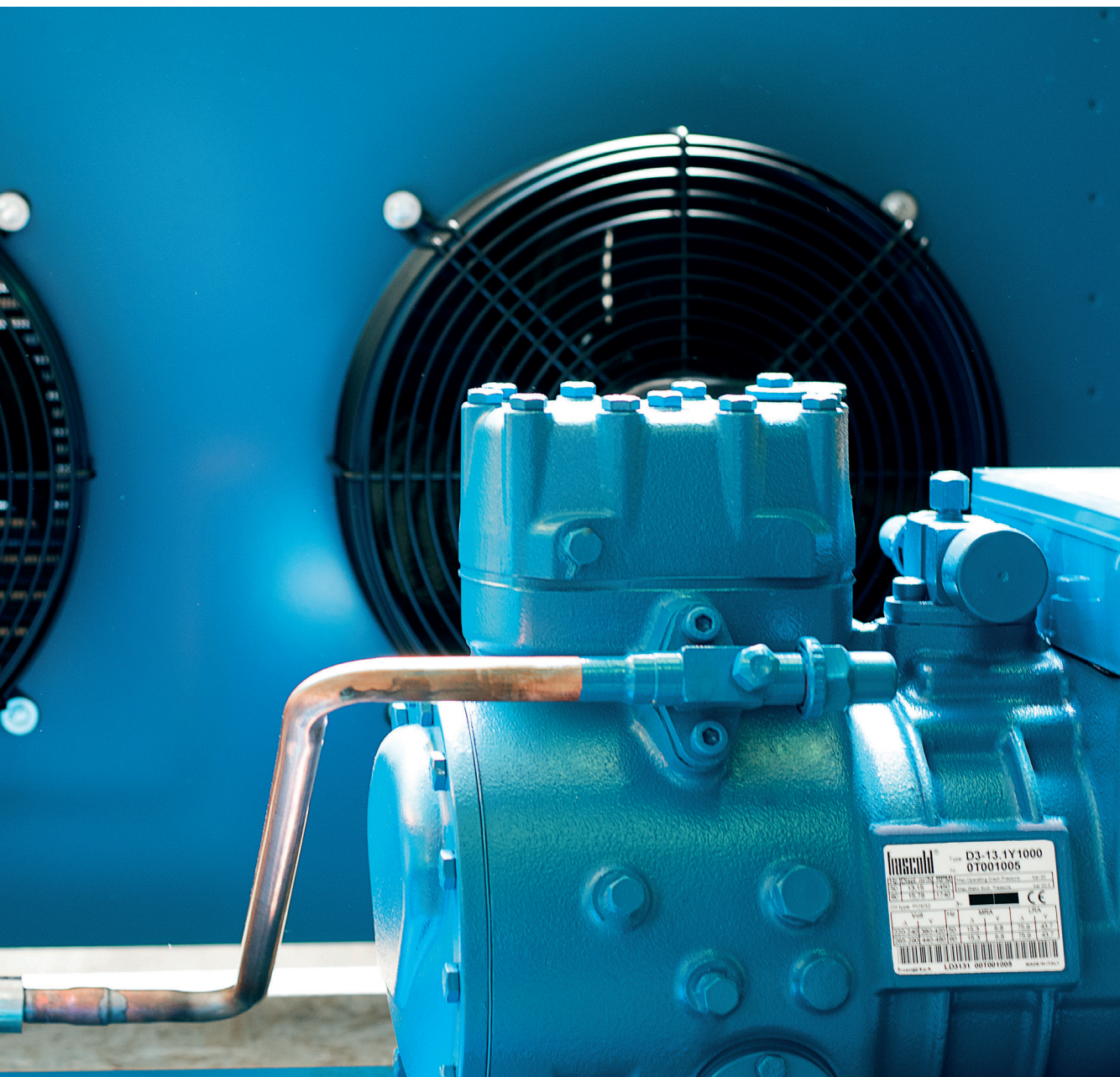


AIR-COOLED CONDENSING UNITS

LB2 - LBT2 Series

50Hz



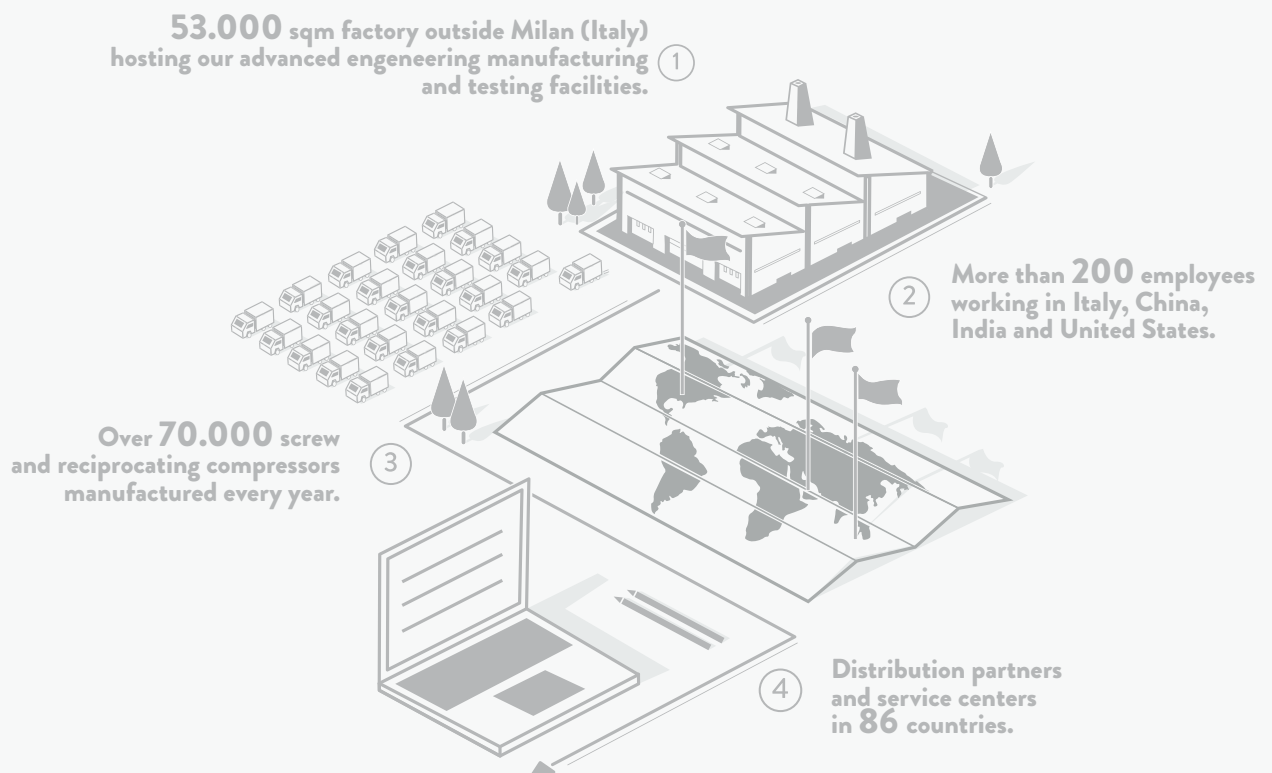
INDEX

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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.

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More than 80 years ago Frascold 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



COMFORT



COMMERCIAL & TRANSPORT
REFRIGERATION



INDUSTRIAL
REFRIGERATION



PROCESS COOLING

SOLUTIONS

Cooling capacity range @50Hz



SCREW COMPRESSORS



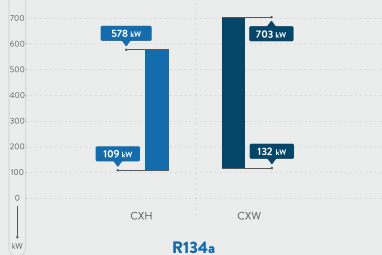
RECIPROCATING COMPRESSORS



CONDENSING UNITS

5

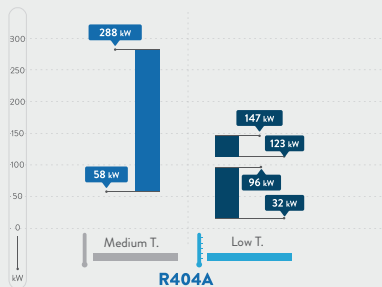
CONDITIONING



Testing Conditions Data Reference:

CXH: Evap. T. +2°C; Cond. T. +50°C; Superheating 10K; Subcooling 5K
CXW: Evap. T. +3°C; Cond. T. +38°C; Superheating 1K; Subcooling 5K

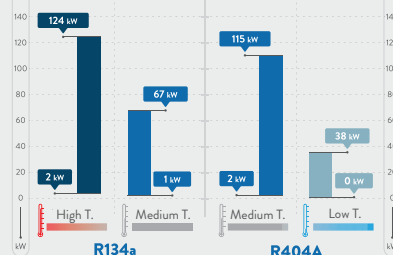
REFRIGERATION



Testing Conditions Data Reference:

Medium T.: Evap. T. -10°C; Cond. T. +45°C
Low T.: Evap. T. -35°C; Cond. T. +40°C ECO

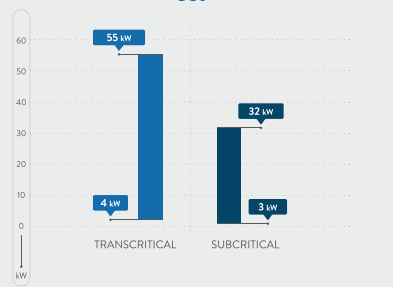
STANDARD REFRIGERANTS



Testing Conditions Data Reference:

High T.: Evap. T. +5°C; Cond. T. +50°C
Medium T.: Evap. T. +10°C; Cond. T. +45°C
Low T.: Evap. T. -35°C; Cond. T. +40°C

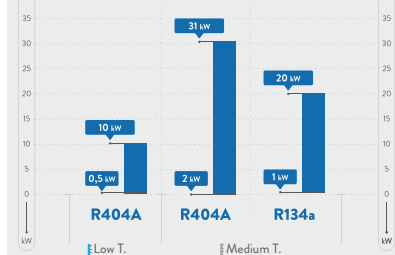
CO₂



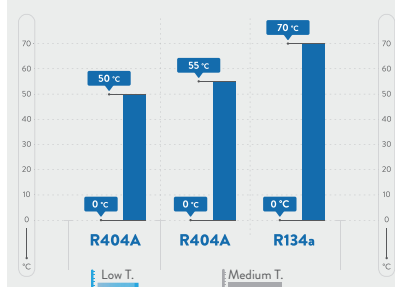
Testing Conditions Data Reference:

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;

EB / LB2 RANGE

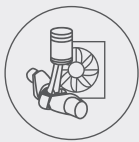


MAX AMBIENT TEMPERATURE (°C)



Testing Conditions Data Reference:

Medium T.: Cooling Capacity @32°C Ambient T.; Evap. T. -10°C
Low T.: Cooling Capacity @32°C Ambient T.; Evap. T. -35°C



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 with a single stage compressor.
- 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 centres, industrial applications, cooling processes in the food production and preservation industry.

FEATURES & BENEFITS



Reliable operation

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 an accurate and comprehensive customer service and prompt assistance in any emergency, both directly and through an extensive network of service centres 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 possible danger of leaks.



Reduced consumption

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.



Compact and complete

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



Wide temperature range and universal use

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/EC**
- **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

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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 may be equipped on request with the optional Kriwan INT69® Diagnose protection devices, a further development of the compressors protection capability. The Diagnose technology is not limited to the protection of the compressor, it 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 optimisation.**

The additional protection capabilities help extending 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

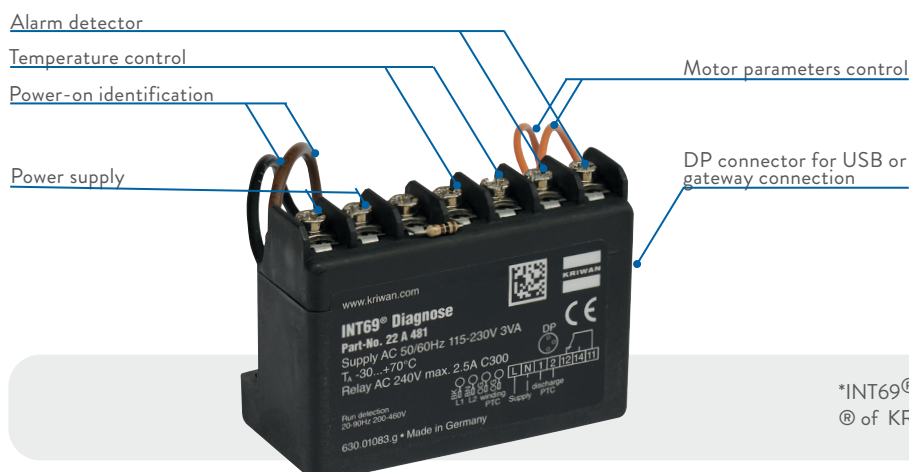
- Reduces operating and maintenance costs
- Practical and with simple operation

Data management

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

9

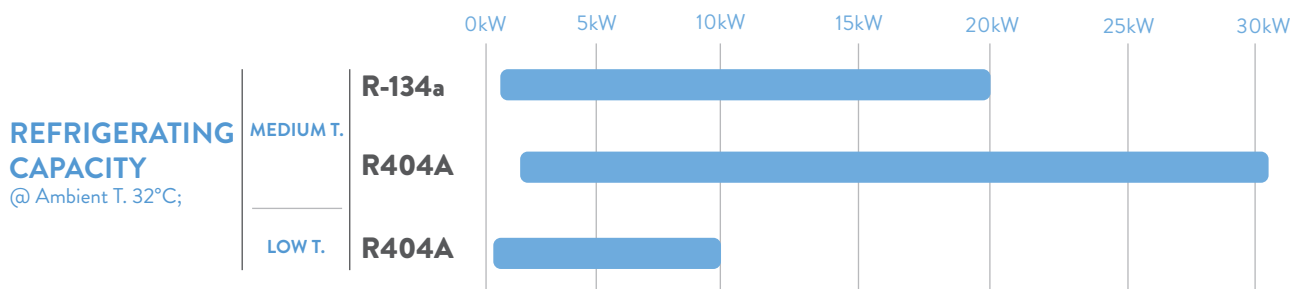
INT69® DIAGNOSE |



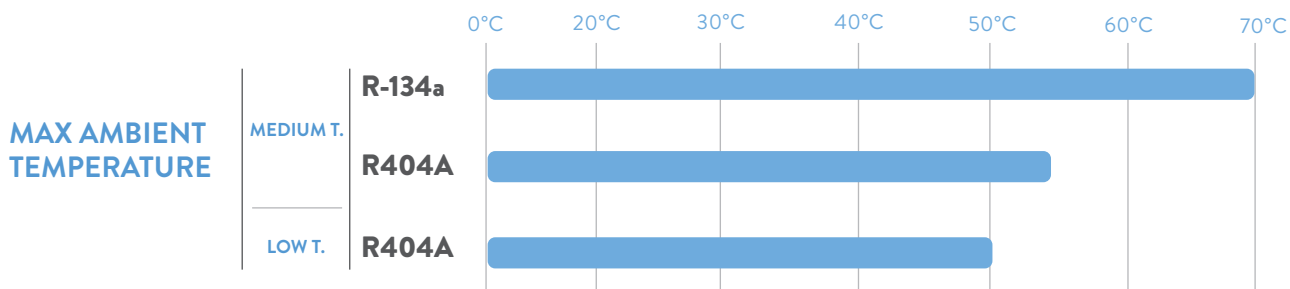
*INT69® Diagnose is intellectual property and trademarks
© of KRIWAN Industrie-Elektronik GmbH.

CONDENSING UNITS PRODUCT RANGE

2 Versions, 58 Models. Range @50Hz



Compressor displacement from 4 to 56 m³/h at 50Hz



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/download/software/fss_3_frascold_selection_software

STANDARD DESIGN SPECIFICATIONS

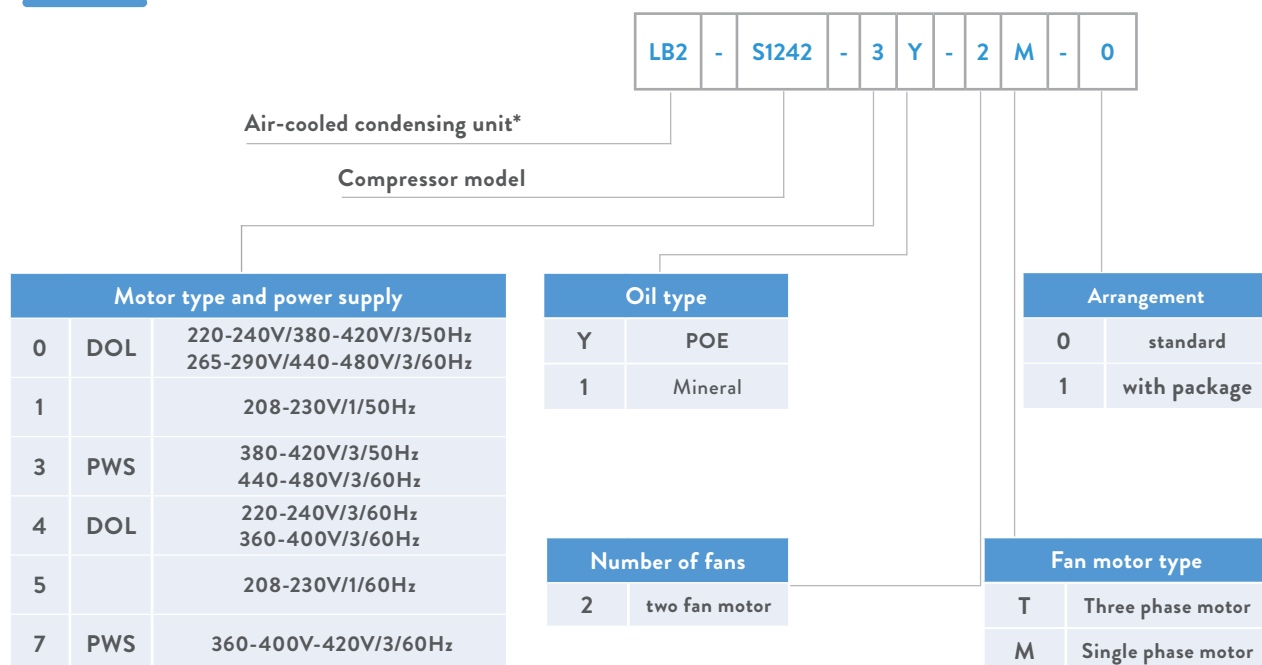
- Semi-hermetic compressor with POE oil filling.
- Condensing unit with wide exchange surface and pipes optimised to reduce pressure drops and refrigerant charge.
- Fan motors with low power consumption and optimised airflow.
- Vertical-type liquid receiver with high storage capacity.
- Compressor discharge 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

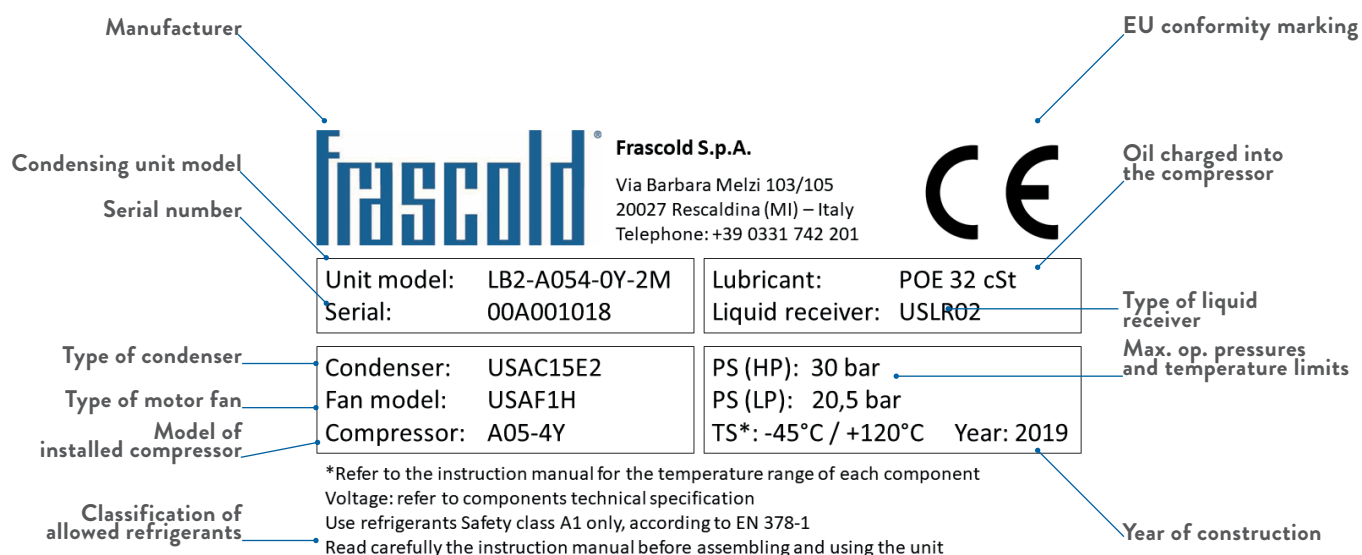
MODEL DESIGNATION



*LB2: Temperate climate - LBT2: Tropical Climate

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INFORMATION PLATE



TECHNICAL DATA AND OPTIONS

LB2 - LBT2 Series

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https://www.frascold.it/en/download/software/fss_3_frascold_selection_software



Technical data

CDU STANDARD	Compressor ^{1.}						Condenser				
	Model	Displ. at 50Hz	Oil charge	Motor ^{3.}			Vol.	AC fan motors		50 Hz	
				Vers. ^{4.}	Power supply ^{5.}	MRA ^{6.}		Qty	Power supply	Max power	
LB2-A054-0Y-2M	A05-4Y	3,95	1	1	A	2,8	0,6	2	230-240	65	
LB2-A075-0Y-2M	A07-5Y	4,93	1	1	A	2,7	0,6	2	230-240	65	
LB2-A16-0Y-2M	A1-6Y	5,47	1	1	A	3,6	0,6	2	230-240	65	
LB2-A17-0Y-2M	A1-7Y	6,91	1	2	A	3,7	0,6	2	230-240	65	
LB2-A157-0Y-2M	A1.5-7Y	6,91	1	1	A	4,5	0,6	2	230-240	65	
LB2-B159-0Y-2M	B1.5-9Y	8,96	1	2	A	5,9	0,6	2	230-240	65	
LB2-B210-0Y-2M	B2-10Y	9,88	1	1	A	6,7	0,6	2	230-240	65	
LB2-D211-0Y-2M	D2-11Y	11,26	1,1	1	A	7,1	1,6	2	230-240	65	
LB2-D213-0Y-2M	D2-13Y	13,15	1,1	2	A	7,1	1,6	2	230-240	65	
LB2-D313-0Y-2M	D3-13Y	13,15	1,1	1	A	8,8	1,6	2	230-240	65	
LB2-D316-0Y-2M	D3-16Y	16,40	1,1	2	A	9,9	1,6	2	230-240	65	
LB2-D318-0Y-2M	D3-18Y	17,93	1,1	2	A	10,0	1,6	2	230-240	65	
LB2-D416-0Y-2M	D4-16Y	16,40	1,2	1	A	11,6	2,0	2	230-240	130	
LB2-Q420-0Y-2M	Q4-20Y	19,77	1,6	2	A	10,1	2,0	2	230-240	130	
LB2-Q424-0Y-2M	Q4-24Y	23,91	1,6	2	A	11,7	2,0	2	230-240	130	
LB2-Q524-0Y-2M	Q5-24Y	23,91	1,6	1	A	13,8	2,0	2	230-240	130	
LB2-Q528-0Y-2M	Q5-28Y	28,02	1,6	2	A	14,0	2,0	2	230-240	130	
LB2-Q533-0Y-2T	Q5-33Y	32,66	1,6	2	A	14,4	4,9	2	400Y (230Δ)	315	
LB2-Q521-0Y-2T	Q5-21Y	21,18	1,6	1	A	11,6	4,9	2	400Y (230Δ)	315	
LB2-Q728-0Y-2T	Q7-28Y	28,02	1,6	1	A	17,6	4,9	2	400Y (230Δ)	315	
LB2-Q733-0Y-2T	Q7-33Y	32,66	1,6	1	A	20,0	4,9	2	400Y (230Δ)	315	
LB2-Q736-0Y-2T	Q7-36Y	35,86	1,6	1	A	19,4	4,9	2	400Y (230Δ)	315	
LB2-S842-3Y-2T	S8-42Y	41,32	2,9	2	B	20,3	6,5	2	400Y (230Δ)	750	
LB2-S1052-3Y-2T	S10-52Y	51,50	2,9	2	B	24,5	6,5	2	400Y (230Δ)	750	
LB2-S1242-3Y-2T	S12-42Y	41,32	2,9	1	B	22,4	6,5	2	400Y (230Δ)	750	
LB2-S1552-3Y-2T	S15-52Y	51,50	2,9	1	B	32,4	6,5	2	400Y (230Δ)	750	
LB2-S1556-3Y-2T	S15-56Y	56,00	2,9	2	B	30,7	6,5	2	400Y (230Δ)	750	
LB2-S2056-3Y-2T	S20-56Y	56,00	2,9	1	B	38,4	10,8	2	400Y (230Δ)	750	

- 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

Air-cooled condensing units

	Condenser		Liquid receiver		Piping connections				CDU STANDARD
	50 Hz		Vol.	Safety valve connection	Suction line		Liquid line		
	Max absorbed current	Max air flow							
	[A]	[m³/h]			[l]	[mm]	[inch]	[mm]	
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-A054-0Y-2M
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-A075-0Y-2M
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-A16-0Y-2M
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-A17-0Y-2M
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-A157-0Y-2M
	0,30	1716	1,5	1/4" NPT	15,8	5/8	9,5	3/8	LB2-B159-0Y-2M
	0,30	1716	1,5	1/4" NPT	19,0	3/4	9,5	3/8	LB2-B210-0Y-2M
	0,30	1716	2,2	1/4" NPT	22,2	7/8	12,7	1/2	LB2-D211-0Y-2M
	0,30	1716	2,2	1/4" NPT	22,2	7/8	12,7	1/2	LB2-D213-0Y-2M
	0,30	1716	2,2	1/4" NPT	28,6	1-1/8	12,7	1/2	LB2-D313-0Y-2M
	0,30	1716	2,2	1/4" NPT	28,6	1-1/8	12,7	1/2	LB2-D316-0Y-2M
	0,30	1716	2,2	1/4" NPT	28,6	1-1/8	12,7	1/2	LB2-D318-0Y-2M
	0,60	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LB2-D416-0Y-2M
	0,60	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LB2-Q420-0Y-2M
	0,60	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LB2-Q424-0Y-2M
	0,60	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LB2-Q524-0Y-2M
	0,60	2500	3,4	1/4" NPT	35,0	1-3/8	15,8	5/8	LB2-Q528-0Y-2M
	0,65 (1,13)	5100	5,7	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-Q533-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LB2-Q521-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-Q728-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-Q733-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-Q736-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-S842-3Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-S1052-3Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LB2-S1242-3Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	42,0	1-5/8	19,0	3/4	LB2-S1552-3Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	42,0	1-5/8	19,0	3/4	LB2-S1556-3Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	42,0	1-5/8	22,2	7/8	LB2-S2056-3Y-2T

Technical data

CDU STANDARD	Compressor ^{1.}						Condenser				
	Model	Displ. at 50Hz	Oil charge	Motor ^{3.}			Vol.	AC fan motors		50 Hz	
				Vers. ^{4.}	Power supply ^{5.}	MRA ^{6.}		Qty	Power supply	Max power	
		[m³/h]	[l]		[V]	[A]			[l]	[V]	
LBT2-A054-0Y-2M	A05-4Y	3,95	1	1	A	2,8	1,6	2	230-240	65	
LBT2-A075-0Y-2M	A07-5Y	4,93	1	1	A	2,7	1,6	2	230-240	65	
LBT2-A16-0Y-2M	A1-6Y	5,47	1	1	A	3,6	1,6	2	230-240	65	
LBT2-A17-0Y-2M	A1-7Y	6,91	1	2	A	3,7	1,6	2	230-240	65	
LBT2-A157-0Y-2M	A15-7Y	6,91	1	1	A	4,5	1,6	2	230-240	65	
LBT2-B159-0Y-2M	B15-9Y	8,96	1	2	A	5,9	1,6	2	230-240	65	
LBT2-B210-0Y-2M	B2-10Y	9,88	1	1	A	6,7	1,6	2	230-240	65	
LBT2-D211-0Y-2M	D2-11Y	11,26	1,1	1	A	7,1	2,0	2	230-240	130	
LBT2-D213-0Y-2M	D2-13Y	13,15	1,1	2	A	7,1	2,0	2	230-240	130	
LBT2-D318-0Y-2M	D3-18Y	17,93	1,1	2	A	10	2,0	2	230-240	130	
LBT2-D313-0Y-2M	D3-13Y	13,15	1,1	1	A	8,8	2,0	2	230-240	130	
LBT2-D316-0Y-2M	D3-16Y	16,40	1,1	2	A	9,9	2,0	2	230-240	130	
LBT2-D416-0Y-2T	D4-16Y	16,40	1,2	1	A	11,6	4,9	2	400Y (230Δ)	315	
LBT2-D418-0Y-2T	D4-18Y	17,93	1,2	1	A	12,5	4,9	2	400Y (230Δ)	315	
LBT2-Q420-0Y-2T	Q4-20Y	19,77	1,6	2	A	10,1	4,9	2	400Y (230Δ)	315	
LBT2-Q424-0Y-2T	Q4-24Y	23,91	1,6	2	A	11,7	4,9	2	400Y (230Δ)	315	
LBT2-Q524-0Y-2T	Q5-24Y	23,91	1,6	1	A	13,8	4,9	2	400Y (230Δ)	315	
LBT2-Q528-0Y-2T	Q5-28Y	28,02	1,6	2	A	14	4,9	2	400Y (230Δ)	315	
LBT2-Q533-0Y-2T	Q5-33Y	32,66	1,6	2	A	14,4	6,5	2	400Y (230Δ)	750	
LBT2-Q521-0Y-2T	Q5-21Y	21,18	1,6	1	A	11,6	6,5	2	400Y (230Δ)	750	
LBT2-Q728-0Y-2T	Q7-28Y	28,02	1,6	1	A	17,6	6,5	2	400Y (230Δ)	750	
LBT2-Q733-0Y-2T	Q7-33Y	32,66	1,6	1	A	20	6,5	2	400Y (230Δ)	750	
LBT2-Q736-0Y-2T	Q7-36Y	35,86	1,6	1	A	19,4	6,5	2	400Y (230Δ)	750	
LBT2-S842-3Y-2T	S8-42Y	41,32	2,9	2	B	20,3	10,8	2	400Y (230Δ)	750	
LBT2-S1242-3Y-2T	S12-42Y	41,32	2,9	1	B	22,4	10,8	2	400Y (230Δ)	750	
LBT2-S1052-3Y-2T	S10-52Y	51,50	2,9	2	B	24,5	10,8	2	400Y (230Δ)	750	
LBT2-S1552-3Y-2T	S15-52Y	51,50	2,9	1	B	32,4	10,8	2	400Y (230Δ)	750	
LBT2-S1556-3Y-2T	S15-56Y	56,00	2,9	2	B	30,7	10,8	2	400Y (230Δ)	750	

- 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

Air-cooled condensing units

	Condenser		Liquid receiver		Piping connections				CDU STANDARD
	50 Hz		Vol.	Safety valve connection	Suction line		Liquid line		
	Max absorbed current	Max air flow							
	[A]	[m³/h]			[l]	[mm]	[inch]	[mm]	
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-A054-0Y-2M
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-A075-0Y-2M
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-A16-0Y-2M
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-A17-0Y-2M
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-A157-0Y-2M
	0,3	1716	2,2	1/4" NPT	15,8	5/8	12,7	1/2	LBT2-B159-0Y-2M
	0,3	1716	2,2	1/4" NPT	19,0	3/4	12,7	1/2	LBT2-B210-0Y-2M
	0,6	2500	3,4	1/4" NPT	22,2	7/8	15,8	5/8	LBT2-D211-0Y-2M
	0,6	2500	3,4	1/4" NPT	22,2	7/8	15,8	5/8	LBT2-D213-0Y-2M
	0,6	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LBT2-D318-0Y-2M
	0,6	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LBT2-D313-0Y-2M
	0,6	2500	3,4	1/4" NPT	28,6	1-1/8	15,8	5/8	LBT2-D316-0Y-2M
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-D416-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-D418-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-Q420-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-Q424-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-Q524-0Y-2T
	0,65 (1,13)	5100	5,7	1/4" NPT	35,0	1-3/8	19,0	3/4	LBT2-Q528-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LBT2-Q533-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	28,6	1-1/8	19,0	3/4	LBT2-Q521-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LBT2-Q728-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LBT2-Q733-0Y-2T
	1,75 (3,0)	8010	6,6	1/4" NPT	35,0	1-3/8	19,0	3/4	LBT2-Q736-0Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	35,0	1-3/8	22,2	7/8	LBT2-S842-3Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	35,0	1-3/8	22,2	7/8	LBT2-S1242-3Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	35,0	1-3/8	22,2	7/8	LBT2-S1052-3Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	42,0	1-5/8	22,2	7/8	LBT2-S1552-3Y-2T
	1,75 (3,0)	8010	11,0	1/2" NPT	42,0	1-5/8	22,2	7/8	LBT2-S1556-3Y-2T

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: the liquid line (filter drier, liquid sight glass and shut-off valve), high and low pressure switch, electrical wiring box.

Accessories

Above mentioned configurations can be completed with other optionals in the following page.

DESCRIPTION	STANDARD	PACKAGE
A,B,D,Q series with direct on line (DOL) electric motor	•	•
Δ connection - 220-240 V / 3 / 50 Hz (265-290 V / 3 / 60 Hz)		
Y connection - 380-420 V / 3 / 50 Hz (440-480 V / 3 / 60 Hz)		
S Series with part winding (PWS) electric motor	•	•
Motor windings thermally protected (PTC sensor + electronic control module)	•	•
Suction and discharge valves with soldering connections	•	•
POE 32 cSt lubricant charge	•	•
4 x Rubber vibration dampers	•	•
Cu-Al air cooled condenser	•	•
Condenser fans with AC motors	•	•
IP54 thermally protected fan motor(s) with guard grille	•	•
Liquid receiver with rotalock and safety valve (set at 30 bar) mounted	•	•
Discharge line with vibration eliminator	•	•
Nitrogen protective charge	•	•
Packing ensuring proper handling and adequate protection	•	•
A,B,D,Q,S: T00ECA01A - electronic control module (monitors motor windings temperature)	•	•
Standard power supply: AC 40-60 Hz 200-240 V ± 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 terminals entry (not connected)		•
Oil separator factory assembled and mechanically connected		•

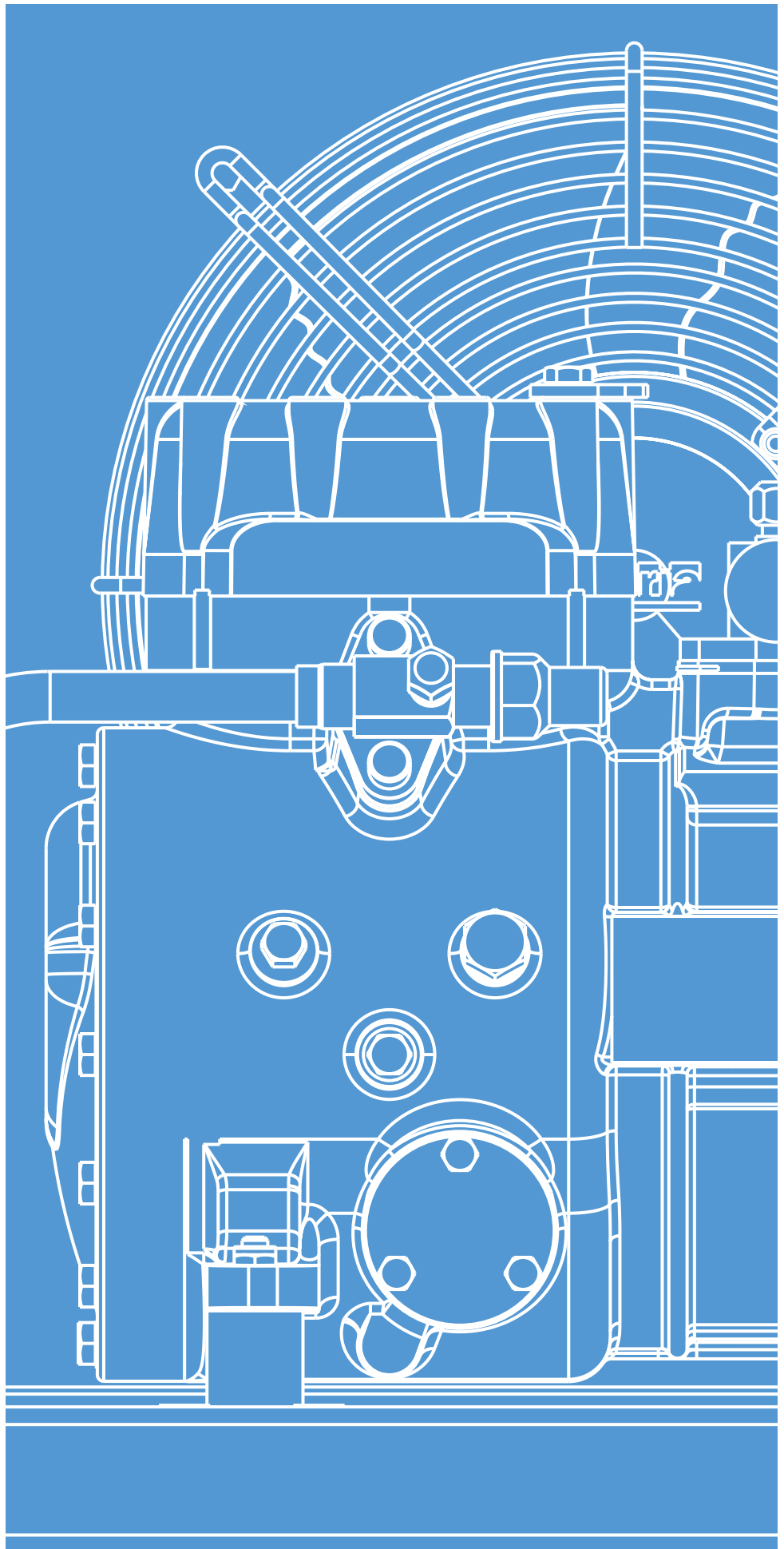
CONSTRUCTION FEATURES AND OPTIONALS

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 start (DOL) electric motor 220-240 V Δ / 380-420 V / 3 / 50 Hz // 265-290 V Δ / 440-480 V / 3 / 60 Hz PTC/AMS sensors; INT69 protection device; POE oil filling; suction and discharge valves; rubber mounts	•	•	•	•	
Semi-hermetic compressor with integrated PWS electric start-up motor 380-420 V / 3 / 50 Hz 440-480 V / 3 / 60 Hz AMS sensors; INT69 protection device; POE oil filling; suction and discharge valves; rubber mounts					•
Liquid receiver (PED certified) with large volume, brazing rotalock valve, safety valve (30 bar set-point)	•	•	•	•	•
Vibration absorber pipe on compressor discharge line	•	•	•	•	•
PACKAGE					
High/Low safety pressure switch (PED certified, Cat. IV)	•	•	•	•	•
Liquid line (filter, liquid sight glass, shut-off valve)	•	•	•	•	•
Oil separator (supplied without oil charge)	•	•	•	•	•
Electrical wiring box	•	•	•	•	•
OPTIONALS (supplied separately)					
Discharge temperature control sensor				•	•
Fan motor speed regulation device for single phase fans only	•	•	•	•	•
Solenoid valve	•	•	•	•	•
Check-valve for compressor discharge line	•	•	•	•	•
Protecting Housing 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

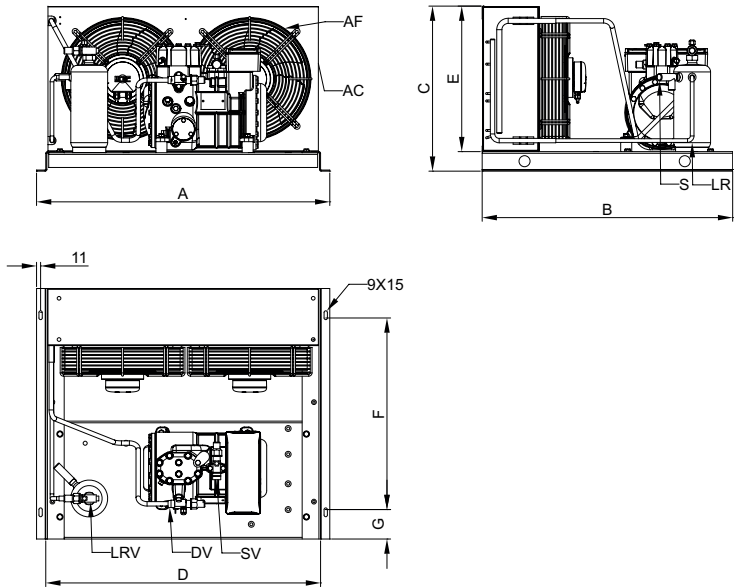
STANDARD

PACKAGE

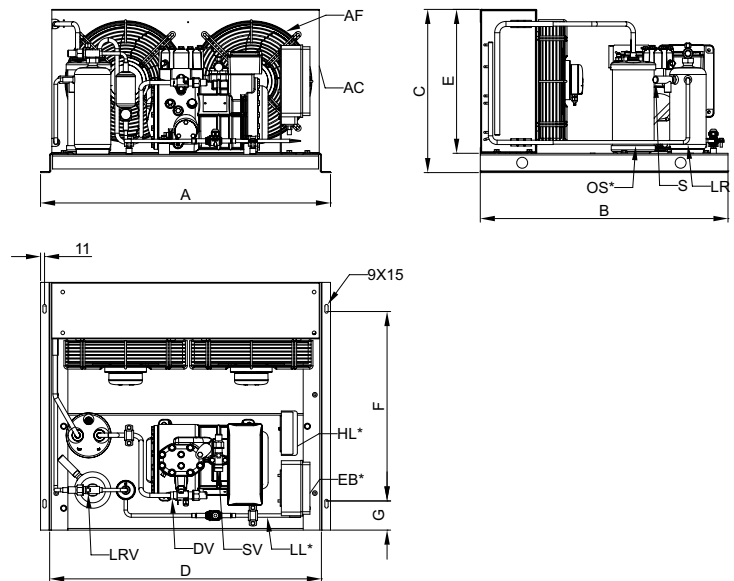


Dimensional drawing
 Standard models

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



STANDARD
 PACKAGE



Dimensional drawing

LB2-D211-0Y-2M

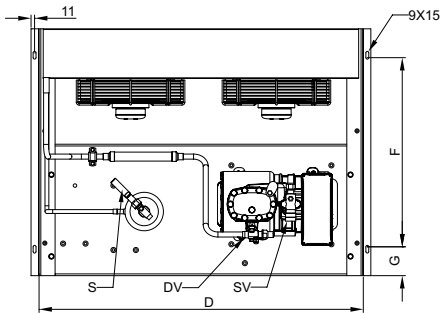
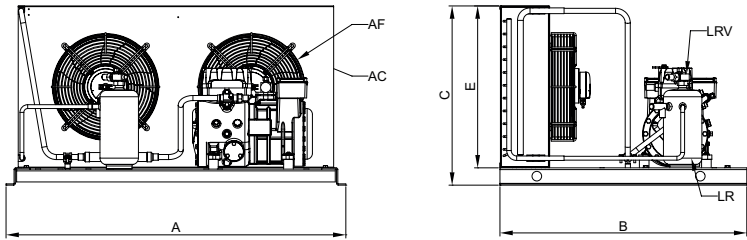
LB2-D213-0Y-2M

LB2-D313-0Y-2M

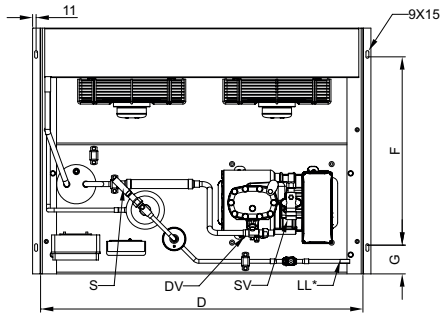
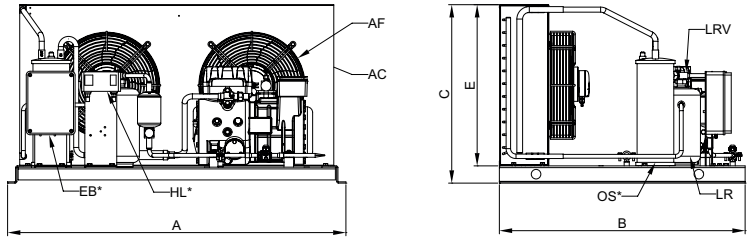
LB2-D316-0Y-2M

LB2-D318-0Y-2M

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]
1060	770	559	1010	505	600	90	1060	795	583	32

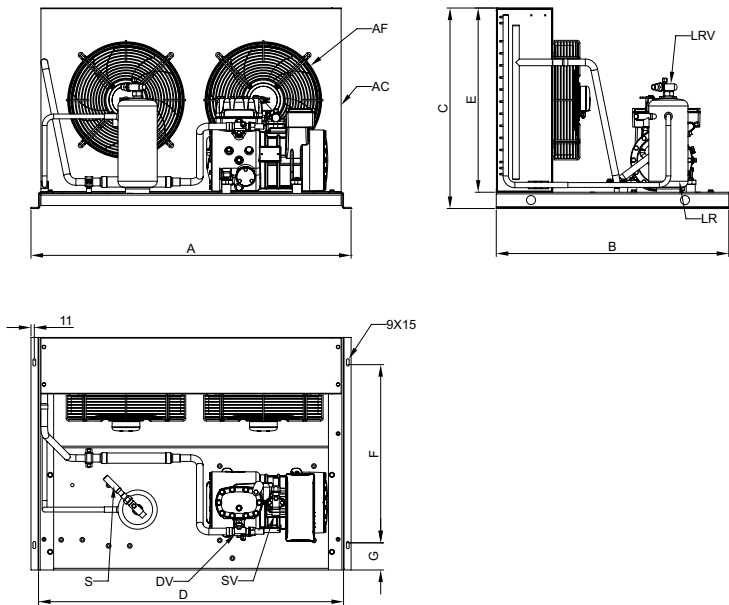


STANDARD
PACKAGE

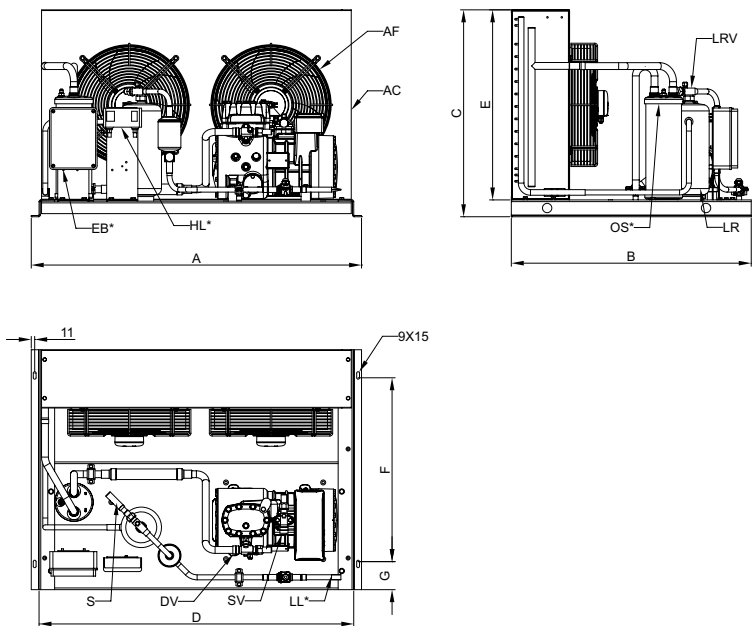


Dimensional drawing

	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

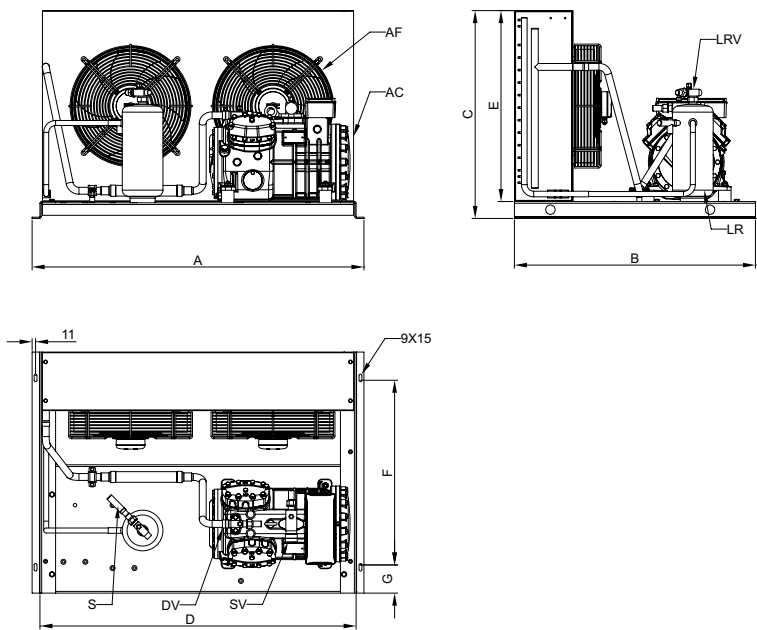


STANDARD
PACKAGE

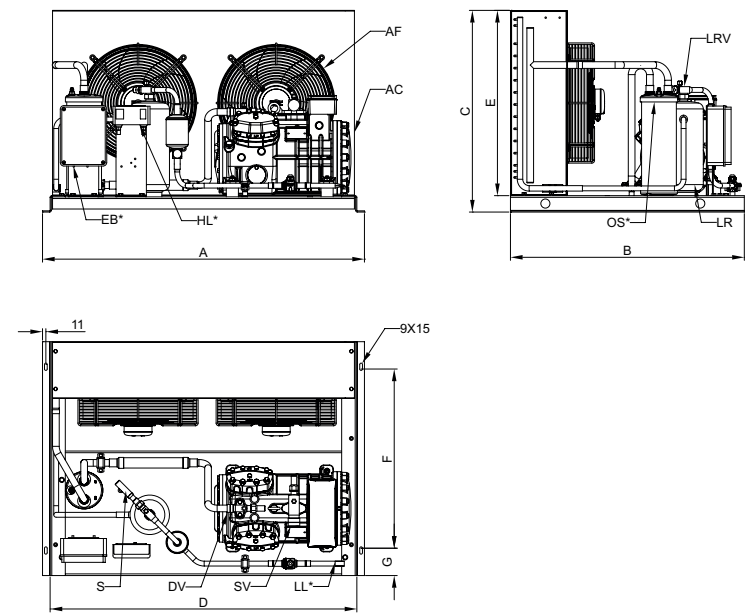


Dimensional drawing

	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	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
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											

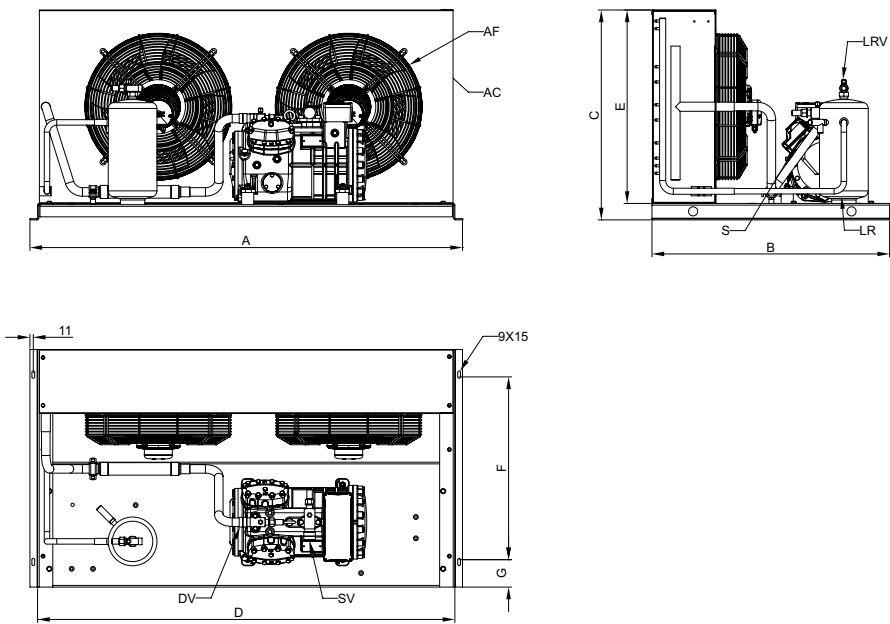


STANDARD
PACKAGE



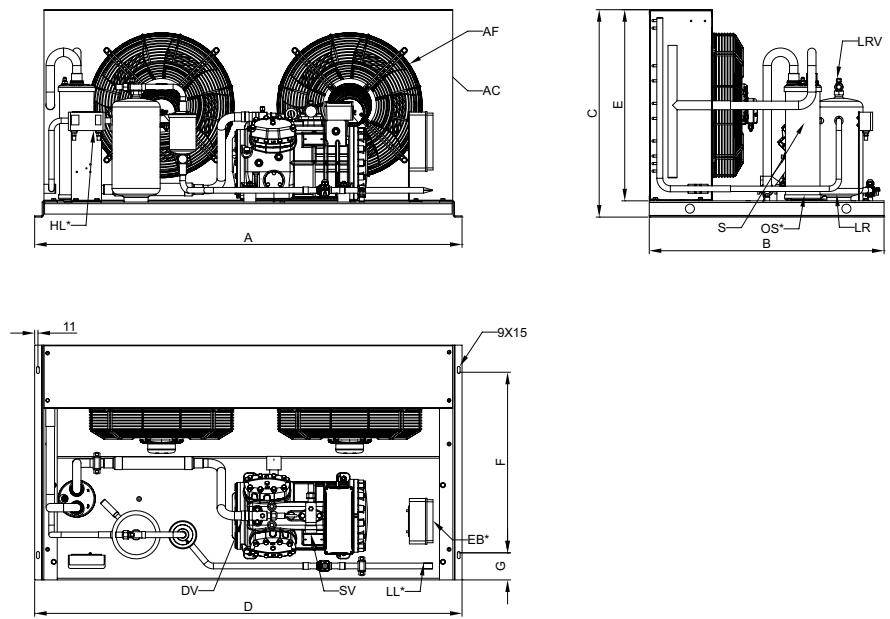
Dimensional drawing

	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-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											



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STANDARD
PACKAGE



Dimensional drawing

LB2-S842-3Y-2T

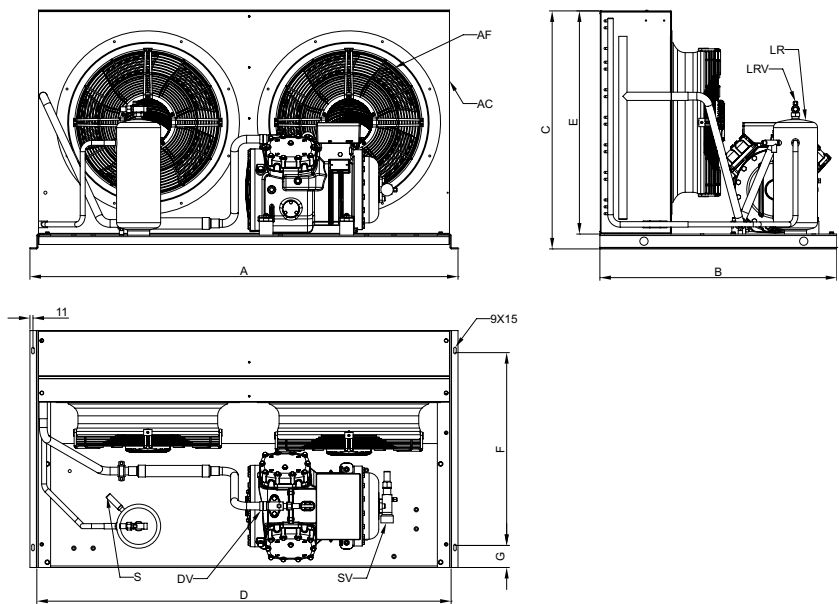
LB2-S1052-3Y-2T

LB2-S1242-3Y-2T

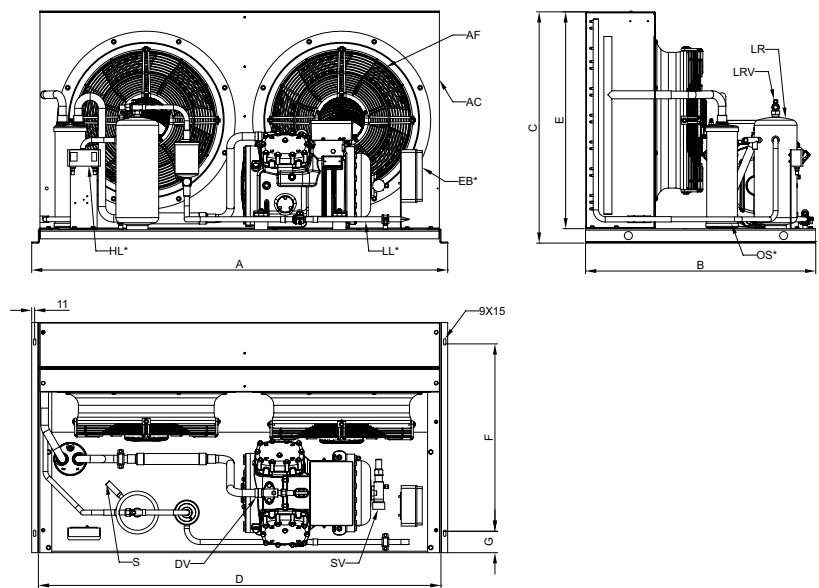
LB2-S1552-3Y-2T

LB2-S1556-3Y-2T

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]	
1556	860	867	1504	813	700	80	1556	884	888	57

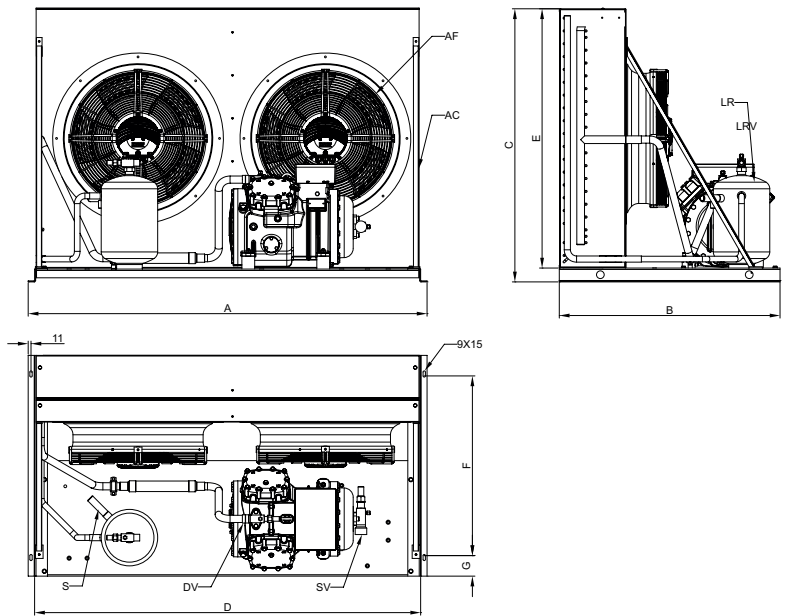


STANDARD
PACKAGE

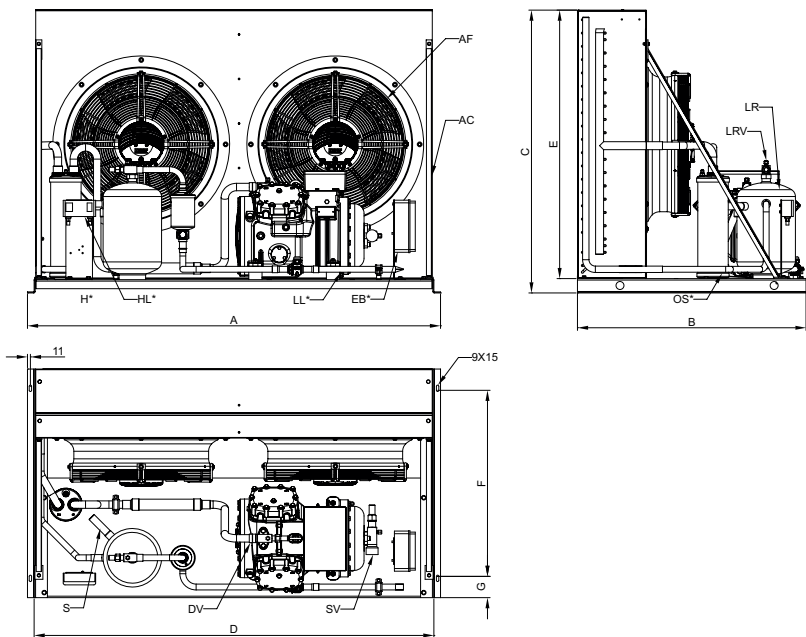


Dimensional drawing

	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-S2056-3Y-2T	1556	860	1062	1504	1013	700	80	1556	884	1089	65

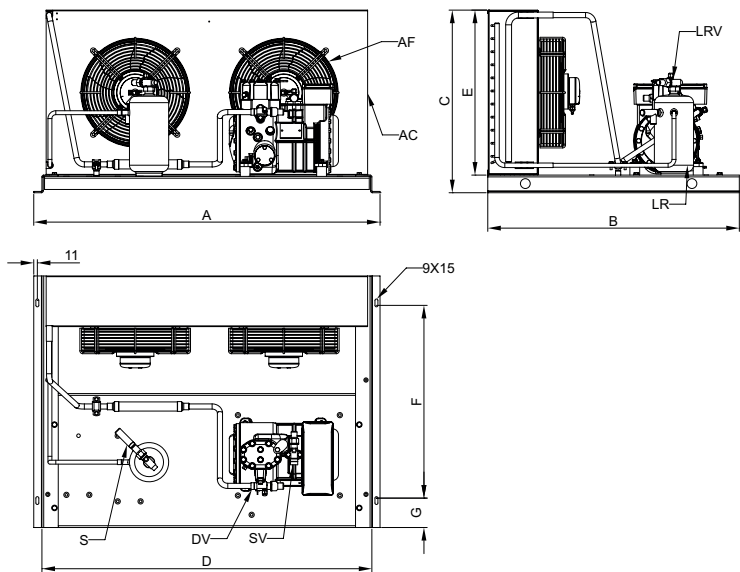


STANDARD
PACKAGE

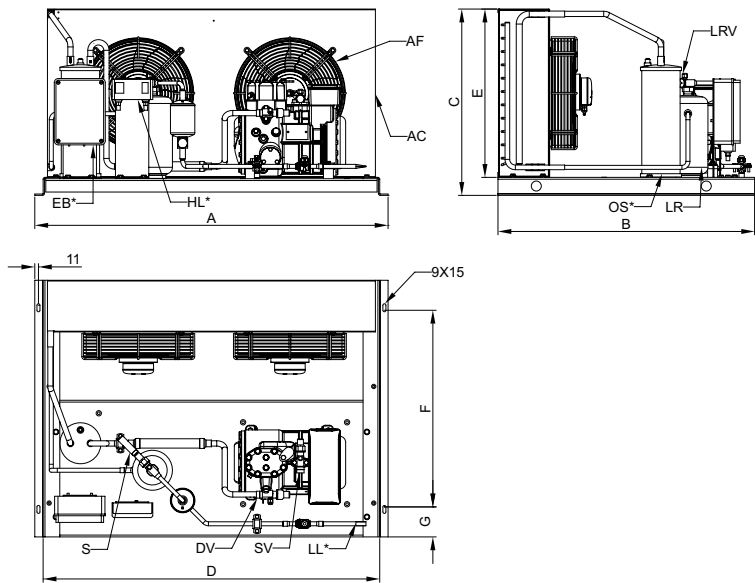


Dimensional drawing
Tropicalized models

	Standard construction							Unit with housing			
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[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											

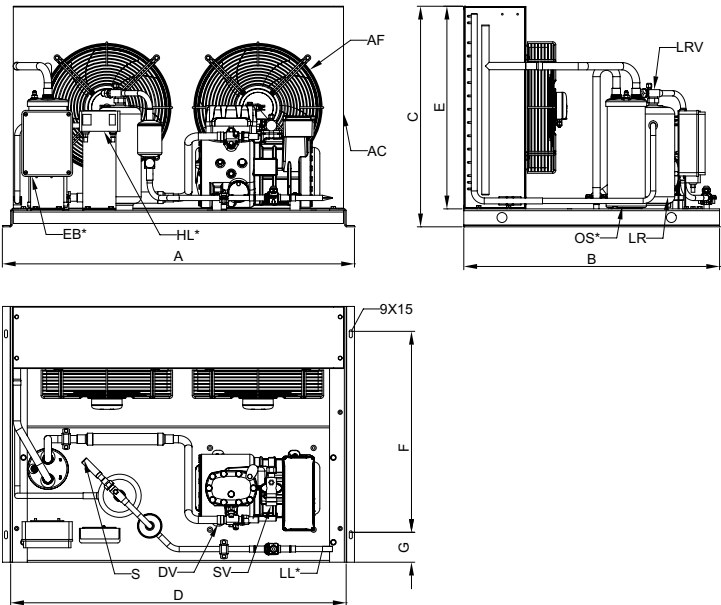
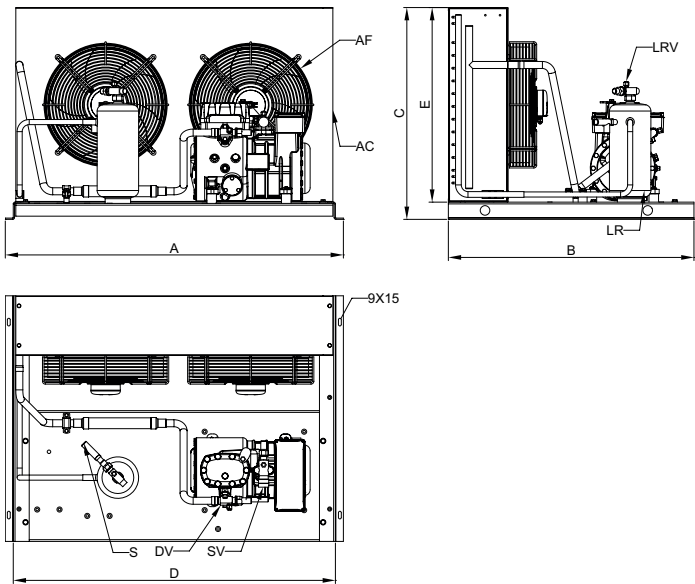


STANDARD
PACKAGE



Dimensional drawing

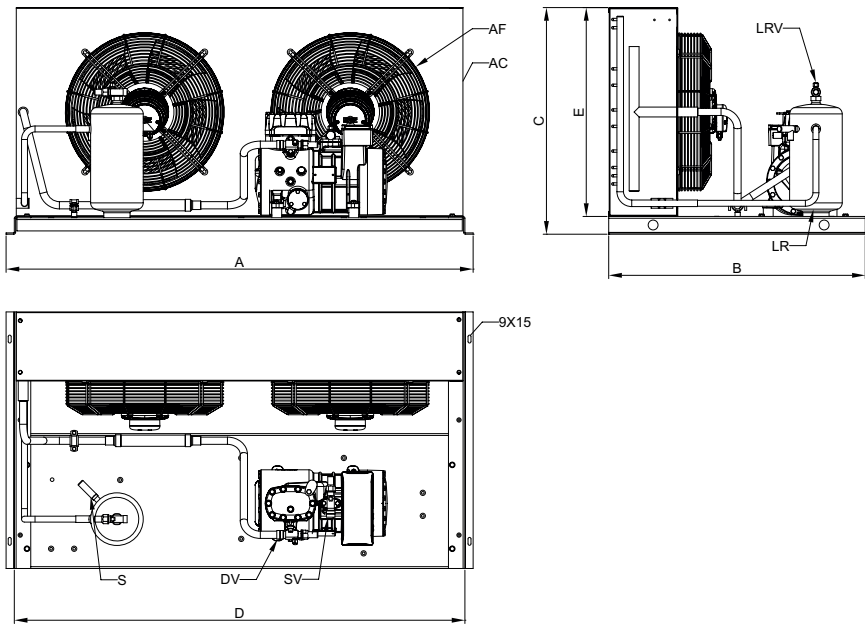
	Standard construction						Unit with housing				
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
LBT2-D211-0Y-2M	1060	770	664	1010	610	600	90	1060	795	688	36
LBT2-D213-0Y-2M			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



STANDARD
PACKAGE

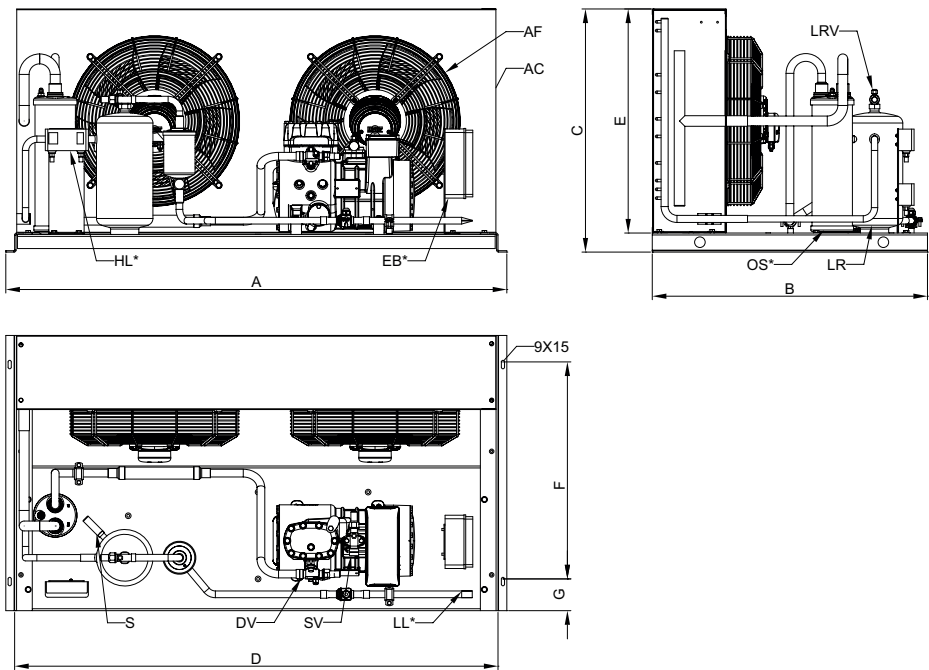
Dimensional drawing

	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]
LBT2-D416-0Y-2T	1420	780	689	1370	635	600	80	1420	784	713	44
LBT2-D418-0Y-2T											



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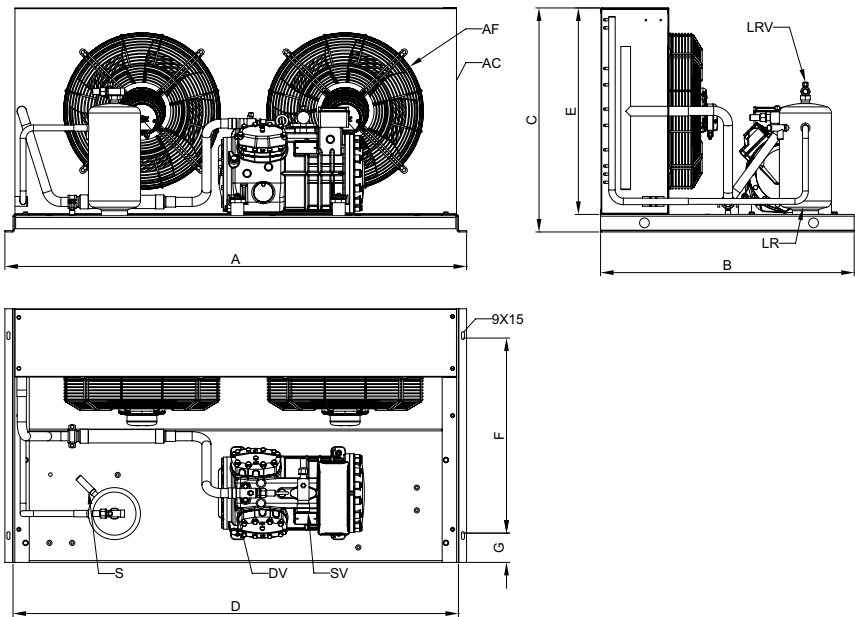
STANDARD
PACKAGE



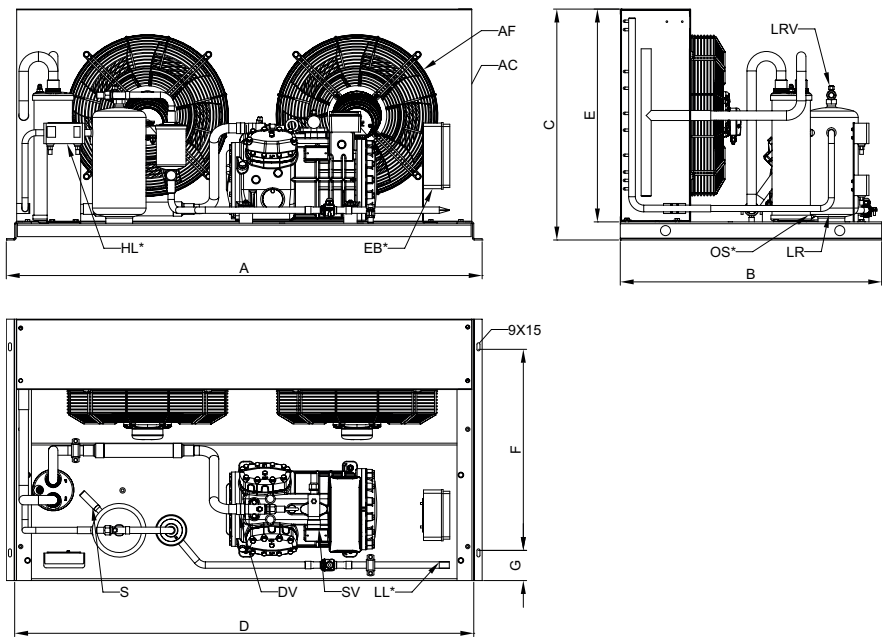
Air-cooled condensing units

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-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											

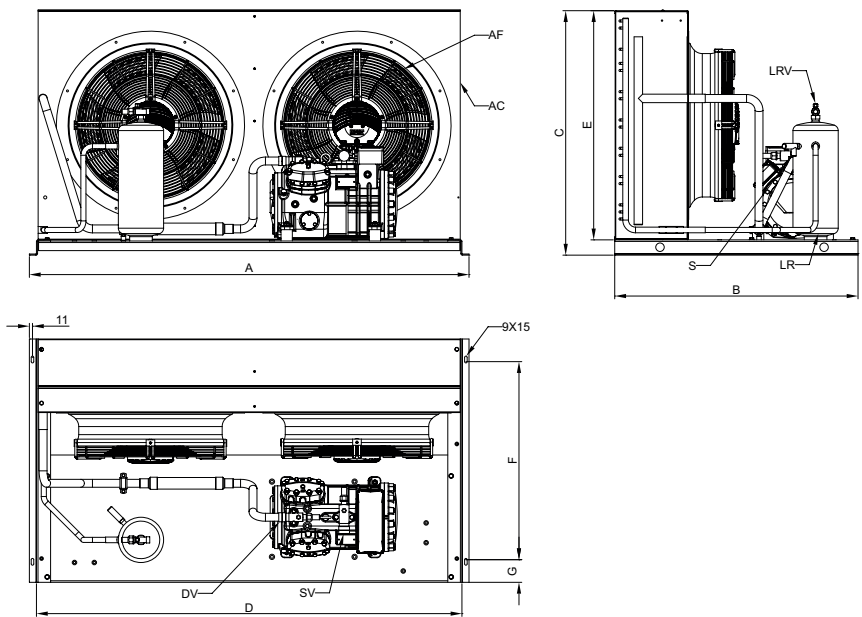


STANDARD
PACKAGE

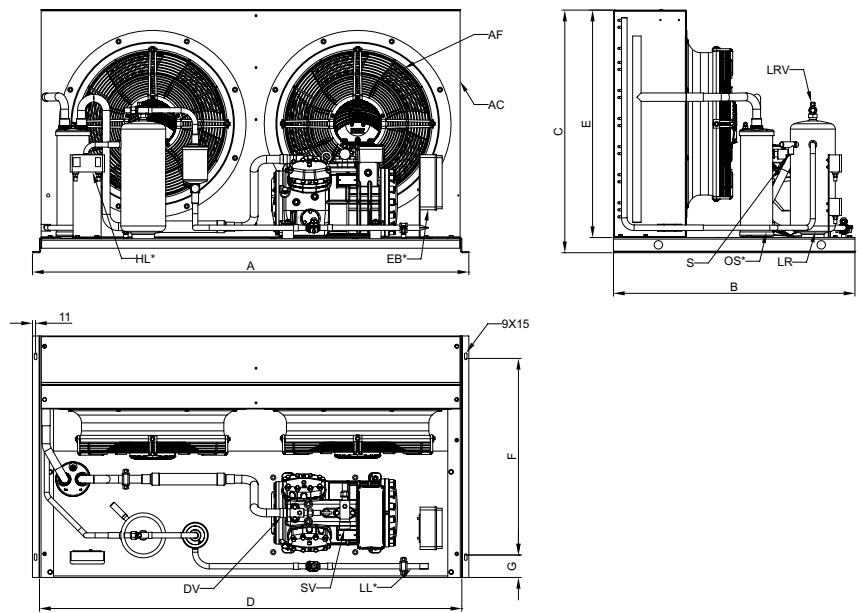


Dimensional drawing

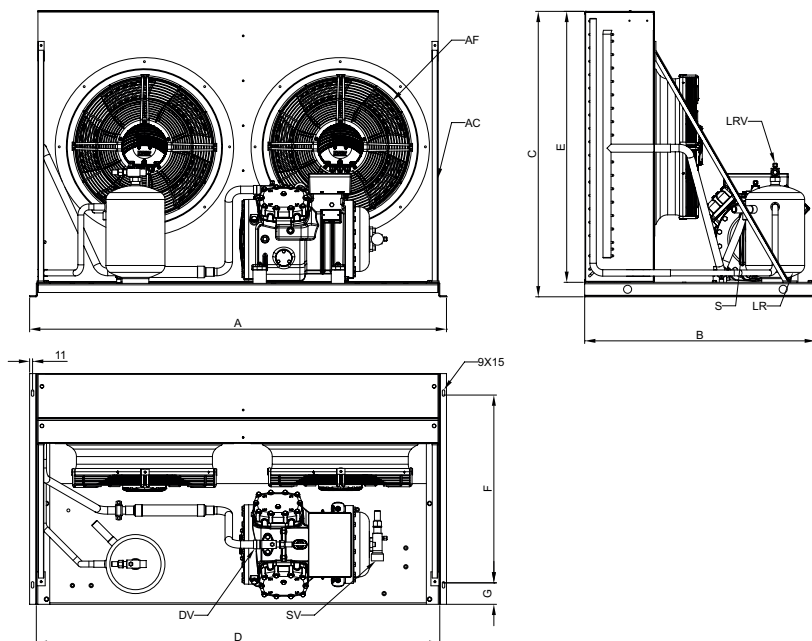
	Standard construction							Unit with housing			
	Overall dimensions			Condenser dimensions		Fixing holes		Overall dimensions			Housing weight
	A	B	C	D	E	F	G	A	B	C	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
LBT2-Q521-0Y-2T	1556	860	867	1504	813	700	80	1556	884	888	57
LBT2-Q533-0Y-2T			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



STANDARD
PACKAGE

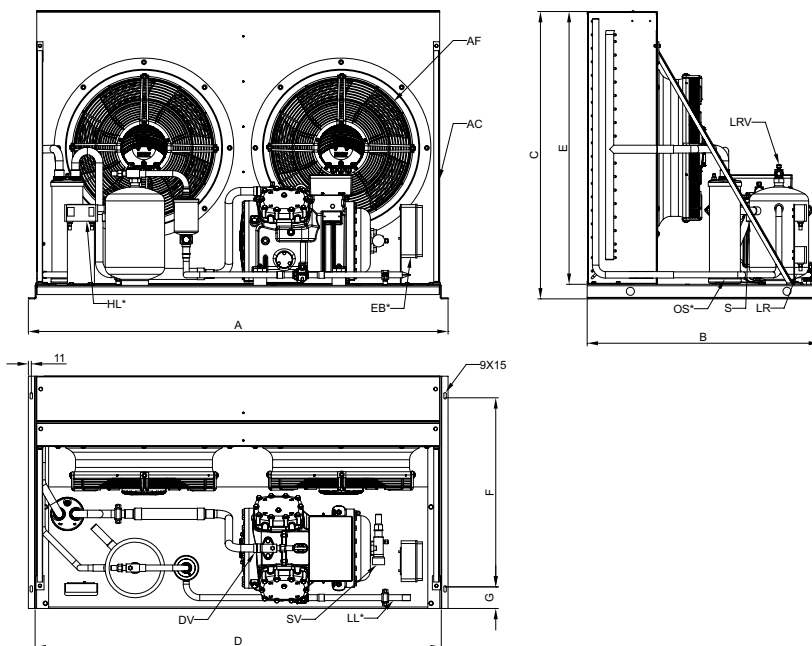


Dimensional drawing

LBT2-S1556-3Y-2T

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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		Dimendions (LxWxH)	Volume
	Net weight	Gross weight	Net weight	Gross weight		
	[kg]	[kg]	[kg]	[kg]	[cm]	[dm³]
LBT2-A054-0Y-2M	88	98	92	101,80	110x85x85	795
LBT2-A075-0Y-2M	88	98	92	101,80	110x85x85	795
LBT2-A16-0Y-2M	88	98	92	101,80	110x85x85	795
LBT2-A17-0Y-2M	88	98	92	101,80	110x85x85	795
LBT2-A157-0Y-2M	88	98	92	101,80	110x85x85	795
LBT2-B159-0Y-2M	90	100	94	103,80	110x85x85	795
LBT2-B210-0Y-2M	92	102	96	105,80	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	164,90	149x88x88	1154
LBT2-D418-0Y-2T	144	159	150	164,90	149x88x88	1154
LBT2-Q420-0Y-2T	168	183	177	191,60	149x88x88	1154
LBT2-Q424-0Y-2T	168	183	177	191,60	149x88x88	1154
LBT2-Q524-0Y-2T	168	183	177	191,60	149x88x88	1154
LBT2-Q528-0Y-2T	168	183	177	191,60	149x88x88	1154
LBT2-Q533-0Y-2T	212	232	220	240,40	161x108x125	2174
LBT2-Q521-0Y-2T	212	232	220	240,40	161x108x125	2174
LBT2-Q728-0Y-2T	212	232	220	240,40	161x108x125	2174
LBT2-Q733-0Y-2T	212	232	220	240,40	161x108x125	2174
LBT2-Q736-0Y-2T	212	232	220	240,40	161x108x125	2174
LBT2-S842-3Y-2T	271	291	281	300,80	161x108x125	2174
LBT2-S1242-3Y-2T	274	294	284	303,80	161x108x125	2174
LBT2-S1052-3Y-2T	274	294	284	303,80	161x108x125	2174
LBT2-S1552-3Y-2T	280	300	290	309,80	161x108x125	2174
LBT2-S1556-3Y-2T	284	304	294	313,80	161x108x125	2174



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