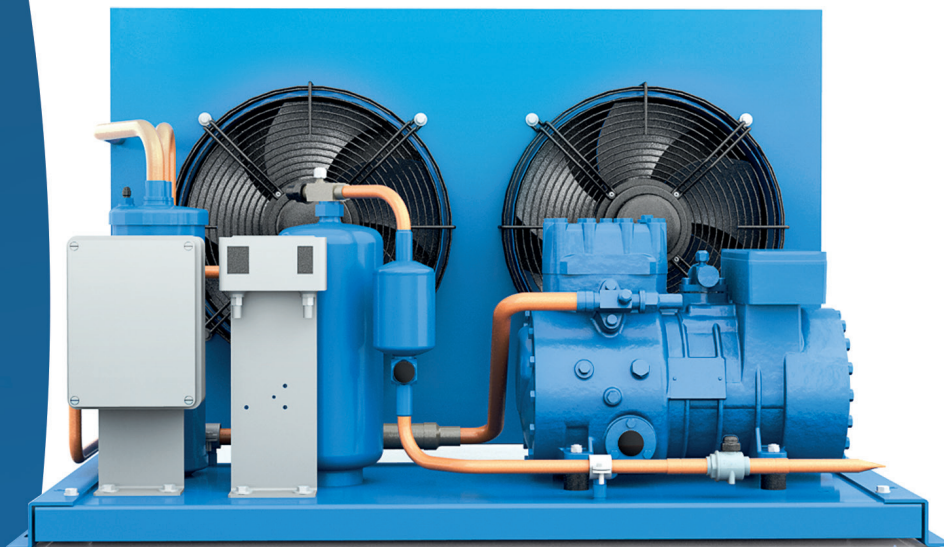


50 Hz & 60 Hz ●

LB2-LBT2 SERIES

AIR-COOLED
CONDENSING UNITS



frascold[®]

INDEX

4	About the Company
5	Segments and Solutions
6	Product Information
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ABOUT THE COMPANY

Frascold manufactures over 70,000 screw and reciprocating compressors a year. Our 53,000 m² factory outside of Milan (Italy) houses our advanced engineering, manufacturing and testing facilities. More than 200 employees work in the Headquarters and in the Subsidiaries based in the United States, China and India, with distribution partners and service centers in 86 countries.

53.000 sqm factory outside Milan (Italy) hosting our advanced engineering manufacturing and testing facilities. ①

② More than 200 employees working in Italy, China, India and United States.

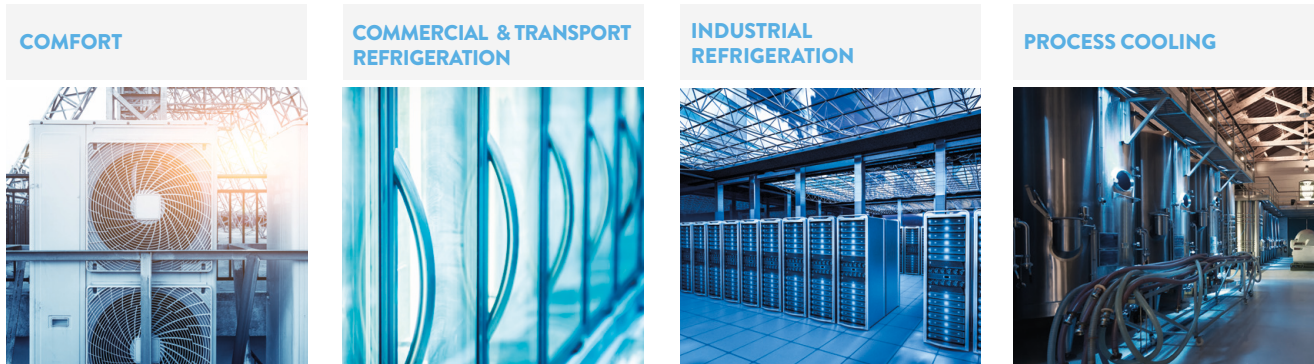
③ Over 70.000 screw and reciprocating compressors manufactured every year.

④ Distribution partners and service centers in 86 countries.

More than 85 years ago Frascold was born as a small family owned Company developing solutions in refrigeration and conditioning industry. Today we invest more and more in people, products, technologies and services aiming to become the best partner for our Customers and the touchstone for the market.

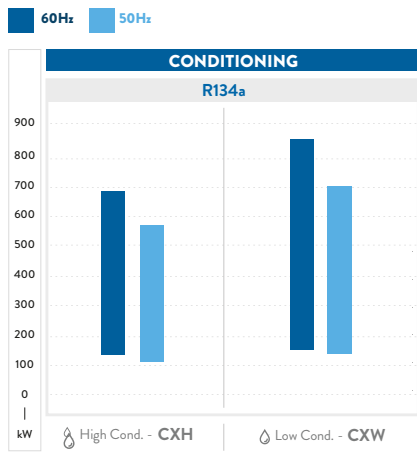
GIUSEPPE GALLI - Frascold Executive Managing Director

SEGMENTS

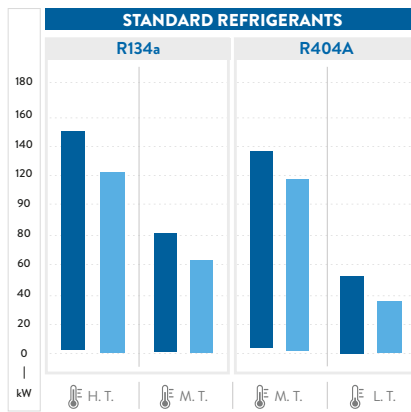


SOLUTIONS

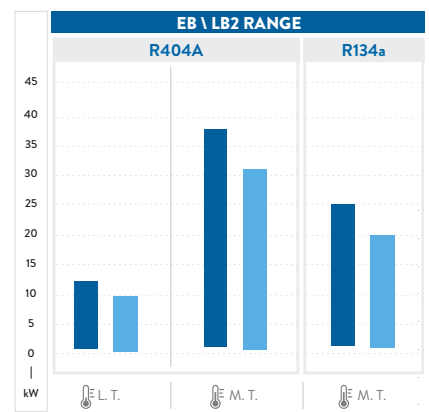
Cooling capacity range @50Hz & @60Hz



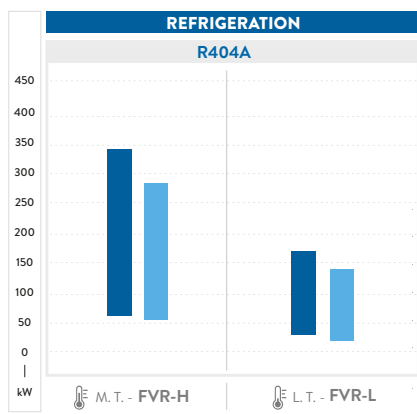
Testing conditions data reference:
 H. Cond.: evap. T. +2°C; cond. T. +50°C; superheating 10K; subcooling 5K
 L. Cond.: evap. T. +3°C; cond. T. +38°C; superheating 10K; subcooling 5K



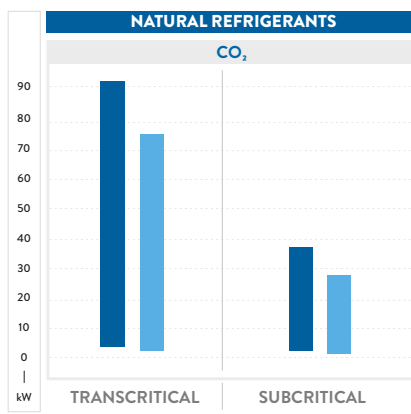
Testing conditions data reference:
 H.T.: evap. T. +5°C; cond. T. +50°C
 M.T.: evap. T. -10°C; cond. T. +45°C
 L.T.: evap. T. -35°C; cond. T. +40°C



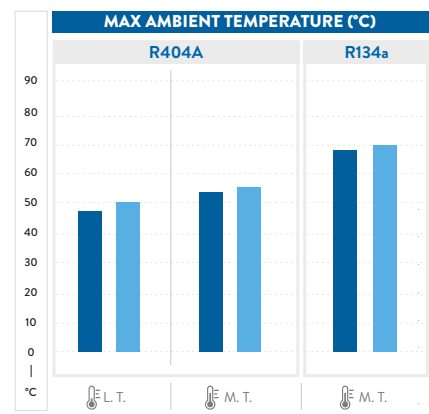
Testing conditions data reference:
 M.T.: cooling capacity @32°C ambient T.; evap. T. -10°C
 L.T.: cooling capacity @32°C ambient T.; evap. T. -35°C



Testing conditions data reference:
 M.T.: evap. T. -10°C; cond. T. +45°C
 L.T.: evap. T. -35°C; cond. T. +40°C ECO



Testing conditions data reference:
 Transcritical: Evap. T. -10°C; Gas cooler out T. 33°C;
 Gas cooler pressure 83,7 bar; Superheating 10K;
 Subcritical: Evap T. -30°C, Cond. T. +10°C; Superheating 10K;



Testing conditions data reference:
 M.T.: evap. T. -10°C
 L.T.: evap. T. -35°C



6

AIR-COOLED CONDENSING UNITS WITH SEMI-HERMETIC COMPRESSOR

Frascold offers a wide range of commercial and industrial cooling condensing units for medium and low temperature applications. Their compact and innovative design is extraordinary and also meets requirements for compact installations in small spaces and in environments where the noise level must be controlled and restricted.

The range of models has two main lines:

- **LB2 models for moderate climate areas.**
- **LBT2 models for tropical climate areas.**

LB2 and LBT2 units are used in many cooling installations, including: cold and refrigerated rooms, supermarkets and shops, distribution centers, industrial applications, cooling processes in the food production and preservation industry.

FEATURES & BENEFITS



Frascold's condensing units are rigorously assembled and tested in our factories in Italy. The optional Diagnose technology protection system can be installed on all Frascold compressors and enables early detection of faults and their rapid resolution, thus reducing maintenance and system downtime.



Full assistance

Frascold offers accurate and comprehensive customer service and prompt assistance in any emergency, both directly and through an extensive network of service centers and partners distributed across all five continents.



Low noise

Frascold compressors are distinguished by their particularly low noise level achieved through the intelligent combination of a body structure, mechanical components and the electric motor. This also enables unit installations very close to the utility in order to reduce pressure drops and the possible danger of leaks.



The best efficiency of condensing units is reached thanks to the advanced design of Frascold semi-hermetic compressors and correct sizing of all components used in the units.



Easy to install and maintain

As a result of their design structure, installation of the units is made simple. Accessibility to all components enables quick and safe maintenance operations.



Their compact size also makes them the perfect solution for installations with limited space.



The range of units enables temperature control in MT, LT and HT. The units can be used with all HCFC and HFC refrigerants.

CONFORMITY DECLARATION

The condensing units comply with the following Directives:

- Machinery directive 2006/42/CE
- Low voltage directive 2014/35/EU

Condensing units are not functional assemblies, which means that in order to work they need to be integrated into a device or system. It is forbidden to commission the product before the device/system in which the cooling unit will be incorporated has been declared compliant with the provisions of the relevant directives, with particular reference to the directive regarding pressure equipment.

Frascold condensing units are constructed according to European safety standards. For the relevant standards please refer to the Manufacturer's Declaration, available on request or on the www.frascold.it website in the certification section.

SAFETY

8

PERFORMANCE DATA FSS3 SOFTWARE

Please refer to our FSS3 to check performances of all our compressors.



①

① Operating limits



②

② Cooling capacity



③

③ All operating data with any kind of refrigerant



④

④ European standard EN12900 at 50Hz



⑤

⑤ Technical information



⑥

⑥ Drawings



⑦

⑦ Manuals



⑧

⑧ Catalogues and certifications

CONTROL PROTECTION DEVICE

The compressor's may be equipped on request with the optional Kriwan INT69®Diagnose protection devices, a further development of the compressor's protection capability. The Diagnose technology is not limited to the protection of the compressor, also provides specific functions of diagnostics aimed for:

- preventing operating faults that may occur in the system through the historical data analysis,
- planning maintenance actions,
- adjusting parameters for system optimization.

The additional protection capabilities help to extend the service life of the compressor. Through this technology applied to the compressors, users benefit from the increased reliability of the refrigeration system and the reduced operating and maintenance costs.

Reliable

- Guarantee of optimal operation throughout the life cycle of the compressor
- Extends the service life of the refrigeration systems
- Improves the compressor protection

Better diagnostic

- Immediate diagnosis and accurate problem-solving in case of error or failure
- Intelligent monitoring of the compressor operation

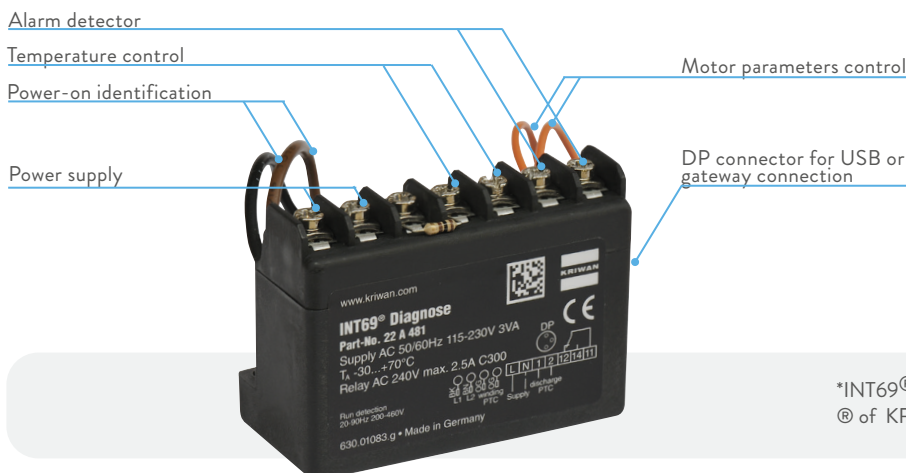
System improvements

- Reduces operating and maintenance costs
- Practical and with simple operation

Data management

- Automatically saves operational data and errors in a memory
- Technical sheet with the retrieval of stored data

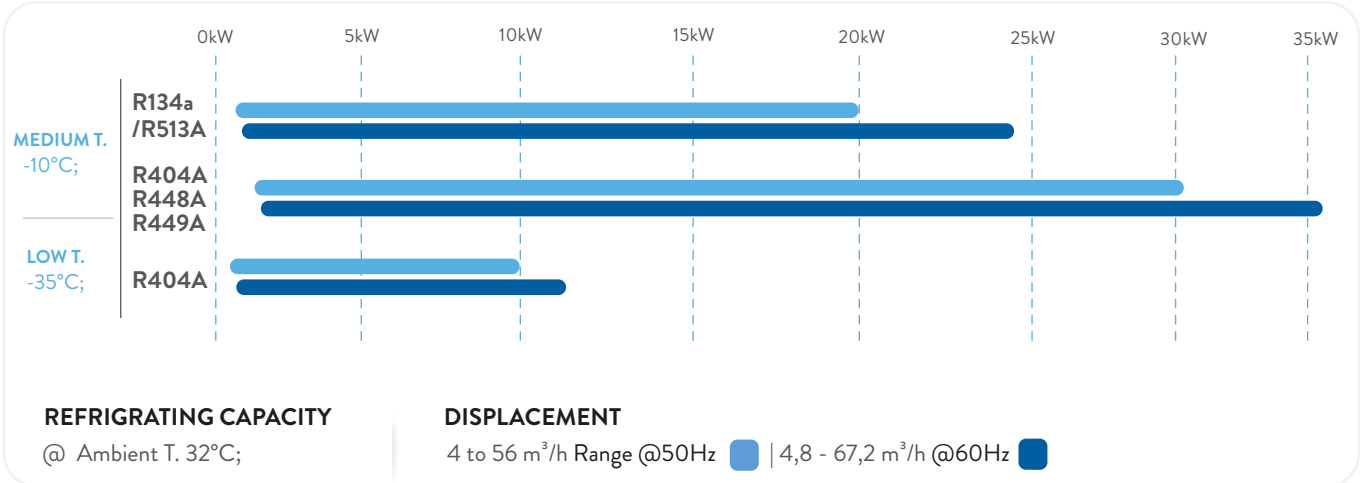
INT69® DIAGNOSE |



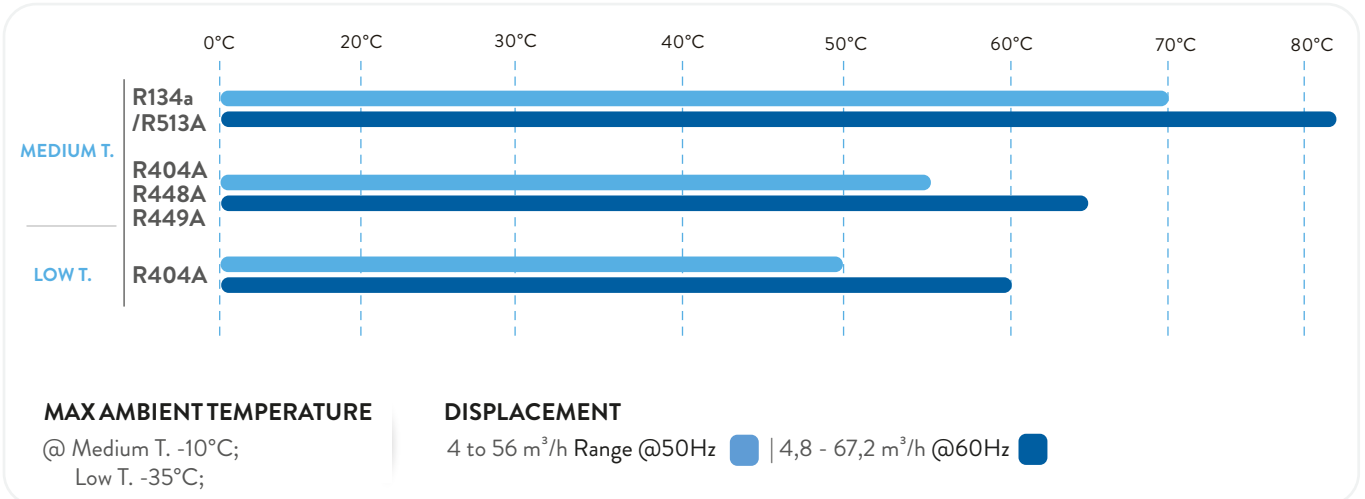
*INT69® Diagnose is intellectual property and trademarks © of KRIWAN Industrie-Elektronik GmbH.

CONDENSING UNITS PRODUCT RANGE

2 version, 58 models



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LEGAL DISCLAIMER:

While Frascold has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications and performances could be subject to change without notice. You can find the most updated information in our Product Selection Software FSS3 at the link: <https://www.frascold.it/en/software>

STANDARD DESIGN SPECIFICATIONS

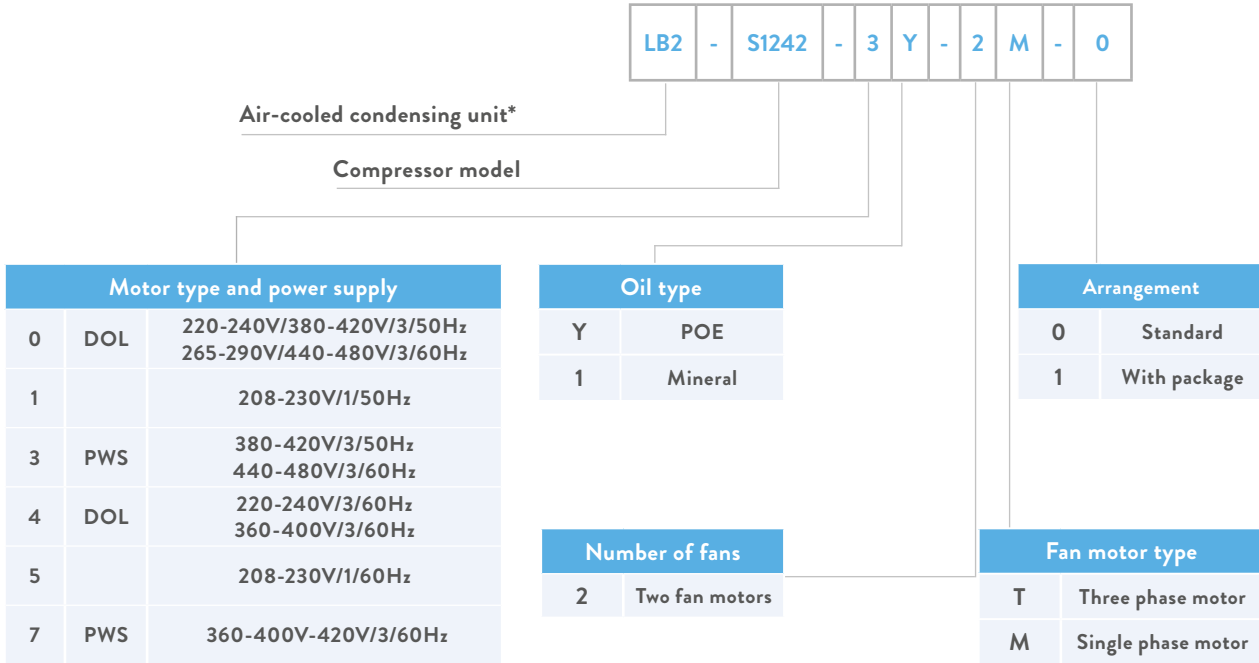
- Semi-hermetic compressor with POE oil filling.
- Condensing unit with wide exchange surface and pipes optimized to reduce pressure drops and refrigerant charge.
- Fan motors with low power consumption and optimized airflow.
- Vertical-type liquid receiver with high storage capacity.
- Compressor discharge line with vibration damping pipe.
- Electronic device for compressor protection.
- Support base frame designed to ensure the necessary strength and stability.

Air-cooled condensing units

The choice of all other components is based on :

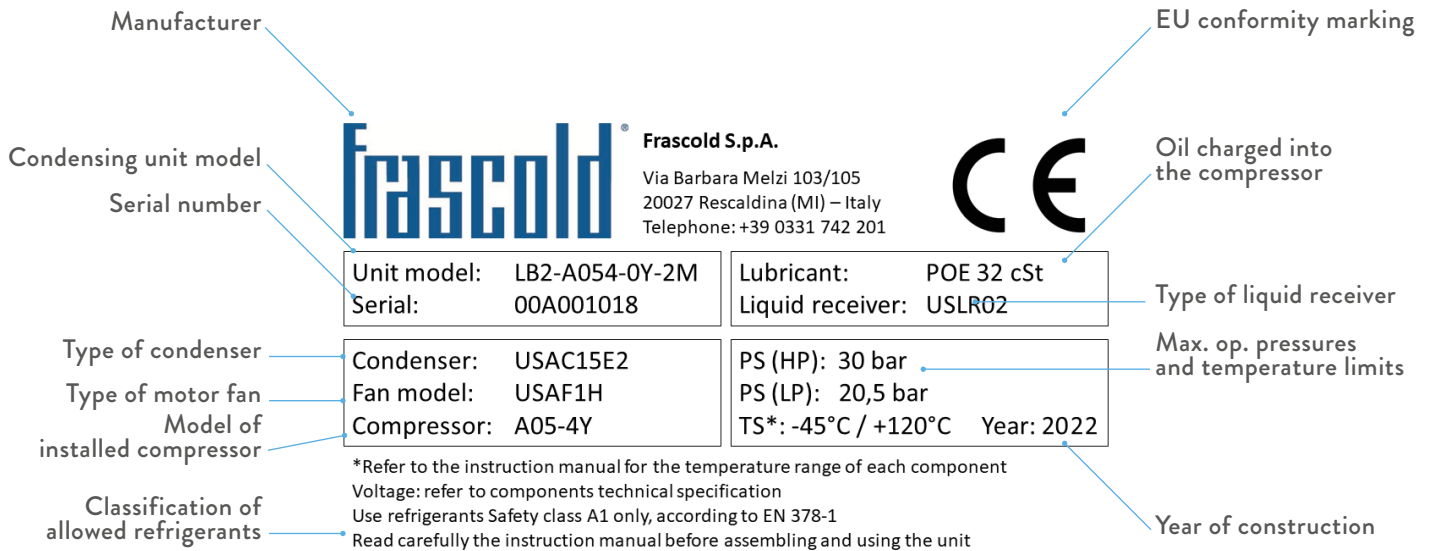
- Safety
- Social responsibility
- Respect for the environment
- Quality

MODEL DESIGNATION



*LB2: Temperate climate - LBT2: Tropical Climate

INFORMATION PLATE



TECHNICAL DATA AND OPTIONS

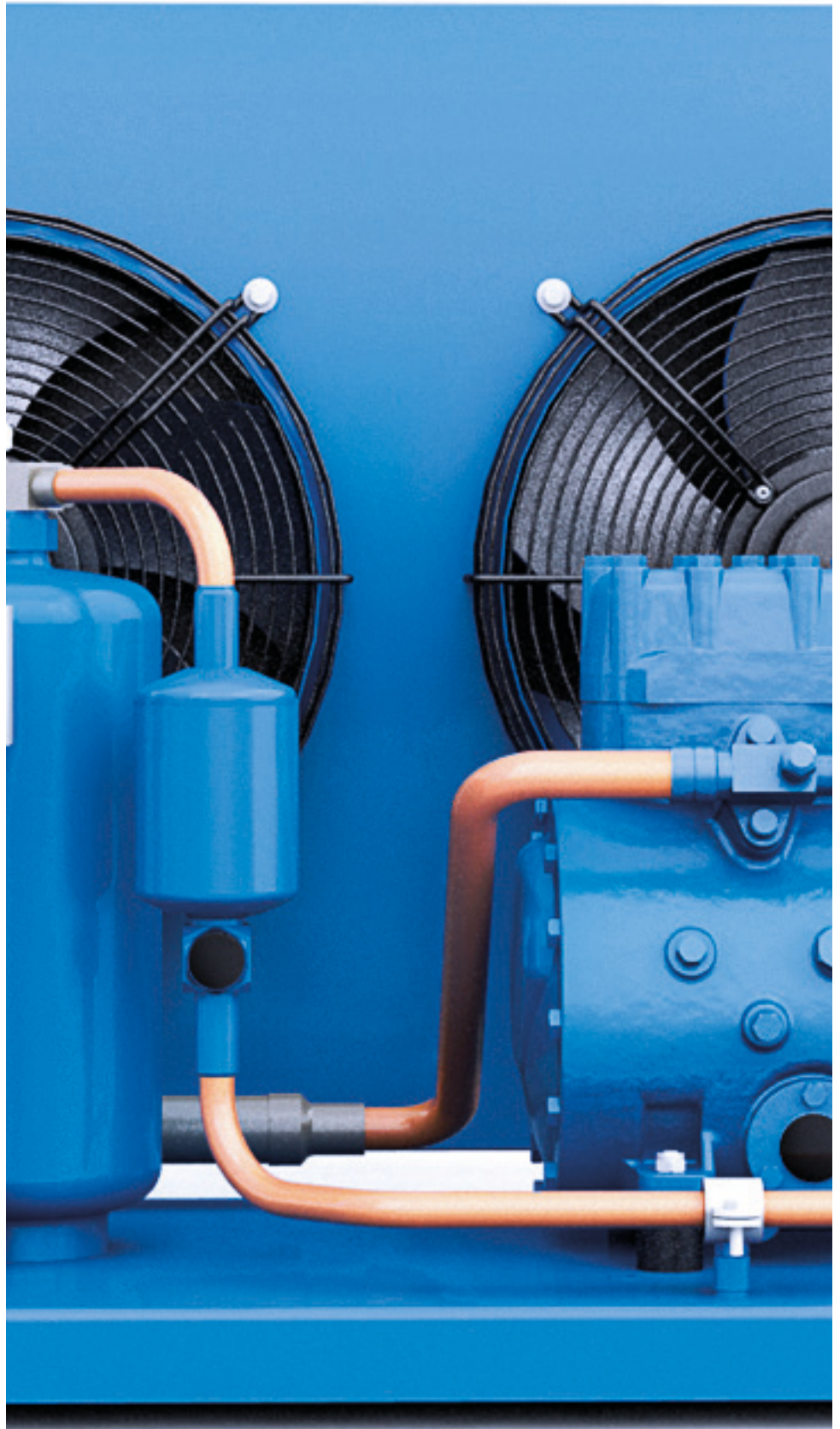
LB2 - LBT2 Series

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You can find the most updated information in our Product Selection Software FSS3 at the link:

<https://www.frascold.it/en/software>



CDU STANDARD	Compressor ^{1.}							Condenser					
	Model	Displacement		Oil charge	Motor ^{3.}			Vol.	AC fan motors				
		50Hz	60Hz		Vers.	Power supply	MRA		Qty	Power supply	Max power ^{7.}		
		[m ³ /h]		[l]							[V]	[A]	[l]
										[kW]			
LB2-A054-0Y-2M	A05-4Y	3,95	4,74	1	1	A	2,8	0,6	2	230-240	130	180	
LB2-A075-0Y-2M	A07-5Y	4,93	5,92	1	1	A	2,7	0,6	2	230-240	130	180	
LB2-A16-0Y-2M	A1-6Y	5,47	6,56	1	1	A	3,6	0,6	2	230-240	130	180	
LB2-A17-0Y-2M	A1-7Y	6,91	8,29	1	2	A	3,7	0,6	2	230-240	130	180	
LB2-A157-0Y-2M	A15-7Y	6,91	8,29	1	1	A	4,5	0,6	2	230-240	130	180	
LB2-B159-0Y-2M	B15-9Y	8,96	10,75	1	2	A	5,9	0,6	2	230-240	130	180	
LB2-B210-0Y-2M	B2-10Y	9,88	11,86	1	1	A	6,7	0,6	2	230-240	130	180	
LB2-D211-0Y-2M	D2-11Y	11,26	13,51	1,1	1	A	7,1	1,6	2	230-240	130	180	
LB2-D213-0Y-2M	D2-13Y	13,15	15,78	1,1	2	A	7,1	1,6	2	230-240	130	180	
LB2-D313-0Y-2M	D3-13Y	13,15	15,78	1,1	1	A	8,8	1,6	2	230-240	130	180	
LB2-D316-0Y-2M	D3-16Y	16,4	19,68	1,1	2	A	9,9	1,6	2	230-240	130	180	
LB2-D318-0Y-2M	D3-18Y	17,93	21,52	1,1	2	A	10	1,6	2	230-240	130	180	
LB2-D416-0Y-2M	D4-16Y	16,4	19,68	1,2	1	A	11,6	2	2	230-240	260	330	
LB2-Q420-0Y-2M	Q4-20Y	19,77	23,72	1,6	2	A	10,1	2	2	230-240	260	330	
LB2-Q424-0Y-2M	Q4-24Y	23,91	28,69	1,6	2	A	11,7	2	2	230-240	260	330	
LB2-Q524-0Y-2M	Q5-24Y	23,91	28,69	1,6	1	A	13,8	2	2	230-240	260	330	
LB2-Q528-0Y-2M	Q5-28Y	28,02	33,62	1,6	2	A	14	2	2	230-240	260	330	
LB2-Q533-0Y-2T	Q5-33Y	32,66	39,19	1,6	2	A	14,4	4,9	2	400Y (230Δ)	630	800	
LB2-Q521-0Y-2T	Q5-21Y	21,18	25,42	1,6	1	A	11,6	4,9	2	400Y (230Δ)	630	800	
LB2-Q536-0Y-2T	Q5-36.1Y	35,86	43,03	1,6	1	A	11,8	4,9	2	400Y (230Δ)	630	800	
LB2-Q728-0Y-2T	Q7-28Y	28,02	33,62	1,6	1	A	17,6	4,9	2	400Y (230Δ)	630	800	
LB2-Q733-0Y-2T	Q7-33Y	32,66	39,19	1,6	1	A	20	4,9	2	400Y (230Δ)	630	800	
LB2-Q736-0Y-2T	Q7-36Y	35,86	43,03	1,6	1	A	19,4	4,9	2	400Y (230Δ)	630	800	
LB2-S842-3Y-2T	S8-42Y	41,32	49,58	2,9	2	B	20,3	6,5	2	400Y (230Δ)	1500	2100	
LB2-S1052-3Y-2T	S10-52Y	51,5	61,8	2,9	2	B	24,5	6,5	2	400Y (230Δ)	1500	2100	
LB2-S1242-3Y-2T	S12-42Y	41,32	49,58	2,9	1	B	22,4	6,5	2	400Y (230Δ)	1500	2100	
LB2-S1552-3Y-2T	S15-52Y	51,5	61,8	2,9	1	B	32,4	6,5	2	400Y (230Δ)	1500	2100	
LB2-S1556-3Y-2T	S15-56Y	56	67,2	2,9	2	B	30,7	6,5	2	400Y (230Δ)	1500	2100	
LB2-S2056-3Y-2T	S20-56Y	56	67,2	2,9	1	B	38,4	10,8	2	400Y (230Δ)	1500	2100	

1. For other compressor technical data refer to catalogue FCAT100
2. POE oil
3. Standard motor / Contact Frascold for different motors
4. Motor size: **version 1** = optimized for medium-high evaporating temperatures / **version 2** = optimized for low evaporating temperatures
5. **A** = 220-240V Δ / 360-420V Y / 3~ / 50Hz // 265-290V Δ / 440-480V Y / 3~ / 60Hz - **B** = 380-420V Y / 3~ / 50Hz // 440-480V Y / 3~ / 60Hz
Tolerance +/- 10% relative to the mean value of the voltage range.
6. Maximum operating current at full load (400V). For rated current see Frascold Selection Software program /
Maximum operating current (MRA) at 230V = (400V MRA) x 1.75
7. Condenser total value

	Condenser				Liquid receiver		Piping connections				CDU STANDARD
	AC fan motors				Vol.	Safety valve connection	Suction line		Liquid line		
	Max absorbed current ^{7.}		Max air flow ^{7.}								
	50Hz	60Hz	50Hz	60Hz			[mm]	[inch]	[mm]	[inch]	
	[A]		[m ³ /h]		[l]						
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-A054-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-A075-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-A16-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-A17-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-A157-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	15,8	5/8"	9,5	3/8"	LB2-B159-0Y-2M
	0,6	0,8	3432	4118	1,5	1/4" NPT	19	3/4"	9,5	3/8"	LB2-B210-0Y-2M
	0,6	0,8	3432	4118	2,2	1/4" NPT	22,2	7/8"	12,7	1/2"	LB2-D211-0Y-2M
	0,6	0,8	3432	4118	2,2	1/4" NPT	22,2	7/8"	12,7	1/2"	LB2-D213-0Y-2M
	0,6	0,8	3432	4118	2,2	1/4" NPT	28,6	1-1/8"	12,7	1/2"	LB2-D313-0Y-2M
	0,6	0,8	3432	4118	2,2	1/4" NPT	28,6	1-1/8"	12,7	1/2"	LB2-D316-0Y-2M
	0,6	0,8	3432	4118	2,2	1/4" NPT	28,6	1-1/8"	12,7	1/2"	LB2-D318-0Y-2M
	1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LB2-D416-0Y-2M
	1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LB2-Q420-0Y-2M
	1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LB2-Q424-0Y-2M
	1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LB2-Q524-0Y-2M
	1,2	1,44	5000	6000	3,4	1/4" NPT	35	1-3/8"	15,8	5/8"	LB2-Q528-0Y-2M
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LB2-Q533-0Y-2T
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LB2-Q521-0Y-2T
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LB2-Q536-0Y-2T
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LB2-Q728-0Y-2T
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LB2-Q733-0Y-2T
	1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LB2-Q736-0Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LB2-S842-3Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LB2-S1052-3Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LB2-S1242-3Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	42	1-5/8"	19	3/4"	LB2-S1552-3Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	42	1-5/8"	19	3/4"	LB2-S1556-3Y-2T
	1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	42	1-5/8"	22,2	7/8"	LB2-S2056-3Y-2T

CDU STANDARD	Compressor ^{1.}							Condenser					
	Model	Displacement		Oil charge	Motor ^{3.}			Vol.	AC fan motors				
		50Hz	60Hz		Vers.	Power supply	MRA		Qty	Power supply	Max power ^{7.}		
		[m ³ /h]	[l]	[V]							[A]	[l]	50Hz
[V]	[kW]												
LBT2-A054-0Y-2M	A05-4Y	3,95	4,74	1	1	A	2,8	1,6	2	230-240	130	180	
LBT2-A075-0Y-2M	A07-5Y	4,93	5,92	1	1	A	2,7	1,6	2	230-240	130	180	
LBT2-A16-0Y-2M	A1-6Y	5,47	6,56	1	1	A	3,6	1,6	2	230-240	130	180	
LBT2-A17-0Y-2M	A1-7Y	6,91	8,29	1	2	A	3,7	1,6	2	230-240	130	180	
LBT2-A157-0Y-2M	A1.5-7Y	6,91	8,29	1	1	A	4,5	1,6	2	230-240	130	180	
LBT2-B159-0Y-2M	B1.5-9Y	8,96	10,75	1	2	A	5,9	1,6	2	230-240	130	180	
LBT2-B210-0Y-2M	B2-10Y	9,88	11,86	1	1	A	6,7	1,6	2	230-240	130	180	
LBT2-D211-0Y-2M	D2-11Y	11,26	13,51	1,1	1	A	7,1	2	2	230-240	260	330	
LBT2-D213-0Y-2M	D2-13Y	13,15	15,78	1,1	2	A	7,1	2	2	230-240	260	330	
LBT2-D318-0Y-2M	D3-18Y	17,93	21,52	1,1	2	A	10	2	2	230-240	260	330	
LBT2-D313-0Y-2M	D3-13Y	13,15	15,78	1,1	1	A	8,8	2	2	230-240	260	330	
LBT2-D316-0Y-2M	D3-16Y	16,4	19,68	1,1	2	A	9,9	2	2	230-240	260	330	
LBT2-D416-0Y-2T	D4-16Y	16,4	19,68	1,2	1	A	11,6	4,9	2	400Y (230Δ)	630	800	
LBT2-D418-0Y-2T	D4-18Y	17,93	21,52	1,2	1	A	12,5	4,9	2	400Y (230Δ)	630	800	
LBT2-Q420-0Y-2T	Q4-20Y	19,77	23,72	1,6	2	A	10,1	4,9	2	400Y (230Δ)	630	800	
LBT2-Q424-0Y-2T	Q4-24Y	23,91	28,69	1,6	2	A	11,7	4,9	2	400Y (230Δ)	630	800	
LBT2-Q524-0Y-2T	Q5-24Y	23,91	28,69	1,6	1	A	13,8	4,9	2	400Y (230Δ)	630	800	
LBT2-Q528-0Y-2T	Q5-28Y	28,02	33,62	1,6	2	A	14	4,9	2	400Y (230Δ)	630	800	
LBT2-Q533-0Y-2T	Q5-33.1Y	32,66	39,19	1,6	2	A	14,4	6,5	2	400Y (230Δ)	1500	2100	
LBT2-Q521-0Y-2T	Q5-21Y	21,18	25,42	1,6	1	A	11,6	6,5	2	400Y (230Δ)	1500	2100	
LBT2-Q536-0Y-2T	Q7-36Y	35,86	43,03	1,6	1	A	20	6,5	2	400Y (230Δ)	1500	2100	
LBT2-Q728-0Y-2T	Q7-28Y	28,02	33,62	1,6	1	A	17,6	6,5	2	400Y (230Δ)	1500	2100	
LBT2-Q733-0Y-2T	Q7-33Y	32,66	39,19	1,6	1	A	20	6,5	2	400Y (230Δ)	1500	2100	
LBT2-Q736-0Y-2T	Q7-36Y	35,86	43,03	1,6	1	A	19,4	6,5	2	400Y (230Δ)	1500	2100	
LBT2-S842-3Y-2T	S8-42Y	41,32	49,58	2,9	2	B	20,3	10,8	2	400Y (230Δ)	1500	2100	
LBT2-S1242-3Y-2T	S12-42Y	41,32	49,58	2,9	1	B	22,4	10,8	2	400Y (230Δ)	1500	2100	
LBT2-S1052-3Y-2T	S10-52Y	51,5	61,8	2,9	2	B	24,5	10,8	2	400Y (230Δ)	1500	2100	
LBT2-S1552-3Y-2T	S15-52Y	51,5	61,8	2,9	1	B	32,4	10,8	2	400Y (230Δ)	1500	2100	
LBT2-S1556-3Y-2T	S15-56Y	56	67,2	2,9	2	B	30,7	10,8	2	400Y (230Δ)	1500	2100	

- For other compressor technical data refer to catalogue FCAT100
- POE oil
- Standard motor / Contact Frascold for different motors
- Motor size: **version 1** = optimized for medium-high evaporating temperatures / **version 2** = optimized for low evaporating temperatures
- A** = 220-240V Δ / 360-420V Y / 3~ / 50Hz // 265-290V Δ / 440-480V Y / 3~ / 60Hz - **B** = 380-420V Y / 3~ / 50Hz // 440-480V Y / 3~ / 60Hz
Tolerance +/- 10% relative to the mean value of the voltage range.
- Maximum operating current at full load (400V). For rated current see Frascold Selection Software program /
Maximum operating current (MRA) at 230V = (400V MRA) x 1.75
- Condenser total value

	Condenser				Liquid receiver		Piping connections				CDU STANDARD
	AC fan motors				Vol.	Safety valve connection	Suction line		Liquid line		
	Max absorbed current ^{7.}		Max air flow ^{7.}								
	50Hz	60Hz	50Hz	60Hz			[l]	[mm]	[inch]	[mm]	
	[A]		[m ³ /h]								
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-A054-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-A075-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-A16-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-A17-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-A157-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	15,8	5/8"	12,7	1/2"	LBT2-B159-0Y-2M	
0,6	0,8	3432	4118	2,2	1/4" NPT	19	3/4"	12,7	1/2"	LBT2-B210-0Y-2M	
1,2	1,44	5000	6000	3,4	1/4" NPT	22,2	7/8"	15,8	5/8"	LBT2-D211-0Y-2M	
1,2	1,44	5000	6000	3,4	1/4" NPT	22,2	7/8"	15,8	5/8"	LBT2-D213-0Y-2M	
1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LBT2-D318-0Y-2M	
1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LBT2-D313-0Y-2M	
1,2	1,44	5000	6000	3,4	1/4" NPT	28,6	1-1/8"	15,8	5/8"	LBT2-D316-0Y-2M	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-D416-0Y-2T	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-D418-0Y-2T	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-Q420-0Y-2T	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-Q424-0Y-2T	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-Q524-0Y-2T	
1,30Y - 2,26Δ	1,44Y - 2,60Δ	10200	12240	5,7	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q528-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q533-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	28,6	1-1/8"	19	3/4"	LBT2-Q521-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q536-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q728-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q733-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	6,6	1/4" NPT	35	1-3/8"	19	3/4"	LBT2-Q736-0Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	35	1-3/8"	22,2	7/8"	LBT2-S842-3Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	35	1-3/8"	22,2	7/8"	LBT2-S1242-3Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	35	1-3/8"	22,2	7/8"	LBT2-S1052-3Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	42	1-5/8"	22,2	7/8"	LBT2-S1552-3Y-2T	
1,50Y - 6,00Δ	3,86Y - 7,10Δ	16020	19224	11	1/2" NPT	42	1-5/8"	22,2	7/8"	LBT2-S1556-3Y-2T	

Find the most updated information in our Product Selection Software FSS3 at the link :
<https://www.frascold.it/en/software>

CONFIGURATIONS

Standard

Basic configuration, including: compressor, air-cooled condenser, fan motors, liquid receiver with shut-off valve, compressor discharge line and base frame.

Standard + Package

The basic configuration is also including: oil separator (supplied without oil charge), the liquid line (filter drier, liquid sight glass and shut-off valve), high and low pressure switch (PED certified, Cat. IV), electrical wiring box.

Accessories

Above mentioned configurations can be completed with other options on the following page.

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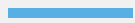
DESCRIPTION	STANDARD	PACKAGE
A, B, D, Q series with direct on line electric motor (DOL)	•	•
Δ connection - 220-240V / 3 / 50Hz (265-290V / 3 / 60Hz)		
Y connection - 380-420V / 3 / 50Hz (440-480V / 3 / 60Hz)		
Serie S con motore elettrico ad avvolgimento parziale (PWS)	•	•
Thermally protected motor winding (PTC sensor + electronic control module)	•	•
Intake and exhaust valves with welded connections	•	•
POE 32 cSt lubricant charge	•	•
4 x Rubber vibration dampers	•	•
Air-cooled Cu-Al condenser	•	•
Condenser fans with AC motors	•	•
Fan motor (s) with IP54 thermal protection with protective grid	•	•
Liquid receiver with rotalock and safety valve (calibrated at 30 bar) mounted	•	•
Discharge line with vibration eliminator	•	•
Protective nitrogen charge	•	•
Packaging that guarantees correct handling and adequate protection	•	•
A, B, D, Q, S: T00ECA01A - electronic control module (monitors the winding temperature engine)	•	•
Standard power supply: AC 40-60 Hz 200-240 V \hat{A} 10% 3 VA		
Wide range of motors for all power supplies	•	•
HP / LP pressure switch automatic reset		•
Liquid line with filter drier, sight glass and shut-off valve		•
IP56 box for terminal input (not connected)		•
Oil separator assembled in the factory and mechanically connected		•

CONSTRUCTION FEATURES AND OPTIONALS

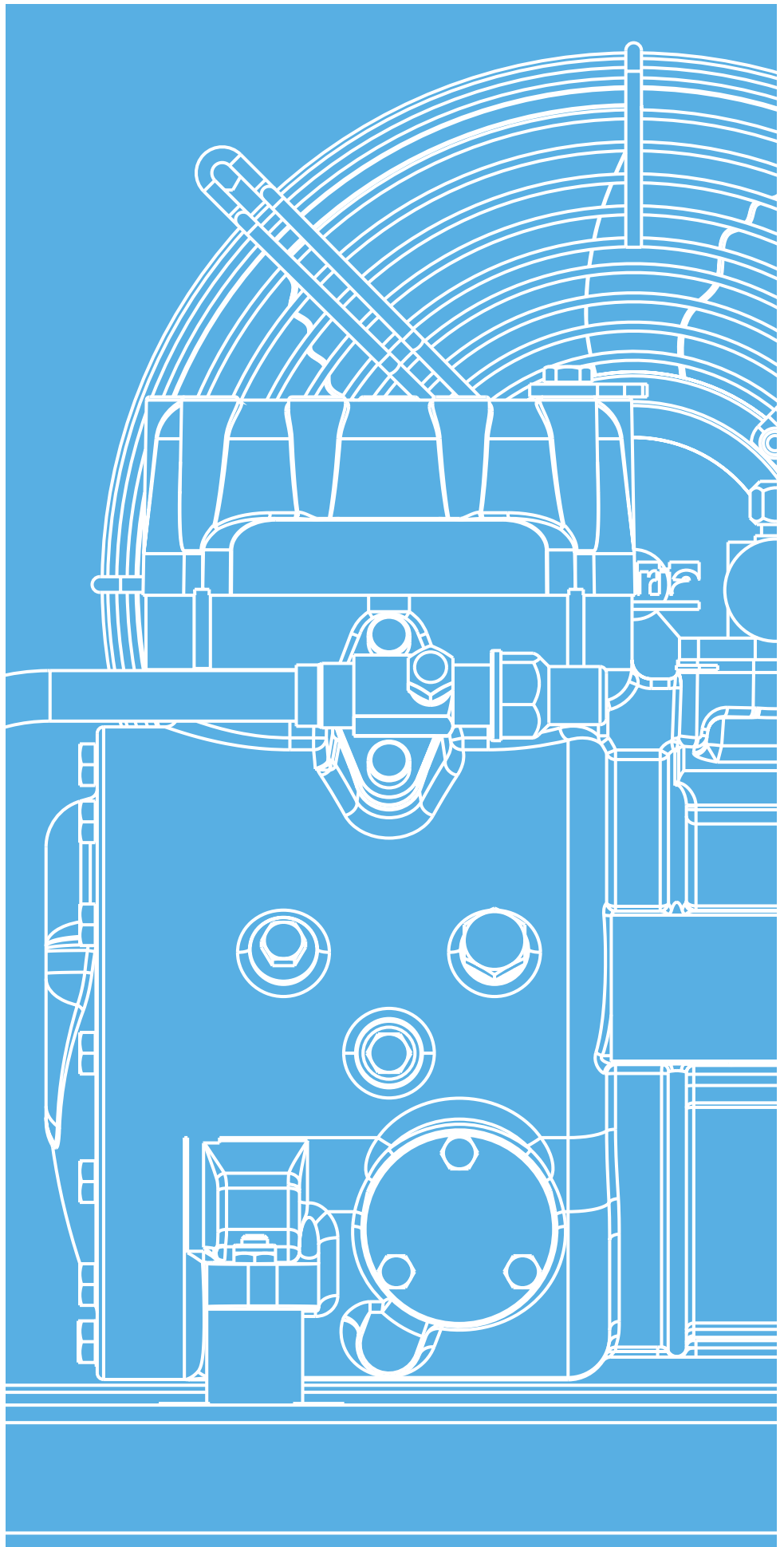
ALL VERSIONS	LB2-A...	LBT2-A...	LB2-B...	LBT2-B...	LB2-D...	LBT2-D...	LB2-Q...	LBT2-Q...	LB2-S...	LBT2-S...
STANDARD										
Semi-hermetic compressor with integrated direct starting electric motor (DOL) PTC / AMS sensors 220-240 V Δ / 380-420 V / 3/50 Hz // 265-290 V Δ / 440-480 V / 3/60 Hz; Device INT69 protection; POE oil filling; intake and exhaust valves; rubber supports	•	•	•	•	•	•	•	•		
Semi-hermetic compressor with integrated direct starting electric motor (DOL) PTC / AMS sensors 220-240 V Δ / 380-420 V / 3/50 Hz // 265-290 V Δ / 440-480 V / 3/60 Hz; Device INT69 protection; POE oil filling; intake and exhaust valves; rubber supports									•	•
Liquid receiver (PED certified) with large volume rotalock valve, brazing, safety valve (setpoint 30 bar)	•	•	•	•	•	•	•	•	•	•
Vibration damper pipe on the compressor discharge line		•		•	•	•	•	•	•	•
AC fans	•	•	•	•	•	•	•	•	•	•
PACKAGE										
High / low safety pressure switch (PED certified, Cat. IV)	•	•	•	•	•	•	•	•	•	•
Liquid line (filter, sight glass, shut-off valve)	•	•	•	•	•	•	•	•	•	•
Oil separator (supplied without oil charge)	•	•	•	•	•	•	•	•	•	•
Electrical connection box	•	•	•	•	•	•	•	•	•	•
OPTIONALS (supplied separately)										
Exhaust temperature control sensor							•	•	•	•
Speed regulation device. fan motor for single-phase fans only	•	•	•	•	•	•	•			
Solenoid valve	•	•	•	•	•	•	•	•	•	•
Control valve for the compressor discharge line	•	•	•	•	•	•	•	•	•	•
Protective case (fairing) for outdoor installation	•	•	•	•	•	•	•	•	•	•

TECHNICAL DRAWINGS AND DIMENSIONS

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LB2 - LBT2 Series



DRAWING KEY



AC	Air-cooled condenser
AF	Fan motor
DV	Discharge valve
LR	Liquid receiver
LRV	Liquid receiver shut-off valve
S	Safety valve / Safety valve connection
SV	Suction valve
OS	Oil separator
EB	Electric wiring box
HL	High/low pressure switch
LL	Liquid line

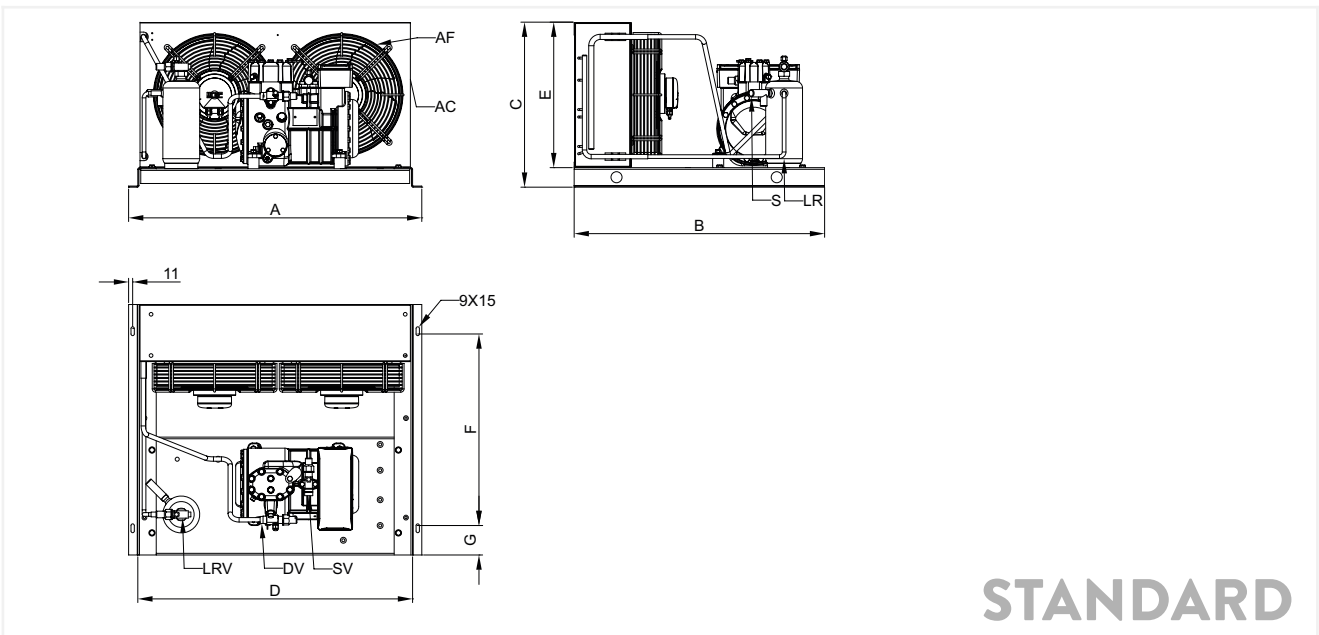
STANDARD

PACKAGE

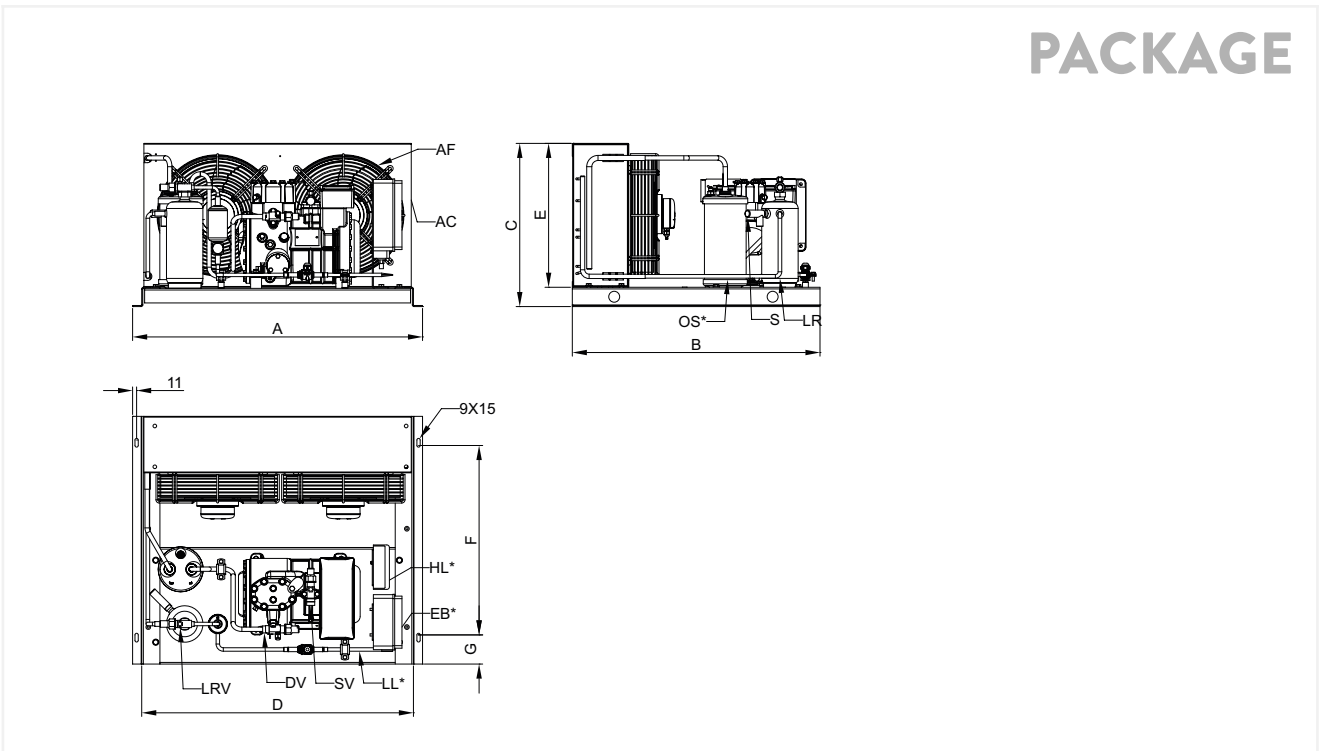


Dimensional drawing
Standard models

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
LB2-A054-0Y-2M											
LB2-A075-0Y-2M											
LB2-A16-0Y-2M											
LB2-A17-0Y-2M	796	680	448	746	395	535	80	796	705	473	25
LB2-A157-0Y-2M											
LB2-B159-0Y-2M											
LB2-B210-0Y-2M											

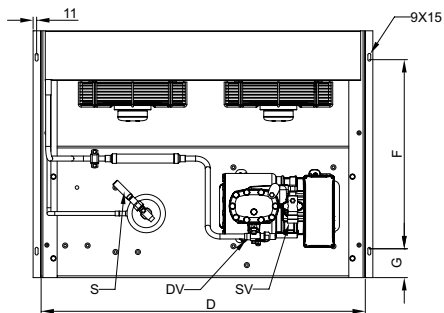
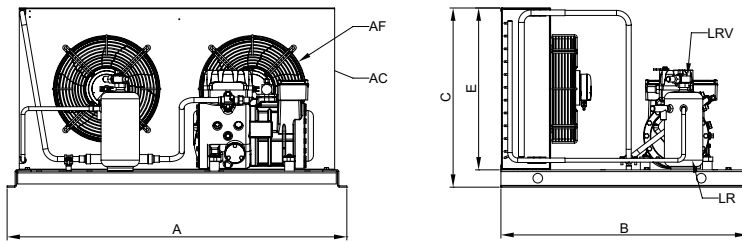


STANDARD
PACKAGE



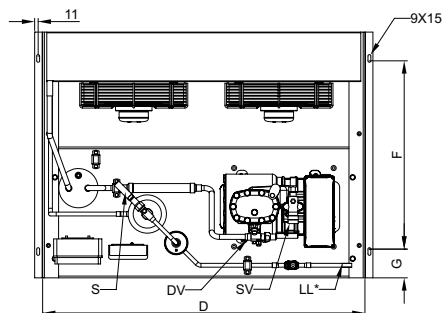
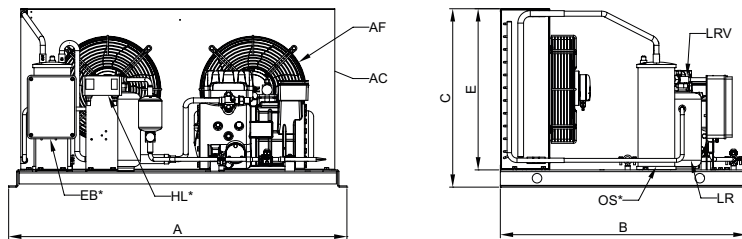
Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LB2-D211-0Y-2M	1060	770	559	1010	505	600	90	1060	795	583	32
LB2-D213-0Y-2M											
LB2-D313-0Y-2M											
LB2-D316-0Y-2M											
LB2-D318-0Y-2M											



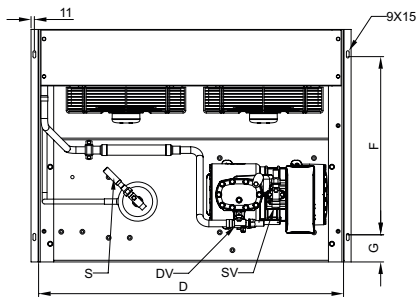
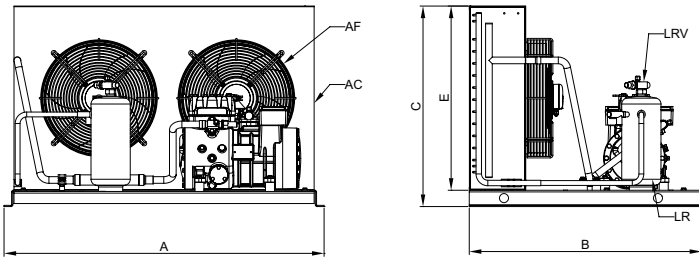
STANDARD

PACKAGE

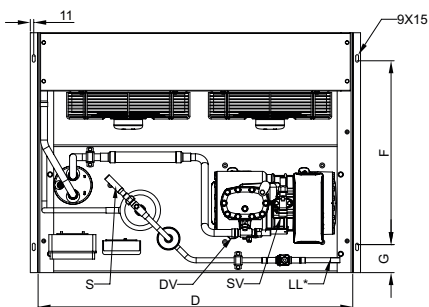
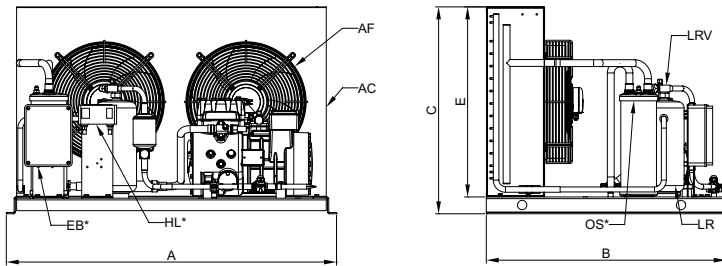


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LB2-D416-0Y-2M	1060	770	664	1010	610	600	90	1060	795	688	36

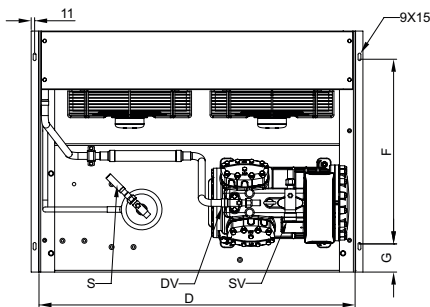
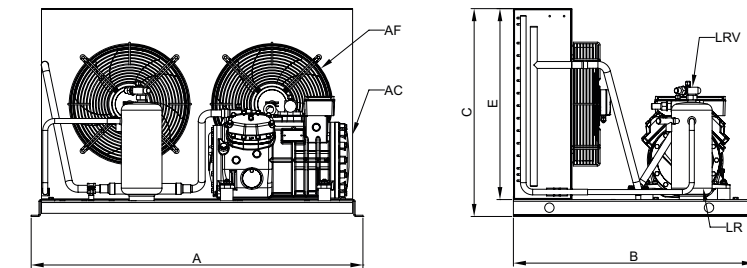


STANDARD PACKAGE



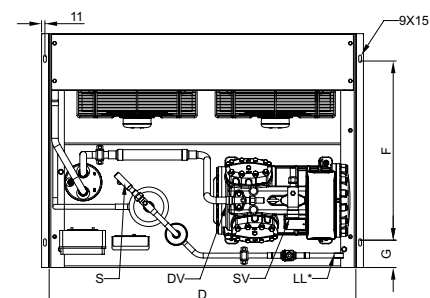
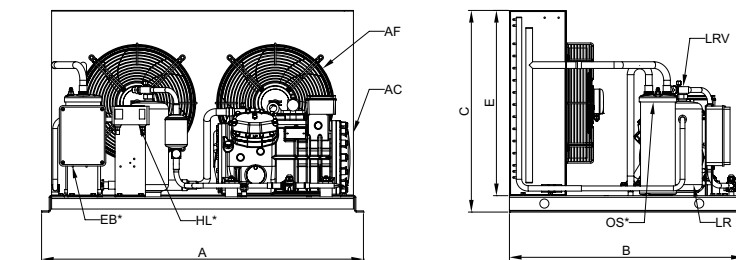
Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
LB2-Q420-0Y-2M	1060	770	664	1010	610	600	90	1060	795	688	36
LB2-Q424-0Y-2M											
LB2-Q524-0Y-2M											
LB2-Q528-0Y-2M											



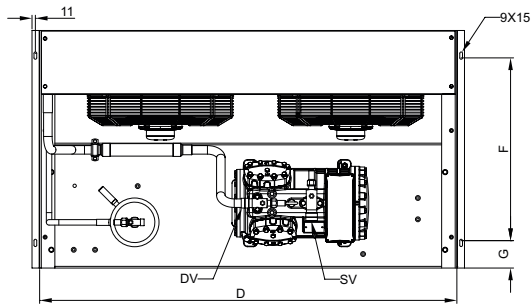
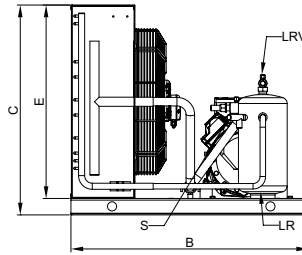
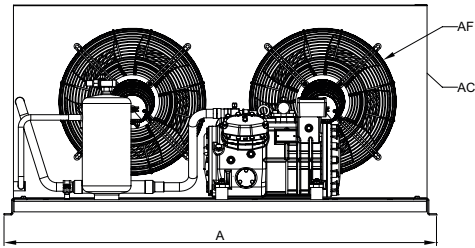
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**STANDARD
PACKAGE**

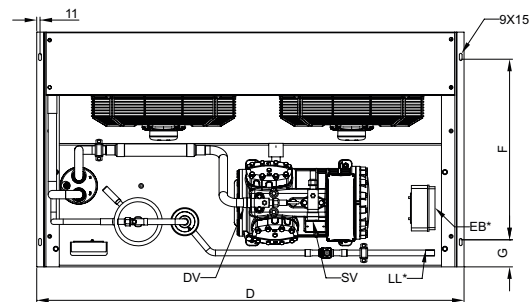
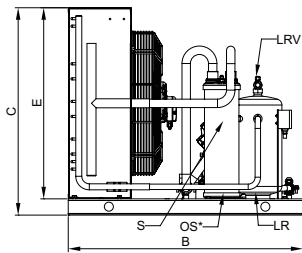
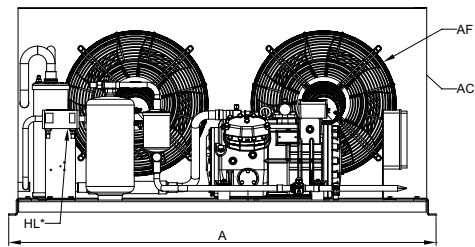


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
LB2-Q533-0Y-2T	1420	780	689	1370	635	600	80	1420	804	713	44
LB2-Q536-0Y-2T											
LB2-Q521-0Y-2T											
LB2-Q728-0Y-2T											
LB2-Q733-0Y-2T											
LB2-Q736-0Y-2T											

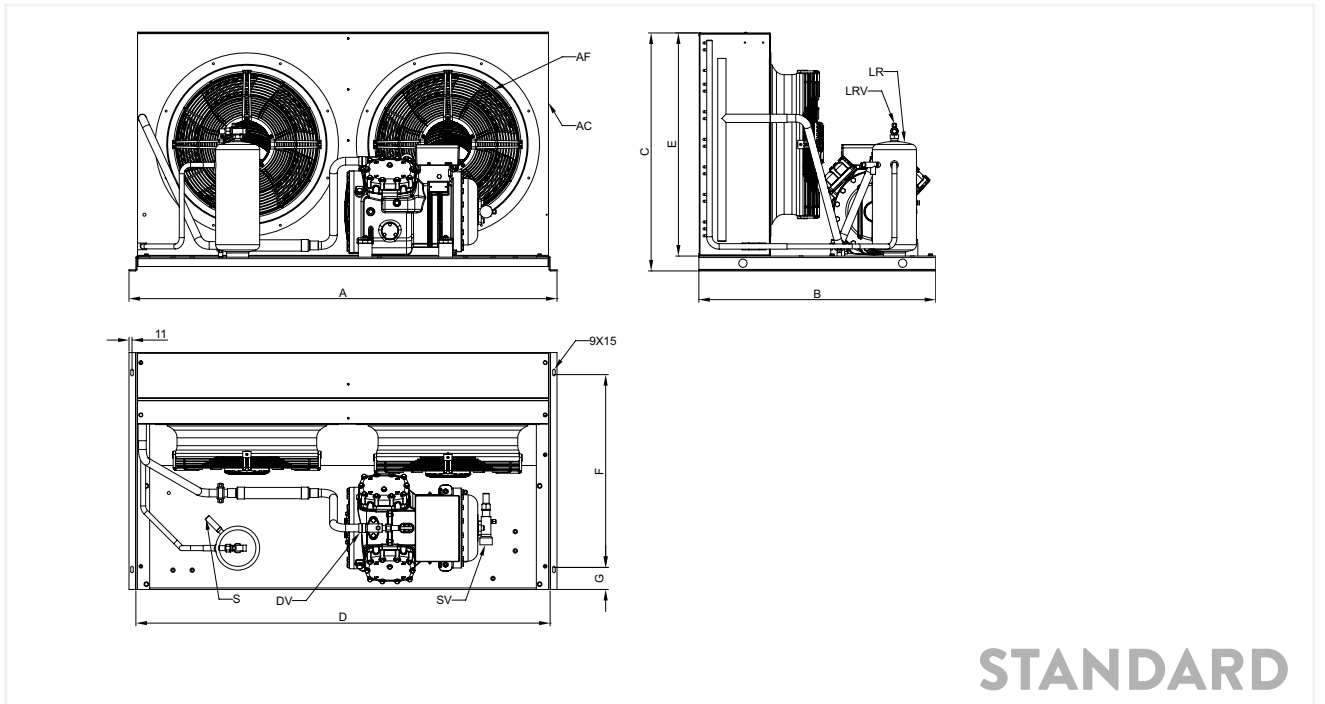


STANDARD PACKAGE



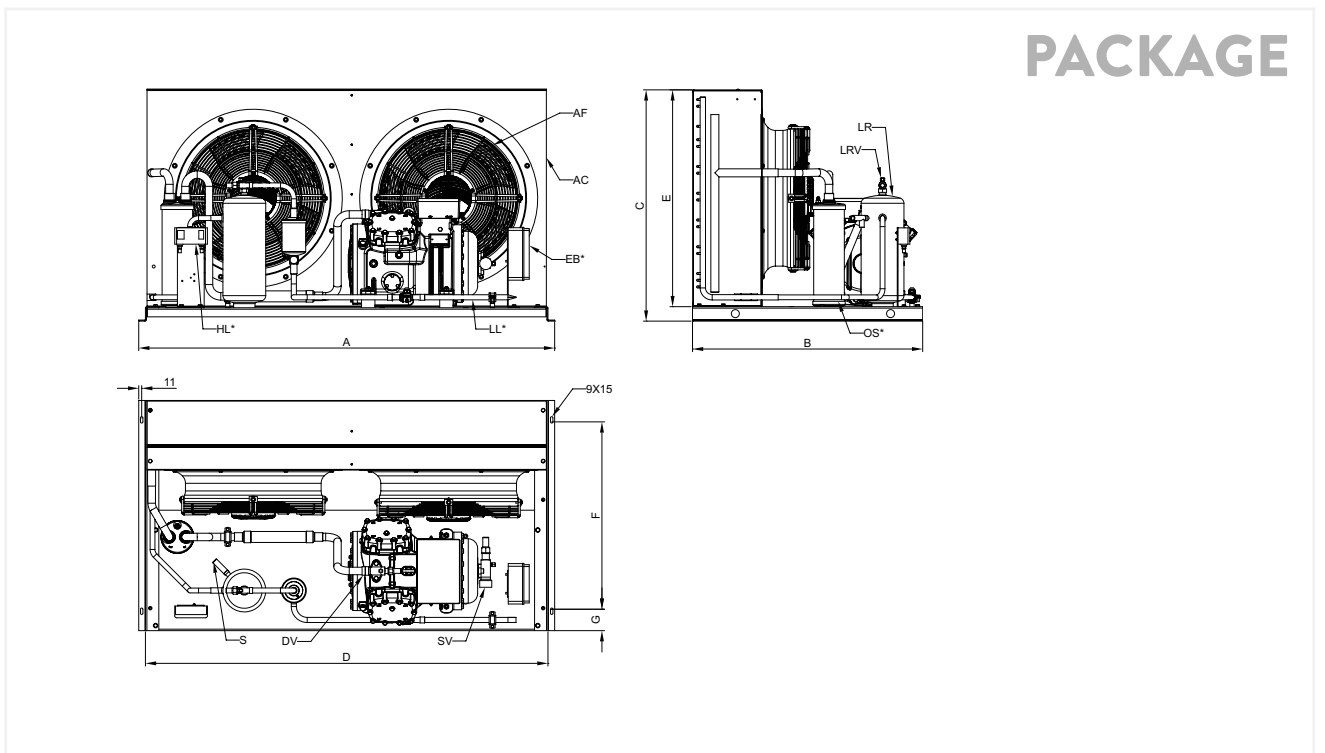
Dimensional drawing

	Standard construction						Unit with housing					
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight	
	A	B	C	D	E	F	G	A	B	C	[kg]	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LB2-S842-3Y-2T												
LB2-S1052-3Y-2T												
LB2-S1242-3Y-2T	1556	860	867	1504	813	700	80	1556	884	888	57	
LB2-S1552-3Y-2T												
LB2-S1556-3Y-2T												



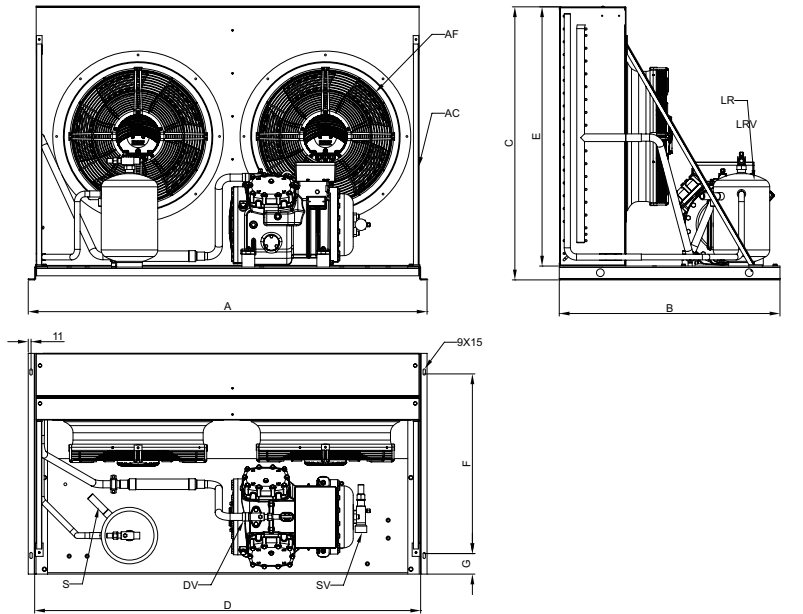
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**STANDARD
PACKAGE**

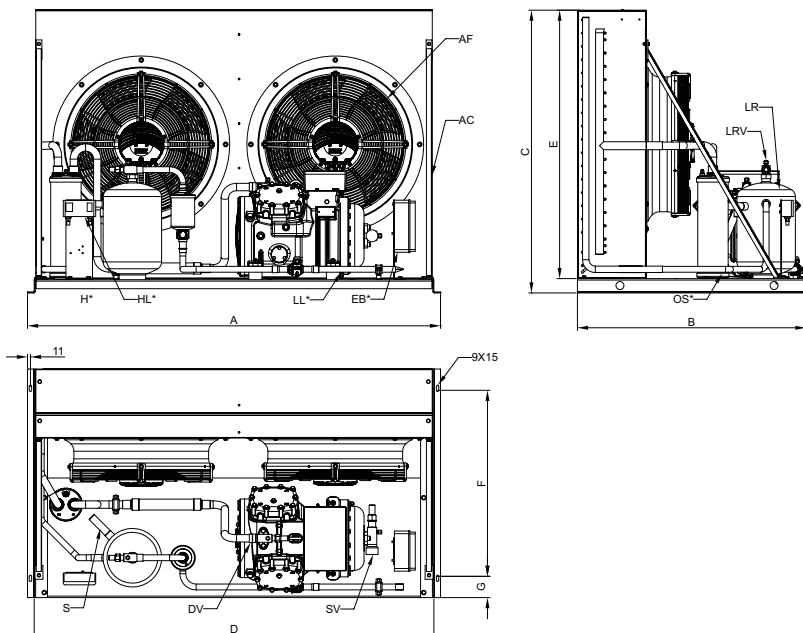


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
LB2-S2056-3Y-2T	1556	860	1062	1504	1013	700	80	1556	884	1089	65



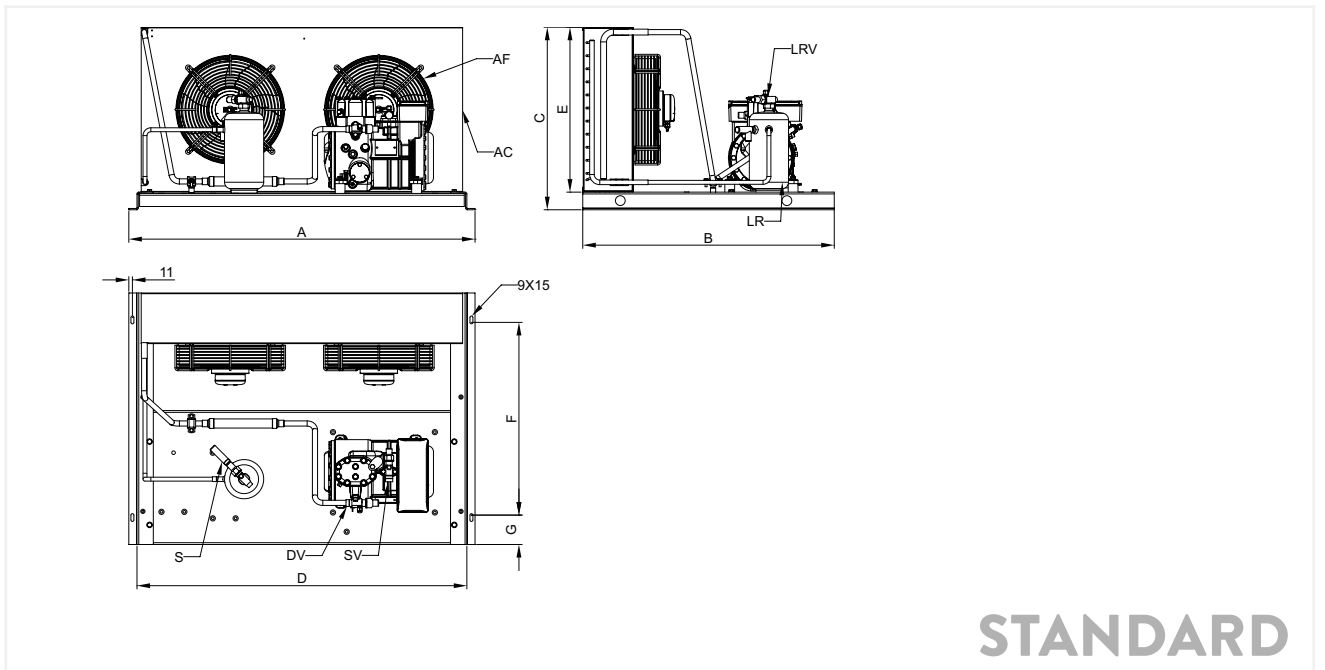
STANDARD PACKAGE



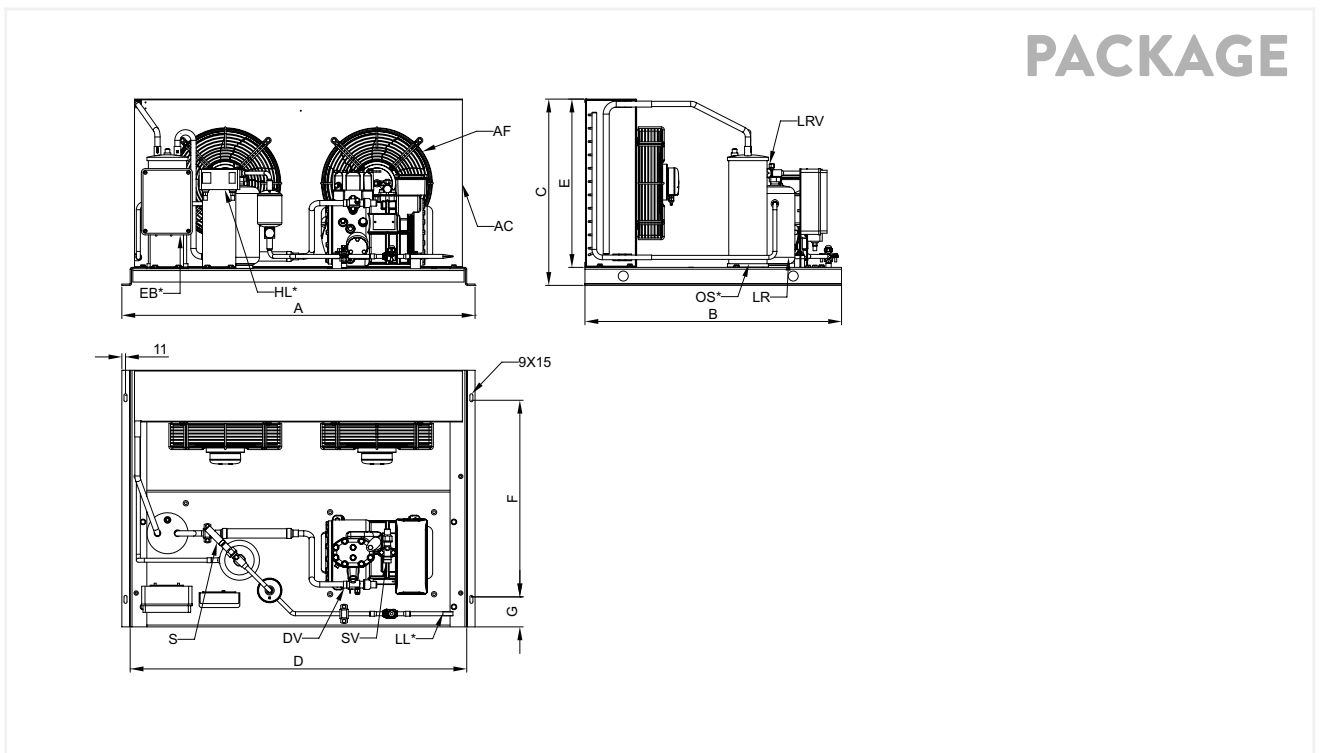
Dimensional drawing

Tropicalized models

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	A [mm]	B [mm]	C [mm]	
LBT2-A054-0Y-2M	1060	770	559	1010	505	600	90	1060	795	583	32
LBT2-A075-0Y-2M											
LBT2-A16-0Y-2M											
LBT2-A17-0Y-2M											
LBT2-A157-0Y-2M											
LBT2-B159-0Y-2M											
LBT2-B210-0Y-2M											

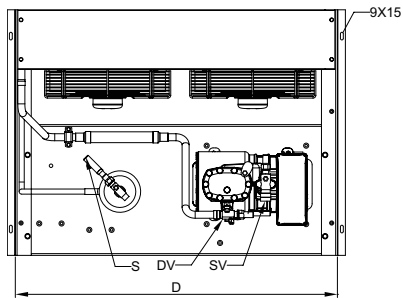
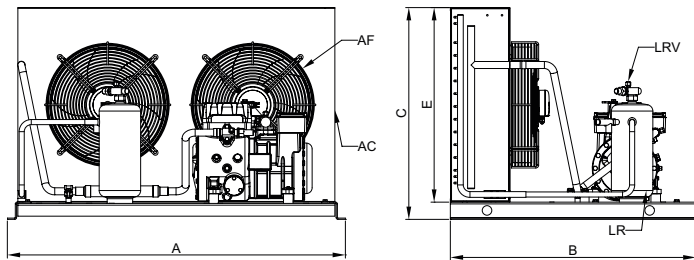


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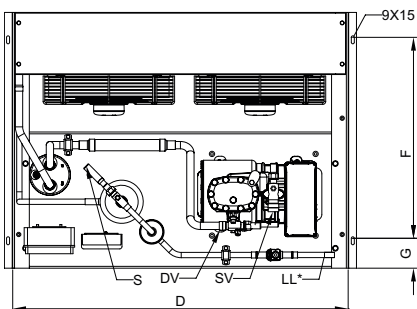
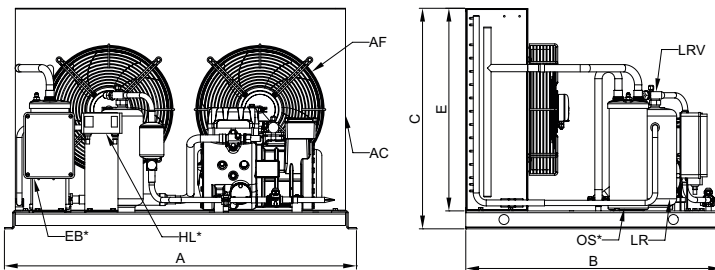


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LBT2-D211-0Y-2M											
LBT2-D213-0Y-2M											
LBT2-D313-0Y-2M	1060	770	664	1010	610	600	90	1060	795	688	36
LBT2-D316-0Y-2M											
LBT2-D318-0Y-2M											

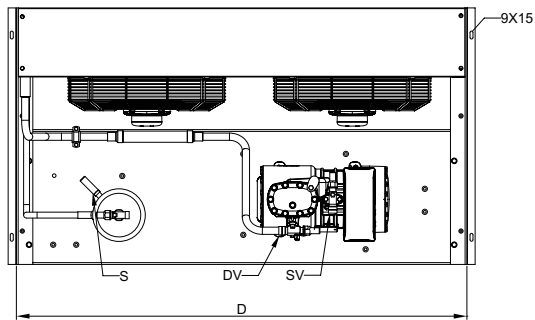
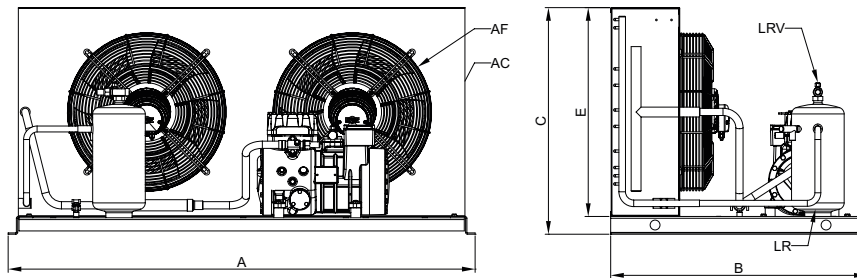


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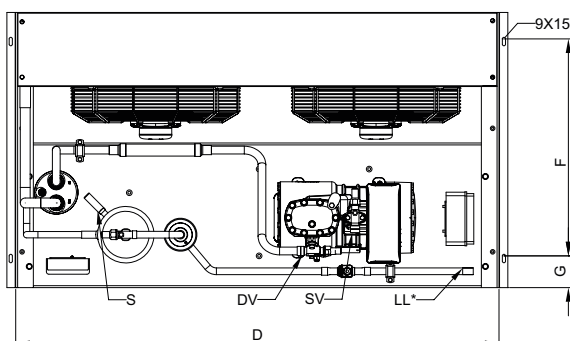
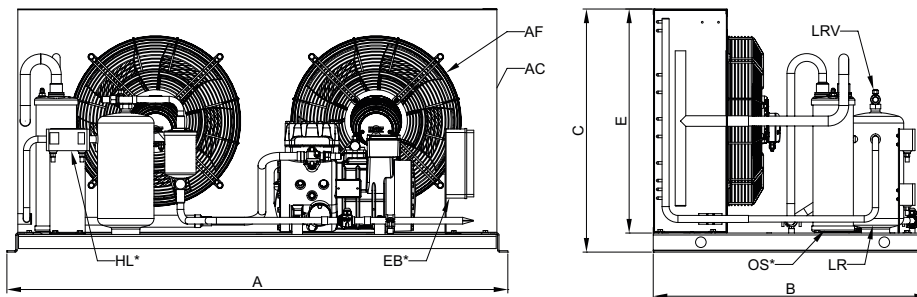
Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
LBT2-D416-0Y-2T	1420	780	689	1370	635	600	80	1420	784	713	44
LBT2-D418-0Y-2T											



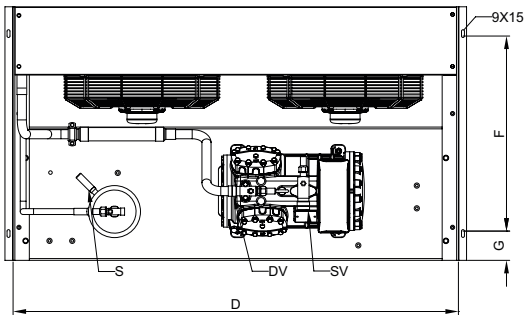
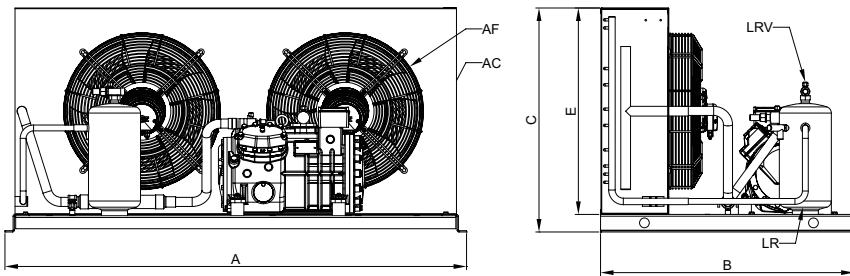
STANDARD

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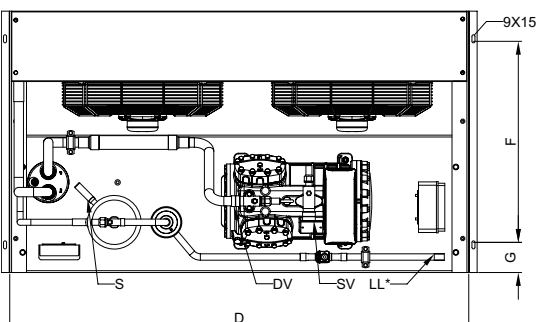
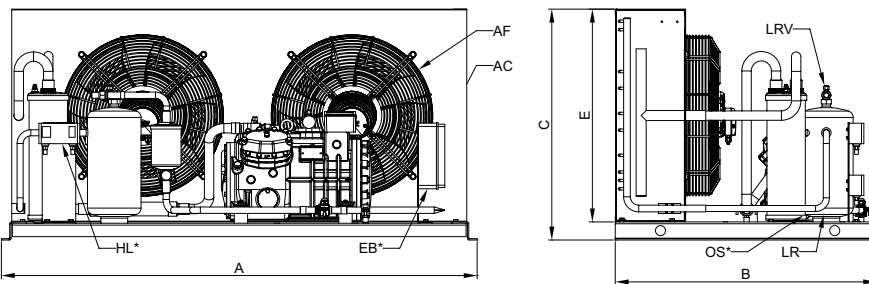


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
LBT2-Q420-0Y-2T	1420	780	689	1370	635	600	80	1420	804	713	44
LBT2-Q424-0Y-2T											
LBT2-Q524-0Y-2T											
LBT2-Q528-0Y-2T											

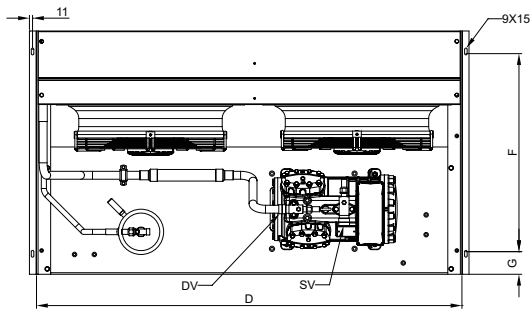
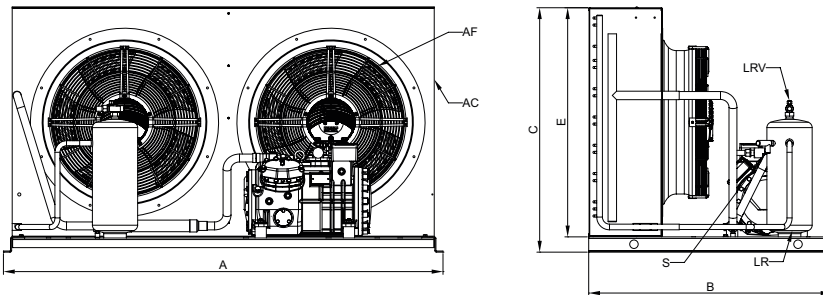


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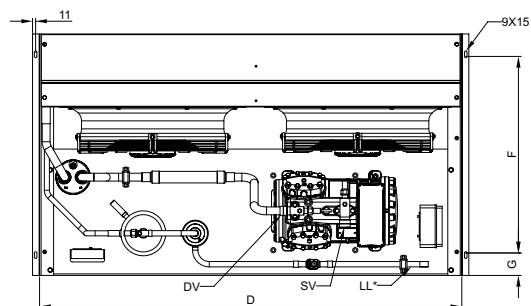
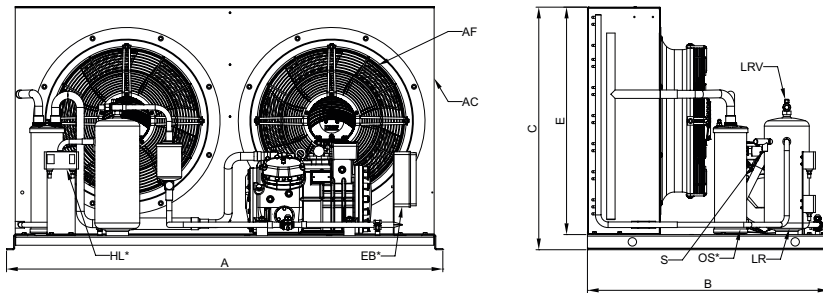


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
LBT2-Q521-0Y-2T	1556	860	867	1504	813	700	80	1556	884	888	57
LBT2-Q533-0Y-2T											
LBT2-Q536-0Y-2T											
LBT2-Q728-0Y-2T											
LBT2-Q733-0Y-2T											
LBT2-Q736-0Y-2T											

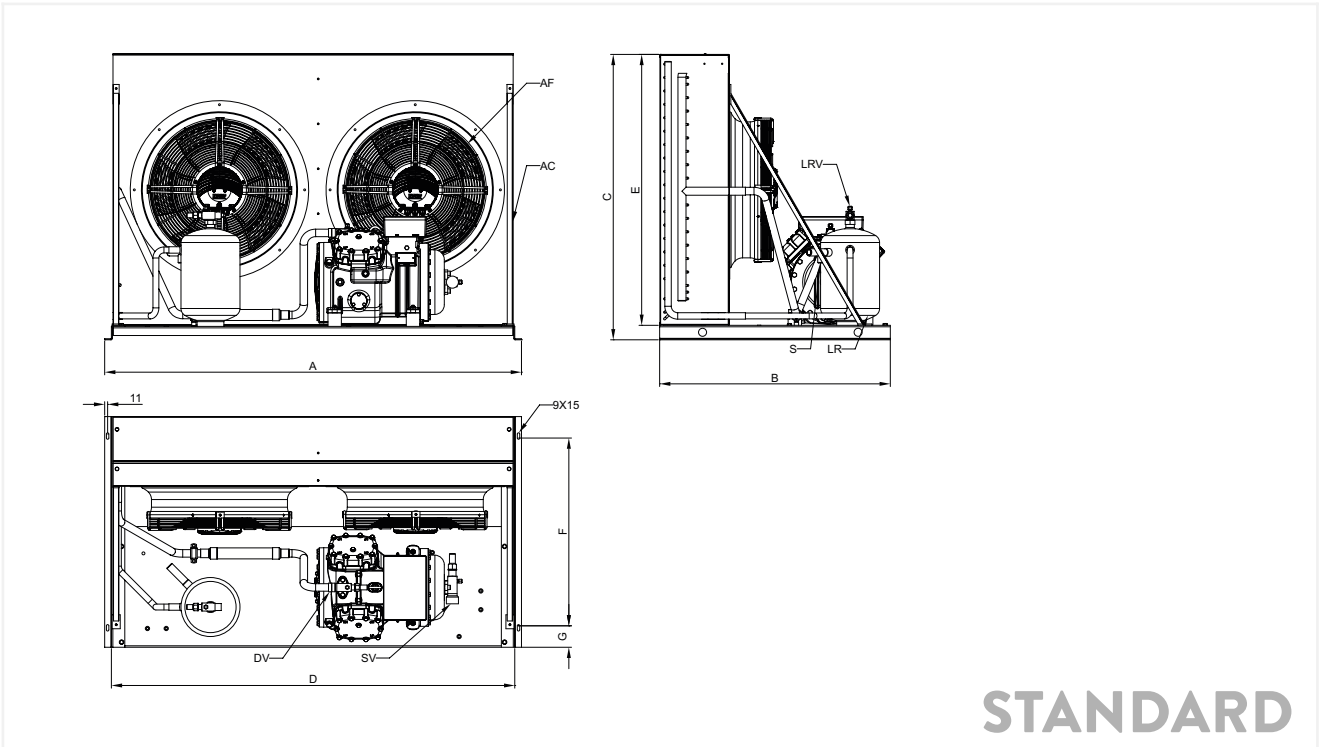


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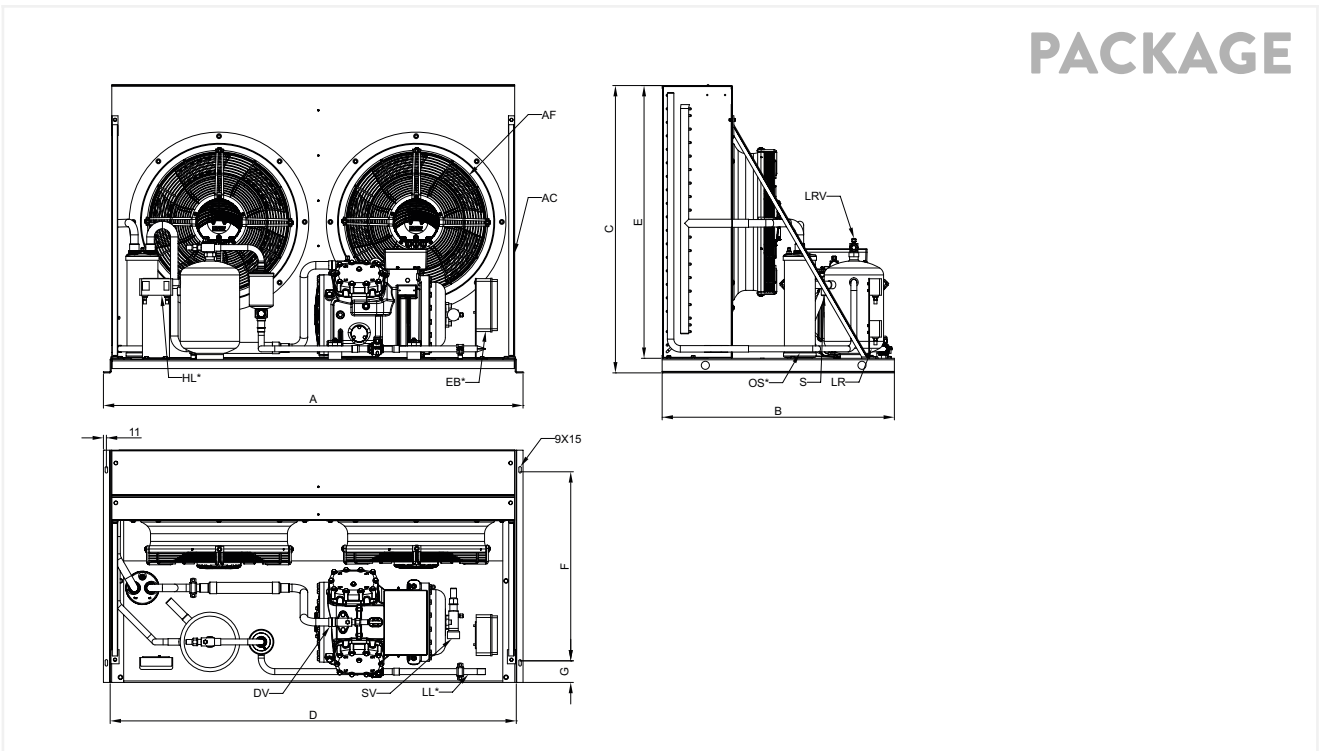


Dimensional drawing

	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LBT2-S842-3Y-2T	1556	860	1062	1504	1013	700	80	1556	884	1089	65
LBT2-S1242-3Y-2T											
LBT2-S1052-3Y-2T											
LBT2-S1552-3Y-2T											
LBT2-S1556-3Y-2T											



STANDARD PACKAGE



STANDARD	Installation/transp.		Installation/transp.		Packaging	
	STANDARD		PACKAGE		Dimensions (LxWxH)	Volume
	Net weight	Gross weight	Net weight	Gross weight		
	[kg]	[kg]	[kg]	[kg]	[cm]	[dm ³]
LB2-A054-0Y-2M	67	75	69	77	87x71x60	377
LB2-A075-0Y-2M	67	75	69	77	87x71x60	377
LB2-A16-0Y-2M	67	75	69	77	87x71x60	377
LB2-A17-0Y-2M	67	75	69	77	87x71x60	377
LB2-A157-0Y-2M	67	75	69	77	87x71x60	377
LB2-B159-0Y-2M	69	77	71	79	87x71x60	377
LB2-B210-0Y-2M	71	79	73	81	87x71x60	377
LB2-D211-0Y-2M	97	107	100	110	110x85x85	795
LB2-D213-0Y-2M	97	107	100	110	110x85x85	795
LB2-D313-0Y-2M	97	107	100	110	110x85x85	795
LB2-D316-0Y-2M	101	111	104	114	110x85x85	795
LB2-D318-0Y-2M	107	117	110	120	110x85x85	795
LB2-D416-0Y-2M	116	126	118	128	110x85x85	795
LB2-Q420-0Y-2M	135	145	137	147	110x85x85	795
LB2-Q424-0Y-2M	140	150	142	152	110x85x85	795
LB2-Q524-0Y-2M	140	150	142	152	110x85x85	795
LB2-Q528-0Y-2M	140	150	142	152	110x85x85	795
LB2-Q533-0Y-2T	168	183	171	186	149x88x88	1154
LB2-Q521-0Y-2T	168	183	171	186	149x88x88	1154
LB2-Q728-0Y-2T	168	183	171	186	149x88x88	1154
LB2-Q733-0Y-2T	168	183	171	186	149x88x88	1154
LB2-Q736-0Y-2T	168	183	171	186	149x88x88	1154
LB2-S842-3Y-2T	250	270	253	273	161x108x125	2174
LB2-S1052-3Y-2T	253	273	256	276	161x108x125	2174
LB2-S1242-3Y-2T	253	273	256	276	161x108x125	2174
LB2-S1552-3Y-2T	259	279	262	282	161x108x125	2174
LB2-S1556-3Y-2T	263	283	266	286	161x108x125	2174
LB2-S2056-3Y-2T	286	306	289	309	161x108x125	2174

CDU TROPICALIZED	Installation/transp.		Installation/transp.		Packaging	
	STANDARD		PACKAGE		Dimensions (LxWxH)	Volume
	Net weight	Gross weight	Net weight	Gross weight		
	[kg]	[kg]	[kg]	[kg]	[cm]	[dm ³]
LBT2-A054-0Y-2M	88	98	92	101,8	110x85x85	795
LBT2-A075-0Y-2M	88	98	92	101,8	110x85x85	795
LBT2-A16-0Y-2M	88	98	92	101,8	110x85x85	795
LBT2-A17-0Y-2M	88	98	92	101,8	110x85x85	795
LBT2-A157-0Y-2M	88	98	92	101,8	110x85x85	795
LBT2-B159-0Y-2M	90	100	94	103,8	110x85x85	795
LBT2-B210-0Y-2M	92	102	96	105,8	110x85x85	795
LBT2-D211-0Y-2M	106	116	112	121,55	110x85x85	795
LBT2-D213-0Y-2M	106	116	112	121,55	110x85x85	795
LBT2-D318-0Y-2M	116	126	122	131,55	110x85x85	795
LBT2-D313-0Y-2M	106	116	112	121,55	110x85x85	795
LBT2-D316-0Y-2M	110	120	116	125,55	110x85x85	795
LBT2-D416-0Y-2T	144	159	150	164,9	149x88x88	1154
LBT2-D418-0Y-2T	144	159	150	164,9	149x88x88	1154
LBT2-Q420-0Y-2T	168	183	177	191,6	149x88x88	1154
LBT2-Q424-0Y-2T	168	183	177	191,6	149x88x88	1154
LBT2-Q524-0Y-2T	168	183	177	191,6	149x88x88	1154
LBT2-Q528-0Y-2T	168	183	177	191,6	149x88x88	1154
LBT2-Q533-0Y-2T	212	232	220	240,4	161x108x125	2174
LBT2-Q521-0Y-2T	212	232	220	240,4	161x108x125	2174
LBT2-Q728-0Y-2T	212	232	220	240,4	161x108x125	2174
LBT2-Q733-0Y-2T	212	232	220	240,4	161x108x125	2174
LBT2-Q736-0Y-2T	212	232	220	240,4	161x108x125	2174
LBT2-S842-3Y-2T	271	291	281	300,8	161x108x125	2174
LBT2-S1242-3Y-2T	274	294	284	303,8	161x108x125	2174
LBT2-S1052-3Y-2T	274	294	284	303,8	161x108x125	2174
LBT2-S1552-3Y-2T	280	300	290	309,8	161x108x125	2174
LBT2-S1556-3Y-2T	284	304	294	313,8	161x108x125	2174

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