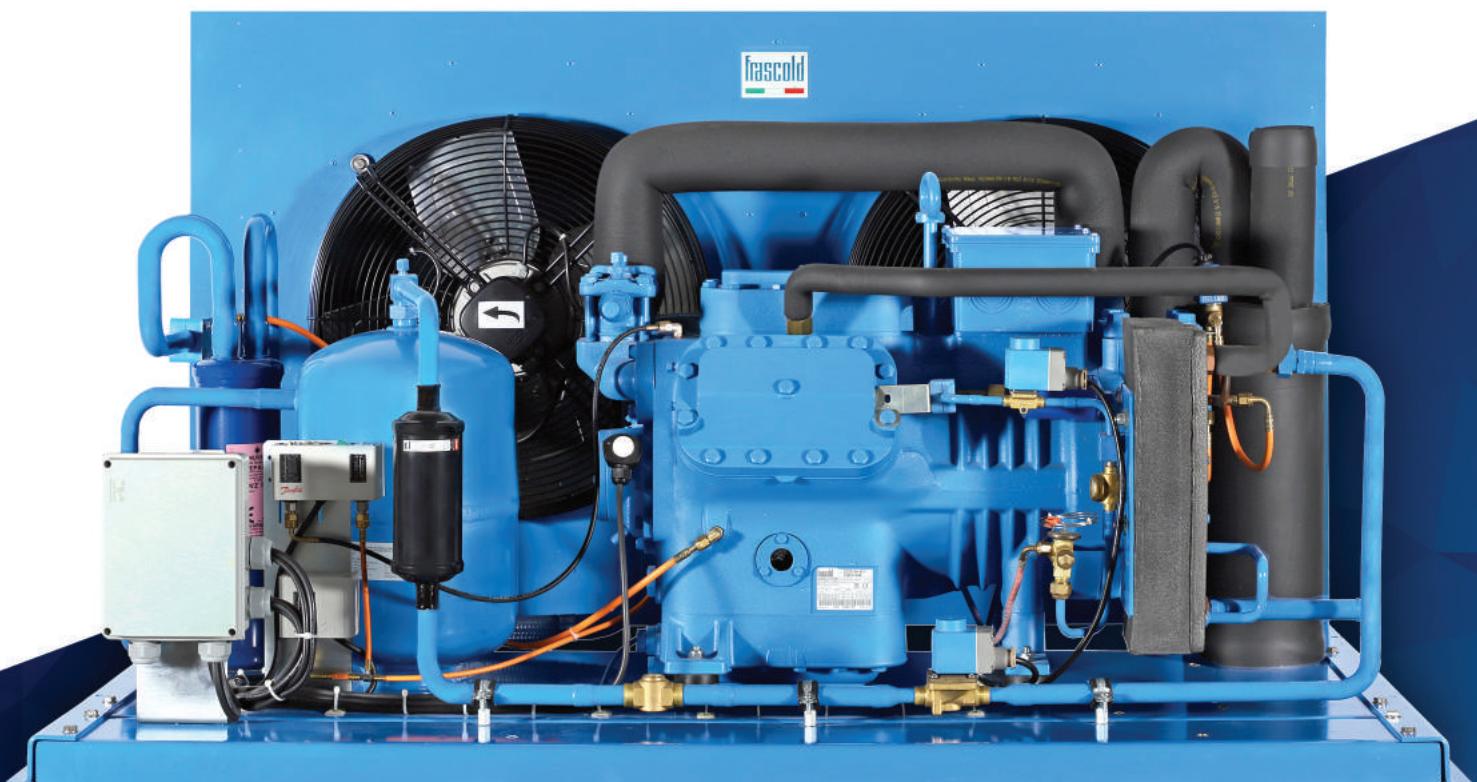




Semi-Hermetic

Air-Cooled Condensing Units





FCAT030_02_EN (v0)

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Air-cooled condensing units with semi-hermetic compressor

Frascold offers a wide range of commercial and industrial air-cooled condensing units for medium and low temperature applications. Their compact design is ideal for installations where need to cover small space and quiet operation is important.

The range of models has two main series:

- **EB models** for moderate climate areas, high efficiency unit with single-stage compressors
- **EBT models** for tropical climate areas, high efficiency unit with single-stage compressors
- **LB models** for moderate climate areas with a single and two-stage compressors
- **LBT models** for tropical climate areas with single-stage compressors

Both series are applied in many cooling installations, including applications like: cold and refrigerated rooms, supermarkets and shops, distribution centres, but also industrial applications, cooling processes in the food production and preservation industry.

Features

Reliable operation: all Frascold condensing units are rigorously assembled and tested in our factories in Italy. The Diagnose technology protection system, available for all Frascold compressors, enables early detection of faults and their quick resolution, thus reducing maintenance and system down time.

Efficiency: The best efficiency of condensing units is reached thanks to the advanced design of Frascold semi-hermetic compressors and accurate sizing of all components. EB & EBT series, ECODesign compliant, can even reach higher efficiency. With VFD built-in technology, available as an option on small compressor models, efficiency is increased further.

Wide temperature range and universal use: The range of units enables temperature control from 10°C to -45°C for models with a single-stage compressor and from -20°C to -70°C for models with a two-stage compressor. The units can be used with all HCFC and HFC, HFO refrigerants.

Low noise: Frascold compressors are distinguished by their particularly low noise level achieved through the intelligent combination of the monobloc structure with the mechanical components, the pipework, the compressor and fan motors. This also enables unit installations very close to the utility provided by the application in order to reduce pressure drops and possible danger of leaks.

Compact and complete: The compact size makes the condensing units a perfect solution for installations with small space available. The different versions proposed and the wide range of accessories make Frascold condensing units more efficient and reliable.

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.

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 all around the world.

Standard design specifications

The choice of all components is based on quality and safety, respect for the environment and social responsibility:

- Frascold semi-hermetic compressor with POE oil filling and suitable for inverter regulation.
- Air-cooled condenser with wide exchange surface and optimised circuiting to reduce pressure drops and refrigerant charge .
- EC & AC fan motors with low power consumption and optimised airflow.
- Vertical-type liquid receiver with high storage capacity.
- Compressor discharge line with vibration absorber pipe.
- Electronic device for compressor protection.
- Oil differential pressure switch for V and Z series compressors units.
- Discharge temperature sensor, optional for Q & S models, standard for V and Z models.
- Support base frame designed to ensure the necessary strength and stability.



Configurations

The condensing units are available in different configurations to meet the installation requirements:

Standard

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

Standard + Oil separator

The basic configuration is also including the oil separator, installed on compressor discharge line, with the oil return pipe to the compressor oil sump. This configuration is available for LB and LBT unit only.

Standard + Package

The basic configuration is also including: the liquid line (filter dryer, liquid sight glass and shut-off valve), high and low pressure switches, high-pressure switch for condensation control, electrical wiring box.

Standard + Oil separator + Package

Full optional configuration, it includes the oil separator and Package components, all factory mounted. This configuration is available for LB and LBT unit only.

Accessories

Above mentioned configurations can be completed with other optionals (see page 17-18).

ASERCOM performance certifications



Frascold is a member of ASERCOM, the Association which ensures the accuracy and reliability of compressors and condensing units performance. ASERCOM has set out the procedure for measuring the performance and the certification process. The certification guarantees that the performance published corresponds to that actually measured with reference to European standard EN12900. The compressors and condensing units with certified performance are listed on ASERCOM's certified products list.

Performance data

Performance data of all condensing units are available through the FSS.3 Frascold selection software, download for free from website, easy to install and user friendly.

FSS.3 selection software can easily inform about the operating limits of the condensing unit, the cooling capacity and all operating data with any kind of refrigerant. The capacities are according to the European standard EN12900 at 50Hz operation. The capacity can also be calculated at 60 Hz.

With FSS.3 it is also possible to get technical information, drawings, manuals, bulletins and others.

FSS.3 Product Selection Software



Blue Is Better!

Conformity

The condensing units comply with the following Directives:

- Machinery directive 2006/42/EC
- Low voltage directive 2014/35/ECE
- Ecodesign directive 2009/125/EC
- Commission regulation EU 2015/1095

To verify compliance with Directive 2009/125/EC Ecodesign-Commission regulation EU 2015/1095, refer to the FTEC030 manual or use the FSS.3 selection program.

The 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.

Models overview

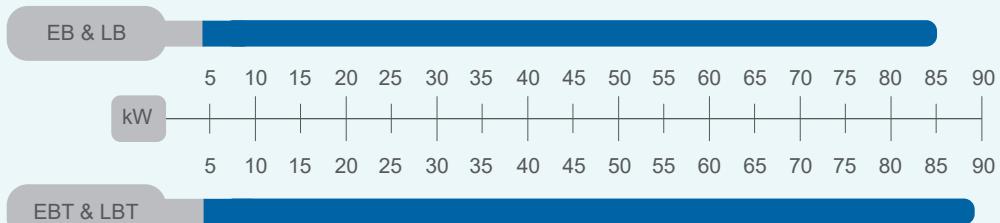
Frascold offers a wide range of models and versions that allow to keep the right temperature and the perfect balance between refrigerant load and efficiency in every refrigeration process. The range of models has two main series:

- High efficiency models: EB for moderate climate areas with a single-stage compressor and EBT for tropical climate areas
- Standard models: LB for moderate climate areas with a single and two-stage compressor and LBT for tropical climate areas

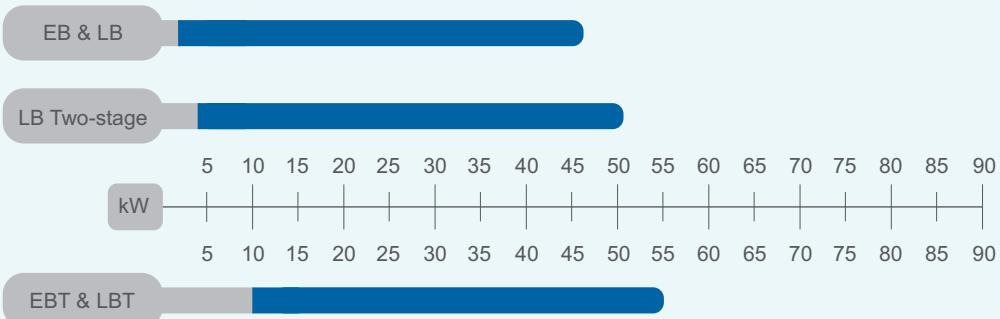
Current range:

3 versions, 88 models with compressors having displacements from 4 to 126 m³/h at 50Hz

Medium Temperature



Low Temperature



Model designation

EB - S1242 - 3 Y - 2 M - 0

Air-cooled condensing unit					Arrangement	
Compressor model					0	Standard
Motor type and power supply					1	with Oil Separator
0	DOL	220-240V/380-420V/3/50Hz 265-290V/440-480V/3/60Hz			2	with Package
1		220V/1/50Hz			3	with Package and Oil Separation
3	PWS	380V-420V/3/50Hz 440V-480V/3/60Hz	Fan motor type		T	Three phase motor
4	DOL	220-240V/3/60Hz 380-420V/3/60Hz			M	Single phase motor
5		220V/1/60Hz	Number of fans		1	One Fan motor
7	PWS	380V-420V/3/60Hz			2	Two Fan motors
1		Inverter			4	Four Fan motors
Oil type						
Y			POE			
1			Mineral			

Special features

Frascold Condensing Units series are designed and configured to meet multiple applications of commercial and industrial cooling. These units are designed for unsurpassed quality, are durable and flexible while maintaining a high energy efficiency.

The EB & EBT series are ECO-Design compliant, according to Directive 2009/125/EC and Regulation 2015/1095/EU.

Low noise: Frascold compressors are distinguished by their particularly low noise level achieved through the intelligent combination of a monobloc body structure with the mechanical components of gas compression and suction and the electric motor. This also enables unit installations that are very close to the utility provided by the application in order to reduce pressure drops and possible danger of leaks

Reliable operation: Frascold condensing units are rigorously assembled and pressure tested in our factories. The Diagnose technology protection system installed on all Frascold compressors enables early detection of faults and their rapid resolution, thus reducing maintenance and system stoppage

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

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

Compact and complete: Their compact size also makes them the perfect solution for installations with limited space. The different versions proposed and the wide range of accessories make Frascold condensing units more efficient and reliable



Reduced consumption: The efficiency of condensing units is due to the advanced design of Frascold semi-hermetic compressors and correct sizing of all components used in the units. By taking advantage of the inverter technology available as an option, the efficiency is further increased

Wide temperature range and universal use: The range of units enables temperature control from 10°C to -45°C for models with a single-stage compressor and from -20°C to -70°C for models with a two-stage compressor. The units can be used with all HCFC and HFC, HFO refrigerants

Information plate

All the important information to identify the main components and operating limits are displayed on the unit name plate.

Manufacturer	Frascold S.p.A. via Barbara Melzi 103/105 20027 Rescaldina (MI) – Italy Telephone: +39 0331 742 201		CE	EU conformance mark
Condensing unit model	Unit model: EB-A054-0Y-1M	Lubricant: POE 32 cSt		
Serial number	Serial: 0S001003	Liquid receiver: USLR02		
Type of condensing unit	Condenser: USA03E	PS (HP): 30 bar		
Type of fan motor	Fan model: USAF1EC	PS (LP): 17 bar		Oil charged into the compressor
Model of installed compressor	Compressor: A05-4Y	TS*: -45°C / +140°C	Year: 2018	Type of liquid receiver
Classification of allowed refrigerants	*Refer to the instruction manual for the temperature range of each components Voltage: refer to components' technical specification Use refrigerants group 2 only, according to EN 378 – 1 Read carefully the Instrucion manual before assembling and using the unit			

Technical data

Condensing units		Compressor ①						Condenser					
Model	Model	Displacement (m³/h 50Hz)	Oil charge (liters)	Version	Motor ③		Model	EC Fan motors					
					Power supply	MRA (A)		Quantity	Model	Power supply	Max power (W)	Max absorbed current (A)	Max Condenser air flow (m³/h 50Hz)
					②	④				⑧	⑨	⑩	
EB-A054-0Y-1M	A05-4Y	3,95	1	1	A	2,8	USAC03E	1	USAF1EC	M	165	1,35	2650
EBT-A054-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-A075-0Y-1M	A07-5Y	4,93	1	1	A	2,7	USAC03E	1	USAF1EC	M	165	1,35	2650
EBT-A075-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-A16-0Y-1M	A1-6Y	5,47	1	1	A	3,6	USAC03E	1	USAF1EC	M	165	1,35	2650
EBT-A16-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-A17-0Y-1M	A1-7Y	6,91	1	2	A	3,7	USAC03E	1	USAF1EC	M	165	1,35	2650
EBT-A17-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-A157-0Y-1M	A1.5-7Y	6,91	1	1	A	4,5	USAC06E	1	USAF2EC	M	160	1,25	3435
EBT-A157-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-B159-0Y-1M	B1.5-9.1Y	8,96	1	2	A	5,9	USAC03E	1	USAF1EC	M	165	1,35	2650
EBT-B159-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-B210-0Y-1M	B2-10.1Y	9,88	1	1	A	6,7	USAC06E	1	USAF2EC	M	160	1,25	3435
EBT-B210-0Y-2M							USAC07E	2	USAF1EC	M	330	2,70	5300
EB-D211-0Y-1M	D2-11.1Y	11,26	1,1	1	A	7,1	USAC06E	1	USAF2EC	M	160	1,25	3435
EBT-D211-0Y-2M							USAC08E	2	USAF2EC	M	320	2,50	6870
EB-D213-0Y-1M	D2-13.1Y	13,15	1,1	2	A	7,1	USAC06E	1	USAF2EC	M	160	1,25	3435
EBT-D213-0Y-2M							USAC08E	2	USAF2EC	M	320	2,50	6870
EB-D313-0Y-1M	D3-13.1Y	13,15	1,1	1	A	8,8	USAC06E	1	USAF2EC	M	160	1,25	3435
EBT-D313-0Y-2M							USAC08E	2	USAF2EC	M	320	2,50	6870
EB-D316-0Y-2M	D3-16.1Y	16,40	1,1	2	A	9,9	USAC07E	2	USAF1EC	M	330	2,70	5300
EBT-D316-0Y-2M							USAC08E	2	USAF2EC	M	320	2,50	6870
EB-D416-0Y-2M	D4-16.1Y	16,40	1,2	1	A	11,6	USAC08E	2	USAF2EC	M	320	2,50	6870
EBT-D416-0Y-2M							USAC16E	2	USAF4EC	M	600	4,10	12420
EB-D318-0Y-2M	D3-18.1Y	17,93	1,1	2	A	10,0	USAC07E	2	USAF1EC	M	330	2,70	5300
EBT-D318-0Y-2M							USAC08E	2	USAF2EC	M	320	2,50	6870
EBT-D418-0Y-2M	D4-18.1Y	17,93	1,2	1	A	12,5	USAC16E	2	USAF4EC	M	600	4,10	12420

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 / 380-420V Y / 3~ / 50Hz // 265-290V Δ / 440-480V Y / 3~ / 60Hz

B = 380-420V Y / 3~ / 50Hz // 440-480V Y / 3~ / 60Hz

Tolerance +/- 10% of the mean value of the voltage range

⑥ Maximum operating current (MRA) at full load (400V). For rated current see FSS.3 Frascold selection program

⑦ Maximum operating current (MRA) at 230V = (400V MRA) x 1.75

⑧ M = 230/1/50 Hz

⑨ Total installed power of the fans

⑩ Maximum total current absorbed by the fans

Technical data

Condensing units		Compressor ①						Condenser						
Model	Model	Displacement (m³/h 50Hz)	Oil charge (liters)	Version	Motor ③		Model	EC Fan motors						
					Power supply	MRA (A)		Quantity	Model	Power supply	Max power (W)	Max absorbed current (A)		
					②	④							⑧	
EB-Q420-0Y-2M	Q4-20.1Y	19,77	1,6	2	A	10,1	USAC08E	2	USAF2EC	M	320	2,50	6870	
EBT-Q420-0Y-2M							USAC16E	2	USAF4EC	M	600	4,10	12420	
EB-Q521-0Y-2M	Q5-21.1Y	21,18	1,6	1	A	11,6	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q521-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-Q424-0Y-2M	Q4-24.1Y	23,91	1,6	2	A	11,7	USAC08E	2	USAF2EC	M	320	2,50	6870	
EBT-Q424-0Y-2M							USAC16E	2	USAF4EC	M	600	4,10	12420	
EB-Q524-0Y-2M	Q5-24.1Y	23,91	1,6	1	A	13,8	USAC08E	2	USAF2EC	M	320	2,50	6870	
EBT-Q524-0Y-2M							USAC16E	2	USAF4EC	M	600	4,10	12420	
EB-Q528-0Y-2M	Q5-28.1Y	28,02	1,6	2	A	14,0	USAC08E	2	USAF2EC	M	320	2,50	6870	
EBT-Q528-0Y-2M							USAC16E	2	USAF4EC	M	600	4,10	12420	
EB-Q728-0Y-2M	Q7-28.1Y	28,02	1,6	1	A	17,6	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q728-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-Q533-0Y-2M	Q5-33.1Y	32,66	1,6	2	A	14,4	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q533-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-Q733-0Y-2M	Q7-33.1Y	32,66	1,6	1	A	20,0	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q733-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-Q536-0Y-2M	Q5-36.1Y	35,86	1,6	2	A	11,8	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q536-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-Q736-0Y-2M	Q7-36.1Y	35,86	1,6	1	A	19,4	USAC16E	2	USAF4EC	M	600	4,10	12420	
EBT-Q736-0Y-2M							USAC18E	2	USAF10EC	M	1300	5,80	18460	
EB-S842-3Y-2M	S8-42Y	41,32	2,9	2	B	20,3	USAC18E	2	USAF10EC	M	1300	5,80	18460	
EBT-S842-3Y-2M							USAC19E	2	USAF10EC	M	1300	5,80	18460	
EB-S1242-3Y-2M	S12-42Y	41,32	2,9	1	B	22,4	USAC18E	2	USAF10EC	M	1300	5,80	18460	
EBT-S1242-3Y-2M							USAC19E	2	USAF10EC	M	1300	5,80	18460	
EB-S1052-3Y-2M	S10-52Y	51,50	2,9	2	B	24,5	USAC18E	2	USAF10EC	M	1300	5,80	18460	
EBT-S1052-3Y-2M							USAC19E	2	USAF10EC	M	1300	5,80	18460	
EB-S1552-3Y-2M	S15-52Y	51,50	2,9	1	B	32,4	USAC18E	2	USAF10EC	M	1300	5,80	18460	
EBT-S1552-3Y-2M							USAC19E	2	USAF10EC	M	1300	5,80	18460	
EB-S1556-3Y-2M	S15-56Y	56,00	2,9	2	B	30,7	USAC18E	2	USAF10EC	M	1300	5,80	18460	
EBT-S1556-3Y-2M							USAC19E	2	USAF10EC	M	1300	5,80	18460	
EB-S2056-3Y-2M	S20-56Y	56,00	2,9	1	B	38,4	USAC19E	2	USAF10EC	M	1300	5,80	18460	

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% of the mean value of the voltage range.

⑥ Maximum operating current (MRA) at full load (400V). For rated current see FSS.3 Frascold selection program

⑦ Maximum operating current (MRA) at 230V = (400V MRA) x 1.75

⑧ M = 230/1/50 Hz

⑨ Total installed power of the fans

⑩ Maximum total current absorbed by the fans

Technical data

Condensing units	Liquid receiver							Piping connections				Installation/Transport			Housing	
	Model	Model	Vol. (dm ³)	R134a R450A R513A	R404A R507A R407F R407A R448A R449A	R407C R22	Safety valve connection	Compressor suction valve		Liquid line valve		Net Weight (kg) (Standard construction)	Gross weight (kg) (Standard construction)	Volume with packaging (dm ³)		
								Ø mm	Ø inch	Ø mm	Ø inch					
			(12)							(13)		(14)		(15)		
EB-A054-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	9,5	3/8"	65	72	465	USHAOU26		
EBT-A054-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	88	98	795	USHAOU29		
EB-A075-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	9,5	3/8"	65	72	465	USHAOU26		
EBT-A075-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	88	98	795	USHAOU29		
EB-A16-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	9,5	3/8"	65	72	465	USHAOU26		
EBT-A16-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	88	98	795	USHAOU29		
EB-A17-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	9,5	3/8"	65	72	465	USHAOU26		
EBT-A17-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	88	98	795	USHAOU29		
EB-A157-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	15,8	5/8"	12,7	1/2"	70	77	531	USHAOU27		
EBT-A157-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	88	98	795	USHAOU29		
EB-B159-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	9,5	3/8"	67	74	465	USHAOU26		
EBT-B159-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	90	100	795	USHAOU29		
EB-B210-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	19,0	3/4"	12,7	1/2"	74	81	531	USHAOU27		
EBT-B210-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	92	102	795	USHAOU29		
EB-D211-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	22,0	7/8"	12,7	1/2"	79	86	531	USHAOU27		
EBT-D211-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	106	116	795	USHAOU30		
EB-D213-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	22,0	7/8"	12,7	1/2"	79	86	531	USHAOU27		
EBT-D213-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	106	116	795	USHAOU30		
EB-D313-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	83	90	531	USHAOU27		
EBT-D313-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	106	116	795	USHAOU30		
EB-D316-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	101	111	795	USHAOU29		
EBT-D316-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	110	120	795	USHAOU30		
EB-D416-0Y-2M	USLR03-M	2,3	2,3	2,2	2,3	1/4"	28,6	1" 1/8	15,8	5/8"	116	126	795	USHAOU30		
EBT-D416-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"			19,0	3/4"	144	159	1150	USHAOU31		
EB-D318-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	107	117	795	USHAOU29		
EBT-D318-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	116	126	795	USHAOU30		
EBT-D418-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	28,6	1" 1/8	19,0	3/4"	144	159	1150	USHAOU31		

(11) Liquid receiver with safety valve

(12) Max liquid refrigerant 90% of the volume. Liquid temperature 20°C

(13) Valves with solder connections

(14) Including service valves, oil charge, rubber supports; not including any accessories supplied on request

(15) Optional component (see page 17)

Technical data

Condensing units	Liquid receiver ⑪							Piping connections				Installation/Transport			Housing	
	Model	Model	Vol. (dm ³)	R134a R450A R513A	R404A R507A R407F R407A R448A R449A	R407C R22	Safety valve connection	Compressor suction valve		Liquid line valve		Net Weight (kg) (Standard construction)	Gross weight (kg) (Standard construction)	Volume with packaging (dm ³)		
								Ø mm	Ø inch	Ø mm	Ø inch					
⑫							⑬				⑭		⑮			
EB-Q420-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	28,6	1" 1/8	15,8	5/8"	135	145	795	USHAOU30		
EBT-Q420-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	28,6	1" 1/8	19,0	3/4"	168	183	1150	USHAOU31		
EB-Q521-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	28,6	1" 1/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q521-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	28,6	1" 1/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-Q424-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	28,6	1" 1/8	15,8	5/8"	140	150	795	USHAOU30		
EBT-Q424-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	28,6	1" 1/8	19,0	3/4"	168	183	1150	USHAOU31		
EB-Q524-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	28,6	1" 1/8	15,8	5/8"	140	150	795	USHAOU30		
EBT-Q524-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	28,6	1" 1/8	19,0	3/4"	168	183	1150	USHAOU31		
EB-Q528-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	35,0	1" 3/8	15,8	5/8"	140	150	795	USHAOU30		
EBT-Q528-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EB-Q728-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q728-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-Q533-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q533-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-Q733-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q733-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-Q536-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q536-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-Q736-0Y-2M	USLR06-M	5,7	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	168	183	1150	USHAOU31		
EBT-Q736-0Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	227	247	2352	USHAOU32		
EB-S842-3Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	265	285	2352	USHAOU32		
EBT-S842-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	35,0	1" 3/8	22,2	7/8"	286	306	2352	USHAOU33		
EB-S1242-3Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	268	288	2352	USHAOU32		
EBT-S1242-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	35,0	1" 3/8	22,2	7/8"	289	309	2352	USHAOU33		
EB-S1052-3Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	268	288	2352	USHAOU32		
EBT-S1052-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	35,0	1" 3/8	22,2	7/8"	289	309	2352	USHAOU33		
EB-S1552-3Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	42,0	1" 5/8	19,0	3/4"	274	294	2352	USHAOU32		
EBT-S1552-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	295	315	2352	USHAOU33		
EB-S1556-3Y-2M	USLR6.6-M	6,6	7,0	6,1	6,9	1/4"	42,0	1" 5/8	19,0	3/4"	278	298	2352	USHAOU32		
EBT-S1556-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	295	315	2352	USHAOU33		
EB-S2056-3Y-2M	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	301	321	2352	USHAOU33		

^⑪ Liquid receiver with safety valve^⑫ Max liquid refrigerant 90% of the volume. Liquid temperature 20°C^⑬ Valves with solder connections^⑭ Including service valves, oil charge, rubber supports; not including any accessories supplied on request^⑮ Optional component (see page 17)

Technical data

Condensing units		Compressor ①						Condenser							
Model	Model	Displacement (m ³ /h 50Hz)	Oil charge (liters)	Version	Motor ③		Model	Fan motors (with thermal protection)						Condenser air flow (m ³ /h 50Hz)	
					Power supply	MRA (A)		Quantity	Model	Power supply	Installed power (W)	Max absorbed current (A)	Condenser air flow (m ³ /h 50Hz)		
					②	④									
LB-A075-0Y-1M	A07-5Y	4,93	1	1	A	2,7	USAC03M	1	USAF2	M	165	0,69	2500		
LB1-A075-0Y-2M				1	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-A075-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LB-A106-0Y-1M	A16-Y	5,47	1	1	A	3,6	USAC03M	1	USAF2	M	165	0,69	2500		
LB-A106-0Y-2M				1	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-A106-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LB-A107-0Y-1M	A17-Y	6,91	1	2	A	3,7	USAC03M	1	USAF2	M	165	0,69	2500		
LB-A107-0Y-2M				2	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-A107-0Y-2M				2	A		USAC07M	2	USAF2	M	330	1,38			
LB-A157-0Y-1M	A1.5-7Y	6,91	1	1	A	4,5	USAC06M	1	USAF3	M	200	0,87	2900		
LB-A157-0Y-2M				1	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-A157-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LB-B159-0Y-1M	B1.5-9.1Y	8,96	1	2	A	5,9	USAC03M	1	USAF2	M	165	0,69	2500		
LB-B159-0Y-2M				2	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-B159-0Y-2M				2	A		USAC07M	2	USAF2	M	330	1,38			
LB-B210-0Y-1M	B2-10.1Y	9,88	1	1	A	6,7	USAC06M	1	USAF3	M	200	0,87	2900		
LB-B210-0Y-2M				1	A		USAC15M	2	USAF1	M	130	0,60	3400		
LBT-B210-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LB-D211-0Y-1M	D2-11.1Y	11,26	1,1	1	A	7,1	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D211-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LBT-D211-0Y-2M				1	A		USAC08M	2	USAF3	M	400	1,74			
LB-D213-0Y-1M	D2-13.1Y	13,15	1,1	2	A	7,1	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D213-0Y-2M				2	A		USAC07M	2	USAF2	M	330	1,38			
LBT-D213-0Y-2M				2	A		USAC08M	2	USAF3	M	400	1,74			
LB-D313-0Y-1M	D3-13.1Y	13,15	1,1	1	A	8,8	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D313-0Y-2M				1	A		USAC07M	2	USAF2	M	330	1,38			
LBT-D313-0Y-2T				1	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	
LB-D316-0Y-1M	D3-16.1Y	16,40	1,1	2	A	9,9	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D316-0Y-2M				2	A		USAC07M	2	USAF2	M	330	1,38	5000		
LBT-D316-0Y-2T				2	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	
LB-D416-0Y-1M	D4-16.1Y	16,40	1,2	1	A	11,6	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D416-0Y-2M				1	A		USAC08M	2	USAF3	M	400	1,74			
LBT-D416-0Y-2T				1	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	
LB-D318-0Y-1M	D3-18.1Y	17,93	1,1	2	A	10,0	USAC06M	1	USAF3	M	200	0,87	2900		
LB-D318-0Y-2M				2	A		USAC07M	2	USAF2	M	330	1,38			
LBT-D318-0Y-2M				2	A		USAC08M	2	USAF3	M	400	1,74			
LB-Q420-0Y-2M	Q4-201.Y	19,77	1,6	2	A	10,1	USAC08M	2	USAF3	M	400	1,74	5800		
LBT-Q420-0Y-2T				2	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	
LB-Q521-0Y-2T	Q5-21.1Y	21,18	1,6	1	A	11,6	USAC16M	2	USAF4	T	630	2,60	1,30	11400	
LBT-Q521-0Y-2T				1	A		USAC18M	2	USAF10	T	1500	6,00	3,50	17400	
LB-Q424-0Y-2M	Q4-24.1Y	23,91	1,6	2	A	11,7	USAC08M	2	USAF3	M	400	1,74	5800		
LBT-Q424-0Y-2T				2	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	
LB-Q524-0Y-2M	Q5-24.1Y	23,91	1,6	1	A	13,8	USAC08M	2	USAF3	M	400	1,74	5800		
LBT-Q524-0Y-2T				1	A		USAC16M	2	USAF4	T	630	2,26	1,30	11400	

Technical data

Condensing units	Compressor ①							Condenser							
	Model	Model	Displacement (m ³ /h 50Hz)	Oil charge (liters)	Motor ③			Model	Fan motors (with thermal protection)						
					Version	Power supply	MRA (A)		Quantity	Model	Power supply	Installed power (W)	Max absorbed current (A)	Condenser air flow (m ³ /h 50Hz)	
					②	④	⑤		⑥ ⑦				Δ	Y	
LB-Q528-0Y-2M	Q5-28.1Y	28,02	1,6	2	A	14,0	14,0	USAC08M	2	USAF3	M	400	1,74	5800	
LBT-Q528-0Y-2T				2	A			USAC16M	2	USAF4	T	630	2,26	1,30	11400
LB-Q728-0Y-2T	Q7-28.1Y	28,02	1,6	1	A	17,6	17,6	USAC16M	2	USAF4	T	630	2,26	1,30	11400
LBT-Q728-0Y-2T				1	A			USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LB-Q533-0Y-2M	Q5-33.1Y	32,66	1,6	2	A	14,4	14,4	USAC08M	2	USAF3	M	400	1,74	5800	
LBT-Q533-0Y-2T				2	A			USAC16M	2	USAF4	T	630	2,26	1,30	11400
LB-Q733-0Y-2T	Q7-33.1Y	32,66	1,6	1	A	20,0	20,0	USAC17M	2	USAF4	T	630	2,26	1,30	10400
LBT-Q733-0Y-2T				1	A			USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LB-Q536-0Y-2T	Q5-36.1Y	35,86	1,6	2	A	11,8	11,8	USAC16M	2	USAF4	T	630	2,26	1,30	11400
LBT-Q536-0Y-2T				2	A			USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LB-Q736-0Y-2T	Q7-36.1Y	35,86	1,6	1	A	19,4	19,4	USAC17M	2	USAF4	T	630	2,26	1,30	10400
LBT-Q736-0Y-2T				1	A			USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LB-S842-3Y-2T	S8-42Y	41,32	2,9	2	B	20,3	20,3	USAC16M	2	USAF4	T	630	2,26	1,30	11400
LBT-S842-3Y-2T				2	B			USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LB-S1242-3Y-2T	S12-42Y	41,32	2,9	1	B	22,4	22,4	USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LBT-S1242-3Y-2T				1	B			USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LB-S1052-3Y-2T	S10-52Y	51,50	2,9	2	B	24,5	24,5	USAC17M	2	USAF4	T	630	2,26	1,30	10400
LBT-S1052-3Y-2T				2	B			USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LB-S1552-3Y-2T	S15-52Y	51,50	2,9	1	B	32,4	32,4	USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LBT-S1552-3Y-2T				1	B			USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LB-S1556-3Y-2T	S15-56Y	56,00	2,9	2	B	30,7	30,7	USAC18M	2	USAF10	T	1500	6,00	3,50	17400
LBT-S1556-3Y-2T				2	B			USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LB-S2056-3Y-2T	S-20-56Y	56,00	2,9	1	B	38,4	38,4	USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LBT-S2056-3Y-4T				1	B			USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-V2059-3Y-2T	V20-59Y	58,48	4,0	1	B	35,3	35,3	USAC19M	4	USAF10	T	3000	12,00	7,00	32800
LBT-V2059-3Y-4T				1	B			USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-V1571-3Y-2T	V15-71Y	70,77	4,0	2	B	32,2	32,2	USAC17M	2	USAF4	T	630	2,26	1,30	10400
LBT-V1571-3Y-2T				2	B			USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LB-V2571-3Y-2T	V25-71Y	70,77	4,0	1	B	43,5	43,5	USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LBT-V2571-3Y-4T				1	B			USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-V2084-3Y-2T	V20-84Y	83,81	4,0	2	B	46,2	46,2	USAC19M	2	USAF10	T	1500	6,00	3,50	16400
LBT-V2084-3Y-4T				2	B			USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-V3084-3Y-4T	V30-84Y	83,81	4,0	1	B	49,2	49,2	USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-Z25106Y-3Y-4T	Z25-106Y	106,16	3,7	2	B			USAC14M	4	USAF4	T	1260	4,52	2,60	20800
LBT-Z25106-3Y-4T				2	B	53,6	53,6	USAC20M	4	USAF10	T	3000	12,00	7,00	32800
LB-Z30126Y-3Y-4T	Z30-126Y	125,72	7,2	2	B			USAC14M	4	USAF4	T	1260	4,52	2,60	20800
LBT-Z30126-3Y-4T				2	B	55,7	55,7	USAC20M	4	USAF10	T	3000	12,00	7,00	32800

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% of the mean value of the voltage range

⑥ Maximum operating current (MRA) at full load (400V). For rated current see FSS.3 Frascold selection program

⑦ Maximum operating current (MRA) at 230V = (400V MRA) x 1.75

⑧ M = 230/1/50 Hz - T = 230-400/3/50 Hz

⑨ Total installed power of the fans

⑩ Maximum total current absorbed by the fans

Technical data

Condensing units	Liquid receiver ⑪							Piping connections				Installation/Transport			Housing
	Model	Model	R134a R450A R513A	R404A R507A R407F R407A R448A R449A	R407C R22	Safety valve connection	Compressor suction valve	Liquid line valve		Net Weight (kg) (Standard construction)	Gross weight (kg) (Standard construction)	Volume with packaging (dm³)			
				⑫			Ø mm	Ø inch	Ø mm	Ø inch					
LB-A075-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	12,7	1/2"	53	62	315	USH0U21	
LB1-A075-0Y-2M									9,5	3/8"	63	72	370	USH0U18	
LBT-A075-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	79	84	594	USH0U17	
LB-A106-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	12,7	1/2"	56	62	315	USH0U21	
LB-A106-0Y-2M									9,5	3/8"	65	72	370	USH0U18	
LBT-A106-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	79	84	594	USH0U17	
LB-A107-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	12,7	1/2"	56	62	315	USH0U21	
LB-A107-0Y-2M									9,5	3/8"	65	72	370	USH0U18	
LBT-A107-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	79	84	594	USH0U17	
LB-A157-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	15,8	5/8"	12,7	1/2"	63	70	470	USH0U21	
LB-A157-0Y-2M	USLR02	1,5	1,8	1,7	1,8	1/4"			9,5	3/8"	65	72	370	USH0U18	
LBT-A157-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	79	84	594	USH0U17	
LB-B159-0Y-1M	USLR02	1,5	1,8	1,7	1,8	1/4"	15,8	5/8"	12,7	1/2"	58	64	315	USH0U21	
LB-B159-0Y-2M									9,5	3/8"	67	74	370	USH0U18	
LBT-B159-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	81	86	594	USH0U17	
LB-B210-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	19,0	3/4"	12,7	1/2"	67	74	470	USH0U18	
LB-B210-0Y-2M	USLR02	1,5	1,8	1,7	1,8	1/4"			12,7	1/2"	79	88	370	USH0U18	
LBT-B210-0Y-2M	USLR03-M	2,2	2,3	2,2	2,3	1/4"			12,7	1/2"	83	93	594	USH0U17	
LB-D211-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	22,0	7/8"	12,7	1/2"	72	80	470	USH0U20	
LB-D211-0Y-2M									12,7	1/2"	84	93	594	USHOU17	
LBT-D211-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	87	96	737	USHOU16	
LB-D213-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	22,0	7/8"	12,7	1/2"	72	80	470	USH0U20	
LB-D213-0Y-2M									12,7	1/2"	84	93	594	USHOU17	
LBT-D213-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	84	93	737	USHOU16	
LB-D313-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	76	84	470	USH0U20	
LB-D313-0Y-2M									12,7	1/2"	92	102	594	USHOU17	
LBT-D313-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			15,8	5/8"	119	128	1202	USH0U15	
LB-D316-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	76	84	470	USH0U20	
LB-D316-0Y-2M									12,7	1/2"	84	93	594	USHOU17	
LBT-D316-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	92	102	1202	USH0U15	
LB-D416-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	15,8	5/8"	78	86	470	USH0U20	
LB-D416-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	94	106	737	USHOU16	
LBT-D416-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	116	130	1202	USH0U15	
LB-D318-0Y-1M	USLR03-M	2,2	2,3	2,2	2,3	1/4"	28,6	1" 1/8	12,7	1/2"	76	84	470	USH0U20	
LB-D318-0Y-2M									12,7	1/2"	84	94	594	USHOU17	
LBT-D318-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	92	104	737	USHOU16	
LB-Q420-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	28,6	1" 1/8	15,8	5/8"	122	134	737	USHOU16	
LBT-Q420-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	139	153	1202	USH0U15	
LB-Q521-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	144	153	1202	USHOU16	
LBT-Q521-0Y-2T	USLR12-M	11,0	6,3	5,5	6,2	1/2"	28,6	1" 1/8	22,2	7/8"	178	189	1652	USH0U14	
LB-Q424-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"			15,8	5/8"	127	134	737	USHOU16	
LBT-Q424-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	139	153	1202	USH0U15	
LB-Q524-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	28,6	1" 1/8	15,8	5/8"	127	137	737	USHOU16	
LBT-Q524-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	139	153	1202	USH0U15	

Technical data

Condensing units		Liquid receiver ⑪						Piping connections				Installation/Transport			Housing
Model	Model	R134a R450A R513A	R404A R507A R407F R407A R448A R449A	R407C R22	Safety valve connection	Compressor suction valve		Liquid line valve		Net Weight (kg) (Standard construction)	Gross weight (kg) (Standard construction)	Volume with packaging (dm³)			
			⑫			Ø mm	Ø inch	Ø mm	Ø inch						
LB-Q528-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	35,0	1" 3/8	15,8	5/8"	127	137	737	USHOU16	
LBT-Q528-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	144	157	1202	USHOU15	
LB-Q728-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	144	155	1202	USHOU15	
LBT-Q728-0Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	178	200	1652	USHOU14	
LB-Q533-0Y-2M	USLR04	3,4	3,6	3,1	3,5	1/4"	35,0	1" 3/8	15,8	5/8"	127	137	737	USHOU16	
LBT-Q533-0Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"			19,0	3/4"	144	157	1202	USHOU15	
LB-Q733-0Y-2T	USLR06.6-M	7,0	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	144	155	1202	USHOU15	
LBT-Q733-0Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	35,0	1" 3/8	22,2	7/8"	178	189	1652	USHOU14	
LB-Q536-0Y-2T	USLR06.6-M	7,0	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	144	155	1202	USHOU15	
LBT-Q536-0Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	178	200	1652	USHOU14	
LB-Q736-0Y-2T	USLR06.6-M	7,0	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	144	155	1202	USHOU15	
LBT-Q736-0Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	178	189	1652	USHOU14	
LB-S842-3Y-2T	USLR06-M	6,6	6,3	5,5	6,2	1/4"	35,0	1" 3/8	19,0	3/4"	186	205	1202	USHOU13	
LBT-S842-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	216	241	1652	USHOU14	
LB-S1242-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	35,0	1" 3/8	22,2	7/8"	219	241	1652	USHOU14	
LBT-S1242-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					235	261	1652	USHOU14	
LB-S1052-3Y-2T	USLR06.6-M	7,0	7,0	6,1	6,9	1/4"	35,0	1" 3/8	19,0	3/4"	194	214	1202	USHOU13	
LBT-S1052-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	221	249	1652	USHOU14	
LB-S1552-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	225	248	1652	USHOU14	
LBT-S1552-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					227	256	1652	USHOU14	
LB-S1556-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	229	252	1107	USHOU14	
LBT-S1556-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					231	259	1652	USHOU14	
LB-S2056-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	231	261	1107	USHOU14	
LBT-S2056-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					294	320	2210	n.a.	
LB-V2059-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	253	279	1848	USHA0U22	
LBT-V2059-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					332	358	2210	n.a.	
LB-V1571-3Y-2T	USLR06.6-M	7,0	7,0	6,1	6,9	1/4"	42,0	1" 5/8	19,0	3/4"	250	275	999	USHA0U23	
LBT-V1571-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"			22,2	7/8"	263	296	1848	USHA0U22	
LB-V2571-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	277	310	1848	USHA0U22	
LBT-V2571-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					346	372	2210	n.a.	
LB-V2084-3Y-2T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	42,0	1" 5/8	22,2	7/8"	251	276	1848	USHA0U22	
LBT-V2084-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					347	373	2210	n.a.	
LB-V3084-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	54,0	2" 1/8	22,2	7/8"	354	380	2210	n.a.	
LB-Z25106Y-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	54,0	2" 1/8	22,2	7/8"	382	407	2210	n.a.	
LBT-Z25106-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					382	416	2210	n.a.	
LB-Z30126Y-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"	54,0	2" 1/8	22,2	7/8"	396	421	2210	n.a.	
LBT-Z30126-3Y-4T	USLR12-M	11,0	12,1	10,6	12,0	1/2"					396	430	2210	n.a.	

^⑪ Liquid receiver without safety valve; Safety valve factory installed on LB-Z & LBT-Z only^⑫ Max liquid refrigerant 90% of the volume. Liquid temperature 20°C^⑬ Valves with solder connections^⑭ Including service valves, oil charge, rubber supports; not including any accessories supplied on request^⑮ Optional component (see page 18)

Control and protection device

The compressor is equipped with the Kriwan INT69® Diagnose protection devices, a further development of the compressors protection capability.

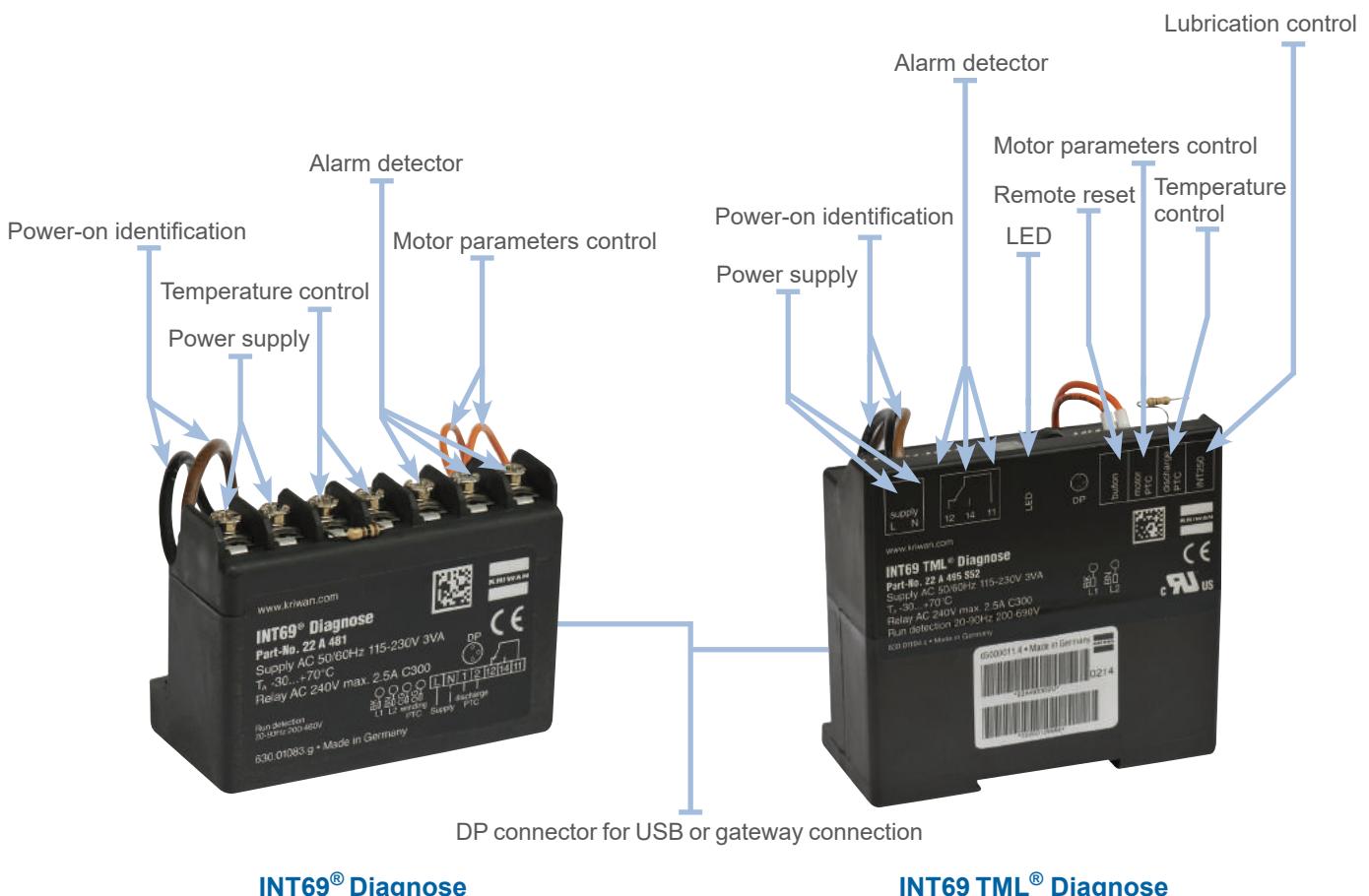
The Diagnose technology is not limited to the protection of the compressor, it also provides specific functions of diagnostics aimed for:

- 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 cost.

Advantages

- Guarantee of optimal operation throughout the life cycle of the compressor
- Practical and with simple operation
- Immediate diagnosis and accurate problem-solving in case of error or failure
- Intelligent monitoring of the compressor operation
- Extends the service life of the refrigeration systems
- Improves the compressor protection
- Reduces operating and maintenance costs
- Automatically saves operational data and errors in a memory
- Technical sheet with retrieval of stored data
- Display of compressor status through flash LED code (for TML version)
- Data download through DP port connection
- Remote communication through Modbus-Gateway and LAN-Gateway protocol
- Also applicable to already installed compressors



INT69® Diagnose and INT69TML® Diagnose are intellectual property and trademarks® of KRIWAN Industrie-Elektronik GmbH.

Construction features and optionals

Air-cooled condensing unit EB & EBT series / model	EB-A...1M	EB-A...2M	EBT-A...2M	EB-B...1M	EB-B...2	EBT-B...2M	EB-D...1M	EB-D...2M	EBT-D...2M	EB-Q...2M	EBT-Q...2M	EB-S...2M	EBT-S...2M
Semi-hermetic compressor with integrated direct electric start-up motor 220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz PTC/AMS sensors; INT69 protection device; POE oil filling; suction and discharge valves; rubber mounts	①	①	①	①	①	①	①	①	①	①	①		
Semi-hermetic compressor with integrated direct electric start-up motor 220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz PTC/AMS sensors; INT69 DIAGNOSE protection device; POE oil filling; suction and discharge valves; rubber mounts										①			
Semi-hermetic compressor with integrated PWS electric start-up motor 380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz AMS sensors; INT69 DIAGNOSE protection device; POE oil filling; suction and discharge valves; rubber mounts											①		
EC Fan motor speed regulation device (supplied loose)	○	○	○	○	○	○	○	○	○	○	○	○	○
Liquid receiver (PED certified) with large volume, brazing rotolock valve, safety valve (30 bar set-point)	①	①	①	①	①	①	①	①	①	①	①	①	①
Vibration absorber pipe on compressor discharge line	①	①	①	①	①	①	①	①	①	①	①	①	①
Optional "Package", including: - Oil separator, liquid line (filter, liquid sight glass, shut-off valve), - High/Low safety pressure switch (PED certified, Cat. IV)	②			②			②						
Optional "Package", including: - Oil separator, liquid line (filter, liquid sight glass, shut-off valve) - High/Low safety pressure switch (PED certified, Cat. IV) - Electrical wiring junction box	④			④			④			④	④	④	③
Solenoid valve (alternative to shut-off valve supplied with "Package")	○	○	○	○	○	○	○	○	○	○	○	○	○
Factory mounted Check-valve for compressor discharge line		⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
Protecting Housing for outdoor installation	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥

① Standard components included

○ Optional component supplied on request

② Package fitting without electric cable junction box

③ Package fitting with electric cables Junction box

④ Oil separator supplied without oil charge

⑤ Accessory required when the compressor is equipped with "US" head for unloading start

⑥ Supplied loose for installation on site

Construction features and optionals

Air-cooled condensing unit LB & LBT series / model	LB-A...1	LB-A...2	LBT-A...2	LB-B...1	LB-B...2	LBT-B...2	LB-D...1	LB-D...2	LBT-D...2	LB-Q...2	LBT-Q...2	LB-S...2	LBT-S...2	LBT-S...4	LB-V...2	LBT-V...2	LB-V...4	LBT-V...4	LB-Z...4	LBT-Z...4
Semi-hermetic compressor with integrated direct electric start-up motor 220-240V Δ / 380-420V / 3 / 50 Hz >> 265-290V Δ / 440-480V / 3 / 60 Hz PTC/AMS sensors; INT69 protection device; POE oil filling; Suction and compression valves; Rubber mounts	①	①	①	①	①	①	①													
Semi-hermetic compressor with integrated direct electric start-up motor 220-240V Δ / 380-420V / 3 / 50 Hz >> 265-290V Δ / 440-480V / 3 / 60 Hz PTC/AMS sensors; INT69 DIAGNOSE protection device; POE oil filling; Suction and compression valves; Rubber mounts								①												
Semi-hermetic compressor with integrated PWS electric start-up motor 380-420V / 3 / 50 Hz >> 440-480V / 3 / 60 Hz AMS sensors; INT69 DIAGNOSE protection device; POE oil filling; Suction and compression valves; Rubber mounts.										①	①									
Semi-hermetic compressor with split integrated electric start-up motor (PWS) 380-420V / 3 / 50 Hz >> 440-480V / 3 / 60 Hz; AMS Sensors; Multifunctional control and diagnosis device INT69TML DIAGNOSE; Delivery temperature control device; Electronic pressure switch for lubrication control; POE oil filling, suction and compression valve; Rubber mounts															①	①	①			
Fan motor speed regulation device (as an alternative to the pressure switch)	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	
Liquid receiver (PED certified) with large volume, brazing Rotalock valve, plug for safety valve connection	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	
30 bar safety valve (only for units with compressor Z25-106Y and Z30-126Y)																		①		
Compressor discharge line with flexible joint	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	
Optional "Package", including: - Liquid line (filter, liquid sight glass, service valve) - High/Low safety pressure switch (PED certified, Cat.IV) - High pressure switch for condensation control - Electrical wiring junction box	③	④	③	④	③	④	③	④	③	③	③	③	③	③	③	③	③	③	③	
Solenoid valve (alternative to shut-off valve supplied with "Package")	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
High/low pressure safety pressure switch (PED certified, Cat. IV)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Oil separator	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	
Factory mounted Check-valve for compressor discharge line	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	
Electrical wiring of "Package" components (pressure switches, fan motors, fan speed control)	○			○			○	○	○	○	○	○	○	○	○	○	○	○	○	
Protecting Housing for outdoor installation	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	

① Standard components included

○ Optional component supplied on request

② Accessory only available with single-phase fan motors (model name that ends in "M").

③ Package fitting without electric cable junction box.

④ Package fitting with electric cables Junction box.

⑤ Supplied without oil charge.

⑥ Accessory required when the compressor is equipped with "US" head for unloading start.

⑦ Supplied loose for installation on site.

The housing is not available for condensing units equipped with inverter fitted on the compressor.

Dimensions

Condensing units	Standard construction ①										Unit with Housing ②				
	Overall dimensions			Condenser dimensions		Fixing holes position		Drawing		Overall dimensions			Housing		Code
	Length	Width	Height	Length	Height	Distance between holes	Distance from side A	Ref.	Page	Length	Width (base)	Width (max)	Height	Weight	
Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Nr.	Nr.	A mm	B mm	C mm	D mm	kg	
EB-A054-0Y-1M	771	700	463	721	410	470	115	1	25	771	703	724	486	22	USHA0U26
EBT-A054-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-A075-0Y-1M	771	700	463	721	410	470	115	1	25	771	703	724	486	22	USHA0U26
EBT-A075-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-A16-0Y-1M	771	700	463	721	410	470	115	1	25	771	703	724	486	22	USHA0U26
EBT-A16-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-A17-0Y-1M	771	700	463	721	410	470	115	1	25	771	703	724	486	22	USHA0U26
EBT-A17-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-A157-0Y-1M	771	700	543	721	490	470	115	2	25	771	703	724	566	25	USHA0U27
EBT-A157-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-B159-0Y-1M	771	700	463	721	410	470	115	1	25	771	703	724	486	22	USHA0U26
EBT-B159-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-B210-0Y-1M	771	700	543	721	490	470	115	2	25	771	703	724	566	25	USHA0U27
EBT-B210-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EB-D211-0Y-1M	771	700	543	721	490	470	115	2	25	771	703	724	566	25	USHA0U27
EBT-D211-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EB-D213-0Y-1M	771	700	543	721	490	470	115	2	25	771	703	724	566	25	USHA0U27
EBT-D213-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EB-D313-0Y-1M	771	700	543	721	490	470	115	2	25	771	703	724	566	25	USHA0U27
EBT-D313-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EB-D316-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EBT-D316-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EB-D416-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EBT-D416-0Y-2M	1420	760	689	1370	635	600	80	5	27	1420	763	784	713	44	USHA0U31
EB-D318-0Y-2M	1060	770	559	1010	505	600	90	3	26	1060	771	792	583	32	USHA0U29
EBT-D318-0Y-2M	1060	770	664	1010	610	600	90	4	26	1060	771	792	688	36	USHA0U30
EBT-D418-0Y-2M	1420	760	689	1370	635	600	80	5	27	1420	763	784	713	44	USHA0U31

① Condensing Unit without Protecting Housing

② Condensing Unit with Protecting Housing (supplied loose) see page 23

Dimensions

Condensing units	Standard construction ①										Unit with Housing ②					
	Overall dimensions			Condenser dimensions		Fixing holes position		Drawing		Overall dimensions			Housing			Code
	Length	Width	Height	Length	Height	Distance between holes	Distance from side A	Ref.	Page	Length	Width (base)	Width (max)	Height	Weight		
Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Nr.	Nr.	A mm	B mm	C mm	D mm	kg		
EB-Q420-0Y-2M	1060	770	664	1010	610	600	90	6	27	1060	771	792	688	36	USHA0U30	
EBT-Q420-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EB-Q521-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q521-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-Q424-0Y-2M	1060	770	664	1010	610	600	90	6	27	1060	771	792	688	36	USHA0U30	
EBT-Q424-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EB-Q524-0Y-2M	1060	770	664	1010	610	600	90	6	27	1060	771	792	688	36	USHA0U30	
EBT-Q524-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EB-Q528-0Y-2M	1060	770	664	1010	610	600	90	6	27	1060	771	792	688	36	USHA0U30	
EBT-Q528-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EB-Q728-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q728-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-Q533-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q533-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-Q733-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q733-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-Q536-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q536-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-Q736-0Y-2M	1420	760	689	1370	635	600	80	7	28	1420	763	784	713	44	USHA0U31	
EBT-Q736-0Y-2M	1556	810	944	860	1506	700	80	8	28	1556	861	882	968	57	USHA0U32	
EB-S842-3Y-2M	1556	810	944	860	1506	700	80	9	29	1556	861	882	968	57	USHA0U32	
EBT-S842-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	
EB-S1242-3Y-2M	1556	810	944	860	1506	700	80	9	29	1556	861	882	968	57	USHA0U32	
EBT-S1242-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	
EB-S1052-3Y-2M	1556	810	944	860	1506	700	80	9	29	1556	861	882	968	57	USHA0U32	
EBT-S1052-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	
EB-S1552-3Y-2M	1556	810	944	860	1506	700	80	9	29	1556	861	882	968	57	USHA0U32	
EBT-S1552-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	
EB-S1556-3Y-2M	1556	810	944	860	1506	700	80	9	29	1556	861	882	968	57	USHA0U32	
EBT-S1556-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	
EB-S2056-3Y-2M	1556	1010	1144	860	1506	700	80	10	29	1556	861	882	1169	65	USHA0U33	

① Condensing Unit without Protecting Housing

② Condensing Unit with Protecting Housing (supplied loose) see page 23

Dimensions

Condensing units	Standard construction ①										Unit with Housing ②					
	Overall dimensions			Condenser dimensions		Fixing holes position		Drawing		Overall dimensions			Housing			Code
	Length	Width	Height	Length	Height	Distance between holes	Distance from side A	Ref.	Page	Length	Width (base)	Width (max)	Height	Weight		
Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Nr.	Nr.	A mm	B mm	C mm	D mm	kg		
LB-A075-0Y-1M	562	700	475	500	420	585	57,5	11	30	512	702	723	450	19	USH0U21	
LB1-A075-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-A075-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-A106-0Y-1M	562	700	475	500	420	585	57,5	11	30	512	702	723	450	19	USH0U21	
LB-A106-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-A106-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-A107-0Y-1M	562	700	473	500	420	585	57,5	11	30	512	702	723	450	19	USH0U21	
LB-A107-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-A107-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-A157-0Y-1M	762	700	531	700	478	485	107,5	11	30	712	702	723	503	24	USH0U20	
LB-A157-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-A157-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-B159-0Y-1M	562	700	473	500	420	585	57,5	11	30	512	702	723	450	19	USH0U21	
LB-B159-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-B159-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-B210-0Y-1M	762	700	531	700	478	485	107,5	11	30	712	702	723	503	24	USH0U20	
LB-B210-0Y-2M	796	620	418	734	365	475	72,5	12	30	746	622	643	395	20	USH0U18	
LBT-B210-0Y-2M	987	700	506	850	450	555	72,5	13	31	937	702	723	478	27	USH0U17	
LB-D211-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D211-0Y-2M	987	700	506	925	453	555	72,5	15	32	937	702	723	478	27	USH0U17	
LBT-D211-0Y-2M	1.060	760	575	998	522	615	72,5	16	33	1.010	762	783	547	33	USH0U16	
LB-D213-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D213-0Y-2M	987	700	506	925	453	555	72,5	15	32	937	702	723	478	27	USH0U17	
LBT-D213-0Y-2M	1.060	760	575	998	522	615	72,5	16	33	1.010	762	783	547	33	USH0U16	
LB-D313-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D313-0Y-2M	987	700	506	925	453	555	72,5	15	32	937	702	723	478	27	USH0U17	
LBT-D313-0Y-2T	1.420	760	689	1.358	522	615	72,5	16	33	1.370	762	783	660	44	USH0U15	
LB-D316-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D316-0Y-2M	987	700	506	925	453	555	72,5	15	32	937	702	723	478	27	USH0U17	
LBT-D316-0Y-2T	1.420	760	689	1.358	522	615	72,5	16	33	1.370	762	783	660	44	USH0U15	
LB-D416-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D416-0Y-2M	1.060	760	575	998	522	615	72,5	15	32	1.010	762	783	547	33	USH0U16	
LBT-D416-0Y-2T	1.420	760	689	1.358	522	615	72,5	16	33	1.370	762	783	660	44	USH0U15	
LB-D318-0Y-1M	762	700	531	700	478	485	107,5	14	32	712	702	723	503	24	USH0U20	
LB-D318-0Y-2M	987	700	506	925	453	555	72,5	15	32	937	702	723	478	27	USH0U17	
LBT-D318-0Y-2M	1.060	760	575	998	522	615	72,5	16	33	1.010	762	783	547	33	USH0U16	
LB-Q420-0Y-2M	1.060	760	575	998	522	615	72,5	17	34	1.010	762	783	547	33	USH0U16	
LBT-Q420-0Y-2T	1.420	760	689	1.358	522	615	72,5	18	34	1.370	762	783	660	44	USH0U15	
LB-Q521-0Y-2T	1.420	760	689	1.358	635	615	72,5	17	34	1.370	762	783	660	44	USH0U15	
LBT-Q521-0Y-2T	1.570	830	864	1.508	810	665	72,5	18	34	1.520	832	853	835	54	USH0U14	
LB-Q424-0Y-2M	1.060	760	575	998	522,0	615	72,5	17	34	1.010	762	783	547	33	USH0U16	
LBT-Q424-0Y-2T	1.420	760	689	1.358	522,0	615	72,5	18	34	1.370	762	783	660	44	USH0U15	
LB-Q524-0Y-2M	1.060	760	575	998	522,0	615	72,5	17	34	1.010	762	783	547	33	USH0U16	
LBT-Q524-0Y-2T	1.420	760	689	1.358	522,0	615	72,5	18	34	1.370	762	783	660	44	USH0U15	

① Condensing Unit without Protecting Housing

② Condensing Unit with Protecting Housing (supplied loose) see page 23

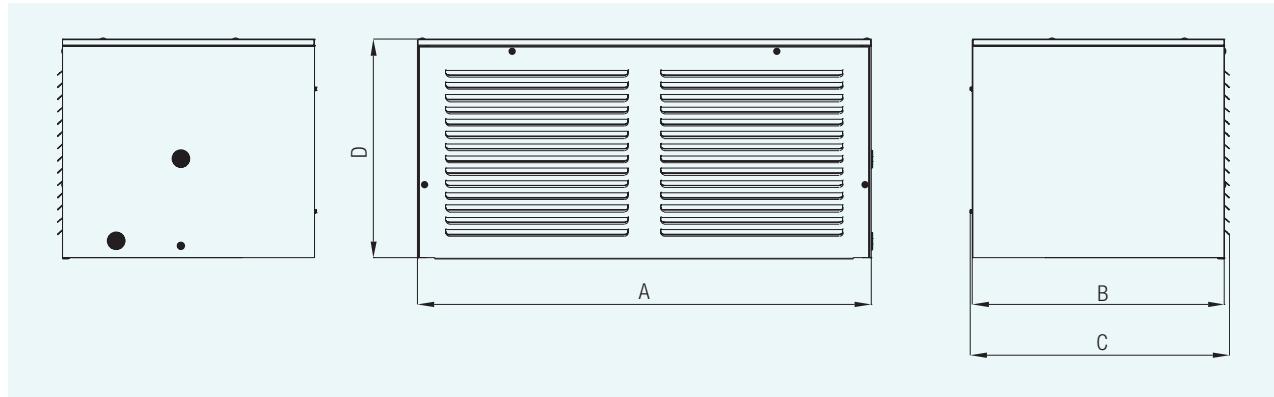
Dimensions

Condensing unit	Standard construction ①										Unit with Housing ②				
	Overall dimensions			Condenser dimensions		Fixing holes position		Drawing		Overall dimensions			Housing		Code
	Length	Width	Height	Length	Height	Distance between holes	Distance from side A	Ref.	Page	Length	Width (base)	Width (max)	Height	Weight	
Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Nr.	Nr.	A mm	B mm	C mm	D mm	kg	
LB-Q528-0Y-2M	1.060	760	575	998	522	615	72,5	17	34	1.010	762	783	547	33	USH0U16
LBT-Q528-0Y-2T	1.420	760	689	1.358	522	615	72,5	18	34	1.370	762	783	660	44	USH0U15
LB-Q728-0Y-2T	1.420	760	689	1.358	635	615	72,5	17	34	1.370	762	783	660	44	USH0U15
LBT-Q728-0Y-2T	1.570	830	864	1.508	810	665	72,5	18	34	1.520	832	853	835	54	USH0U14
LB-Q533-0Y-2M	1.060	760	575	998	522	615	72,5	17	34	1.010	762	783	547	33	USH0U16
LBT-Q533-0Y-2T	1.420	760	689	1.358	522	615	72,5	18	34	1.370	762	783	660	44	USH0U15
LB-Q733-0Y-2T	1.420	760	689	1.358	635	615	72,5	17	34	1.370	762	783	660	44	USH0U15
LBT-Q733-0Y-2T	1.570	830	864	1.508	810	665	72,5	18	34	1.520	832	853	835	54	USH0U14
LB-Q536-0Y-2T	1.420	760	689	1.358	635	615	72,5	17	34	1.370	762	783	660	44	USH0U15
LBT-Q536-0Y-2T	1.570	830	864	1.508	810	665	72,5	18	34	1.520	832	853	835	54	USH0U14
LB-Q736-0Y-2T	1.420	760	689	1.358	635	615	72,5	17	34	1.370	762	783	660	44	USH0U15
LBT-Q736-0Y-2T	1.570	830	864	1.508	810	665	72,5	18	34	1.520	832	853	835	54	USH0U14
LB-S842-3Y-2T	1.420	760	689	1.358	635	615	72,5	19	35	1.370	812	833	660	45	USH0U13
LBT-S842-3Y-2T	1.570	830	864	1.508	810	685	72,5	20	35	1.520	832	853	835	54	USH0U14
LB-S1242-3Y-2T	1.570	830	864	1.508	810	685	72,5	19	35	1.520	832	853	835	54	USH0U14
LBT-S1242-3Y-2T	1.570	830	864	1.508	810	685	72,5	20	35	1.520	832	853	835	54	USH0U14
LB-S1052-3Y-2T	1.420	760	689	1.358	635	615	72,5	19	35	1.370	812	833	660	45	USH0U13
LBT-S1052-3Y-2T	1.570	830	864	1.508	810	685	72,5	20	35	1.520	832	853	835	54	USH0U14
LB-S1552-3Y-2T	1.570	830	864	1.508	810	685	72,5	19	35	1.520	832	853	835	54	USH0U14
LBT-S1552-3Y-2T	1.570	830	864	1.508	810	685	72,5	20	35	1.520	832	853	835	54	USH0U14
LB-S1556-3Y-2T	1.570	830	864	1.508	810	685	72,5	19	35	1.520	832	853	835	54	USH0U14
LBT-S1556-3Y-2T	1.570	830	864	1.508	810	685	72,5	20	35	1.520	832	853	835	54	USH0U14
LB-S2056-3Y-2T	1.570	830	864	1.508	810	685	72,5	19	35	1.520	832	853	835	54	USH0U14
LBT-S2056-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	21	36	-	-	-	-	-	n.a.
LB-V2059-3Y-2T	1.570	915	885	1.508	810	685	72,5	23	37	1.520	917	938	835	59	USH0U22
LBT-V2059-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	24	37	-	-	-	-	-	n.a.
LB-V1571-3Y-2T	1.420	915	690	1.358	635	685	72,5	22	37	1.370	917	838	880	48	USH0U23
LBT-V1571-3Y-2T	1.570	915	885	1.508	810	685	72,5	23	37	1.520	917	938	835	59	USH0U22
LB-V2571-3Y-2T	1.570	915	885	1.508	810	685	72,5	23	37	1.520	917	938	835	59	USH0U22
LBT-V2571-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	24	38	-	-	-	-	-	n.a.
LB-V2084-3Y-2T	1.570	915	885	1.508	810	685	72,5	23	37	1.520	917	938	835	59	USH0U22
LBT-V2084-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	24	38	-	-	-	-	-	n.a.
LB-V3084-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	24	38	-	-	-	-	-	n.a.
LB-Z25106Y-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	25	39	-	-	-	-	-	n.a.
LBT-Z25106-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	25	39	-	-	-	-	-	n.a.
LB-Z30126Y-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	25	39	-	-	-	-	-	n.a.
LBT-Z30126-3Y-4T	1.420	950	1.315	1.358	1.260	805	72,5	25	39	-	-	-	-	-	n.a.

① Condensing Unit without Protecting Housing

② Condensing Unit with Protecting Housing (supplied loose) see page 23

Dimensional drawings - Housing



Housing code	Length	Width (base)	Width (max)	Height	Weight
	A	B	C	D	kg
USHOU13	1370	812	833	660	45
USHOU14	1520	832	853	835	54
USHOU15	1370	762	783	660	44
USHOU16	1010	762	783	547	33
USHOU17	937	702	723	478	27
USHOU18	746	622	643	395	20
USHOU20	712	702	723	503	24
USHOU21	512	702	723	450	19
USHAOU22	1520	917	938	835	60
USHAOU23	1370	917	938	660	49
USHAOU24	1370	1012	1033	660	53
USHAOU25	1520	1117	1138	835	68
USHAOU26	721	702	725	432	22
USHAOU27	721	702	725	514	25
USHAOU29	1010	770	793	529	32
USHAOU30	634	770	793	634	36
USHAOU31	1370	762	785	659	44
USHAOU32	1506	860	883	834	57
USHAOU33	1506	860	883	1034	65

Dimensional drawings - Positions and dimensions

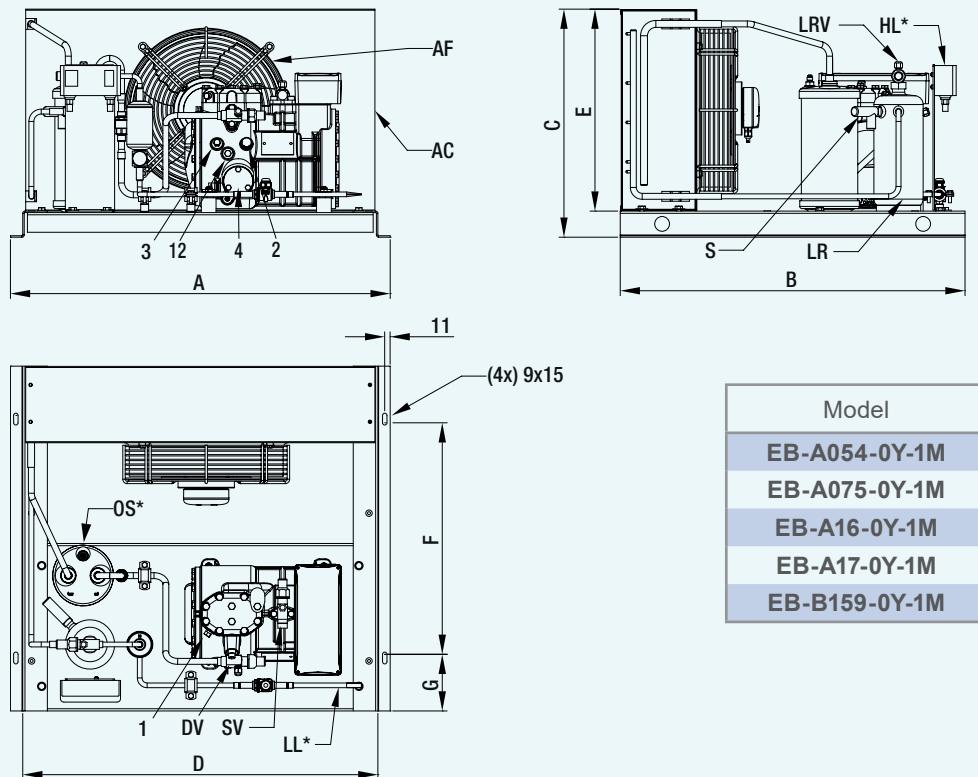
Condensing units model			EB-A...1 LB-A..1	EB-A...2 LB-A..2	EB-T-A...2 LB-T-A...2		EB-B...1 LB-B..1	EB-B...2 LB-B..2	EB-T-B...2 LB-T-B...2		EB-D...1 LB-D..1	EB-D...2 LB-D..2	EB-T-D...2 LB-T-D...2	EB-Q...2 LB-Q..2	EB-T-Q...2 LB-T-Q..2	EB-S...2 LB-S..2	EB-T-S...2 LB-T-S..2	LBT-S...4	LB-V...2	LB-T-V...2	LB-V...4	LB-T-V...4	LB-Z...4	LB-T-Z...4	
Pos.	Components																								
1	High-pressure plug	NPT	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"		
2	Low-pressure plug	NPT	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"		
3	Oil filling plug	GAS	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
4	Oil level indicator																								
5	Oil heater pocket																								
6	Oil drain plug	ISO4017							M8 x 22									M10 x 30							
6	Oil drain plug	GAS																	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	
7	Connection for liquid injection valve	NPT																1/8"	1/4"	1/4"	1/8"	1/8"	1/8"	1/8"	
8	Connection for liquid injection sensor	NPT																1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	
9	Oil pressure switch connection (LP)	SAE																		1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
10	Oil pressure switch connection (HP)	SAE																		1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
12	Oil return plug	NPT	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	
14	Max discharge temperature sensor plug																								
AC	Air-cooled condensing unit		(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	
AF	Fan motor		(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	
DV	Discharge valve		(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	
LR	Liquid receiver		(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	
LRV	Liquid receiver shut-off valve		(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	
SV	Suction valve		(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	
OS	Oil separator		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
EB	Electric wiring box		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
HL	High/low pressure switch		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
H	High pressure switch		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
LL	Liquid line		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
S	Safety valve / Safety valve connection		(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	
SC	Fan motor speed controller		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	

(1) Optional components supplied on request.

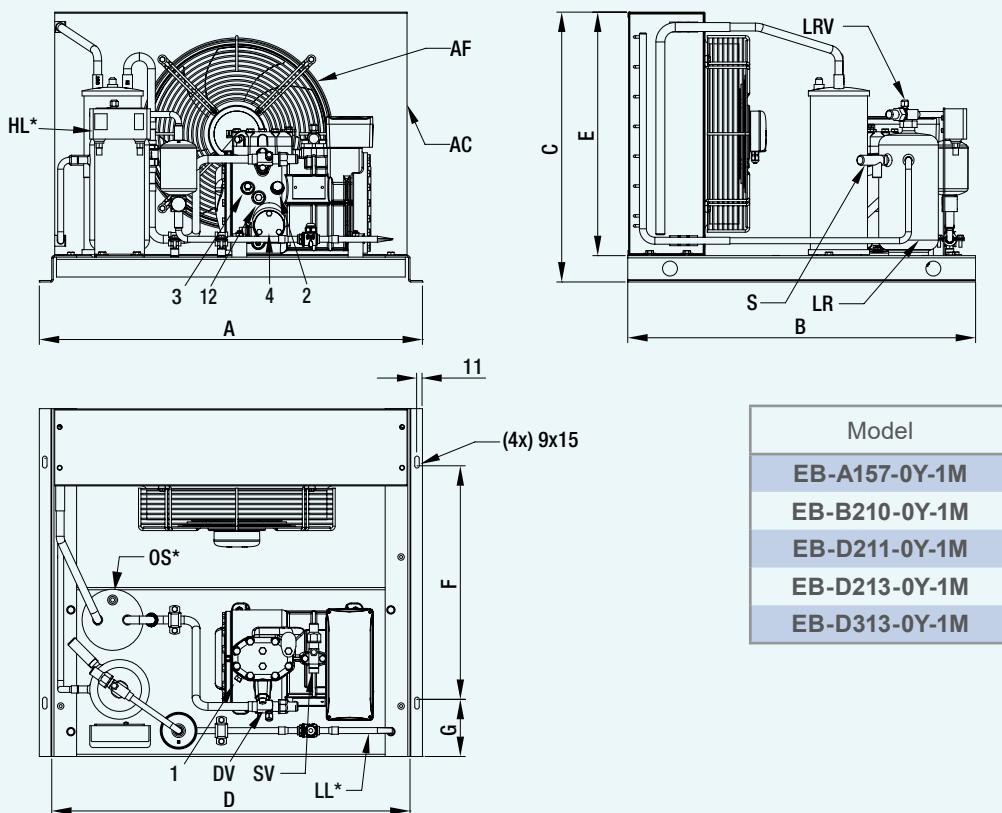
(2) See Technical Data, page 8-9 and 12-13.

(3) See Technical Data, page 10-11 and 14-15.

Dimensional drawings

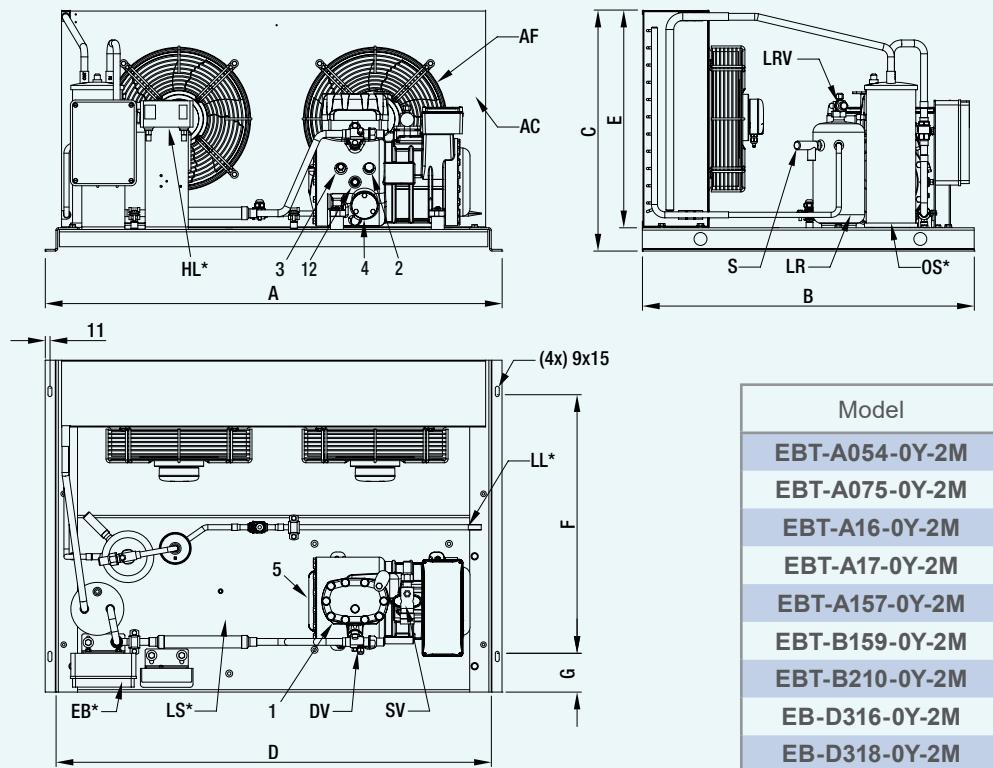


Drawing 1

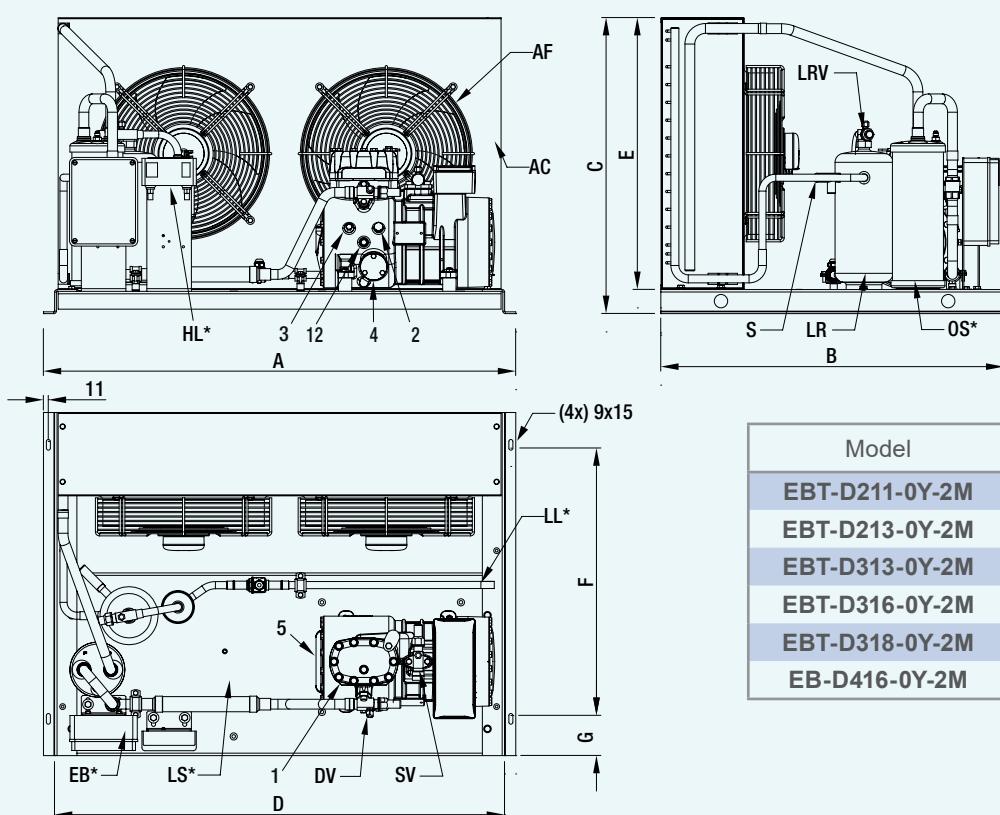


Drawing 2

Dimensional drawings

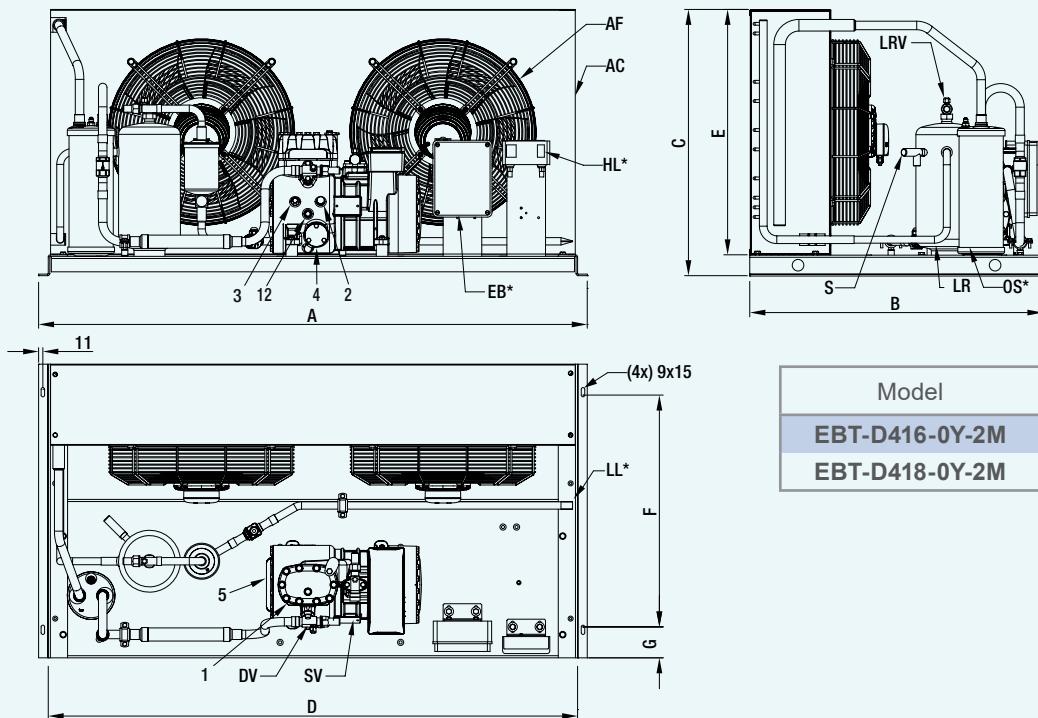


Drawing 3

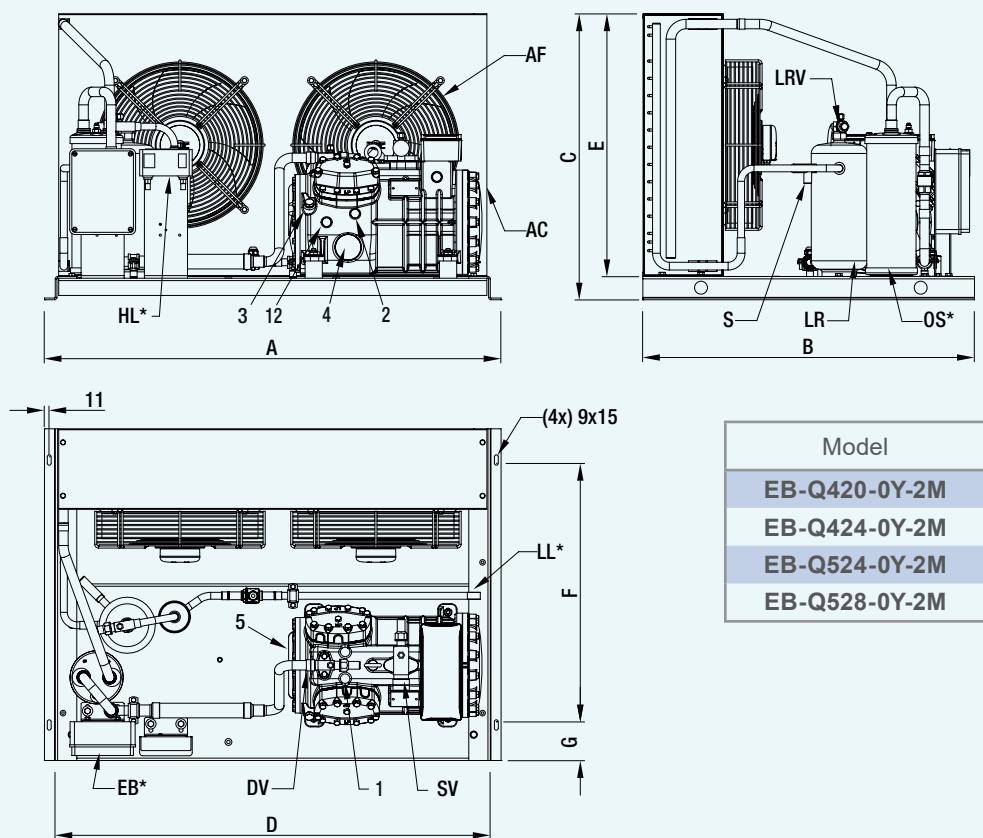


Drawing 4

Dimensional drawings

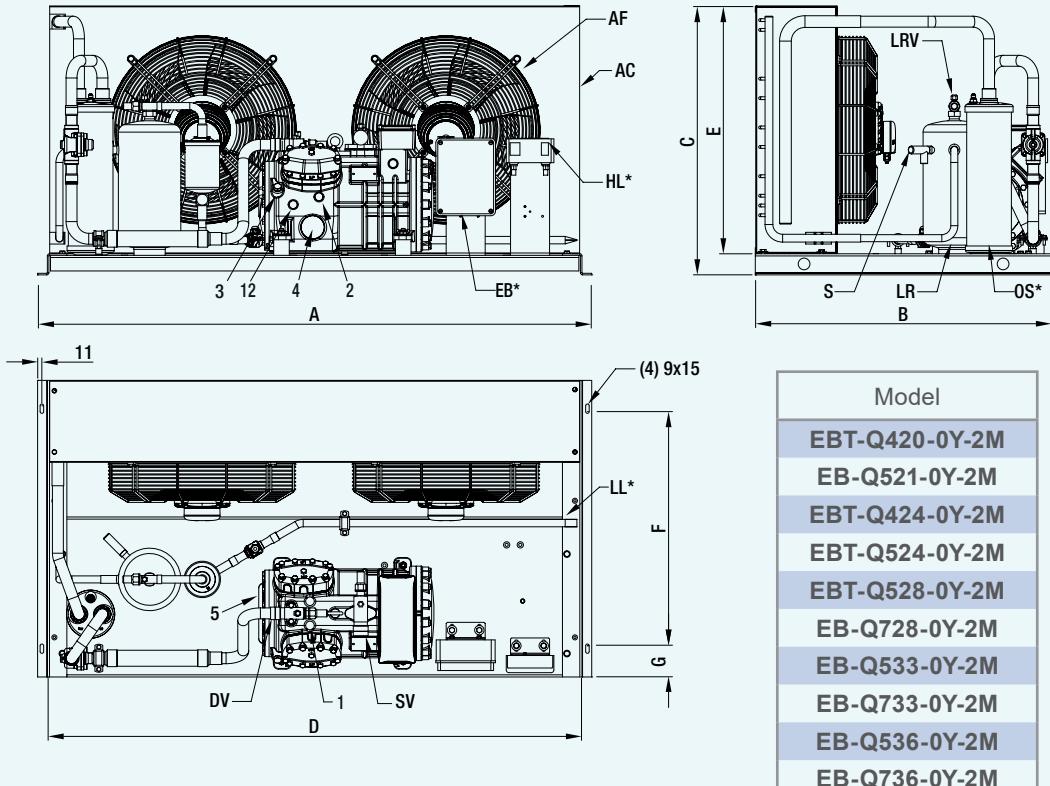


Drawing 5

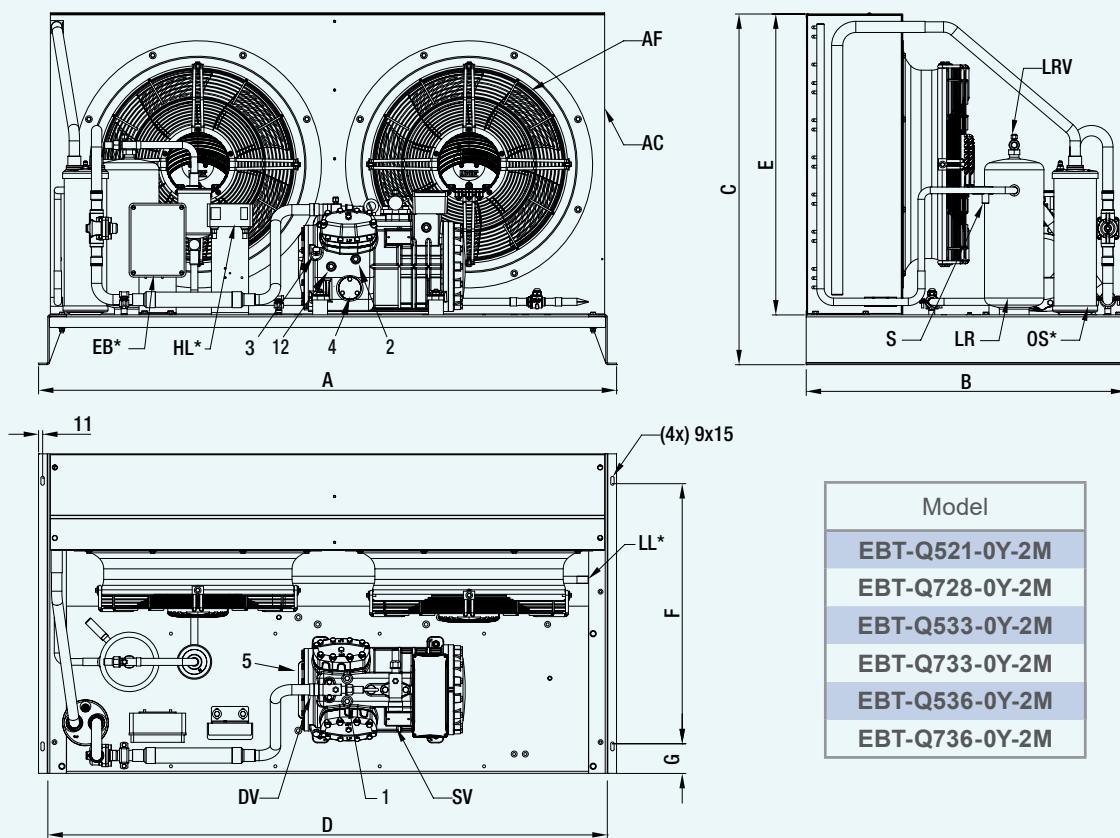


Drawing 6

Dimensional drawings

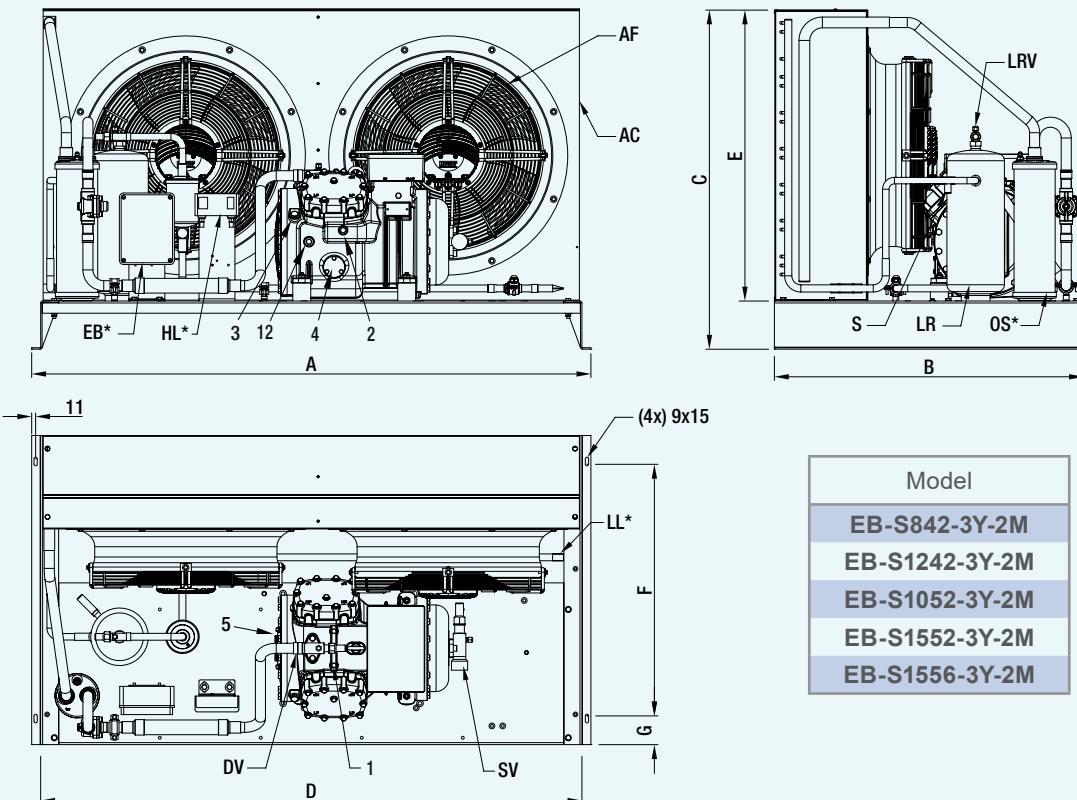


Drawing 7

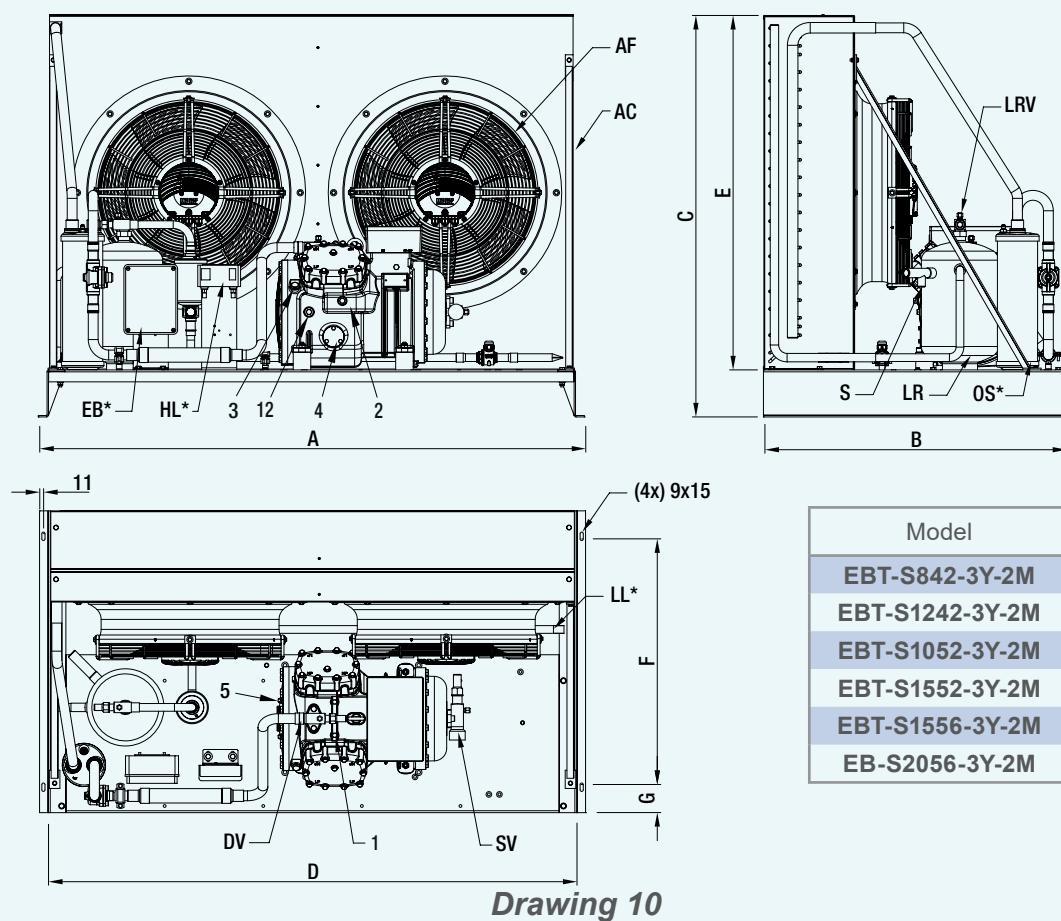


Drawing 8

Dimensional drawings

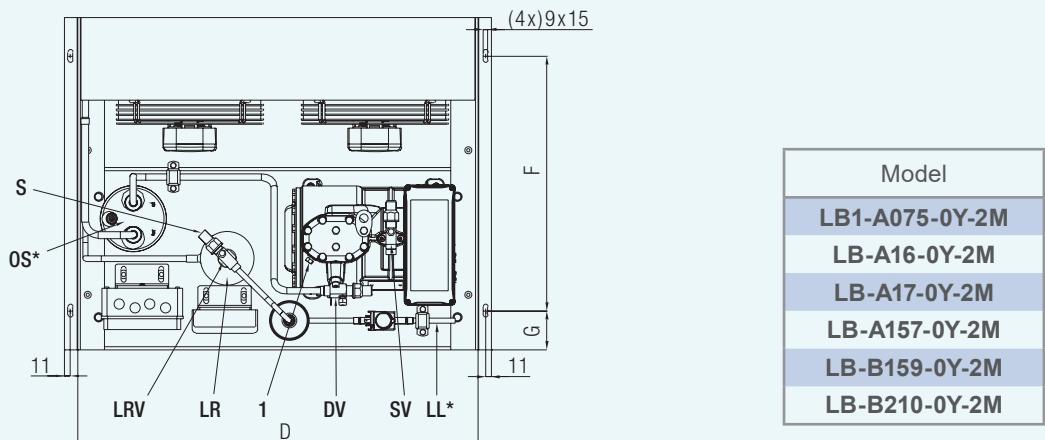
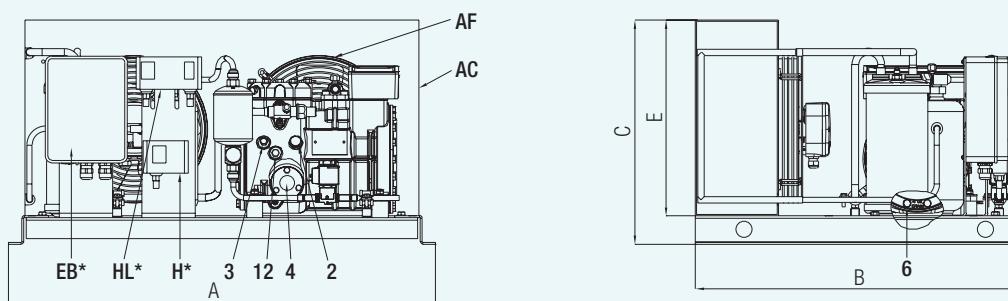
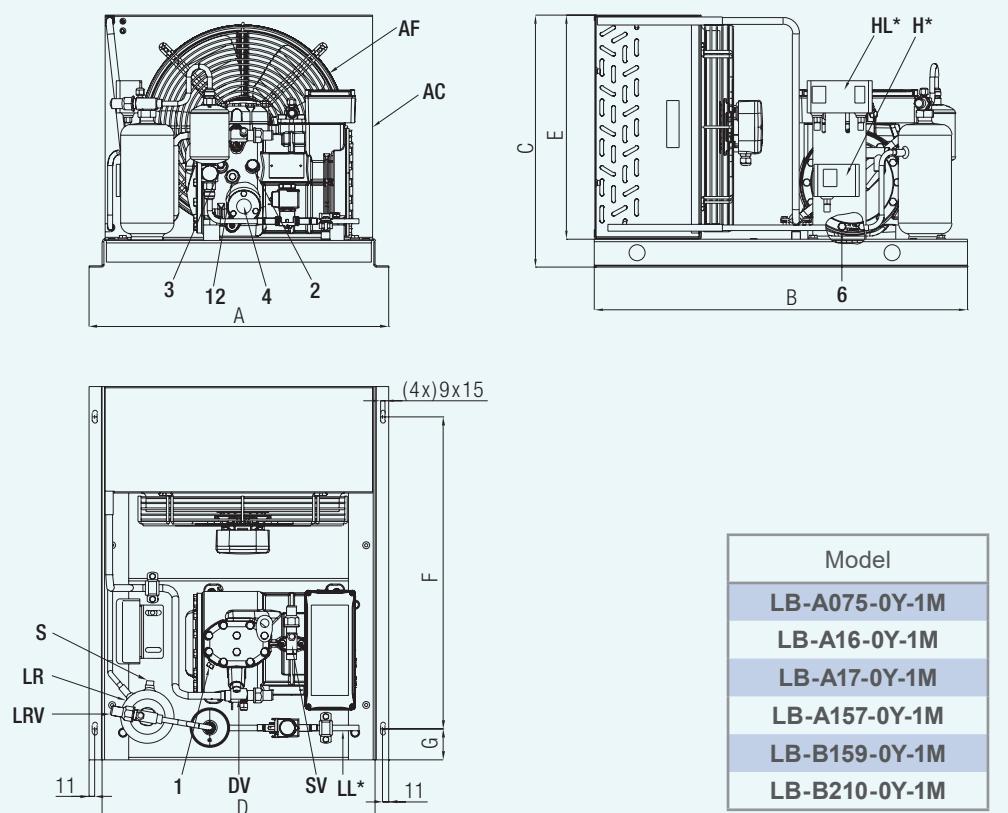


Drawing 9



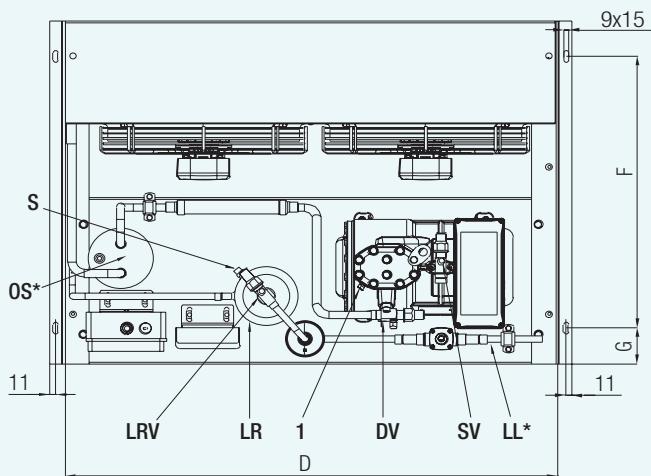
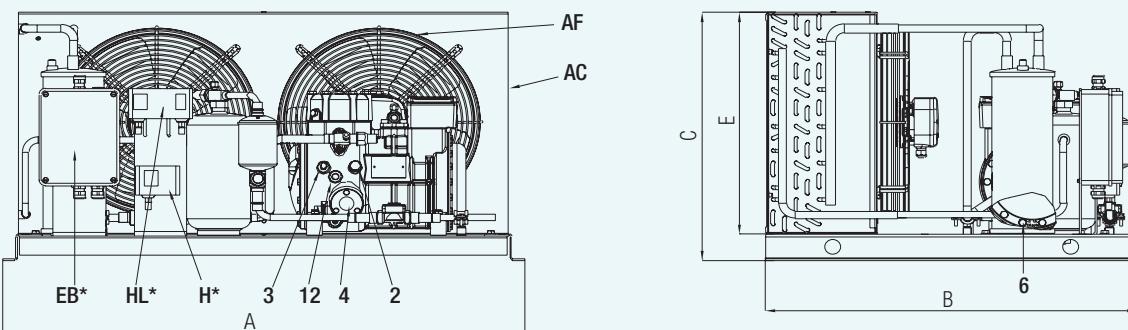
Drawing 10

Dimensional drawings



Drawing 12

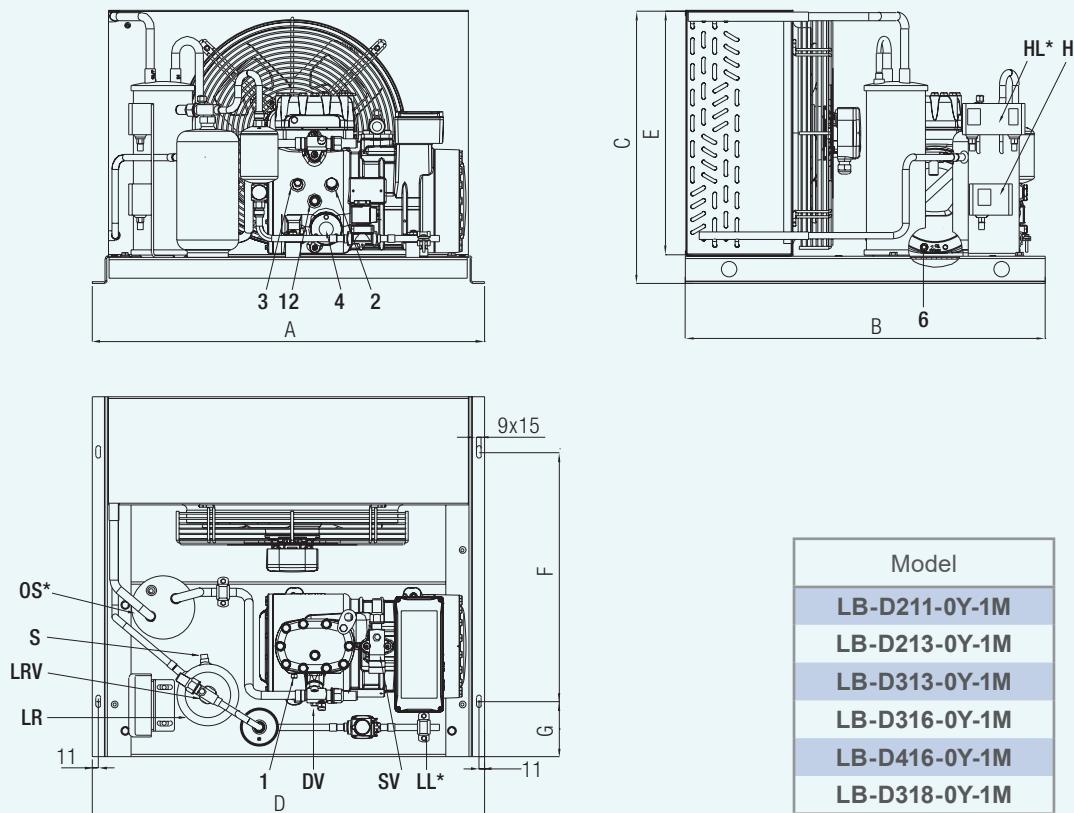
Dimensional drawings



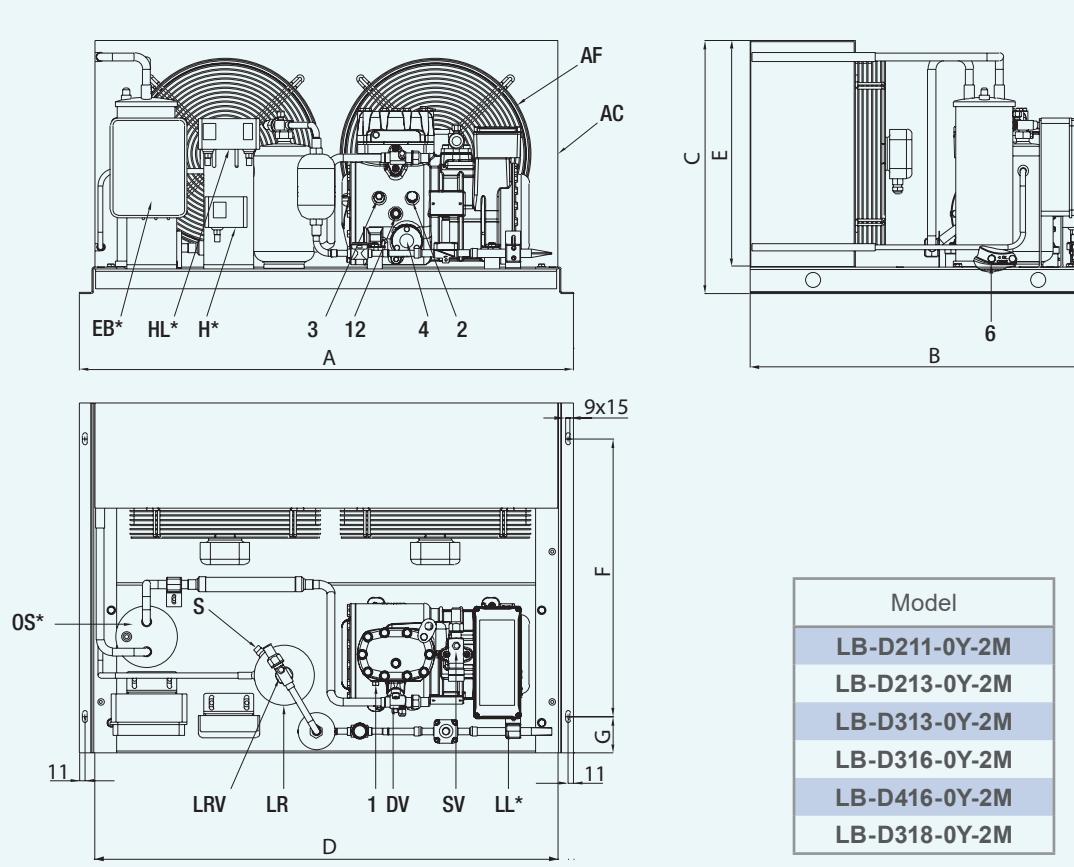
Model
LBT-A075-0Y-2M
LBT-A106-0Y-2M
LBT-A107-0Y-2M
LBT-A157-0Y-2M
LBT-B159-0Y-2M
LBT-B210-0Y-2M

Drawing 13

Dimensional drawings

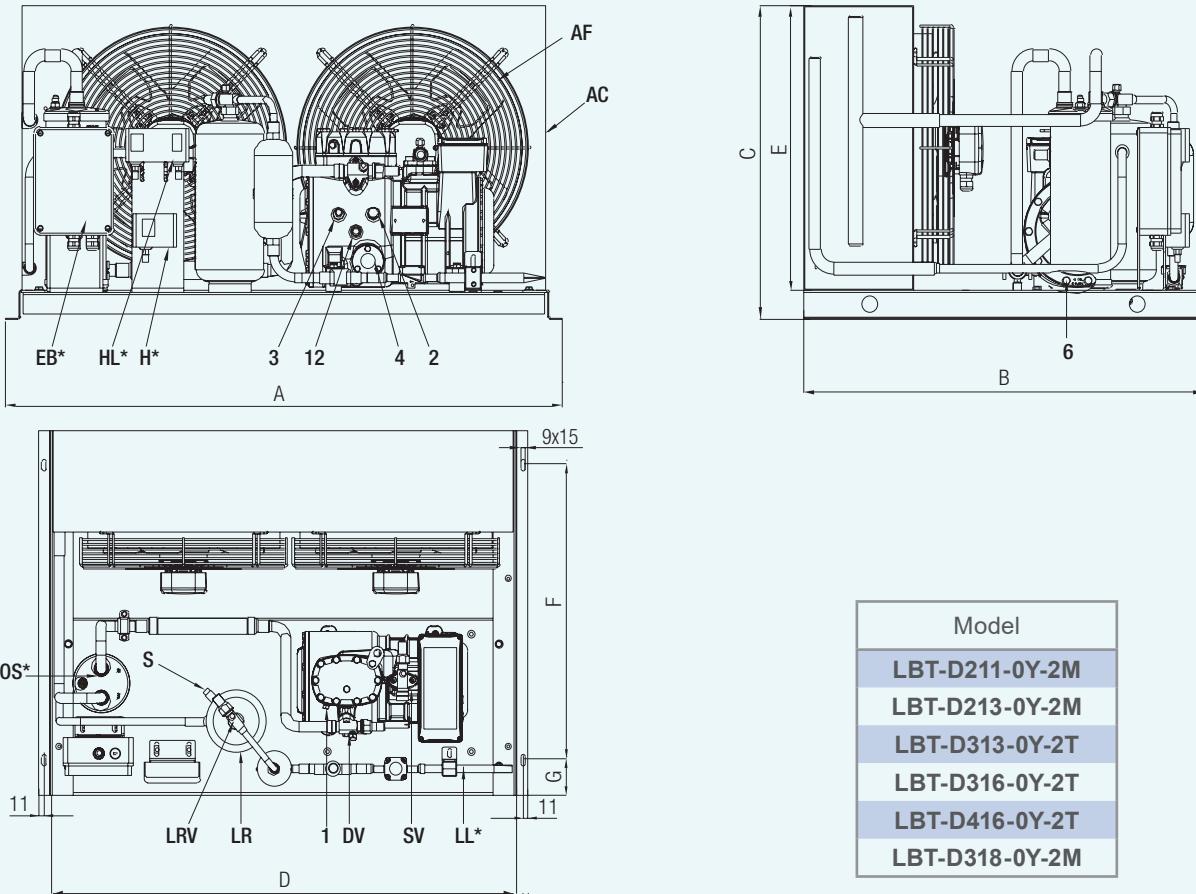


Drawing 14



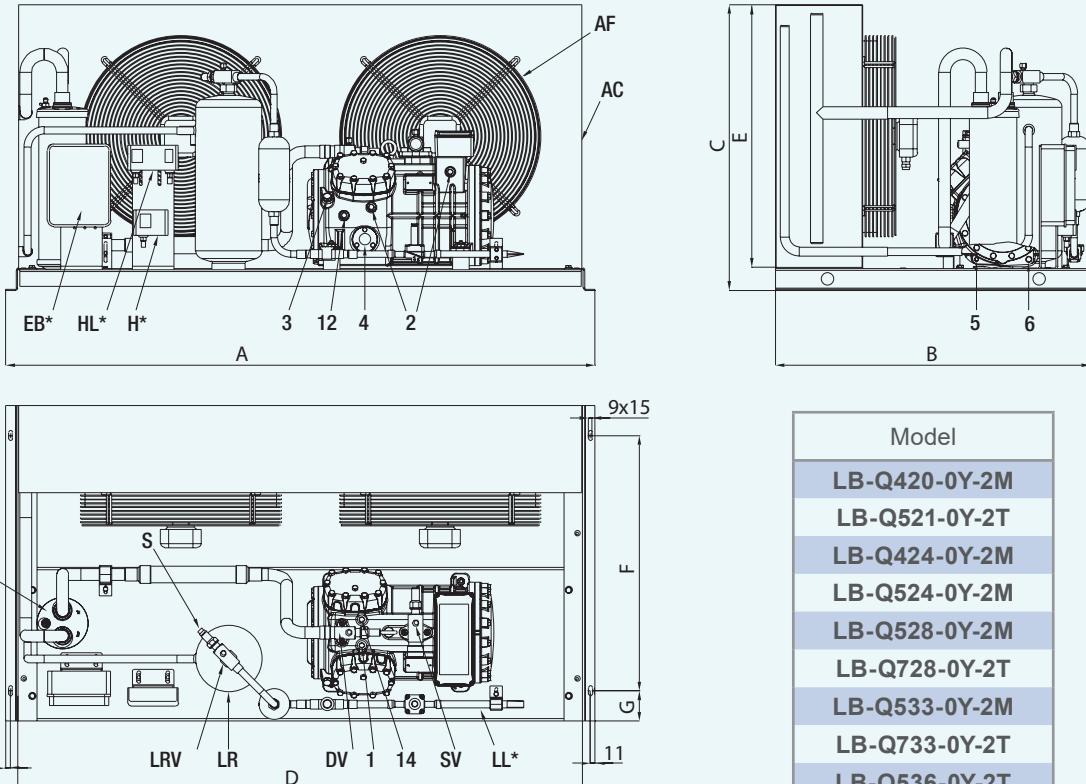
Drawing 15

Dimensional drawings

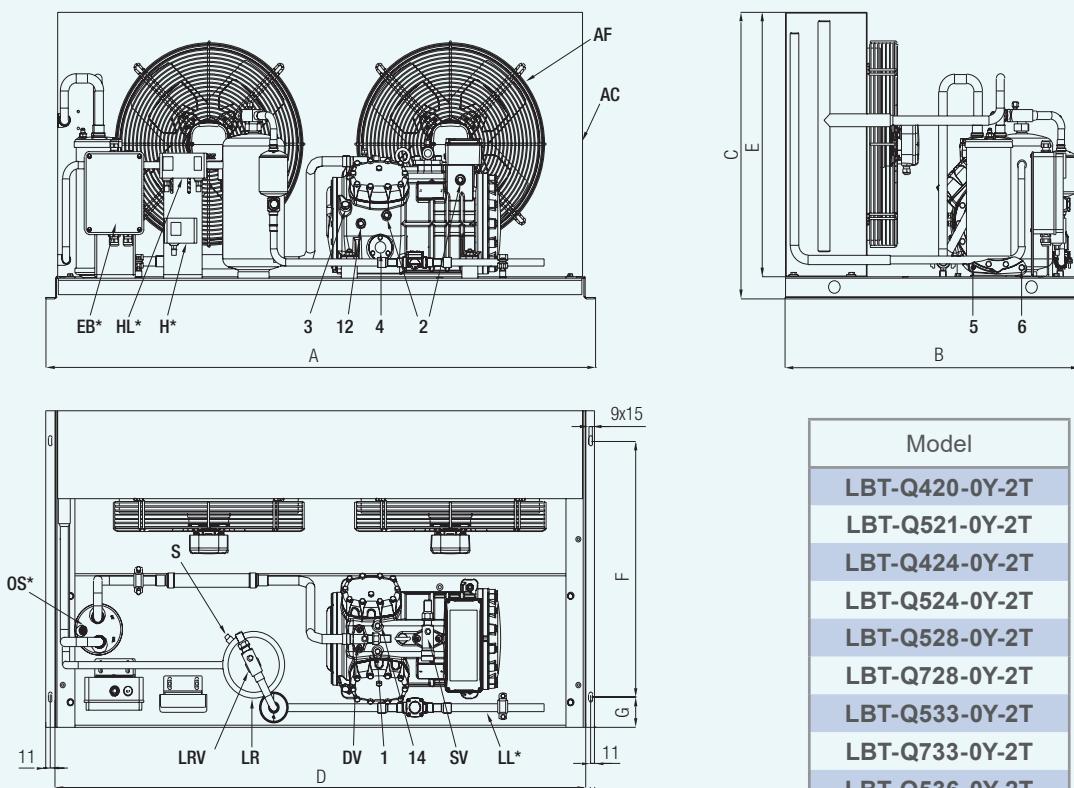


Drawing 16

Dimensional drawings

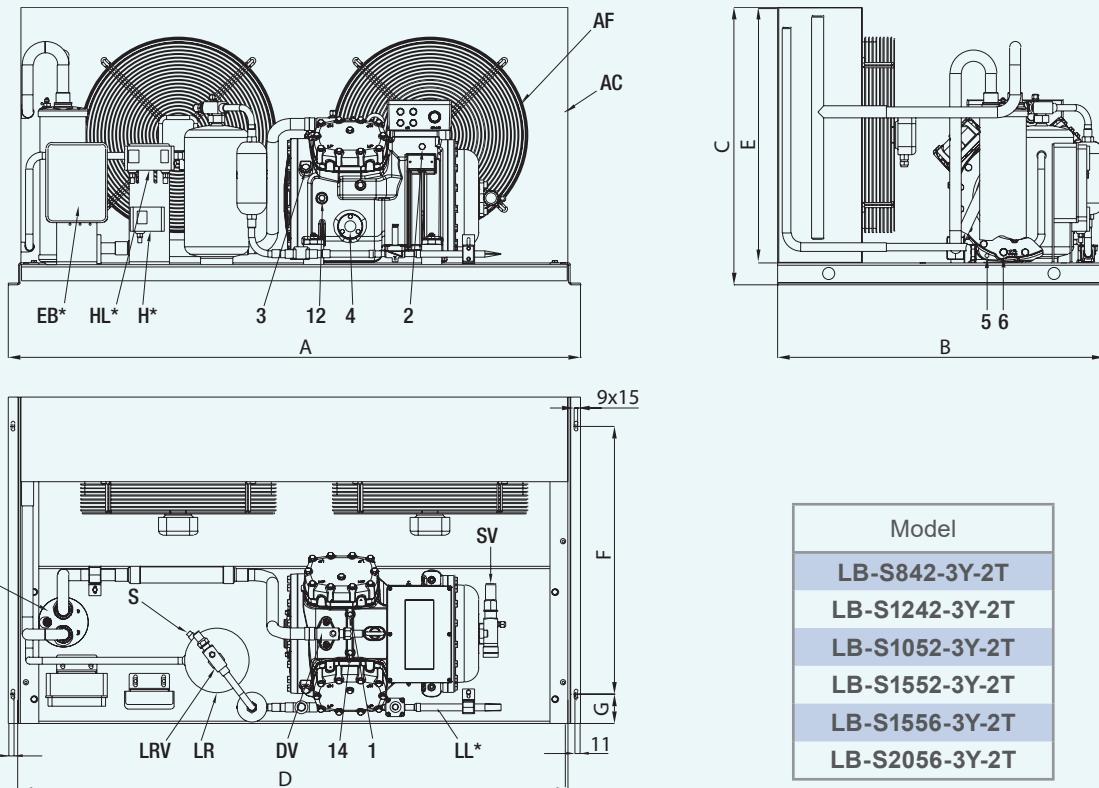


Drawing 17

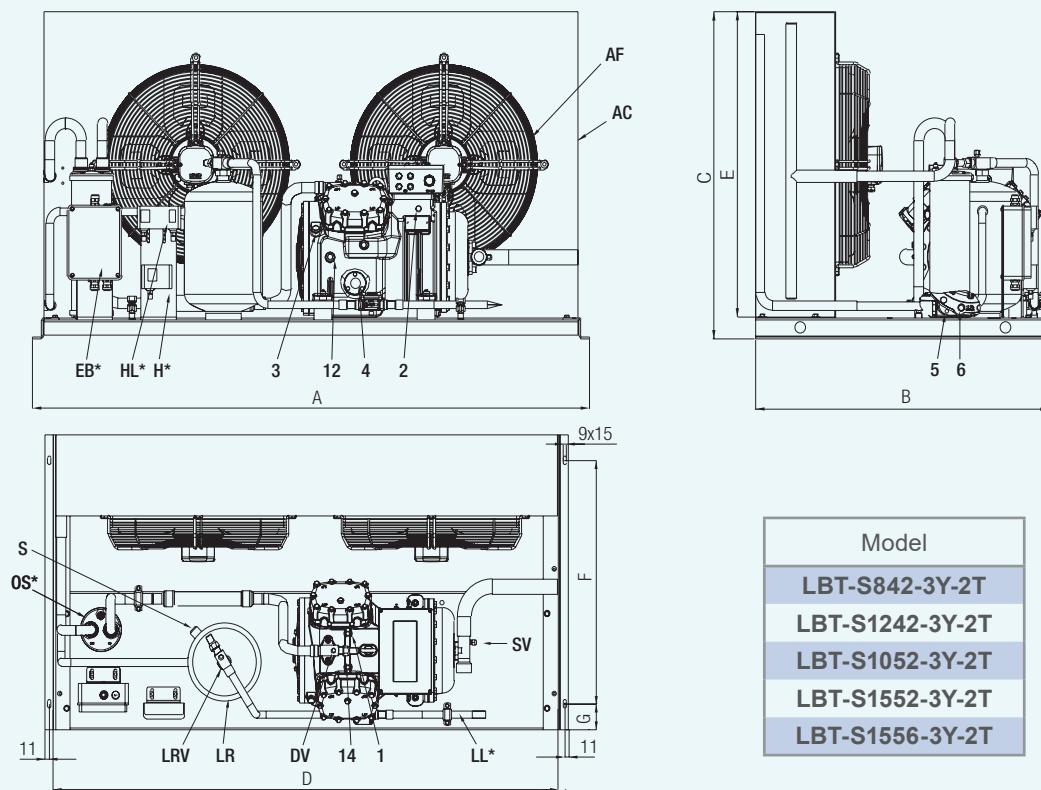


Drawing 18

Dimensional drawings

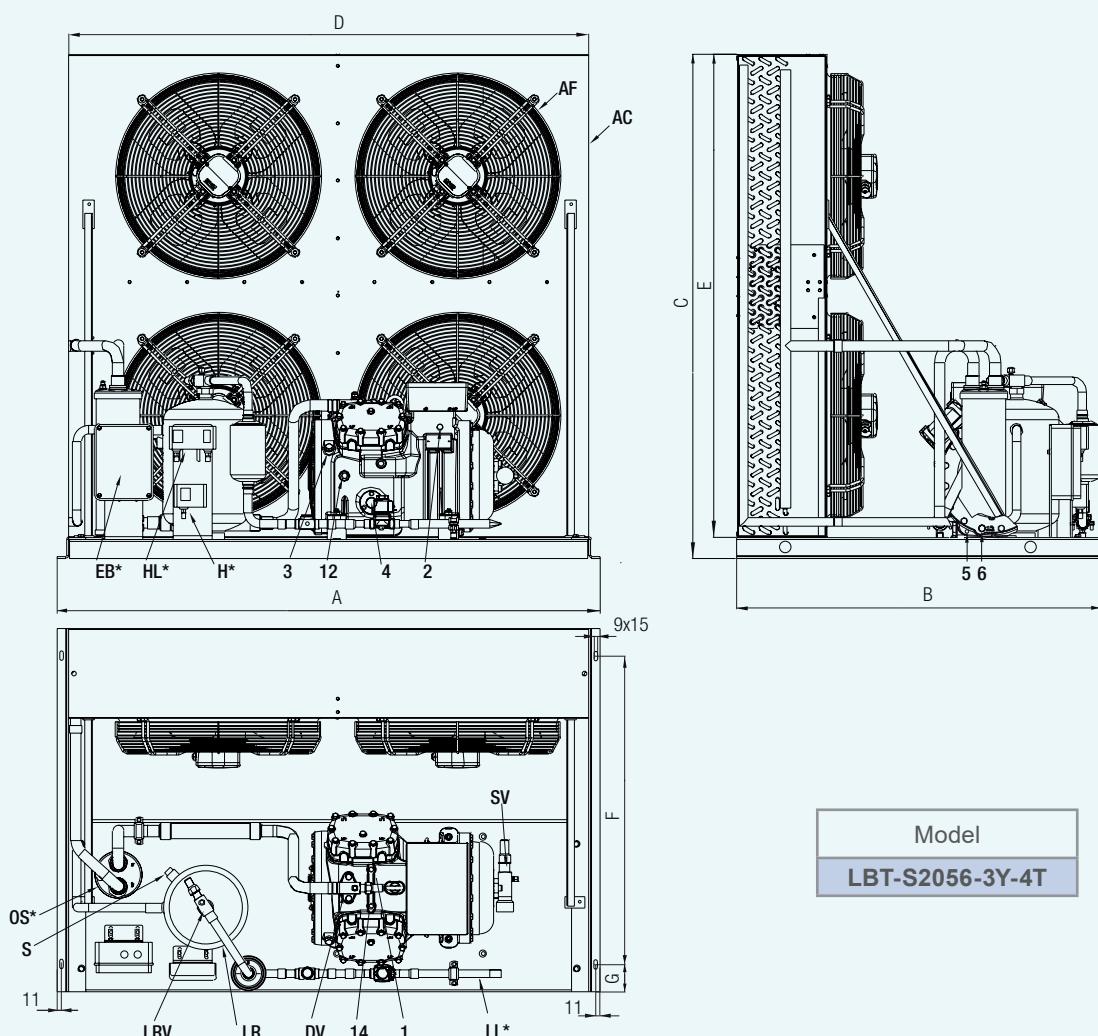


Drawing 19



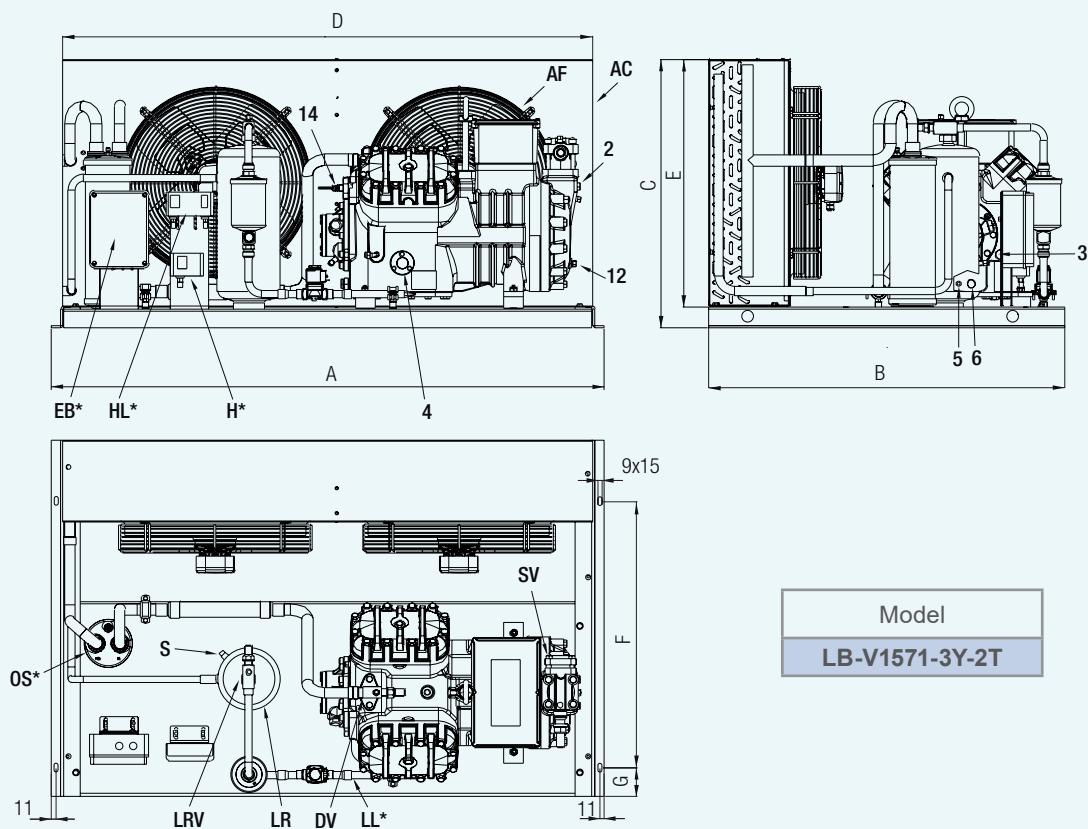
Drawing 20

Dimensional drawings

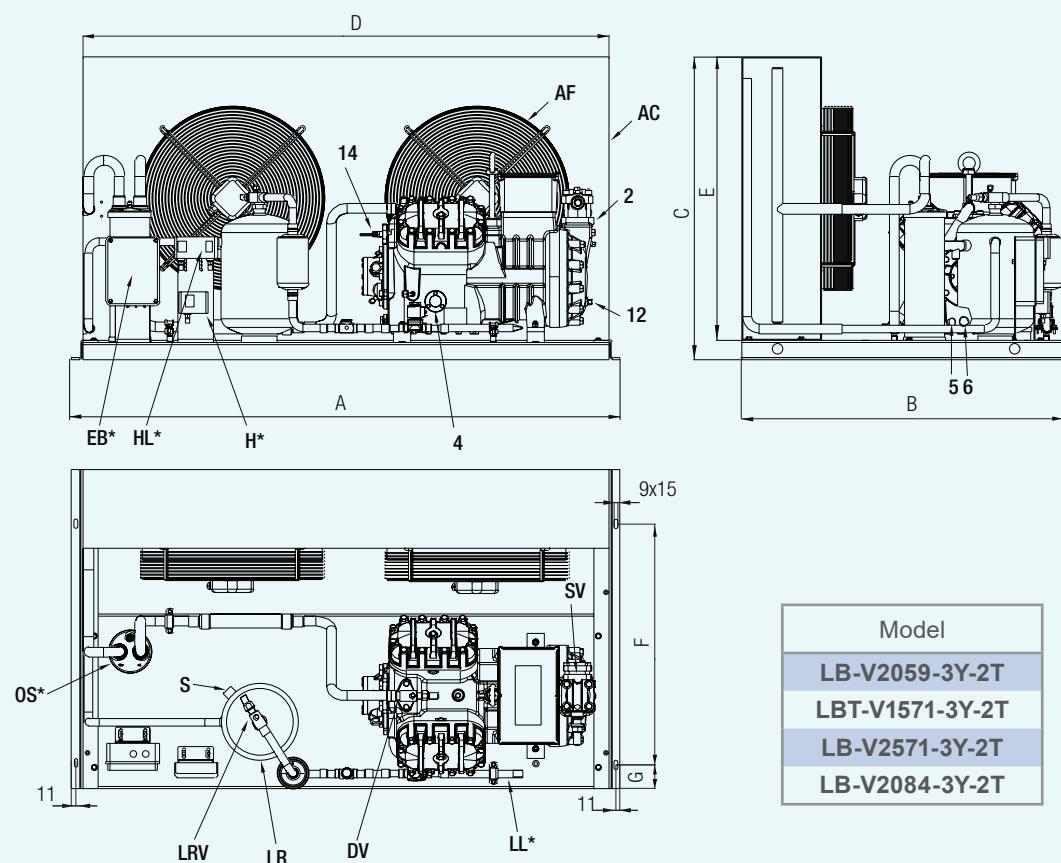


Drawing 21

Dimensional drawings

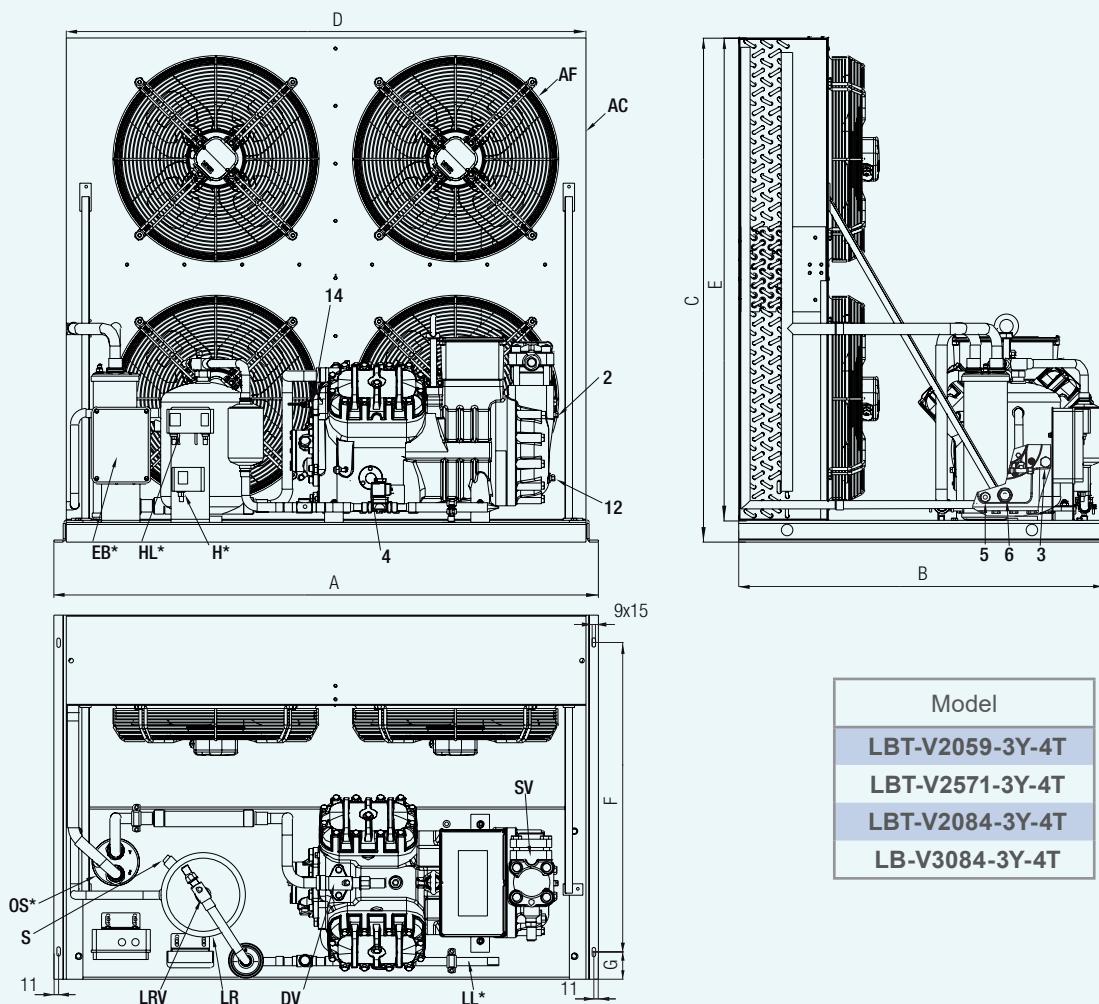


Drawing 22



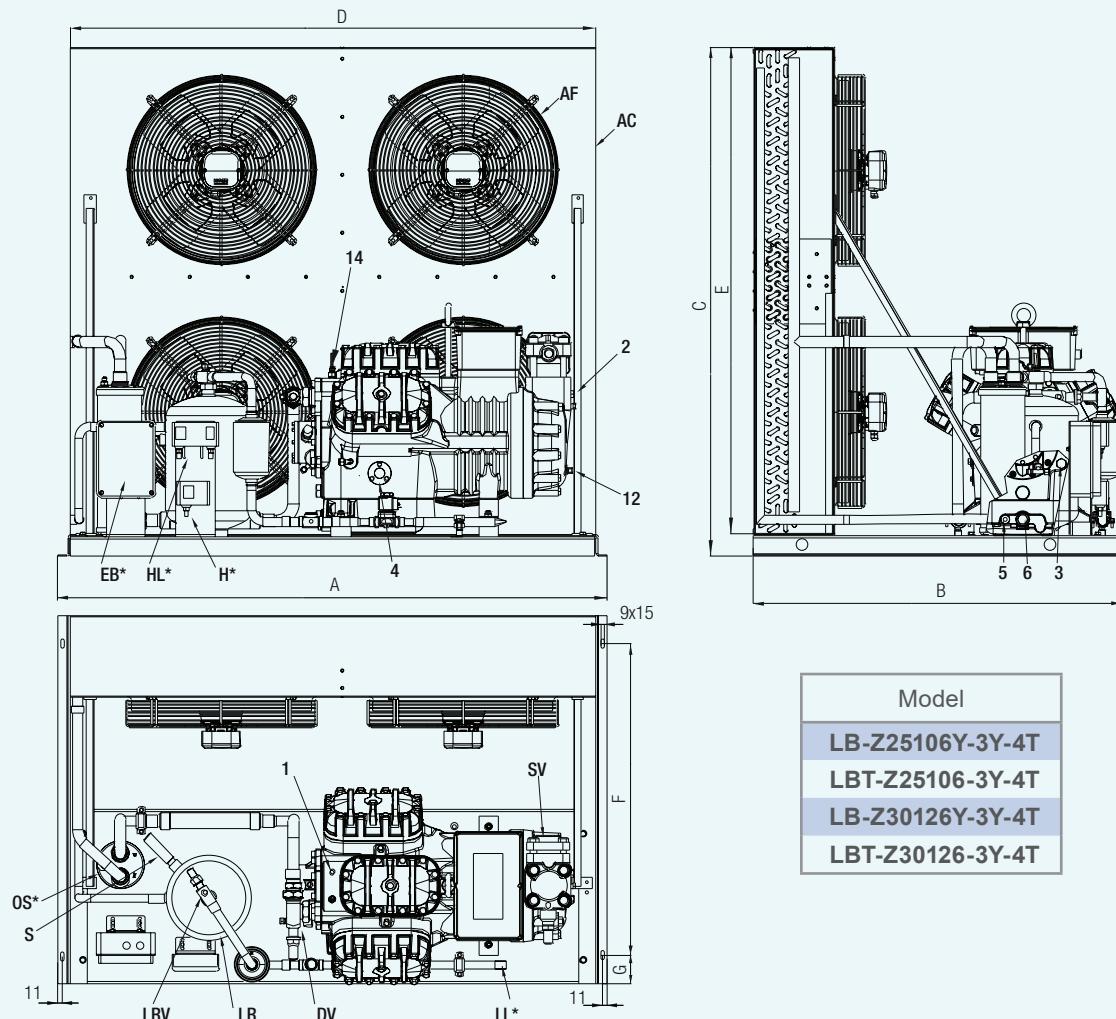
Drawing 23

Dimensional drawings



Drawing 24

Dimensional drawings



Drawing 25

Two-stage air-cooled condensing units

Technical data

Condensing units		Compressor ①						Condenser								
Model	Model	Displacement (m ³ /h 50Hz)		Oil charge (liters)	Motor ②		Model	Quantity	Fan motors (with thermal protection)							
					Power supply	MRA (A)			Model	Power supply	Installed power (W)	Max absorbed current (A)	Condenser air flow (m ³ /h 50Hz)			
		LP	HP	③	④	⑤			⑥	⑦	⑧	⑨	⑩	⑪	Δ	Υ
LB-S526.16-3Y-2T	S5-26.16Y	25,2	16,4	3	B	14	USAC16M	2	USAFA4	T	630	2,26	1,30	11400		
LB-S727.19-3Y-2T	S7-27.19Y	26,9	19,1	3	B	18	USAC17M	2	USAFA4	T	630	2,26	1,30	10400		
LB-V1042.29-3Y-2T	V10-42.29Y	41,9	29,4	4	B	23	USAC18M	2	USAFA10	T	1500	6,00	3,50	17400		
LB-Z1560.30-3Y-2T	Z15-60.30Y	58,8	29,4	7	B	31	USAC18M	2	USAFA10	T	1500	6,00	3,50	17400		
LB-Z2072.36-3Y-2T	Z20-72.36Y	70,0	35,4	7	B	37	USAC19M	2	USAFA10	T	1500	6,00	3,50	16400		
LB-Z2584.42-3Y-2T	Z25-84.42Y	41,9	41,9	7	B	45	USAC19M	2	USAFA10	T	1500	6,00	3,50	16400		
LB-Z30102.51-3Y-4T	Z30-102-51Y	51,5	51,5	7	B	53	USAC14M	4	USAFA4	T	1260	4,52	2,60	20800		

Condensing units		Liquid receiver ⑨				Piping connections				Installation / Transport			Drawing	
Model	Model	R404A R507A R448A R449A	R22	Safety valve connection	Compressor suction valve		Liquid line valve		Net Weight (kg)	Gross weight (kg)	Volume with packaging (dm ³)	Ref.	Page	
					Ø mm	Ø inch	Ø mm	Ø inch						
⑩	⑪	Nr.	Nr.											
LB-S526.16-3Y-2T	USLR06-M	5,5	6,2	1/4"	35	1" 3/8	19,0	3/4"	208	233	1102	26	43	
LB-S727.19-3Y-2T	USLR6.6-M	6,1	6,9	1/4"	35	1" 3/8	19,0	3/4"	225	250	1102	26	43	
LB-V1042.29-3Y-2T	USLR12-M	10,6	12,0	1/2"	35	1" 3/8	22,2	7/8"	275	300	1487	27	43	
LB-Z1560.30-3Y-2T	USLR12-M	10,6	12,0	1/2"	42	1" 5/8	22,2	7/8"	322	347	2252	28	44	
LB-Z2072.36-3Y-2T	USLR12-M	10,6	12,0	1/2"	42	1" 5/8	22,2	7/8"	327	352	2252	28	44	
LB-Z2584.42-3Y-2T	USLR12-M	10,6	12,0	1/2"	42	1" 5/8	22,2	7/8"	332	357	2252	28	44	
LB-Z30102.51-3Y-4T	USLR12-M	10,6	12,0	1/2"	54	2" 1/8	22,2	7/8"	405	430	2790	29	45	

① For other compressor technical data refer to catalogue FCAT105.

② Standard motor / Contact Frascold for different power supply motors.

③ Oil charge with POE oil 32 cSt ; installation of crankcase heater is recommend.

④ B = Y 380-420V / 3 ~ / 50Hz 440-480V // Y / 3 ~ / 60Hz.

⑤ Maximum operating current at full load (400V). For rated current see FSS.3 Frascold Selection program.

Tolerance +/- 10% of the mean value of the voltage range.

⑥ T = 230-400 / 3/50 Hz.

⑦ Total installed power of the fans.

⑧ Maximum total current absorbed by the fans.

⑨ Max liquid refrigerant 90% of the volume. Liquid temperature 20°C.

⑩ Valves with solder connections.

⑪ Including service valves, oil charge, rubber supports; not including any accessories supplied on request.

Construction features and optionals

Air-cooled condensing unit series / model	LB-S526.16-3Y-2T	LB-S727.19-3Y-2T	LB-V1042.29-3Y-2T	LB-Z1560.30-3Y-2T	LB-Z22072.36-3Y-2T	LB-Z22584.42-3Y-2T	LB-Z30102.51-3Y-4T
Two-stage semi-hermetic compressor with integrated PWS electric motor with AMS sensors 380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz POE oil charge, Discharge temperature control device, Suction and discharge valves, Rubber mounts	●	●					
Two-stage semi-hermetic compressor with integrated PWS electric motor with AMS sensors 380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz POE oil charge Discharge temperature control device, Electronic oil pressure switch for lubrication control, Suction and discharge valves, Rubber mounts			●	●	●	●	●
Injection Control Card			●	●	●	●	●
INT69 Diagnose control and protection device → (models V and Z only for Diagnostic Control version)	●	●	●	●	●	●	●
INT69TML Diagnose control and protection device → (Direct Control version only)			●	●	●	●	●
DeltaP-II electronic pressure switch-Lubrication pressure control → (Standard Control and Diagnostic Control versions only)			●	●	●	●	●
INT250FR electronic pressure switch for lubrication pressure control → (Direct Control version only)			●	●	●	●	●
Liquid receiver (PED certified) with large volume, brazing Rotalock valve, plug on safety valve connection (1)	●	●	●	●	●	●	●
Compressor discharge line with vibration absorber pipe	●	●	●	●	●	●	●
Liquid sub-cooler kit	○	○	○	○	○	○	○
Optional "Package", including: Liquid line (filter, liquid sight glass, shut-off valve), Hgh/Low safety pressure switch (PED certified, Cat.IV), High pressure switch for condensation control, Electrical wiring junction box	○	○	○	○	○	○	○
High/Low pressure safety pressure switch (PED certified, Cat. IV)	○	○	○	○	○	○	○
Oil crankcase heater (always recommended with two-stage compressors)	○	○	○	○	○	○	○
Solenoid valve (in alternative to shut-off valve supplied with "Packge")	○	○	○	○	○	○	○
Oil separator (1)	○	○	○	○	○	○	○
Factory mounted Check-valve for compressor discharge line (2)	○	○	○	○	○	○	○
Electrical wiring of "Package" components (pressure switches, fan motors, fan speed control)	○	○	○	○	○	○	○

- Standard components included
- Optional component supplied on request
- (1) Supplied without oil charge
- (2) Accessory required when the compressor is equipped with "US" head for unloading start

Two-stage air-cooled condensing units

Dimensional drawings - Positions and dimensions

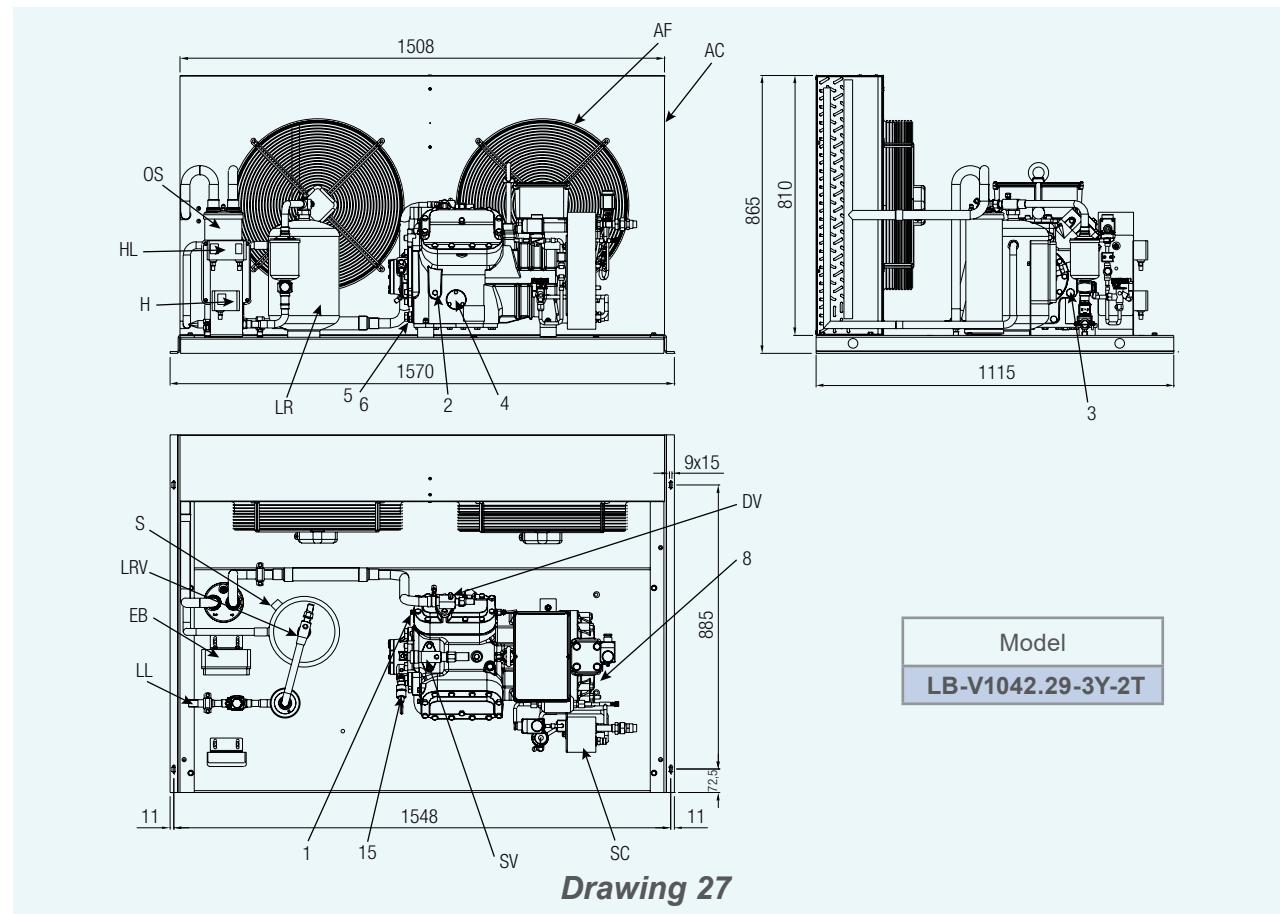
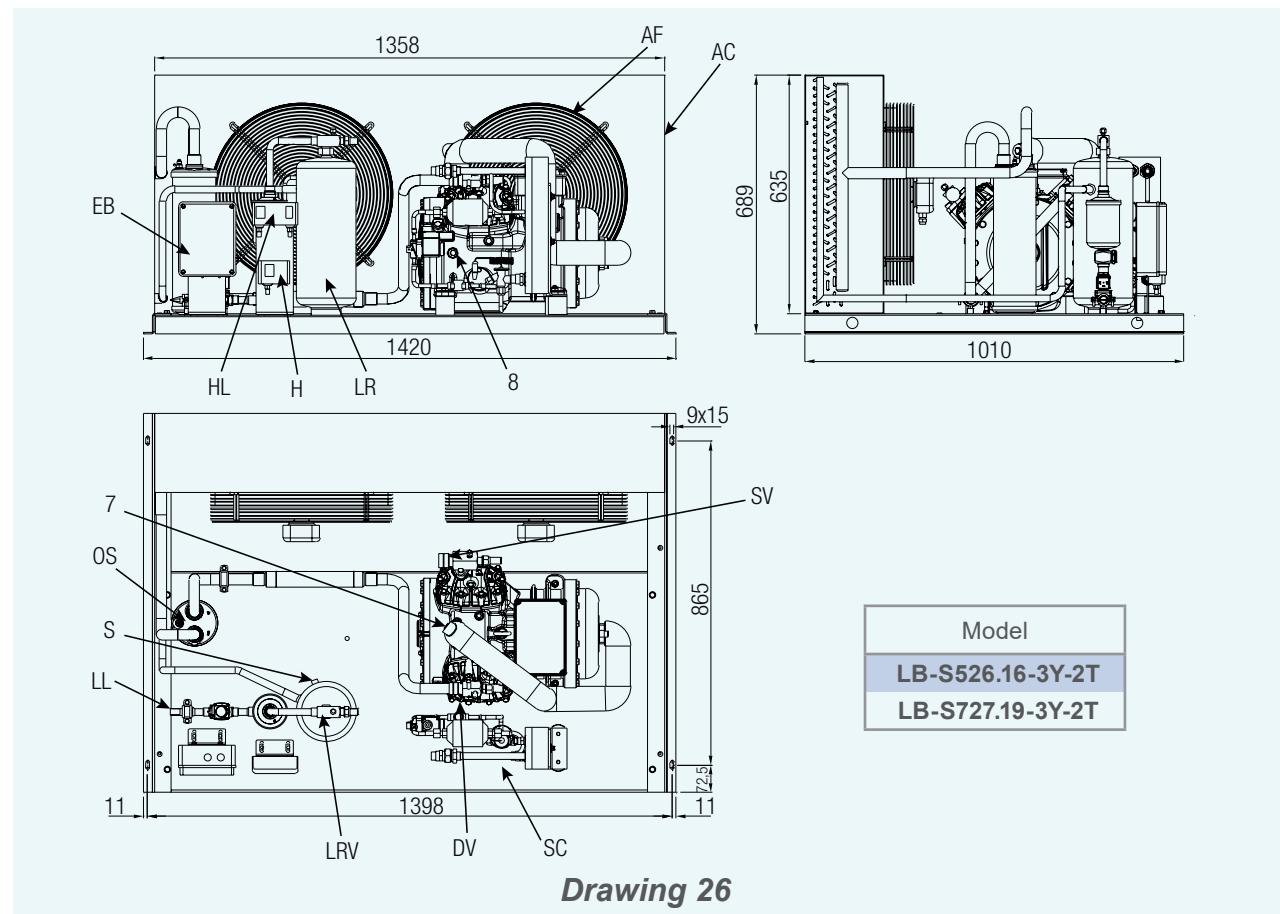
Condensing unit model			LB-S526.16-3Y-2T	LB-S727.19-3Y-2T	LB-V1042.29-3Y-2T	LB-Z1560.30-3Y-2T	LB-Z2072.36-3Y-2T	LB-Z2584.42-3Y-2T	LB-Z30102.51-3Y-4T
Pos.	Components								
1	High-pressure plug	NPT	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
2	Low-pressure plug	NPT	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
3	Oil filling plug	GAS	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"
4	Oil level sight glass								
5	Oil heater pocket								
6	Oil drain plug								
7	Connection for liquid injection								
8	Oil return plug	NPT	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
15	Electronic oil pressure switch								
AC	Air-cooled condenser		①	①	①	①	①	①	①
AF	Fan motor		①	①	①	①	①	①	①
DV	Discharge valve		①	①	①	①	①	①	①
LR	Liquid receiver		①	①	①	①	①	①	①
LRV	Liquid receiver shut-off valve								
SV	Suction valve		①	①	①	①	①	①	①
S	Safety valve connection		①	①	①	①	①	①	①
OS	Oil separator		②	②	②	②	②	②	②
EB	Electric wiring box		②	②	②	②	②	②	②
HL	High/low pressure switch		②	②	②	②	②	②	②
H	High pressure switch		②	②	②	②	②	②	②
LL	Liquid line		②	②	②	②	②	②	②
SC	Sub-cooler kit		②	②	②	②	②	②	②

① Technical data on page 40.

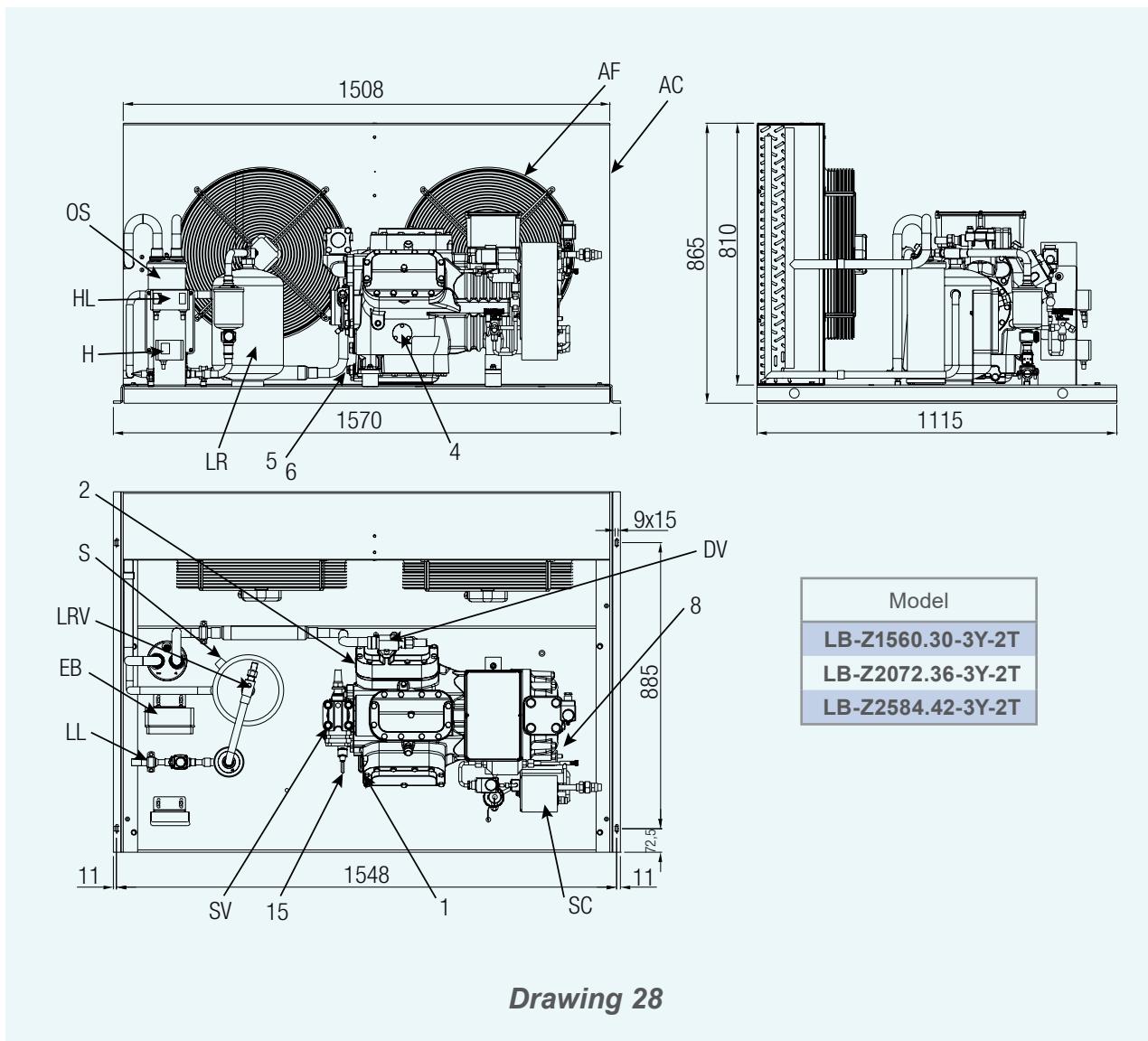
② Optional components, supplied on request.

Two-stage air-cooled condensing units

Dimensional drawings

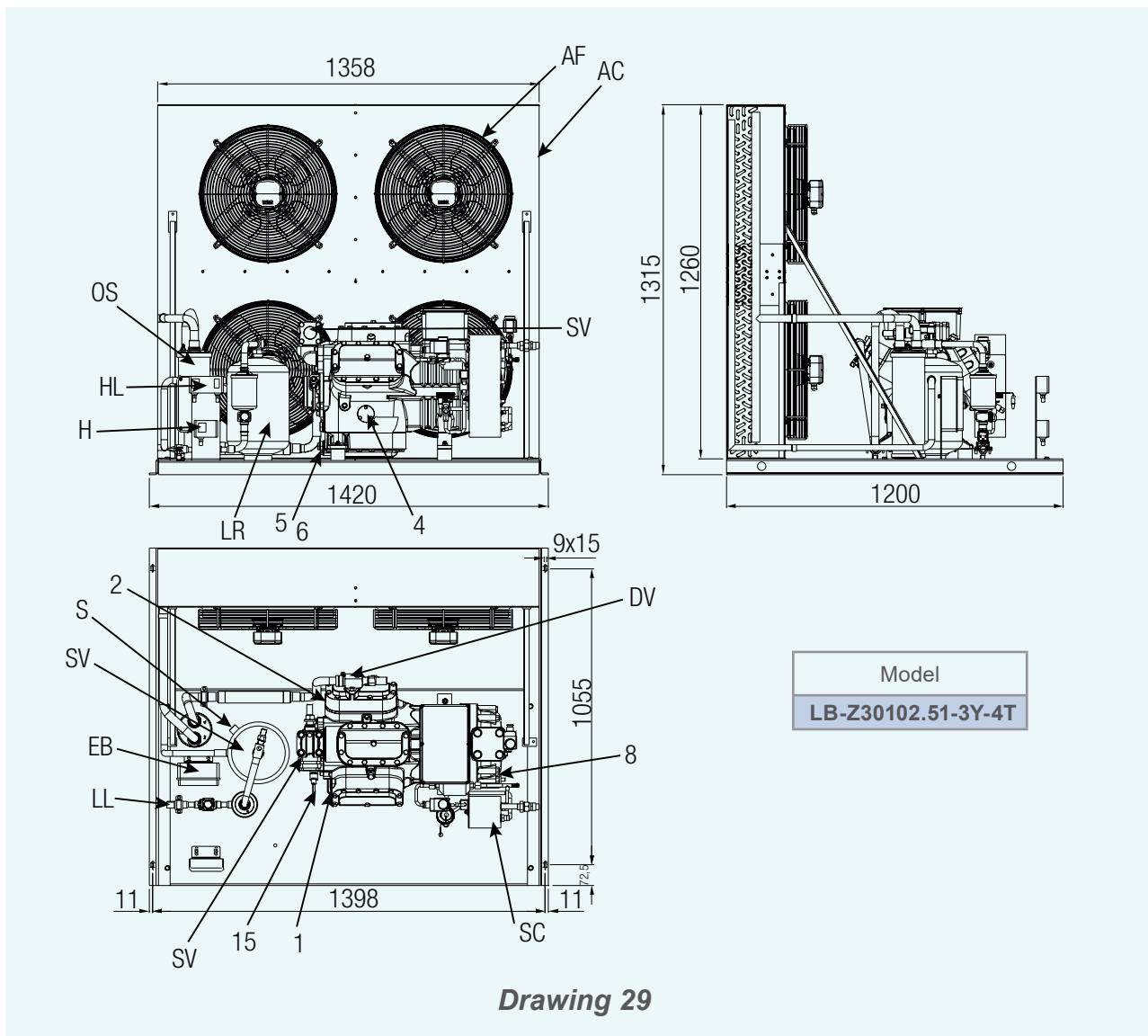


Dimensional drawings



Drawing 28

Dimensional drawings



Two-stage air-cooled condensing units

NOTES:



From 1936 to date, a long process involving the development, constant improvement and attention to the latest technology

A global leader in the industry for over 80 years, Frascold produces 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.

Frascold has subsidiaries in the United States, China and India, and partners in 86 countries. We are the second largest semi-hermetic compressor manufacturer in Europe, and the third largest in the world.

We are committed to our customers, our employees and our values of innovation, quality and service.

We are passionate about being the best, and strive to improve and refine whenever possible. Investing in ourselves and our partners has made us the world's premier compressor manufacturer.

Frascold products

Renowned worldwide for their high quality and used in commercial and industrial applications.

- Reciprocating compressors
- Screw compressors
- Condensing units

Applications

The products are used in many refrigeration sectors, relating to air conditioning, process chiller and heat pump; and they influence the daily lives of many people.

- Retail cooling systems
- Industrial refrigeration
- Transport refrigeration and marine cooling systems
- Environmental simulation chambers
- Air conditioning systems
- Liquid chillers
- Heat pumps



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