

# frascold®

## Semi-Hermetic

Air-Cooled Condensing Units



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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 also possible to get technical information, drawings, manuals, bulletins and others.

## FSS.3 Product Selection Software

| Single Stage Series, for HFC - HCFC - HFO - HC |                              |
|--|------------------------------|
| Model  | Z35-100Y                     |
| Refrigerating capacity                         | Btu/h 181875                 |
| Refrigerating capacity (ref)                   | Btu/h 181875                 |
| Evaporator capacity                            | Btu/h 181875                 |
| Power input                                    | hp(Br) 30.556                |
| Condenser capacity, theor.                     | Btu/h 260561                 |
| Current  | A 39.72                      |
| COP/EER  | W/W 2.31                     |
| Mass flow                                      | kg/h 1597                    |
| Operating frequency                            | Hz 50                        |
| Power supply                                   | 400/3/50/PWS (Std)           |
| Selection mode                                 | Refrigeration / Air Cond.    |
| Operating mode                                 | 100% of the capacity         |
| Evaporating pressure                           | psi 62.58                    |
| Suction gas superheating                       | °F 54                        |
| Suction gas temperature                        | °F 68                        |
| Discharge temperature                          | °F 195.63                    |
| Condensing pressure                            | psi 296.65                   |
| Liquid temperature                             | °F 112.4                     |
| Ratio (%)                                      | 100.0%                       |
| Note   |                              |
| Oil flow                                       | l/min -                      |
| Heat Exchanged (oil Cooler)                    | Btu/h -                      |
| Oil Temp. at Oil Cooler Outlet                 | °F -                         |
| Certified by                                   | ASERCOM (ref. EN12900, 50... |

**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

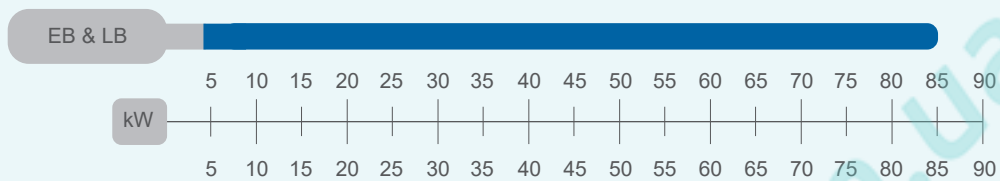
Frascold offers a wide range of models and versions that allow to keep the right temperature and the perfect balance between refrigerant load and efficiency in every refrigeration process. The range of models has two main series:

- **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 m<sup>3</sup>/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<br>265-290V/440-480V/3/60Hz | 2                     | with Package                   |
| 1                           |         | 220V/1/50Hz  | 3                     | with Package and Oil Separator |
| 3                           | PWS     | 380V-420V/3/50Hz<br>440V-480V/3/60Hz                 | <b>Fan motor type</b> |                                |
| 4                           | DOL     | 220-240V/3/60Hz<br>380-420V/3/60Hz                   | T                     | Three phase motor              |
| 5                           |         | 220V/1/60Hz  | M                     | Single phase motor             |
| 7                           | PWS     | 380V-420V/3/60Hz                                     | <b>Number of fans</b> |                                |
| I                           |         | Inverter   | 1                     | One Fan motor                  |
| <b>Oil type</b>             |         |  | 2                     | Two Fan motors                 |
| Y                           | POE     |  | 4                     | Four Fan motors                |
| 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                           | <b>Frascold</b> Frascold S.p.A.<br>via Barbara Melzi 103/105<br>20027 Rescaldina (MI) - Italy<br>Telephone: +39 0331 742 201  | CE                      | EU conformance mark                                |
| Condensing unit model                  | Unit model: EB-A054-0Y-1M   | Lubricant: POE 32 cSt   | Oil charged into the compressor                    |
| Serial number                          | Serial: OS001003  | Liquid receiver: USLR02 | Type of liquid receiver                            |
| Type of condensing unit                | Condenser: USAC03E  | PS (HP): 30 bar         | Maximum operating pressures and temperature limits |
| Type of fan motor                      | Fan model: USAF1EC  | PS (LP): 17 bar         |  |
| Model of installed compressor          | Compressor: A05-4Y  | TS*: -45°C / +140°C     | Year of construction                               |
| Classification of allowed refrigerants | * Refer to the instruction manual for the temperature range of each components<br>Voltage: refer to components' technical specification<br>Use refrigerants group 2 only, according to EN 378-1<br>Read carefully the instruction manual before assembling and using the unit |                         |  |

## Technical data

| Condensing units      |           | Compressor ①                |                     |         |              |            | Condenser |               |         |              |                  |                             |  |
|-----------------------|-----------|-----------------------------|---------------------|---------|--------------|------------|-----------|---------------|---------|--------------|------------------|-----------------------------|--|
| Model                 | Model     | Displacement<br>(m³/h 50Hz) | Oil charge (liters) | Version | Motor ③      |            | Model     | EC Fan motors |         |              |                  |                             |  |
|                       |           |                             |                     |         | Power supply | MRA<br>(A) |           | Quantity      | Model   | Power supply | Max power<br>(W) | Max absorbed<br>current (A) | Max Condenser<br>air flow<br>(m³/h 50Hz) |
|                       |           |                             | ②                   | ④       | ⑤            | ⑥ ⑦        |           |               |         |              |                  |                             |  |
| <b>EB-A054-0Y-1M</b>  | A05-4Y    | 3,95                        | 1                   | 1       | A            | 2,8        | USAC03E   | 1             | USAF1EC | M            | 165              | 1,35                        |  |
| <b>EBT-A054-0Y-2M</b> |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-A075-0Y-1M</b>  | A07-5Y    | 4,93                        | 1                   | 1       | A            | 2,7        | USAC03E   | 1             | USAF1EC | M            | 165              | 1,35                        | 2650                                     |
| <b>EBT-A075-0Y-2M</b> |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-A16-0Y-1M</b>   | A1-6Y     | 5,47                        | 1                   | 1       | A            | 3,6        | USAC03E   | 1             | USAF1EC | M            | 165              | 1,35                        | 2650                                     |
| <b>EBT-A16-0Y-2M</b>  |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-A17-0Y-1M</b>   | A1-7Y     | 6,91                        | 1                   | 2       | A            | 3,7        | USAC03E   | 1             | USAF1EC | M            | 165              | 1,35                        | 2650                                     |
| <b>EBT-A17-0Y-2M</b>  |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-A157-0Y-1M</b>  | A1.5-7Y   | 6,91                        | 1                   | 1       | A            | 4,5        | USAC06E   | 1             | USAF2EC | M            | 160              | 1,25                        | 3435                                     |
| <b>EBT-A157-0Y-2M</b> |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-B159-0Y-1M</b>  | B1.5-9.1Y | 8,96                        | 1                   | 2       | A            | 5,9        | USAC03E   | 1             | USAF1EC | M            | 165              | 1,35                        | 2650                                     |
| <b>EBT-B159-0Y-2M</b> |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-B210-0Y-1M</b>  | B2-10.1Y  | 9,88                        | 1                   | 1       | A            | 6,7        | USAC06E   | 1             | USAF2EC | M            | 160              | 1,25                        | 3435                                     |
| <b>EBT-B210-0Y-2M</b> |           |                             |                     |         |              |            | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EB-D211-0Y-1M</b>  | D2-11.1Y  | 11,26                       | 1,1                 | 1       | A            | 7,1        | USAC06E   | 1             | USAF2EC | M            | 160              | 1,25                        | 3435                                     |
| <b>EBT-D211-0Y-2M</b> |           |                             |                     |         |              |            | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EB-D213-0Y-1M</b>  | D2-13.1Y  | 13,15                       | 1,1                 | 2       | A            | 7,1        | USAC06E   | 1             | USAF2EC | M            | 160              | 1,25                        | 3435                                     |
| <b>EBT-D213-0Y-2M</b> |           |                             |                     |         |              |            | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EB-D313-0Y-1M</b>  | D3-13.1Y  | 13,15                       | 1,1                 | 1       | A            | 8,8        | USAC06E   | 1             | USAF2EC | M            | 160              | 1,25                        | 3435                                     |
| <b>EBT-D313-0Y-2M</b> |           |                             |                     |         |              |            | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EB-D316-0Y-2M</b>  | D3-16.1Y  | 16,40                       | 1,1                 | 2       | A            | 9,9        | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EBT-D316-0Y-2M</b> |           |                             |                     |         |              |            | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EB-D416-0Y-2M</b>  | D4-16.1Y  | 16,40                       | 1,2                 | 1       | A            | 11,6       | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EBT-D416-0Y-2M</b> |           |                             |                     |         |              |            | USAC16E   | 2             | USAF4EC | M            | 600              | 4,10                        | 12420                                    |
| <b>EB-D318-0Y-2M</b>  | D3-18.1Y  | 17,93                       | 1,1                 | 2       | A            | 10,0       | USAC07E   | 2             | USAF1EC | M            | 330              | 2,70                        | 5300                                     |
| <b>EBT-D318-0Y-2M</b> |           |                             |                     |         |              |            | USAC08E   | 2             | USAF2EC | M            | 320              | 2,50                        | 6870                                     |
| <b>EBT-D418-0Y-2M</b> | 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 / 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       |          | Compressor ①                |                     |         |         |              | Condenser |               |          |       |              |               |                          |
|------------------------|----------|-----------------------------|---------------------|---------|---------|--------------|-----------|---------------|----------|-------|--------------|---------------|--------------------------|
| Model                  | Model    | Displacement<br>(m³/h 50Hz) | Oil charge (liters) | Version | Motor ③ |              | Model     | EC Fan motors |          |       |              |               |                          |
|                        |          |                             | ②                   |         | ④       | Power supply |           | MRA (A)       | Quantity | Model | Power supply | Max power (W) | Max absorbed current (A) |
|                        |          |                             |                     | ⑤       |         | ⑥ ⑦          |           | ⑧             |          |       | ⑨            | ⑩             |                          |
| <b>EB-Q420-0Y-2M</b>   | Q4-20.1Y | 19,77                       | 1,6                 | 2       | A       | 10,1         | USAC08E   | 2             | USAF2EC  | M     | 320          | 2,50          | 6870                     |
| <b>EBT-Q420-0Y-2M</b>  |          |                             |                     |         |         |              | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EB-Q521-0Y-2M</b>   | Q5-21.1Y | 21,18                       | 1,6                 | 1       | A       | 11,6         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q521-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-Q424-0Y-2M</b>   | Q4-24.1Y | 23,91                       | 1,6                 | 2       | A       | 11,7         | USAC08E   | 2             | USAF2EC  | M     | 320          | 2,50          | 6870                     |
| <b>EBT-Q424-0Y-2M</b>  |          |                             |                     |         |         |              | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EB-Q524-0Y-2M</b>   | Q5-24.1Y | 23,91                       | 1,6                 | 1       | A       | 13,8         | USAC08E   | 2             | USAF2EC  | M     | 320          | 2,50          | 6870                     |
| <b>EBT-Q524-0Y-2M</b>  |          |                             |                     |         |         |              | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EB-Q528-0Y-2M</b>   | Q5-28.1Y | 28,02                       | 1,6                 | 2       | A       | 14,0         | USAC08E   | 2             | USAF2EC  | M     | 320          | 2,50          | 6870                     |
| <b>EBT-Q528-0Y-2M</b>  |          |                             |                     |         |         |              | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EB-Q728-0Y-2M</b>   | Q7-28.1Y | 28,02                       | 1,6                 | 1       | A       | 17,6         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q728-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-Q533-0Y-2M</b>   | Q5-33.1Y | 32,66                       | 1,6                 | 2       | A       | 14,4         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q533-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-Q733-0Y-2M</b>   | Q7-33.1Y | 32,66                       | 1,6                 | 1       | A       | 20,0         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q733-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-Q536-0Y-2M</b>   | Q5-36.1Y | 35,86                       | 1,6                 | 2       | A       | 11,8         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q536-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-Q736-0Y-2M</b>   | Q7-36.1Y | 35,86                       | 1,6                 | 1       | A       | 19,4         | USAC16E   | 2             | USAF4EC  | M     | 600          | 4,10          | 12420                    |
| <b>EBT-Q736-0Y-2M</b>  |          |                             |                     |         |         |              | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S842-3Y-2M</b>   | S8-42Y   | 41,32                       | 2,9                 | 2       | B       | 20,3         | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EBT-S842-3Y-2M</b>  |          |                             |                     |         |         |              | USAC19E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S1242-3Y-2M</b>  | S12-42Y  | 41,32                       | 2,9                 | 1       | B       | 22,4         | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EBT-S1242-3Y-2M</b> |          |                             |                     |         |         |              | USAC19E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S1052-3Y-2M</b>  | S10-52Y  | 51,50                       | 2,9                 | 2       | B       | 24,5         | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EBT-S1052-3Y-2M</b> |          |                             |                     |         |         |              | USAC19E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S1552-3Y-2M</b>  | S15-52Y  | 51,50                       | 2,9                 | 1       | B       | 32,4         | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EBT-S1552-3Y-2M</b> |          |                             |                     |         |         |              | USAC19E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S1556-3Y-2M</b>  | S15-56Y  | 56,00                       | 2,9                 | 2       | B       | 30,7         | USAC18E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EBT-S1556-3Y-2M</b> |          |                             |                     |         |         |              | USAC19E   | 2             | USAF10EC | M     | 1300         | 5,80          | 18460                    |
| <b>EB-S2056-3Y-2M</b>  | 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 <sup>⑪</sup> |       |                         |                         |  |              | Piping connections      |                          |        |                   | Installation/Transport |  |  | Housing |  |
|-----------------------|------------------------------|-------|-------------------------|-------------------------|--|--------------|-------------------------|--------------------------|--------|-------------------|------------------------|--|--|---------|--|
|                       | Model                        | Model | Vol. (dm <sup>3</sup> ) | R134a<br>R450A<br>R513A | R404A<br>R507A<br>R407F<br>R407A<br>R448A<br>R449A | R407C<br>R22 | Safety valve connection | Compressor suction valve |        | Liquid line valve |                        | Net Weight (kg)<br>(Standard construction) | Gross weight (kg)<br>(Standard construction) |         | Volume with packaging (dm <sup>3</sup> ) |
|                       |                              |       |                         |                         |  |              |                         | Ø mm                     | Ø inch | Ø mm              | Ø inch                 |  |  |         |  |
|                       |                              |       |                         |                         |  | <sup>⑫</sup> |                         | <sup>⑬</sup>             |        | <sup>⑭</sup>      |                        | <sup>⑮</sup>                               |  |         |  |
| <b>EB-A054-0Y-1M</b>  | USLR02                       |       | 1,5                     | 1,8                     | 1,7  | 1,8          | 1/4"                    | 15,8                     | 5/8"   | 9,5               | 3/8"                   | 65   | 72   | 465     | USHAOU26                                 |
| <b>EBT-A054-0Y-2M</b> | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 88   | 98   | 795     | USHAOU29                                 |
| <b>EB-A075-0Y-1M</b>  | USLR02                       |       | 1,5                     | 1,8                     | 1,7  | 1,8          | 1/4"                    | 15,8                     | 5/8"   | 9,5               | 3/8"                   | 65   | 72   | 465     | USHAOU26                                 |
| <b>EBT-A075-0Y-2M</b> | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 88   | 98   | 795     | USHAOU29                                 |
| <b>EB-A16-0Y-1M</b>   | USLR02                       |       | 1,5                     | 1,8                     | 1,7  | 1,8          | 1/4"                    | 15,8                     | 5/8"   | 9,5               | 3/8"                   | 65   | 72   | 465     | USHAOU26                                 |
| <b>EBT-A16-0Y-2M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 88   | 98   | 795     | USHAOU29                                 |
| <b>EB-A17-0Y-1M</b>   | USLR02                       |       | 1,5                     | 1,8                     | 1,7  | 1,8          | 1/4"                    | 15,8                     | 5/8"   | 9,5               | 3/8"                   | 65   | 72   | 465     | USHAOU26                                 |
| <b>EBT-A17-0Y-2M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 88   | 98   | 795     | USHAOU29                                 |
| <b>EB-A157-0Y-1M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    | 15,8                     | 5/8"   | 12,7              | 1/2"                   | 70   | 77   | 531     | USHAOU27                                 |
| <b>EBT-A157-0Y-2M</b> | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 88   | 98   | 795     | USHAOU29                                 |
| <b>EB-B159-0Y-1M</b>  | USLR02                       |       | 1,5                     | 1,8                     | 1,7  | 1,8          | 1/4"                    | 15,8                     | 5/8"   | 9,5               | 3/8"                   | 67   | 74   | 465     | USHAOU26                                 |
| <b>EBT-B159-0Y-2M</b> | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 90   | 100  | 795     | USHAOU29                                 |
| <b>EB-B210-0Y-1M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    | 19,0                     | 3/4"   | 12,7              | 1/2"                   | 74   | 81   | 531     | USHAOU27                                 |
| <b>EBT-B210-0Y-2M</b> | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    |                          |        | 12,7              | 1/2"                   | 92   | 102  | 795     | USHAOU29                                 |
| <b>EB-D211-0Y-1M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    | 22,0                     | 7/8"   | 12,7              | 1/2"                   | 79   | 86   | 531     | USHAOU27                                 |
| <b>EBT-D211-0Y-2M</b> | USLR04                       |       | 3,4                     | 3,6                     | 3,1  | 3,5          | 1/4"                    |                          |        | 15,8              | 5/8"                   | 106  | 116  | 795     | USHAOU30                                 |
| <b>EB-D213-0Y-1M</b>  | USLR03-M                     |       | 2,2                     | 2,3                     | 2,2  | 2,3          | 1/4"                    | 22,0                     | 7/8"   | 12,7              | 1/2"                   | 79   | 86   | 531     | USHAOU27                                 |
| <b>EBT-D213-0Y-2M</b> | USLR04                       |       | 3,4                     | 3,6                     | 3,1  | 3,5          | 1/4"                    |                          |        | 15,8              | 5/8"                   | 106  | 116  | 795     | USHAOU30                                 |
| <b>EB-D313-0Y-1M</b>  | 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                                 |
| <b>EBT-D313-0Y-2M</b> | USLR04                       |       | 3,4                     | 3,6                     | 3,1  | 3,5          | 1/4"                    |                          |        | 15,8              | 5/8"                   | 106  | 116  | 795     | USHAOU30                                 |
| <b>EB-D316-0Y-2M</b>  | 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                                 |
| <b>EBT-D316-0Y-2M</b> | USLR04                       |       | 3,4                     | 3,6                     | 3,1  | 3,5          | 1/4"                    |                          |        | 15,8              | 5/8"                   | 110  | 120  | 795     | USHAOU30                                 |
| <b>EB-D416-0Y-2M</b>  | 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                                 |
| <b>EBT-D416-0Y-2M</b> | USLR06-M                     |       | 5,7                     | 6,3                     | 5,5  | 6,2          | 1/4"                    |                          |        | 19,0              | 3/4"                   | 144  | 159  | 1150    | USHAOU31                                 |
| <b>EB-D318-0Y-2M</b>  | 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                                 |
| <b>EBT-D318-0Y-2M</b> | USLR04                       |       | 3,4                     | 3,6                     | 3,1  | 3,5          | 1/4"                    |                          |        | 15,8              | 5/8"                   | 116  | 126  | 795     | USHAOU30                                 |
| <b>EBT-D418-0Y-2M</b> | 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 <sup>⑪</sup> |                         |  |              |                         | Piping connections       |        |                   |        | Installation/Transport                     |  |  | Housing  |
|------------------------|-----------|------------------------------|-------------------------|--|--------------|-------------------------|--------------------------|--------|-------------------|--------|--|--|--|----------|
| Model                  | Model     | Vol. (dm <sup>3</sup> )      | R134a<br>R450A<br>R513A | R404A<br>R507A<br>R407F<br>R407A<br>R448A<br>R449A | R407C<br>R22 | Safety valve connection | Compressor suction valve |        | Liquid line valve |        | Net Weight (kg)<br>(Standard construction) | Gross weight (kg)<br>(Standard construction) | Volume with packaging (dm <sup>3</sup> ) |          |
|                        |           |                              |                         |  |              |                         | Ø mm                     | Ø inch | Ø mm              | Ø inch |  |  |  |          |
|                        |           | <sup>⑫</sup>                 |                         |  |              |                         | <sup>⑬</sup>             |        |                   |        | <sup>⑭</sup>                               |  |  |          |
| <b>EB-Q420-0Y-2M</b>   | USLR04    | 3,4                          | 3,6                     | 3,1  | 3,5          | 1/4"                    | 28,6                     | 1" 1/8 | 15,8              | 5/8"   | 135  | 145  | 795                                      | USHAOU30 |
| <b>EBT-Q420-0Y-2M</b>  | 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 |
| <b>EB-Q521-0Y-2M</b>   | 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 |
| <b>EBT-Q521-0Y-2M</b>  | 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 |
| <b>EB-Q424-0Y-2M</b>   | USLR04    | 3,4                          | 3,6                     | 3,1  | 3,5          | 1/4"                    | 28,6                     | 1" 1/8 | 15,8              | 5/8"   | 140  | 150  | 795                                      | USHAOU30 |
| <b>EBT-Q424-0Y-2M</b>  | 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 |
| <b>EB-Q524-0Y-2M</b>   | USLR04    | 3,4                          | 3,6                     | 3,1  | 3,5          | 1/4"                    | 28,6                     | 1" 1/8 | 15,8              | 5/8"   | 140  | 150  | 795                                      | USHAOU30 |
| <b>EBT-Q524-0Y-2M</b>  | 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 |
| <b>EB-Q528-0Y-2M</b>   | USLR04    | 3,4                          | 3,6                     | 3,1  | 3,5          | 1/4"                    | 35,0                     | 1" 3/8 | 15,8              | 5/8"   | 140  | 150  | 795                                      | USHAOU30 |
| <b>EBT-Q528-0Y-2M</b>  | 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 |
| <b>EB-Q728-0Y-2M</b>   | 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 |
| <b>EBT-Q728-0Y-2M</b>  | 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 |
| <b>EB-Q533-0Y-2M</b>   | 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 |
| <b>EBT-Q533-0Y-2M</b>  | 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 |
| <b>EB-Q733-0Y-2M</b>   | 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 |
| <b>EBT-Q733-0Y-2M</b>  | 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 |
| <b>EB-Q536-0Y-2M</b>   | 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 |
| <b>EBT-Q536-0Y-2M</b>  | 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 |
| <b>EB-Q736-0Y-2M</b>   | 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 |
| <b>EBT-Q736-0Y-2M</b>  | 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 |
| <b>EB-S842-3Y-2M</b>   | 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 |
| <b>EBT-S842-3Y-2M</b>  | 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 |
| <b>EB-S1242-3Y-2M</b>  | 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 |
| <b>EBT-S1242-3Y-2M</b> | 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 |
| <b>EB-S1052-3Y-2M</b>  | 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 |
| <b>EBT-S1052-3Y-2M</b> | 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 |
| <b>EB-S1552-3Y-2M</b>  | 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 |
| <b>EBT-S1552-3Y-2M</b> | 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 |
| <b>EB-S1556-3Y-2M</b>  | 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 |
| <b>EBT-S1556-3Y-2M</b> | 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 |
| <b>EB-S2056-3Y-2M</b>  | 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<br>(m <sup>3</sup> /h 50Hz) | Oil charge (liters) | Version | Motor ③      |            | Model     | Fan motors (with thermal protection) |        |              |                        |                             |      |  |
|                  |           |  |                     |         | Power supply | MRA<br>(A) |           | Quantity                             | Model  | Power supply | Installed power<br>(W) | Max absorbed current<br>(A) |      | Condenser air flow<br>(m <sup>3</sup> /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                        |      | 5000   |
| 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                        |      | 5000   |
| 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                        |      | 5000   |
| 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                        |      | 5000   |
| 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                        |      | 5000   |
| 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                        |      | 5000   |
| 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                        |      | 5000   |
| LBT-D211-0Y-2M   |           |  |                     | 1       | A            |            | USAC08M   | 2                                    | USAF3  | M            | 400                    | 1,74                        |      | 5800   |
| 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                        |      | 5000   |
| LBT-D213-0Y-2M   |           |  |                     | 2       | A            |            | USAC08M   | 2                                    | USAF3  | M            | 400                    | 1,74                        |      | 5800   |
| 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                        |      | 5000   |
| 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                        |      | 5800   |
| 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                        |      | 5000   |
| LBT-D318-0Y-2M   |           |  |                     | 2       | A            |            | USAC08M   | 2                                    | USAF3  | M            | 400                    | 1,74                        |      | 5800   |
| 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<br>(m <sup>3</sup> /h 50Hz) | Oil charge (liters) | Version | Motor ③      |            | Model     | Fan motors (with thermal protection) |        |              |                        |                             |      |  |
|                         |          |  |                     |         | Power supply | MRA<br>(A) |           | Quantity                             | Model  | Power supply | Installed power<br>(W) | Max absorbed current<br>(A) |      | Condenser air flow<br>(m <sup>3</sup> /h 50Hz) |
|                         |          |  |                     |         |              |            |           |                                      |        |              |                        | Δ                           | Y    |  |
|                         |          |  | ②                   | ④       | ⑤            | ⑥⑦         |           |                                      | ⑧      | ⑨            | ⑩                      |                             |      |  |
| <b>LB-Q528-0Y-2M</b>    | Q5-28.1Y | 28,02                                    | 1,6                 | 2       | A            | 14,0       | USAC08M   | 2                                    | USAF3  | M            | 400                    | 1,74                        |      | 5800   |
| <b>LBT-Q528-0Y-2T</b>   |          |  |                     | USAC16M | 2            |            | USAF4     | T                                    | 630    | 2,26         | 1,30                   | 11400                       |      |  |
| <b>LB-Q728-0Y-2T</b>    | Q7-28.1Y | 28,02                                    | 1,6                 | 1       | A            | 17,6       | USAC16M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 11400  |
| <b>LBT-Q728-0Y-2T</b>   |          |  |                     | USAC18M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 17400                       |      |  |
| <b>LB-Q533-0Y-2M</b>    | Q5-33.1Y | 32,66                                    | 1,6                 | 2       | A            | 14,4       | USAC08M   | 2                                    | USAF3  | M            | 400                    | 1,74                        |      | 5800   |
| <b>LBT-Q533-0Y-2T</b>   |          |  |                     | USAC16M | 2            |            | USAF4     | T                                    | 630    | 2,26         | 1,30                   | 11400                       |      |  |
| <b>LB-Q733-0Y-2T</b>    | Q7-33.1Y | 32,66                                    | 1,6                 | 1       | A            | 20,0       | USAC17M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 10400  |
| <b>LBT-Q733-0Y-2T</b>   |          |  |                     | USAC18M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 17400                       |      |  |
| <b>LB-Q536-0Y-2T</b>    | Q5-36.1Y | 35,86                                    | 1,6                 | 2       | A            | 11,8       | USAC16M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 11400  |
| <b>LBT-Q536-0Y-2T</b>   |          |  |                     | USAC18M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 17400                       |      |  |
| <b>LB-Q736-0Y-2T</b>    | Q7-36.1Y | 35,86                                    | 1,6                 | 1       | A            | 19,4       | USAC17M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 10400  |
| <b>LBT-Q736-0Y-2T</b>   |          |  |                     | USAC18M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 17400                       |      |  |
| <b>LB-S842-3Y-2T</b>    | S8-42Y   | 41,32                                    | 2,9                 | 2       | B            | 20,3       | USAC16M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 11400  |
| <b>LBT-S842-3Y-2T</b>   |          |  |                     | USAC18M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 17400                       |      |  |
| <b>LB-S1242-3Y-2T</b>   | S12-42Y  | 41,32                                    | 2,9                 | 1       | B            | 22,4       | USAC18M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 17400  |
| <b>LBT-S1242-3Y-2T</b>  |          |  |                     | USAC19M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 16400                       |      |  |
| <b>LB-S1052-3Y-2T</b>   | S10-52Y  | 51,50                                    | 2,9                 | 2       | B            | 24,5       | USAC17M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 10400  |
| <b>LBT-S1052-3Y-2T</b>  |          |  |                     | USAC19M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 16400                       |      |  |
| <b>LB-S1552-3Y-2T</b>   | S15-52Y  | 51,50                                    | 2,9                 | 1       | B            | 32,4       | USAC18M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 17400  |
| <b>LBT-S1552-3Y-2T</b>  |          |  |                     | USAC19M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 16400                       |      |  |
| <b>LB-S1556-3Y-2T</b>   | S15-56Y  | 56,00                                    | 2,9                 | 2       | B            | 30,7       | USAC18M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 17400  |
| <b>LBT-S1556-3Y-2T</b>  |          |  |                     | USAC19M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 16400                       |      |  |
| <b>LB-S2056-3Y-2T</b>   | S-20-56Y | 56,00                                    | 2,9                 | 1       | B            | 38,4       | USAC19M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 16400  |
| <b>LBT-S2056-3Y-4T</b>  |          |  |                     | USAC20M | 4            |            | USAF10    | T                                    | 3000   | 12,00        | 7,00                   | 32800                       |      |  |
| <b>LB-V2059-3Y-2T</b>   | V20-59Y  | 58,48                                    | 4,0                 | 1       | B            | 35,3       | USAC19M   | 4                                    | USAF10 | T            | 3000                   | 12,00                       | 7,00 | 32800  |
| <b>LBT-V2059-3Y-4T</b>  |          |  |                     | USAC20M | 4            |            | USAF10    | T                                    | 3000   | 12,00        | 7,00                   | 32800                       |      |  |
| <b>LB-V1571-3Y-2T</b>   | V15-71Y  | 70,77                                    | 4,0                 | 2       | B            | 32,2       | USAC17M   | 2                                    | USAF4  | T            | 630                    | 2,26                        | 1,30 | 10400  |
| <b>LBT-V1571-3Y-2T</b>  |          |  |                     | USAC19M | 2            |            | USAF10    | T                                    | 1500   | 6,00         | 3,50                   | 16400                       |      |  |
| <b>LB-V2571-3Y-2T</b>   | V25-71Y  | 70,77                                    | 4,0                 | 1       | B            | 43,5       | USAC19M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 16400  |
| <b>LBT-V2571-3Y-4T</b>  |          |  |                     | USAC20M | 4            |            | USAF10    | T                                    | 3000   | 12,00        | 7,00                   | 32800                       |      |  |
| <b>LB-V2084-3Y-2T</b>   | V20-84Y  | 83,81                                    | 4,0                 | 2       | B            | 46,2       | USAC19M   | 2                                    | USAF10 | T            | 1500                   | 6,00                        | 3,50 | 16400  |
| <b>LBT-V2084-3Y-4T</b>  |          |  |                     | USAC20M | 4            |            | USAF10    | T                                    | 3000   | 12,00        | 7,00                   | 32800                       |      |  |
| <b>LB-V3084-3Y-4T</b>   | V30-84Y  | 83,81                                    | 4,0                 | 1       | B            | 49,2       | USAC20M   | 4                                    | USAF10 | T            | 3000                   | 12,00                       | 7,00 | 32800  |
| <b>LB-Z25106Y-3Y-4T</b> | Z25-106Y | 106,16                                   | 3,7                 | 2       | B            | 53,6       | USAC14M   | 4                                    | USAF4  | T            | 1260                   | 4,52                        | 2,60 | 20800  |
| <b>LBT-Z25106-3Y-4T</b> |          |  |                     | USAC20M | 4            |            | USAF10    | T                                    | 3000   | 12,00        | 7,00                   | 32800                       |      |  |
| <b>LB-Z30126Y-3Y-4T</b> | Z30-126Y | 125,72                                   | 7,2                 | 2       | B            | 55,7       | USAC14M   | 4                                    | USAF4  | T            | 1260                   | 4,52                        | 2,60 | 20800  |
| <b>LBT-Z30126-3Y-4T</b> |          |  |                     | 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 <sup>⑪</sup> |  |              |                            |                             | Piping connections |                      |        |  | Installation/Transport                       |   |      | Housing |
|-----------------------|----------|------------------------------|--|--------------|----------------------------|-----------------------------|--------------------|----------------------|--------|--|--|---|------|---------|
| Model                 | Model    | R134a<br>R450A<br>R513A      | R404A<br>R507A<br>R407F<br>R407A<br>R448A<br>R449A | R407C<br>R22 | Safety valve<br>connection | Compressor<br>suction valve |                    | Liquid<br>line valve |        | Net Weight (kg)<br>(Standard construction) | Gross weight (kg)<br>(Standard construction) | Volume with packaging<br>(dm <sup>3</sup> ) |      |         |
|                       |          |                              |  |              |                            | Ø mm                        | Ø inch             | Ø mm                 | Ø inch |  |  |   |      |         |
|                       |          | ⑫                            |  |              |                            |                             | ⑬                  |                      |        |  | ⑭  |   |      |         |
| <b>LB-A075-0Y-1M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 15,8               | 5/8"                 | 12,7   | 1/2"                                       | 53   | 62  | 315  | USH0U21 |
| <b>LB1-A075-0Y-2M</b> |          |                              |  |              |                            |                             |                    |                      |        |  | 63   | 72  | 370  | USH0U18 |
| <b>LBT-A075-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 79   | 84  | 594  | USH0U17 |
| <b>LB-A106-0Y-1M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 15,8               | 5/8"                 | 12,7   | 1/2"                                       | 56   | 62  | 315  | USH0U21 |
| <b>LB-A106-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 65   | 72  | 370  | USH0U18 |
| <b>LBT-A106-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 79   | 84  | 594  | USH0U17 |
| <b>LB-A107-0Y-1M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 15,8               | 5/8"                 | 12,7   | 1/2"                                       | 56   | 62  | 315  | USH0U21 |
| <b>LB-A107-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 65   | 72  | 370  | USH0U18 |
| <b>LBT-A107-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 79   | 84  | 594  | USH0U17 |
| <b>LB-A157-0Y-1M</b>  | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 63   | 70  | 470  | USH0U21 |
| <b>LB-A157-0Y-2M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 15,8               | 5/8"                 | 12,7   | 1/2"                                       | 65   | 72  | 370  | USH0U18 |
| <b>LBT-A157-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 79   | 84  | 594  | USH0U17 |
| <b>LB-B159-0Y-1M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 15,8               | 5/8"                 | 12,7   | 1/2"                                       | 58   | 64  | 315  | USH0U21 |
| <b>LB-B159-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 67   | 74  | 370  | USH0U18 |
| <b>LBT-B159-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 81   | 86  | 594  | USH0U17 |
| <b>LB-B210-0Y-1M</b>  | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 67   | 74  | 470  | USH0U18 |
| <b>LB-B210-0Y-2M</b>  | USLR02   | 1,5                          | 1,8  | 1,7          | 1,8                        | 1/4"                        | 19,0               | 3/4"                 | 12,7   | 1/2"                                       | 79   | 88  | 370  | USH0U18 |
| <b>LBT-B210-0Y-2M</b> | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 83   | 93  | 594  | USH0U17 |
| <b>LB-D211-0Y-1M</b>  | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        | 22,0               | 7/8"                 | 12,7   | 1/2"                                       | 72   | 80  | 470  | USH0U20 |
| <b>LB-D211-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 84   | 93  | 594  | USH0U17 |
| <b>LBT-D211-0Y-2M</b> | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        |                    |                      |        |  | 87   | 96  | 737  | USH0U16 |
| <b>LB-D213-0Y-1M</b>  | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        | 22,0               | 7/8"                 | 12,7   | 1/2"                                       | 72   | 80  | 470  | USH0U20 |
| <b>LB-D213-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 84   | 93  | 594  | USH0U17 |
| <b>LBT-D213-0Y-2M</b> | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        |                    |                      |        |  | 84   | 93  | 737  | USH0U16 |
| <b>LB-D313-0Y-1M</b>  | 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 |
| <b>LB-D313-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 92   | 102   | 594  | USH0U17 |
| <b>LBT-D313-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 119  | 128   | 1202 | USH0U15 |
| <b>LB-D316-0Y-1M</b>  | 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 |
| <b>LB-D316-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 84   | 93  | 594  | USH0U17 |
| <b>LBT-D316-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 92   | 102   | 1202 | USH0U15 |
| <b>LB-D416-0Y-1M</b>  | USLR03-M | 2,2                          | 2,3  | 2,2          | 2,3                        | 1/4"                        |                    |                      |        |  | 78   | 86  | 470  | USH0U20 |
| <b>LB-D416-0Y-2M</b>  | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        | 28,6               | 1" 1/8               | 15,8   | 5/8"                                       | 94   | 106   | 737  | USH0U16 |
| <b>LBT-D416-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 116  | 130   | 1202 | USH0U15 |
| <b>LB-D318-0Y-1M</b>  | 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 |
| <b>LB-D318-0Y-2M</b>  |          |                              |  |              |                            |                             |                    |                      |        |  | 84   | 94  | 594  | USH0U17 |
| <b>LBT-D318-0Y-2M</b> | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        |                    |                      |        |  | 92   | 104   | 737  | USH0U16 |
| <b>LB-Q420-0Y-2M</b>  | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        | 28,6               | 1" 1/8               | 15,8   | 5/8"                                       | 122  | 134   | 737  | USH0U16 |
| <b>LBT-Q420-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 139  | 153   | 1202 | USH0U15 |
| <b>LB-Q521-0Y-2T</b>  | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        | 28,6               | 1" 1/8               | 19,0   | 3/4"                                       | 144  | 153   | 1202 | USH0U16 |
| <b>LBT-Q521-0Y-2T</b> | USLR12-M | 11,0                         | 6,3  | 5,5          | 6,2                        | 1/2"                        |                    |                      |        |  | 22,2   | 7/8"  | 178  | 189     |
| <b>LB-Q424-0Y-2M</b>  | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        | 28,6               | 1" 1/8               | 15,8   | 5/8"                                       | 127  | 134   | 737  | USH0U16 |
| <b>LBT-Q424-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 139  | 153   | 1202 | USH0U15 |
| <b>LB-Q524-0Y-2M</b>  | USLR04   | 3,4                          | 3,6  | 3,1          | 3,5                        | 1/4"                        | 28,6               | 1" 1/8               | 15,8   | 5/8"                                       | 127  | 137   | 737  | USH0U16 |
| <b>LBT-Q524-0Y-2T</b> | USLR06-M | 6,6                          | 6,3  | 5,5          | 6,2                        | 1/4"                        |                    |                      |        |  | 139  | 153   | 1202 | USH0U15 |



## Technical data

| Condensing units |            | Liquid receiver <sup>⑪</sup> |  |              |                            |                             | Piping connections |                      |        |  | Installation/Transport                       |   |      | Housing  |
|------------------|------------|------------------------------|--|--------------|----------------------------|-----------------------------|--------------------|----------------------|--------|--|--|---|------|----------|
| Model            | Model      | R134a<br>R450A<br>R513A      | R404A<br>R507A<br>R407F<br>R407A<br>R448A<br>R449A | R407C<br>R22 | Safety valve<br>connection | Compressor<br>suction valve |                    | Liquid<br>line valve |        | Net Weight (kg)<br>(Standard construction) | Gross weight (kg)<br>(Standard construction) | Volume with packaging<br>(dm <sup>3</sup> ) |      |          |
|                  |            |                              |  |              |                            | Ø mm                        | Ø inch             | Ø mm                 | Ø inch |  |  |   |      |          |
|                  |            | ⑫                            |  |              |                            |                             | ⑬                  |                      |        |  | ⑭  |   |      |          |
| 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"                        |                    |                      | 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"                        |                    |                      | 22,2   | 7/8"                                       | 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"                        |                    |                      | 22,2   | 7/8"                                       | 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"                        |                    |                      | 22,2   | 7/8"                                       | 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"                        |                    |                      | 22,2   | 7/8"                                       | 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  |            |                              |  |              |                            |                             |                    |                      |        |  | 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  |            |                              |  |              |                            |                             |                    |                      |        |  | 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  |            |                              |  |              |                            |                             |                    |                      |        |  | 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 |            |                              |  |              |                            |                             |                    |                      |        |  | 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 |            |                              |  |              |                            |                             |                    |                      |        |  | 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**

**INT69 TML® Diagnose**

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<br>220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz<br>PTC/AMS sensors; INT69 protection device;<br>POE oil filling; suction and discharge valves; rubber mounts          | ①         | ①                    | ①         | ①                   | ①         | ①                    |                      |                      |
| Semi-hermetic compressor with integrated direct electric start-up motor<br>220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz<br>PTC/AMS sensors; INT69 DIAGNOSE protection device;<br>POE oil filling; suction and discharge valves; rubber mounts |           |                      |           |                     |           |                      | ①                    |                      |
| Semi-hermetic compressor with integrated PWS electric start-up motor<br>380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz<br>AMS sensors; INT69 DIAGNOSE protection device;<br>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 rotalock valve,<br>safety valve (30 bar set-point)   | ①         | ①                    | ①         | ①                   | ①         | ①                    | ①                    | ①                    |
| Vibration absorber pipe on compressor discharge line  | ①         | ①                    | ①         | ①                   | ①         | ①                    | ①                    | ①                    |
| Optional "Package", including:<br>- Oil separator, liquid line (filter, liquid sight glass, shut-off valve),<br>- High/Low safety pressure switch (PED certified, Cat. IV)  | ②<br>④    |                      | ②<br>④    |                     | ②<br>④    |                      |                      |                      |
| Optional "Package", including:<br>- Oil separator, liquid line (filter, liquid sight glass, shut-off valve)<br>- High/Low safety pressure switch (PED certified, Cat. IV)<br>- Electrical wiring junction box   |           | ③<br>④               |           | ③<br>④              |           | ③<br>④               | ③<br>④               | ③<br>④               |
| 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                    |
| Protecting Housing for outdoor installation   | 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 | LB-B...1 | LB-B...2 | LB-D...1 | LB-D...2 | LB-Q...2 | LB-S...2 | LB-S...4 | LB-V...2 | LB-V...4 | LB-Z...4 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Semi-hermetic compressor with integrated direct electric start-up motor<br>220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz<br>PTC/AMS sensors; INT69 protection device;<br>POE oil filling; Suction and compression valves; Rubber mounts   | ①        | ①        | ①        | ①        | ①        | ①        |          |          |          |          |          |          |
| Semi-hermetic compressor with integrated direct electric start-up motor<br>220-240V Δ / 380-420V / 3 / 50 Hz <> 265-290V Δ / 440-480V / 3 / 60 Hz<br>PTC/AMS sensors; INT69 DIAGNOSE protection device;<br>POE oil filling; Suction and compression valves; Rubber mounts  |          |          |          |          |          |          | ①        |          |          |          |          |          |
| Semi-hermetic compressor with integrated PWS electric start-up motor<br>380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz<br>AMS sensors; INT69 DIAGNOSE protection device;<br>POE oil filling; Suction and compression valves; Rubber mounts.  |          |          |          |          |          |          |          | ①        | ①        |          |          |          |
| Semi-hermetic compressor with split integrated electric start-up motor (PWS)<br>380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz; AMS Sensors; Multifunctional<br>control and diagnosis device INT69TML DIAGNOSE; Delivery temperature<br>control device; Electronic pressure switch for lubrication control; POE oil filling,<br>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        |
| Liquid receiver (PED certified) with large volume, brazing Rotalock valve, plug<br>for safety valve connection   | ①        | ①        | ①        | ①        | ①        | ①        | ①        | ①        | ①        | ①        | ①        | ①        |
| 30 bar safety valve<br>(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        |
| Optional "Package", including:<br>- Liquid line (filter, liquid sight glass, service valve)<br>- High/Low safety pressure switch (PED certified, Cat.IV)<br>- High pressure switch for condensation control<br>- Electrical wiring junction box  | ③        | ④        | ③        | ④        | ③        | ④        | 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        |
| Factory mounted Check-valve for compressor discharge line  |          | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        | ⑥        |
| Electrical wiring of "Package" components<br>(pressure switches, fan motors, fan speed control)  |          | ○        |          | ○        |          | ○        | ○        | ○        | ○        | ○        | ○        | ○        |
| Protecting Housing for outdoor installation  | 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 |          |
|                       | Length                  | Width | Height | Length               | Height | Distance between holes | Distance from side A | Ref.    | Page | Length              | Width (base) | Width (max) | Height | Weight  | Code     |
|                       | 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      |          |
| <b>EB-A054-0Y-1M</b>  | 771                     | 700   | 463    | 721                  | 410    | 470                    | 115                  | 1       | 25   | 771                 | 703          | 724         | 486    | 22      | USHA0U26 |
| <b>EBT-A054-0Y-2M</b> | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-A075-0Y-1M</b>  | 771                     | 700   | 463    | 721                  | 410    | 470                    | 115                  | 1       | 25   | 771                 | 703          | 724         | 486    | 22      | USHA0U26 |
| <b>EBT-A075-0Y-2M</b> | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-A16-0Y-1M</b>   | 771                     | 700   | 463    | 721                  | 410    | 470                    | 115                  | 1       | 25   | 771                 | 703          | 724         | 486    | 22      | USHA0U26 |
| <b>EBT-A16-0Y-2M</b>  | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-A17-0Y-1M</b>   | 771                     | 700   | 463    | 721                  | 410    | 470                    | 115                  | 1       | 25   | 771                 | 703          | 724         | 486    | 22      | USHA0U26 |
| <b>EBT-A17-0Y-2M</b>  | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-A157-0Y-1M</b>  | 771                     | 700   | 543    | 721                  | 490    | 470                    | 115                  | 2       | 25   | 771                 | 703          | 724         | 566    | 25      | USHA0U27 |
| <b>EBT-A157-0Y-2M</b> | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-B159-0Y-1M</b>  | 771                     | 700   | 463    | 721                  | 410    | 470                    | 115                  | 1       | 25   | 771                 | 703          | 724         | 486    | 22      | USHA0U26 |
| <b>EBT-B159-0Y-2M</b> | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-B210-0Y-1M</b>  | 771                     | 700   | 543    | 721                  | 490    | 470                    | 115                  | 2       | 25   | 771                 | 703          | 724         | 566    | 25      | USHA0U27 |
| <b>EBT-B210-0Y-2M</b> | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EB-D211-0Y-1M</b>  | 771                     | 700   | 543    | 721                  | 490    | 470                    | 115                  | 2       | 25   | 771                 | 703          | 724         | 566    | 25      | USHA0U27 |
| <b>EBT-D211-0Y-2M</b> | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EB-D213-0Y-1M</b>  | 771                     | 700   | 543    | 721                  | 490    | 470                    | 115                  | 2       | 25   | 771                 | 703          | 724         | 566    | 25      | USHA0U27 |
| <b>EBT-D213-0Y-2M</b> | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EB-D313-0Y-1M</b>  | 771                     | 700   | 543    | 721                  | 490    | 470                    | 115                  | 2       | 25   | 771                 | 703          | 724         | 566    | 25      | USHA0U27 |
| <b>EBT-D313-0Y-2M</b> | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EB-D316-0Y-2M</b>  | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EBT-D316-0Y-2M</b> | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EB-D416-0Y-2M</b>  | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-D416-0Y-2M</b> | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 5       | 27   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EB-D318-0Y-2M</b>  | 1060                    | 770   | 559    | 1010                 | 505    | 600                    | 90                   | 3       | 26   | 1060                | 771          | 792         | 583    | 32      | USHA0U29 |
| <b>EBT-D318-0Y-2M</b> | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 4       | 26   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-D418-0Y-2M</b> | 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 |          |
|                        | Length                  | Width | Height | Length               | Height | Distance between holes | Distance from side A | Ref.    | Page | Length              | Width (base) | Width (max) | Height | Weight  | Code     |
|                        | 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      |          |
| Model                  |                         |       |        |                      |        |                        |                      |         |      |                     |              |             |        |         |          |
| <b>EB-Q420-0Y-2M</b>   | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 6       | 27   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-Q420-0Y-2M</b>  | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EB-Q521-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q521-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-Q424-0Y-2M</b>   | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 6       | 27   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-Q424-0Y-2M</b>  | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EB-Q524-0Y-2M</b>   | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 6       | 27   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-Q524-0Y-2M</b>  | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EB-Q528-0Y-2M</b>   | 1060                    | 770   | 664    | 1010                 | 610    | 600                    | 90                   | 6       | 27   | 1060                | 771          | 792         | 688    | 36      | USHA0U30 |
| <b>EBT-Q528-0Y-2M</b>  | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EB-Q728-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q728-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-Q533-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q533-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-Q733-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q733-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-Q536-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q536-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-Q736-0Y-2M</b>   | 1420                    | 760   | 689    | 1370                 | 635    | 600                    | 80                   | 7       | 28   | 1420                | 763          | 784         | 713    | 44      | USHA0U31 |
| <b>EBT-Q736-0Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 8       | 28   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EB-S842-3Y-2M</b>   | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 9       | 29   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EBT-S842-3Y-2M</b>  | 1556                    | 1010  | 1144   | 860                  | 1506   | 700                    | 80                   | 10      | 29   | 1556                | 861          | 882         | 1169   | 65      | USHA0U33 |
| <b>EB-S1242-3Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 9       | 29   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EBT-S1242-3Y-2M</b> | 1556                    | 1010  | 1144   | 860                  | 1506   | 700                    | 80                   | 10      | 29   | 1556                | 861          | 882         | 1169   | 65      | USHA0U33 |
| <b>EB-S1052-3Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 9       | 29   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EBT-S1052-3Y-2M</b> | 1556                    | 1010  | 1144   | 860                  | 1506   | 700                    | 80                   | 10      | 29   | 1556                | 861          | 882         | 1169   | 65      | USHA0U33 |
| <b>EB-S1552-3Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 9       | 29   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EBT-S1552-3Y-2M</b> | 1556                    | 1010  | 1144   | 860                  | 1506   | 700                    | 80                   | 10      | 29   | 1556                | 861          | 882         | 1169   | 65      | USHA0U33 |
| <b>EB-S1556-3Y-2M</b>  | 1556                    | 810   | 944    | 860                  | 1506   | 700                    | 80                   | 9       | 29   | 1556                | 861          | 882         | 968    | 57      | USHA0U32 |
| <b>EBT-S1556-3Y-2M</b> | 1556                    | 1010  | 1144   | 860                  | 1506   | 700                    | 80                   | 10      | 29   | 1556                | 861          | 882         | 1169   | 65      | USHA0U33 |
| <b>EB-S2056-3Y-2M</b>  | 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 |         |
|                  | Length                  | Width | Height | Length               | Height | Distance between holes | Distance from side A | Ref.    | Page | Length              | Width (base) | Width (max) | Height | Weight  | Code    |
|                  | 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      |         |
| Model            |                         |       |        |                      |        |                        |                      |         |      |                     |              |             |        |         |         |
| 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

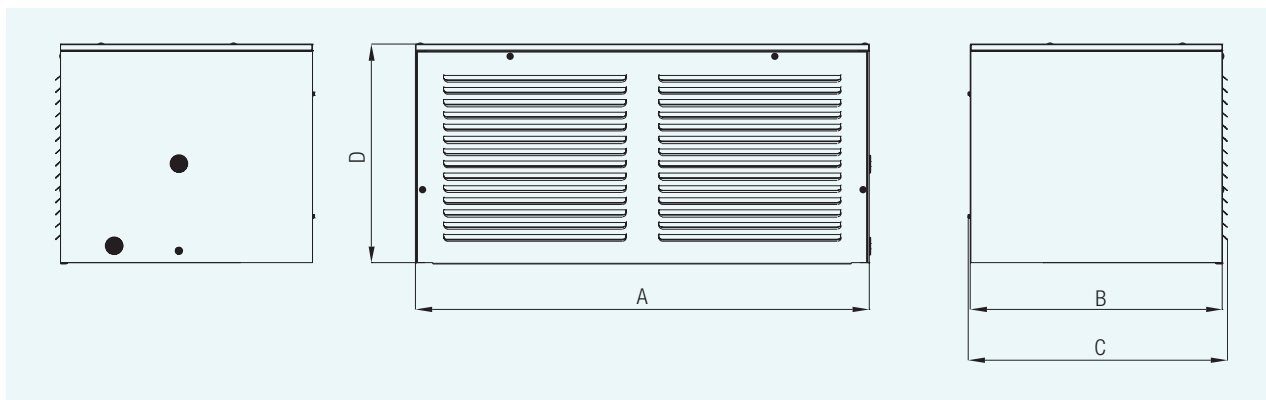
## Dimensions

| Condensing unit   | Standard construction ① |       |        |                      |        |                        |                      |         |      | Unit with Housing ② |              |             |        |         |         |
|-------------------|-------------------------|-------|--------|----------------------|--------|------------------------|----------------------|---------|------|---------------------|--------------|-------------|--------|---------|---------|
|                   | Overall dimensions      |       |        | Condenser dimensions |        | Fixing holes position  |                      | Drawing |      | Overall dimensions  |              |             |        | Housing |         |
|                   | Length                  | Width | Height | Length               | Height | Distance between holes | Distance from side A | Ref.    | Page | Length              | Width (base) | Width (max) | Height | Weight  | Code    |
|                   | 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          | 938         | 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-Z25106Y-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-Z30126Y-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<br>kg |
|-----------------|--------|--------------|-------------|--------|--------------|
|                 | A      | B            | C           | D      |              |
| <b>USHOU13</b>  | 1370   | 812          | 833         | 660    | 45           |
| <b>USHOU14</b>  | 1520   | 832          | 853         | 835    | 54           |
| <b>USHOU15</b>  | 1370   | 762          | 783         | 660    | 44           |
| <b>USHOU16</b>  | 1010   | 762          | 783         | 547    | 33           |
| <b>USHOU17</b>  | 937    | 702          | 723         | 478    | 27           |
| <b>USHOU18</b>  | 746    | 622          | 643         | 395    | 20           |
| <b>USHOU20</b>  | 712    | 702          | 723         | 503    | 24           |
| <b>USHOU21</b>  | 512    | 702          | 723         | 450    | 19           |
| <b>USHAOU22</b> | 1520   | 917          | 938         | 835    | 60           |
| <b>USHAOU23</b> | 1370   | 917          | 938         | 660    | 49           |
| <b>USHAOU24</b> | 1370   | 1012         | 1033        | 660    | 53           |
| <b>USHAOU25</b> | 1520   | 1117         | 1138        | 835    | 68           |
| <b>USHAOU26</b> | 721    | 702          | 725         | 432    | 22           |
| <b>USHAOU27</b> | 721    | 702          | 725         | 514    | 25           |
| <b>USHAOU29</b> | 1010   | 770          | 793         | 529    | 32           |
| <b>USHAOU30</b> | 634    | 770          | 793         | 634    | 36           |
| <b>USHAOU31</b> | 1370   | 762          | 785         | 659    | 44           |
| <b>USHAOU32</b> | 1506   | 860          | 883         | 834    | 57           |
| <b>USHAOU33</b> | 1506   | 860          | 883         | 1034   | 65           |

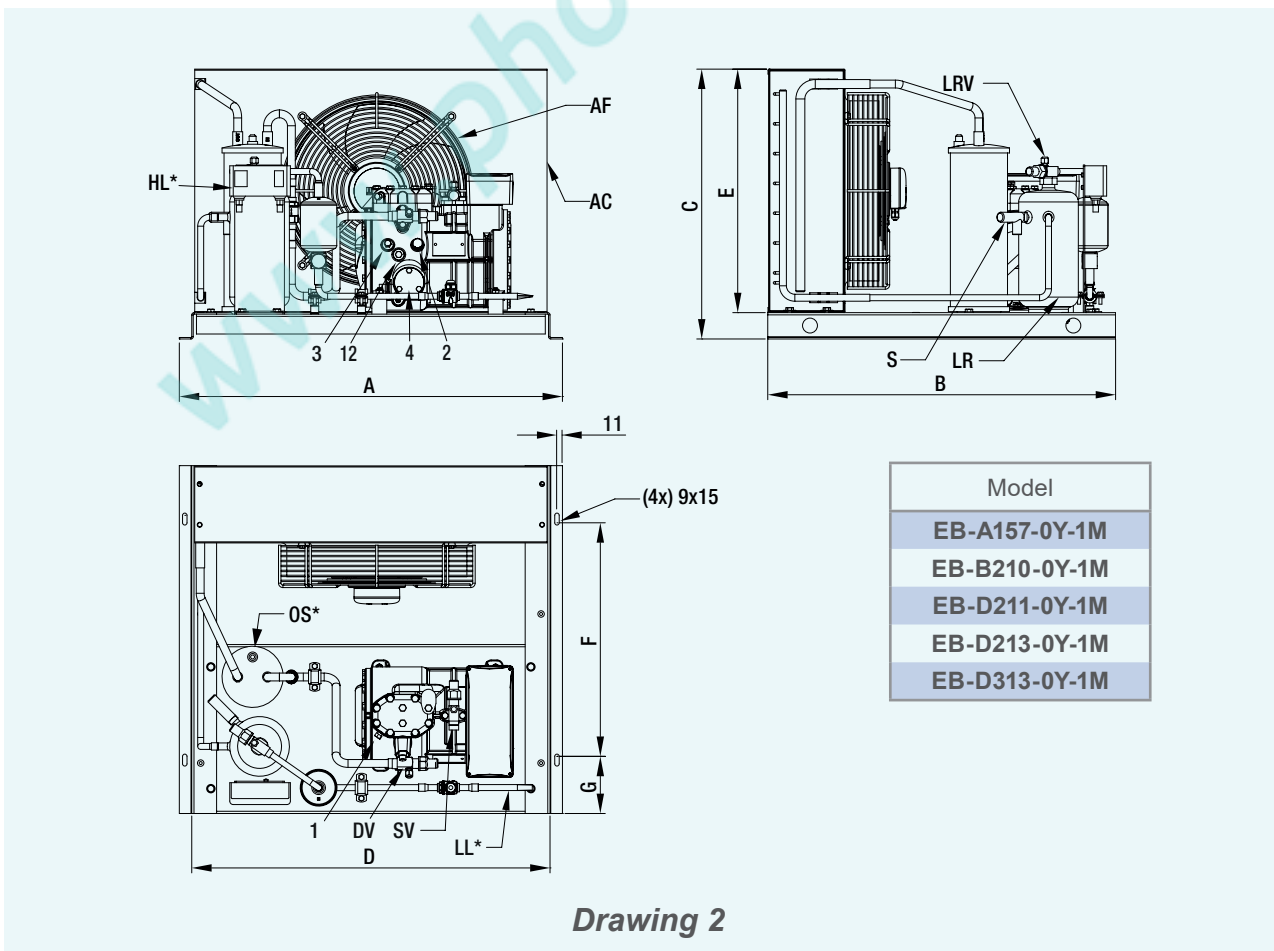
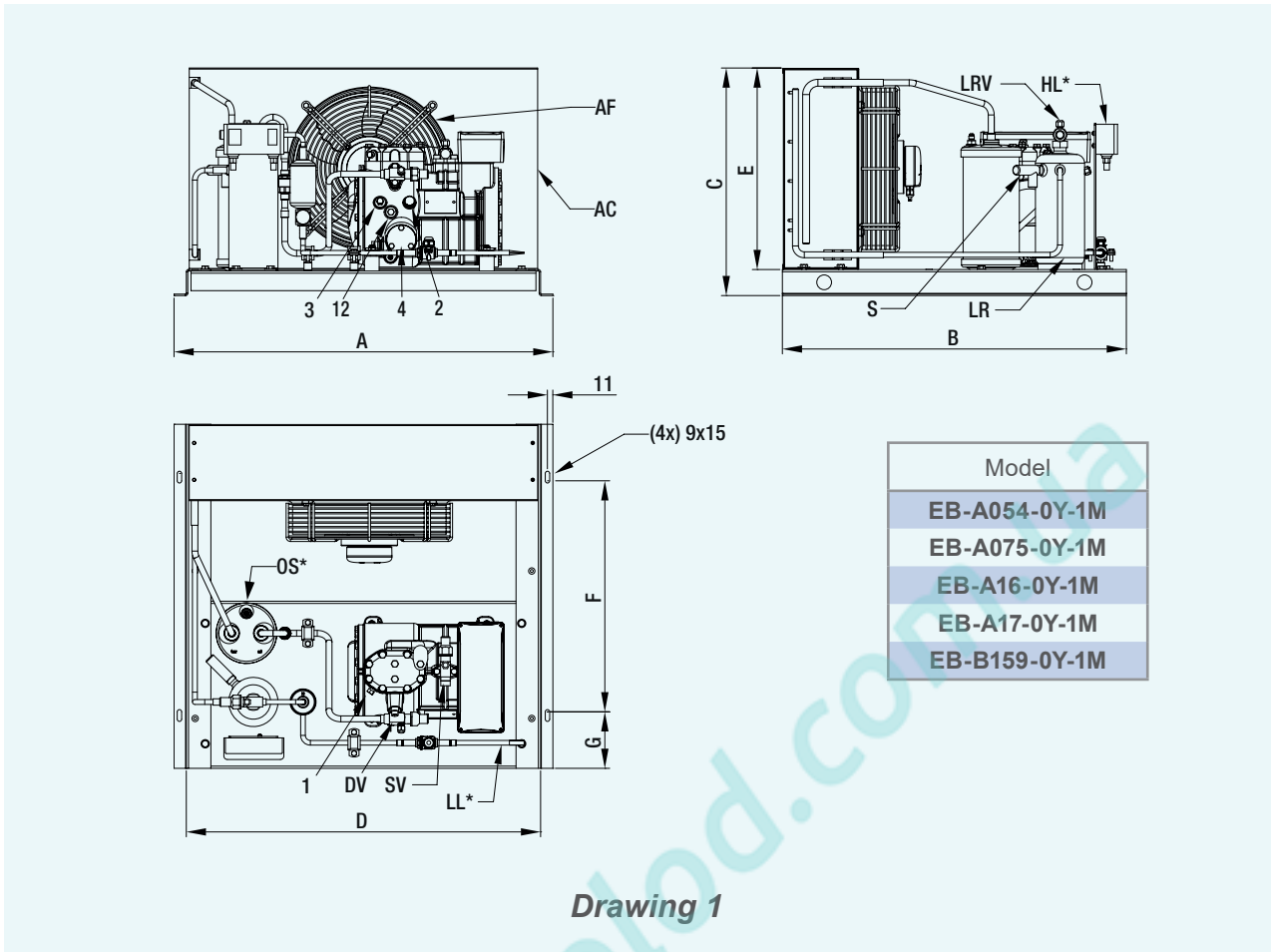
## Dimensional drawings - Positions and dimensions

| Condensing units model |  |         | EB-A...1<br>LB-A...1 | EB-A...2<br>LB-A...2 | EB-B...1<br>LB-B...1 | EB-B...2<br>LB-B...2 | EB-D...1<br>LB-D...1 | EB-D...2<br>LB-D...2 | EB-Q...2<br>LB-Q...2 | EB-S...2<br>LB-S...2 | LBT-S...4 | LB-V...2<br>LBT-V...2 | LB-V...4<br>LBT-V...4 | LB-Z...4<br>LBT-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"                  |
| 2                      | Low-pressure plug                      | NPT     | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"                 | 1/8"      | 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"      | 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"                  |
| 7                      | Connection for liquid injection valve  | NPT     |                      |                      |                      |                      |                      |                      | 1/8"                 | 1/4"                 | 1/4"      | 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"                  |
| 9                      | Oil pressure switch connection (LP)    | SAE     |                      |                      |                      |                      |                      |                      |                      |                      |           | 1/4"                  | 1/4"                  | 1/4"                  |
| 10                     | Oil pressure switch connection (HP)    | SAE     |                      |                      |                      |                      |                      |                      |                      |                      |           | 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"                 | 1/4"                 | 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                     |
| AF                     | Fan motor                              |         | 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                     |
| LR                     | Liquid receiver                        |         | 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                     |
| SV                     | Suction valve                          |         | 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                     |
| EB                     | Electric wiring box                    |         | 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                     |
| H                      | High pressure switch                   |         | 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                     |
| S                      | Safety valve / Safety valve connection |         | 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                     |

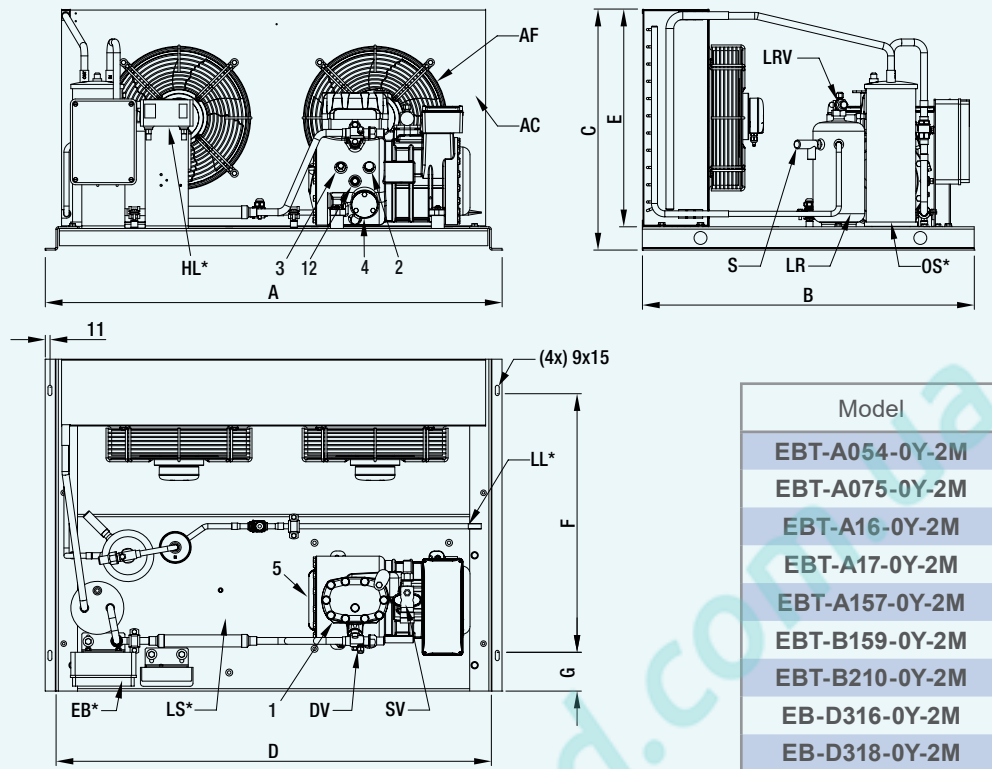
- ① Optional components supplied on request.
- ② See Technical Data, page 8-9 and 12-13.
- ③ See Technical Data, page 10-11 and 14-15.



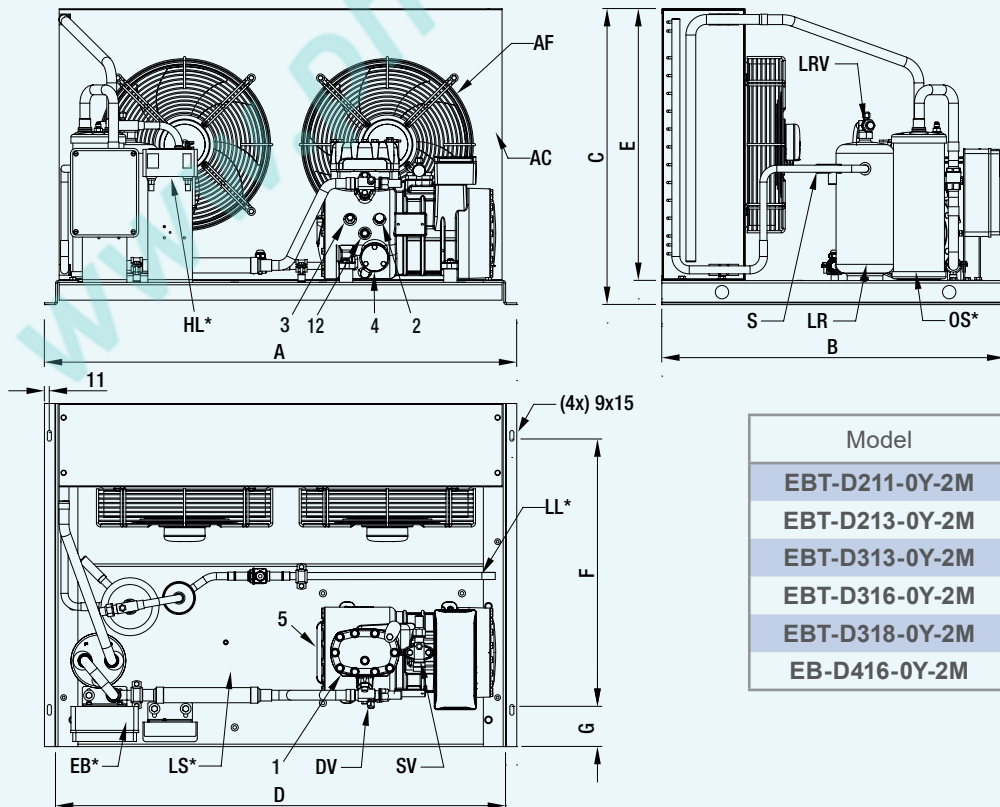
## Dimensional drawings



## Dimensional drawings

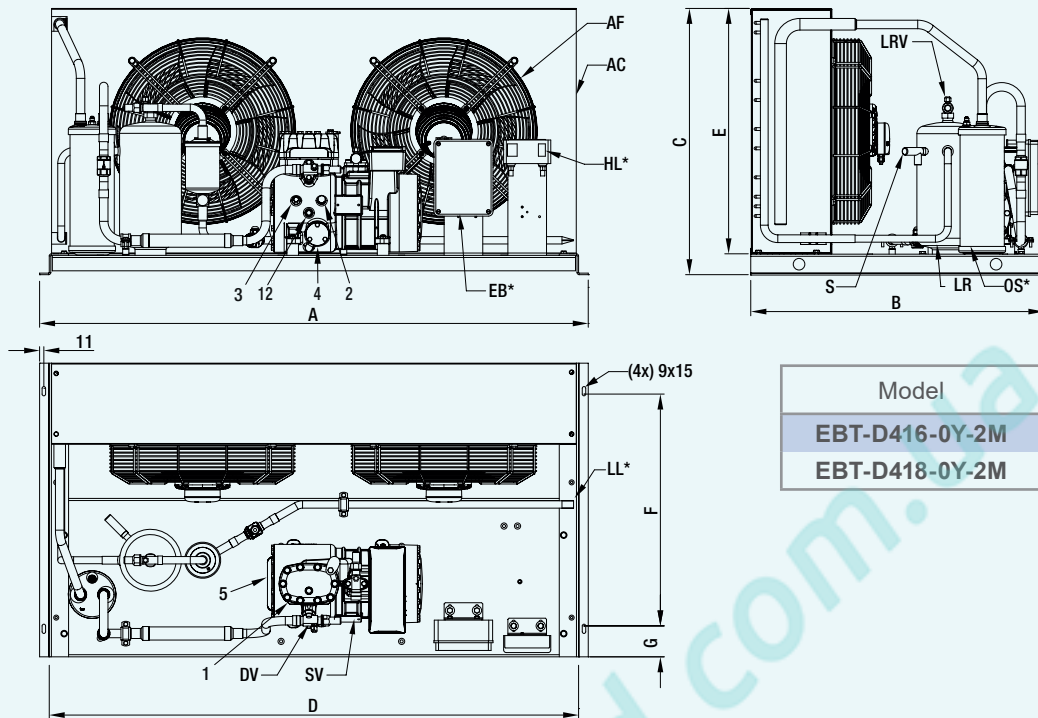


Drawing 3

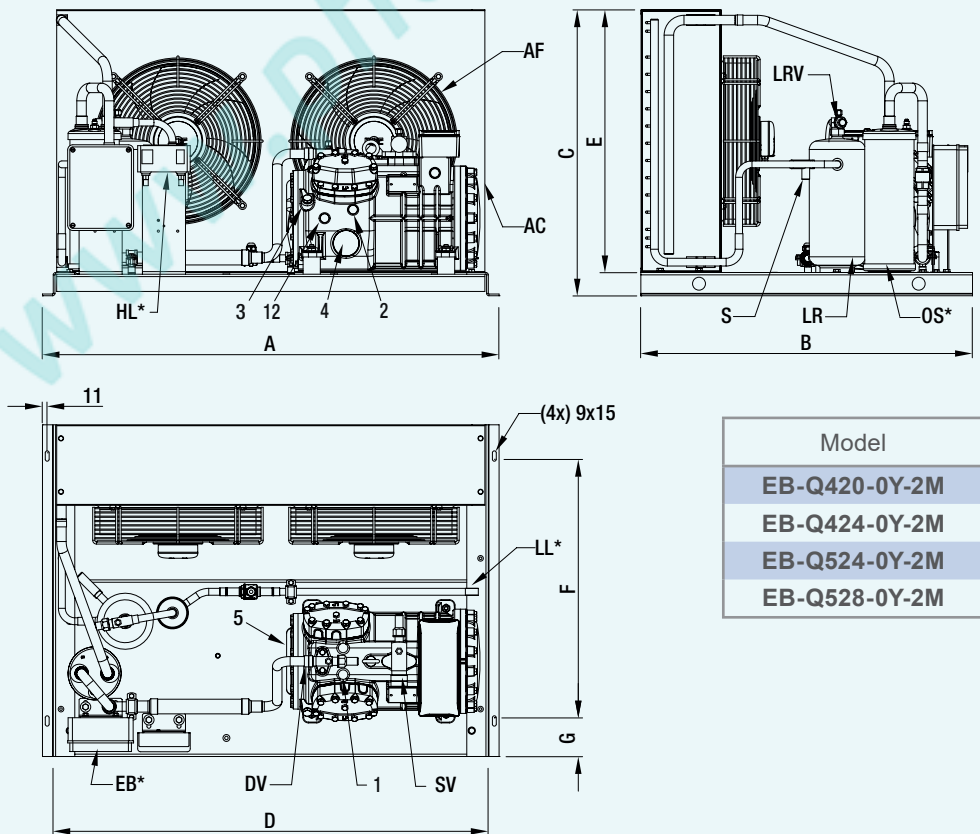


Drawing 4

## Dimensional drawings

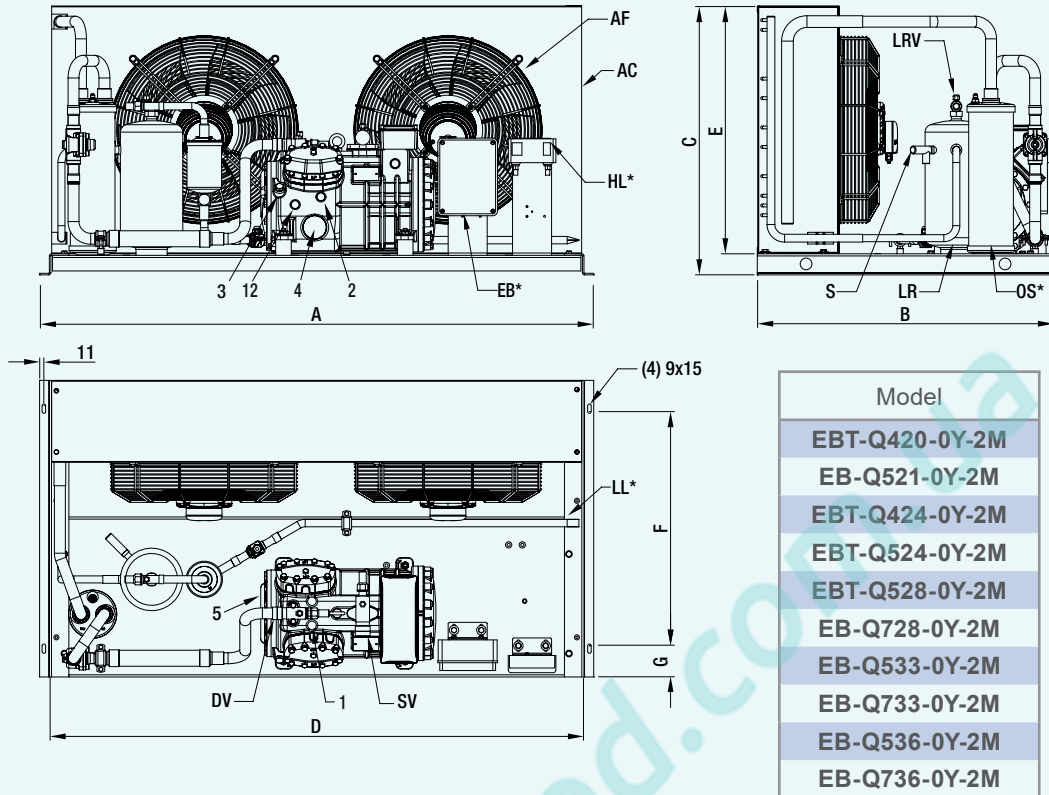


Drawing 5

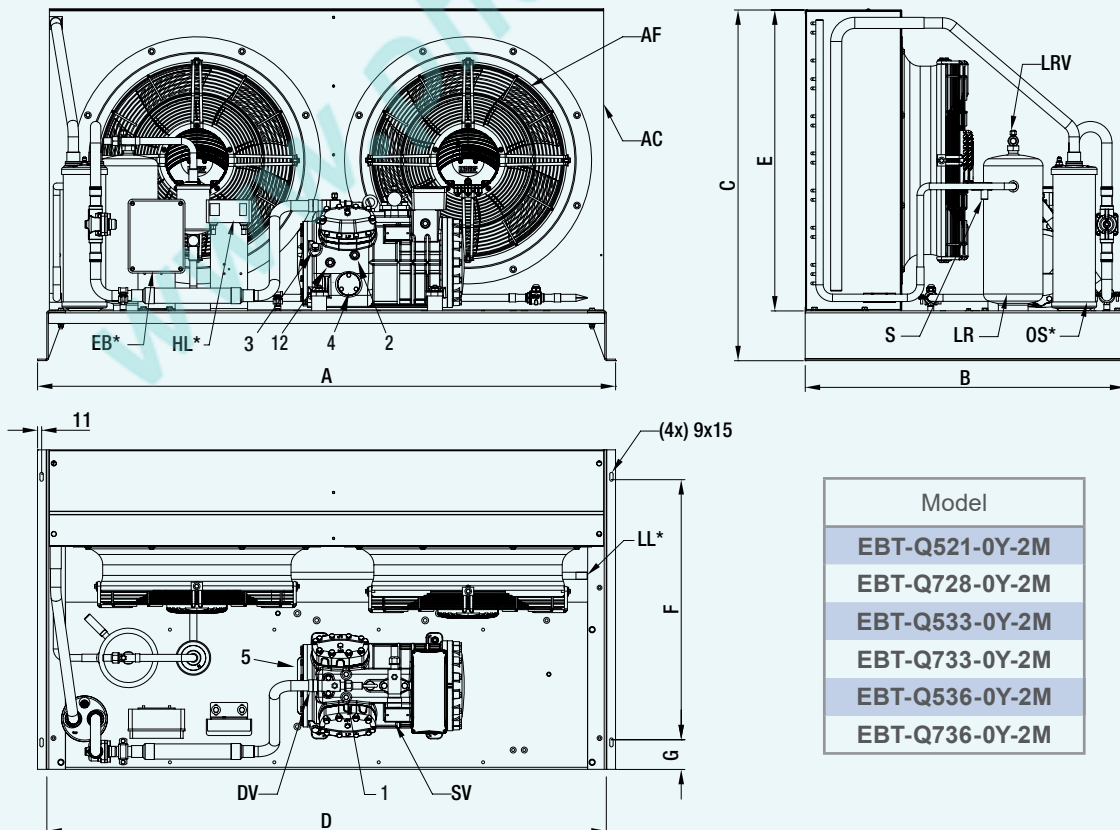


Drawing 6

## Dimensional drawings

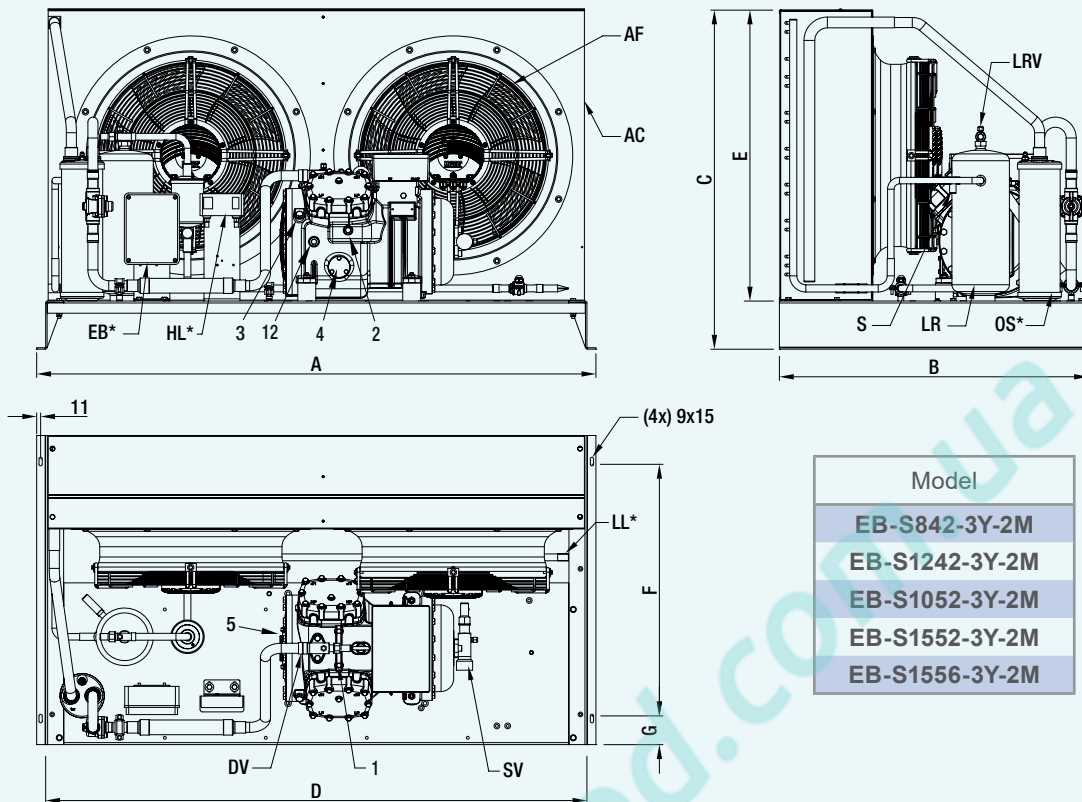


Drawing 7

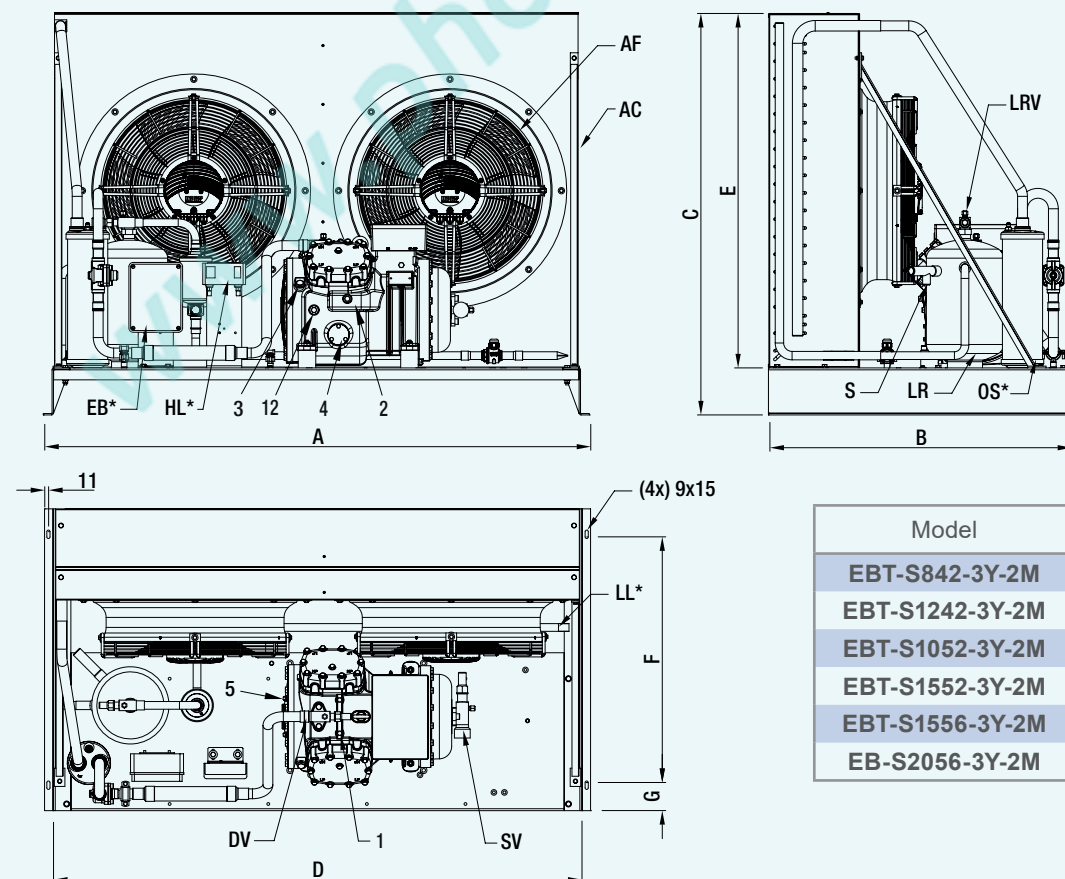


Drawing 8

## Dimensional drawings



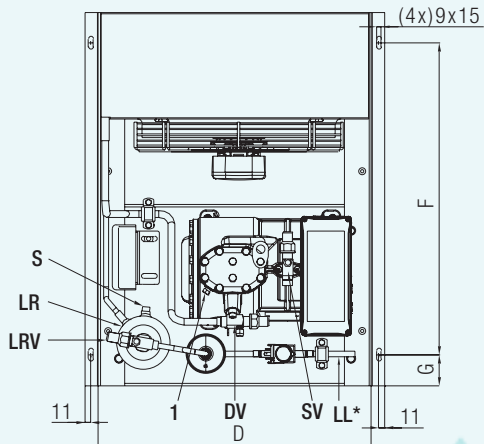
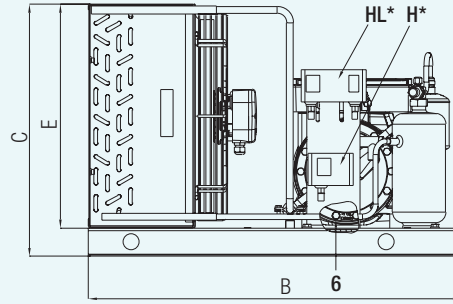
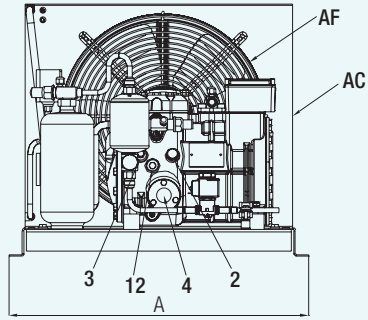
**Drawing 9**



**Drawing 10**

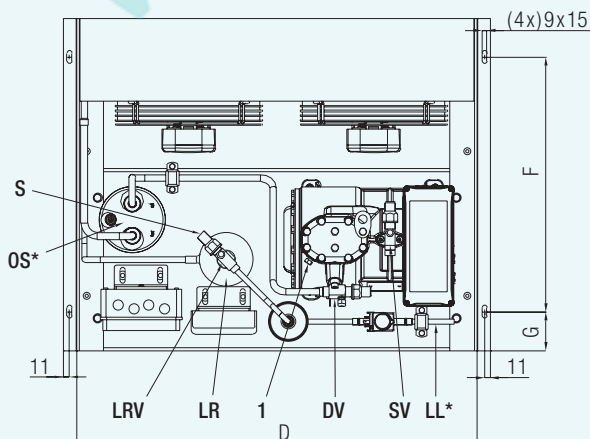
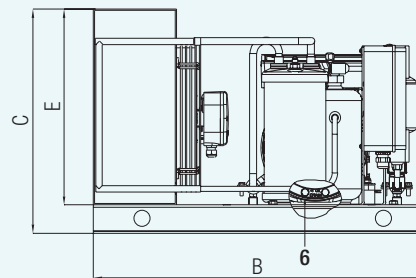
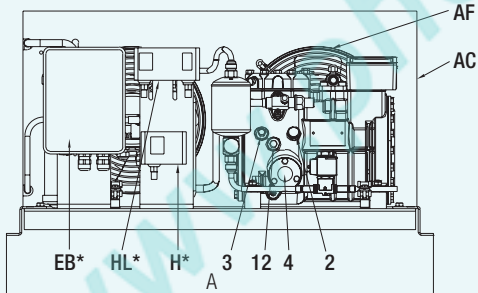


## Dimensional drawings



| Model         |
|---------------|
| LB-A075-0Y-1M |
| LB-A16-0Y-1M  |
| LB-A17-0Y-1M  |
| LB-A157-0Y-1M |
| LB-B159-0Y-1M |
| LB-B210-0Y-1M |

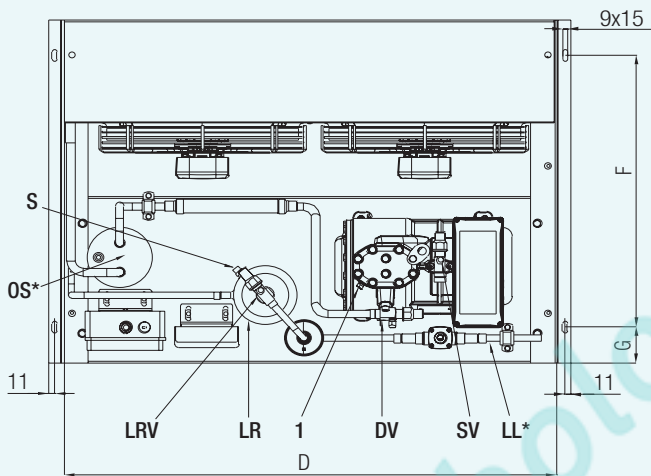
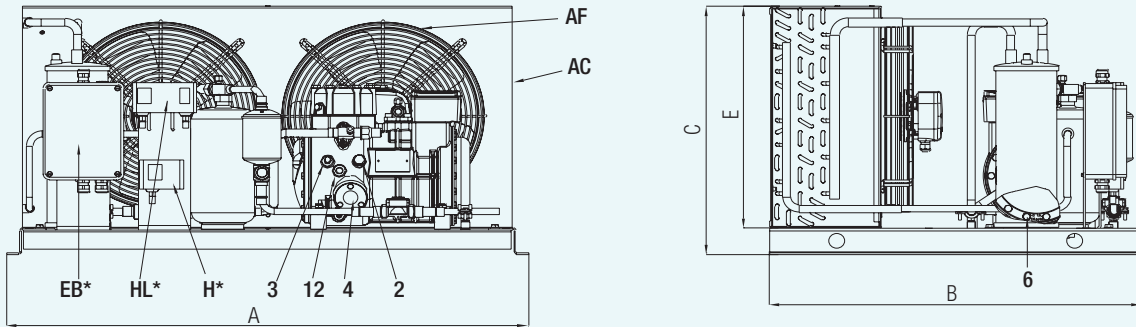
**Drawing 11**



| Model          |
|----------------|
| LB1-A075-0Y-2M |
| LB-A16-0Y-2M   |
| LB-A17-0Y-2M   |
| LB-A157-0Y-2M  |
| LB-B159-0Y-2M  |
| LB-B210-0Y-2M  |

**Drawing 12**

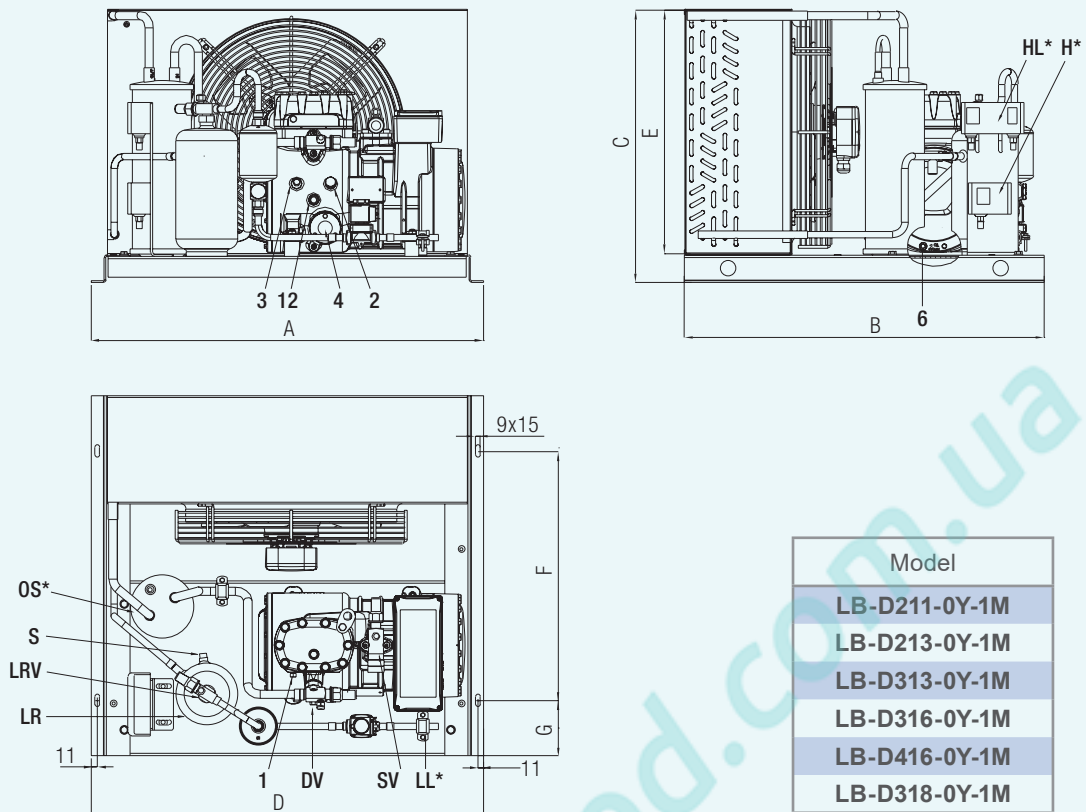
## Dimensional drawings



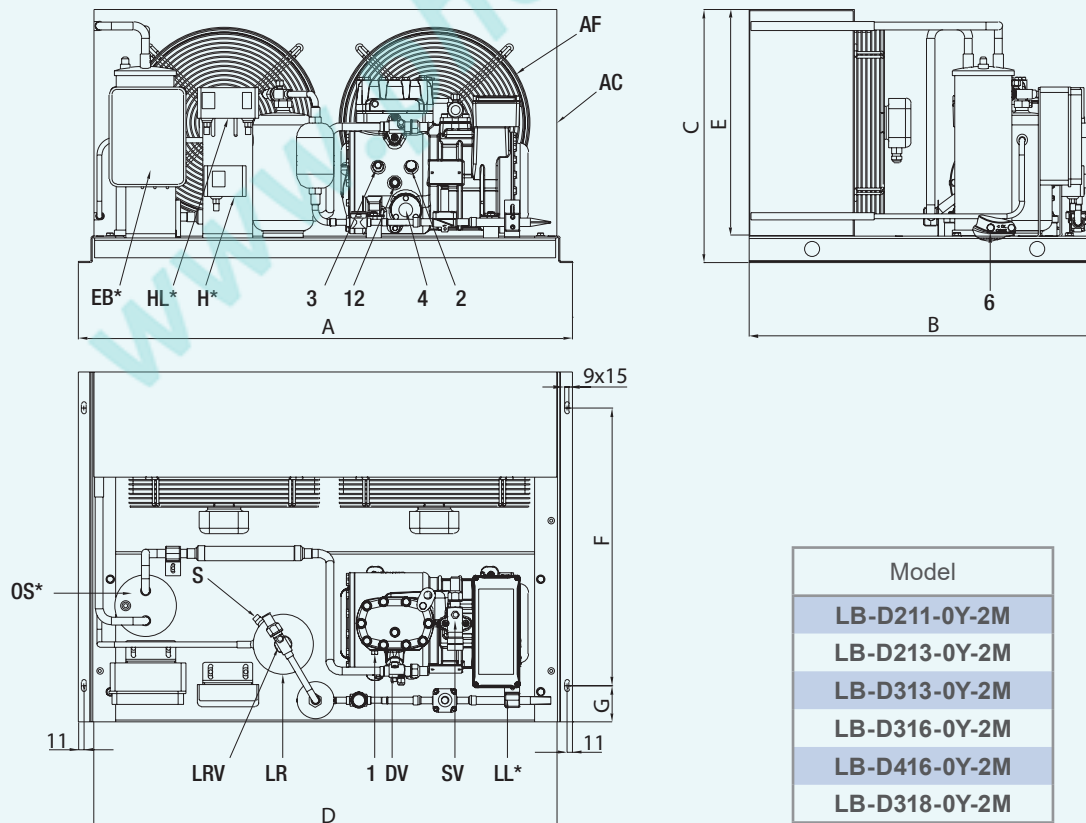
| Model          |
|----------------|
| LBT-A075-0Y-2M |
| LBT-A106-0Y-2M |
| LBT-A107-0Y-2M |
| LBT-A157-0Y-2M |
| LBT-B159-0Y-2M |
| LBT-B210-0Y-2M |

**Drawing 13**

## Dimensional drawings

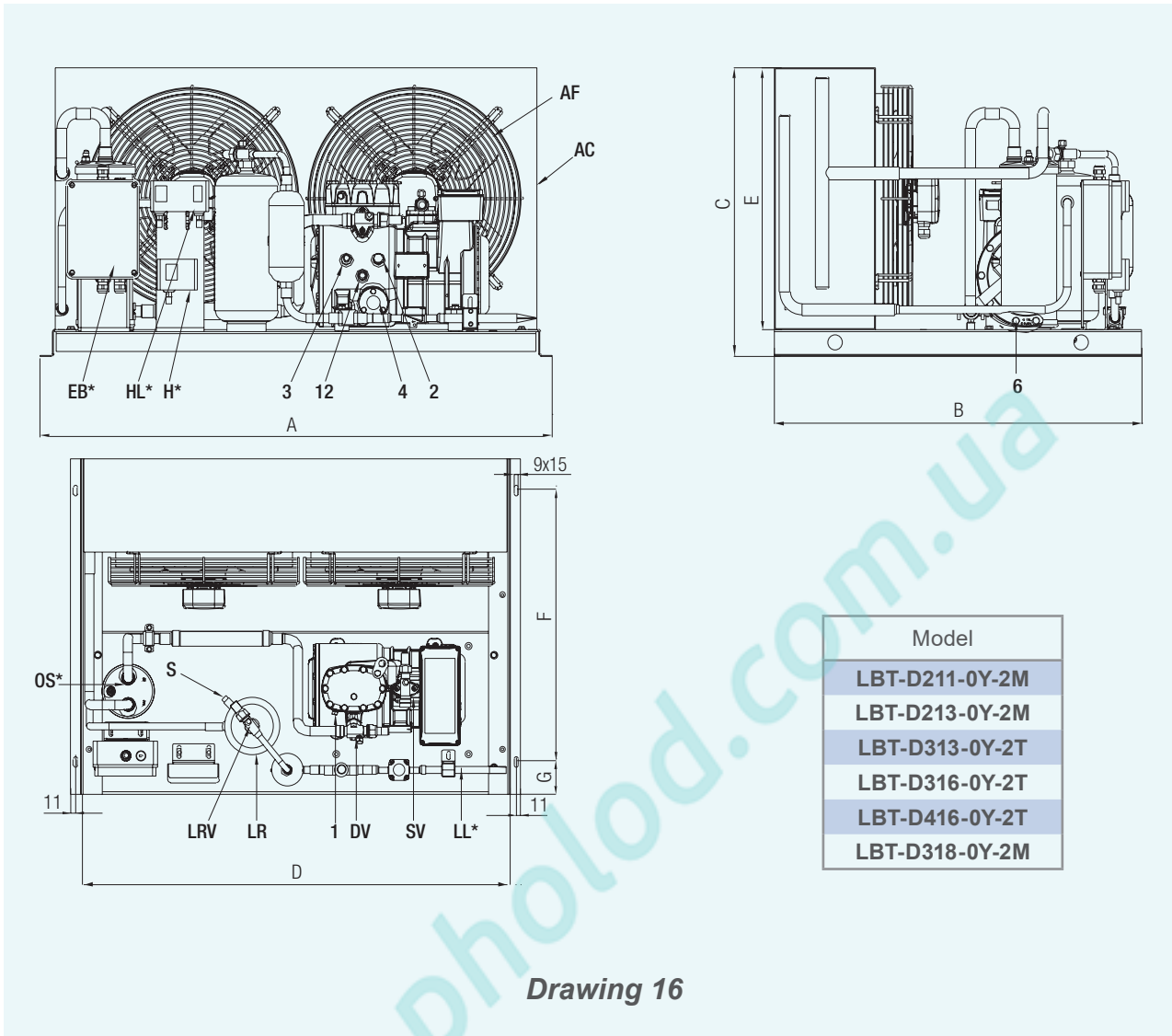


**Drawing 14**

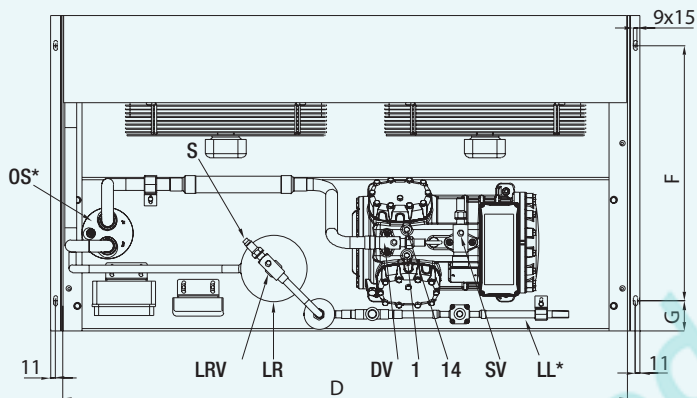
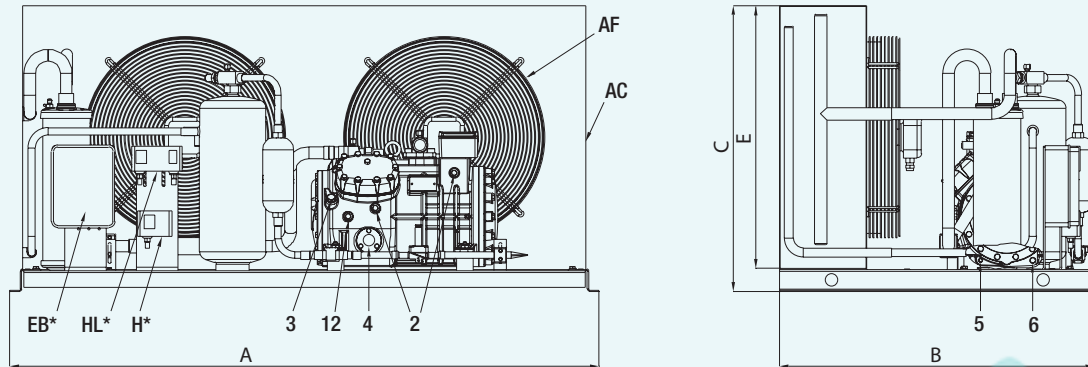


**Drawing 15**

## Dimensional drawings

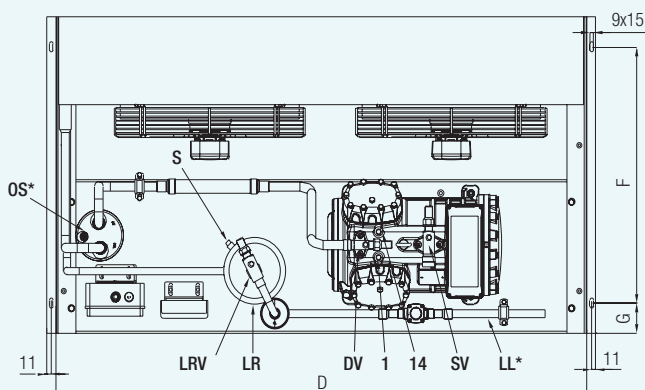
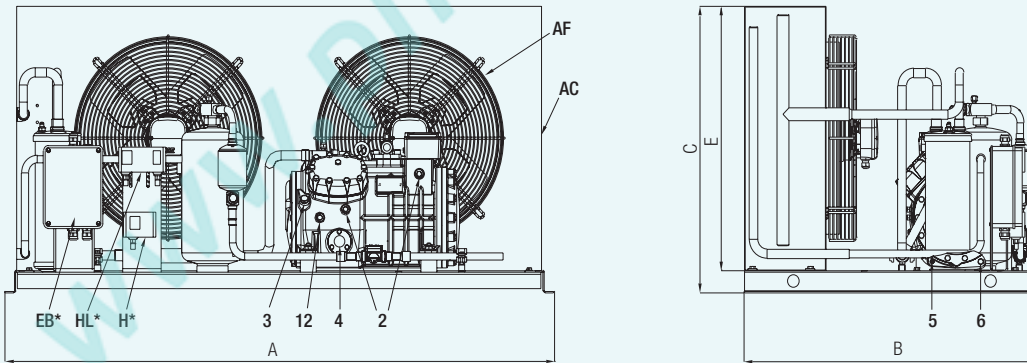


## Dimensional drawings



| Model         |
|---------------|
| LB-Q420-0Y-2M |
| LB-Q521-0Y-2T |
| LB-Q424-0Y-2M |
| LB-Q524-0Y-2M |
| LB-Q528-0Y-2M |
| LB-Q728-0Y-2T |
| LB-Q533-0Y-2M |
| LB-Q733-0Y-2T |
| LB-Q536-0Y-2T |
| LB-Q736-0Y-2T |

**Drawing 17**

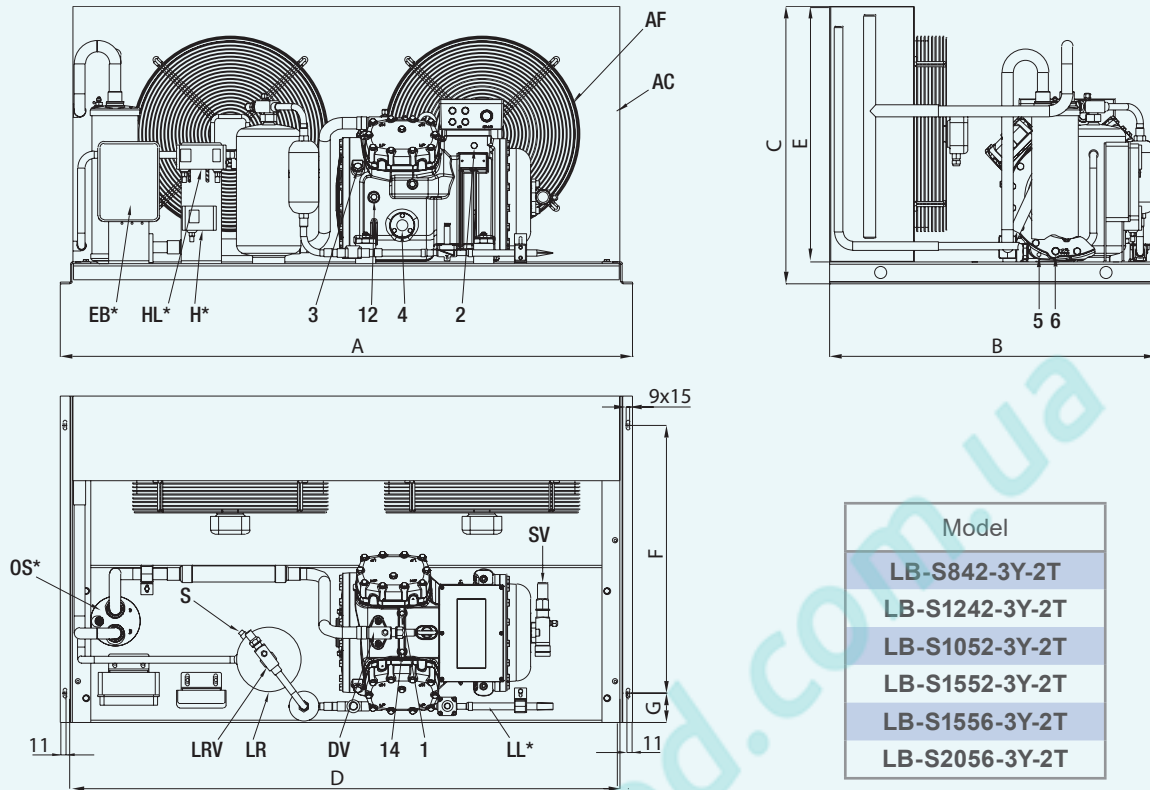


| Model          |
|----------------|
| LBT-Q420-0Y-2T |
| LBT-Q521-0Y-2T |
| LBT-Q424-0Y-2T |
| LBT-Q524-0Y-2T |
| LBT-Q528-0Y-2T |
| LBT-Q728-0Y-2T |
| LBT-Q533-0Y-2T |
| LBT-Q733-0Y-2T |
| LBT-Q536-0Y-2T |
| LBT-Q736-0Y-2T |

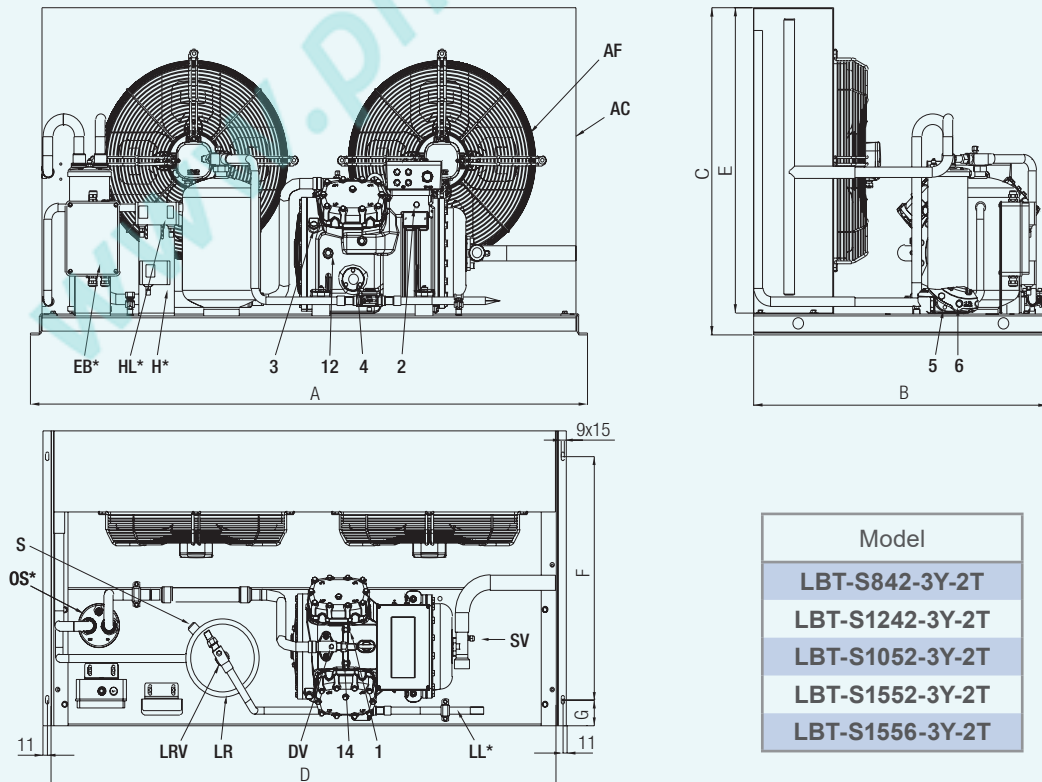
**Drawing 18**



## Dimensional drawings

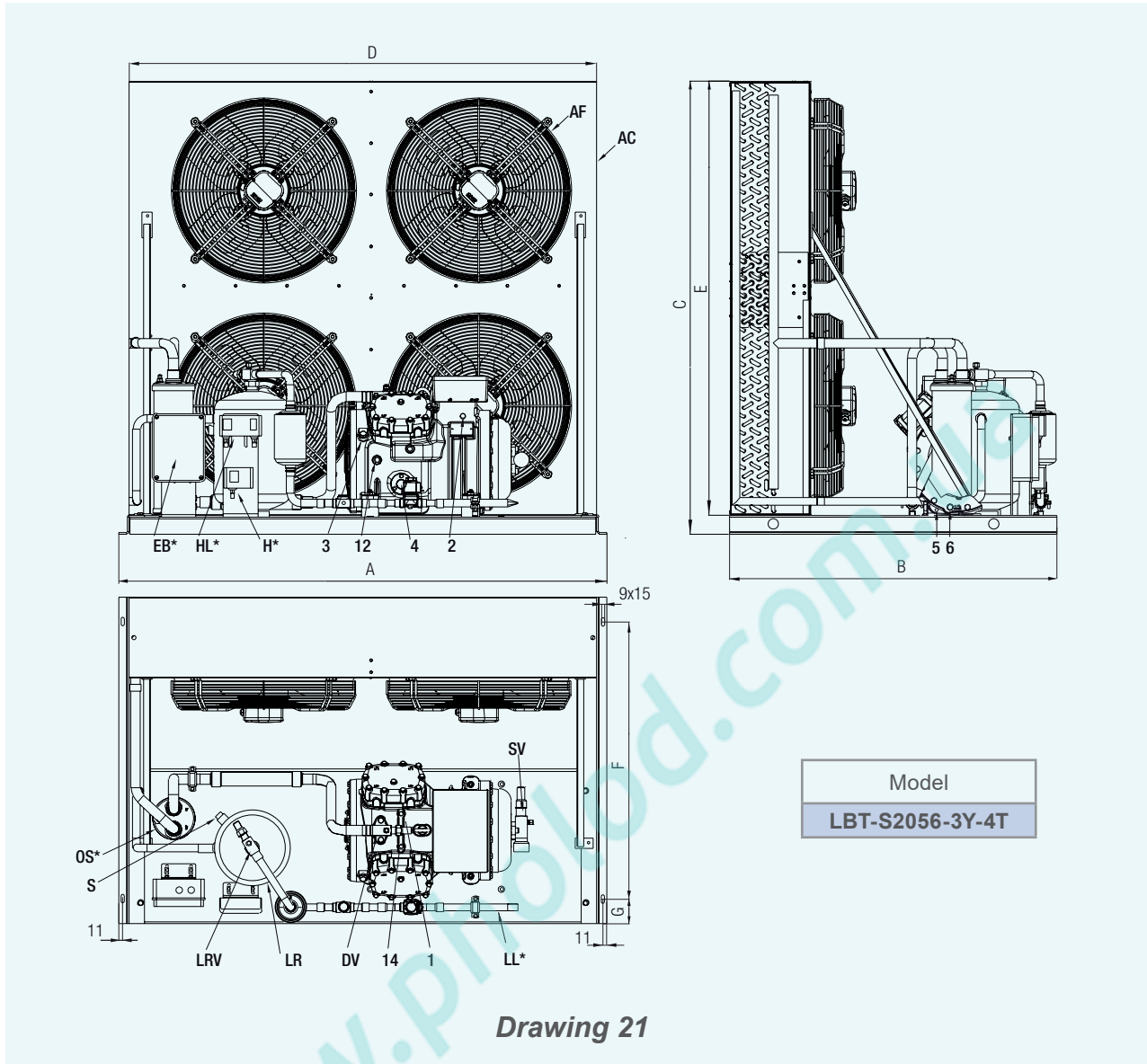


*Drawing 19*

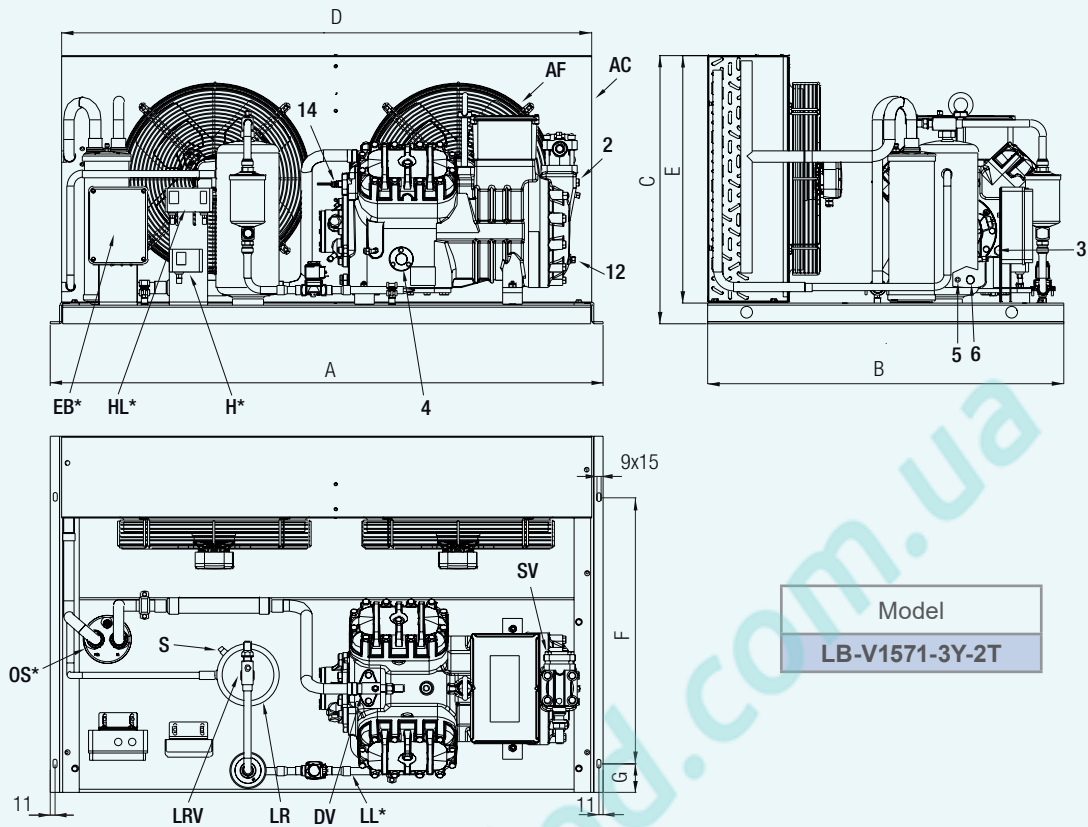


*Drawing 20*

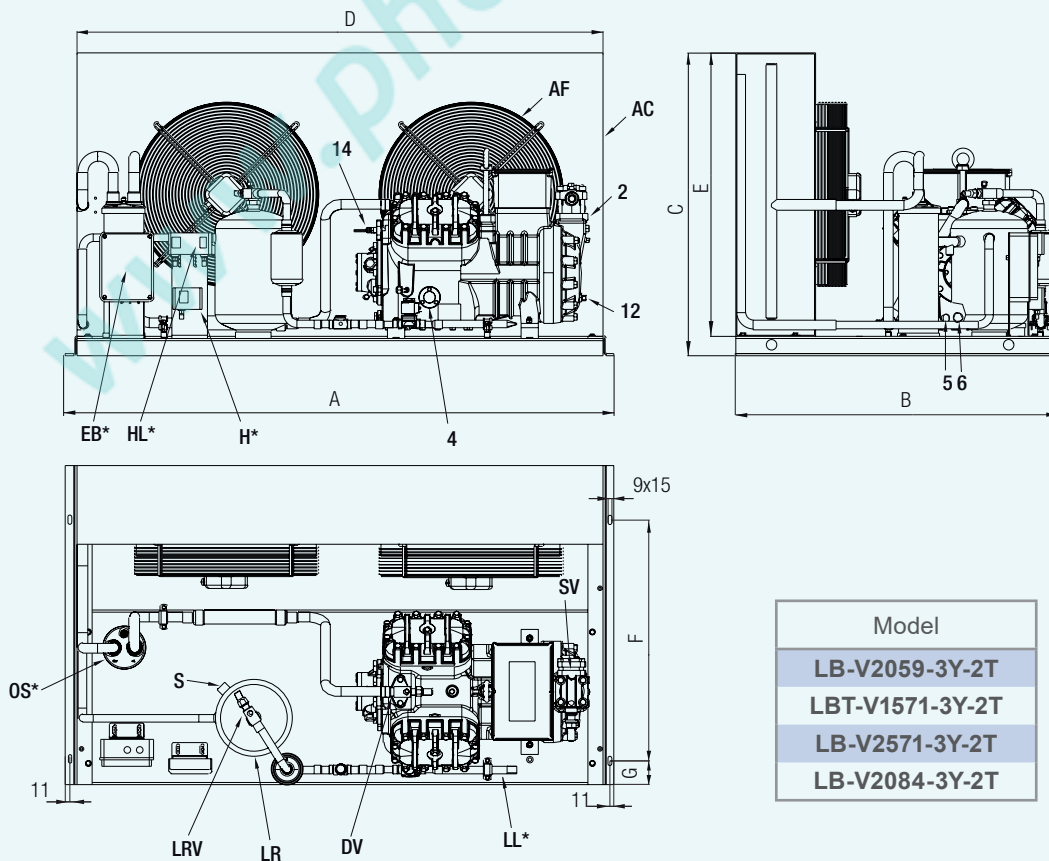
## Dimensional drawings



## Dimensional drawings

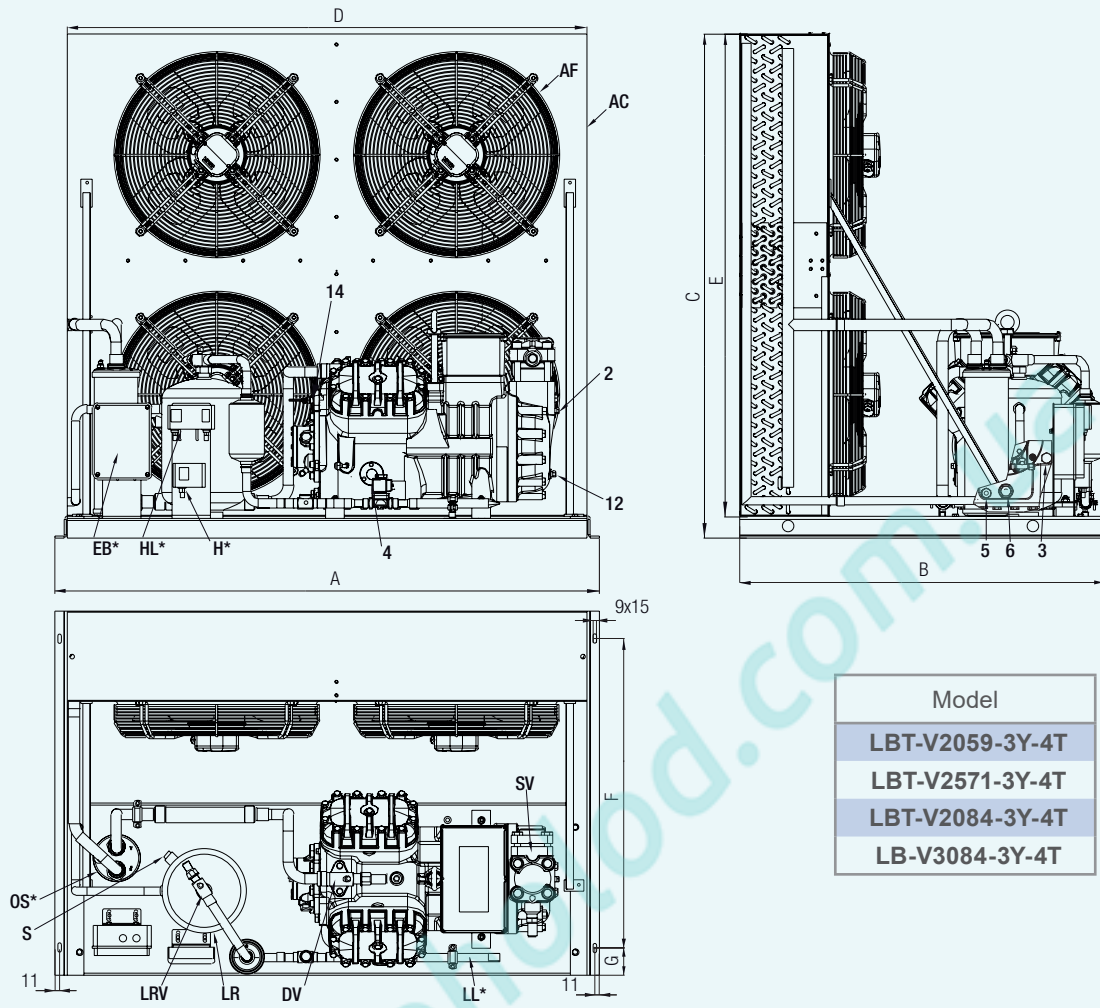


Drawing 22



Drawing 23

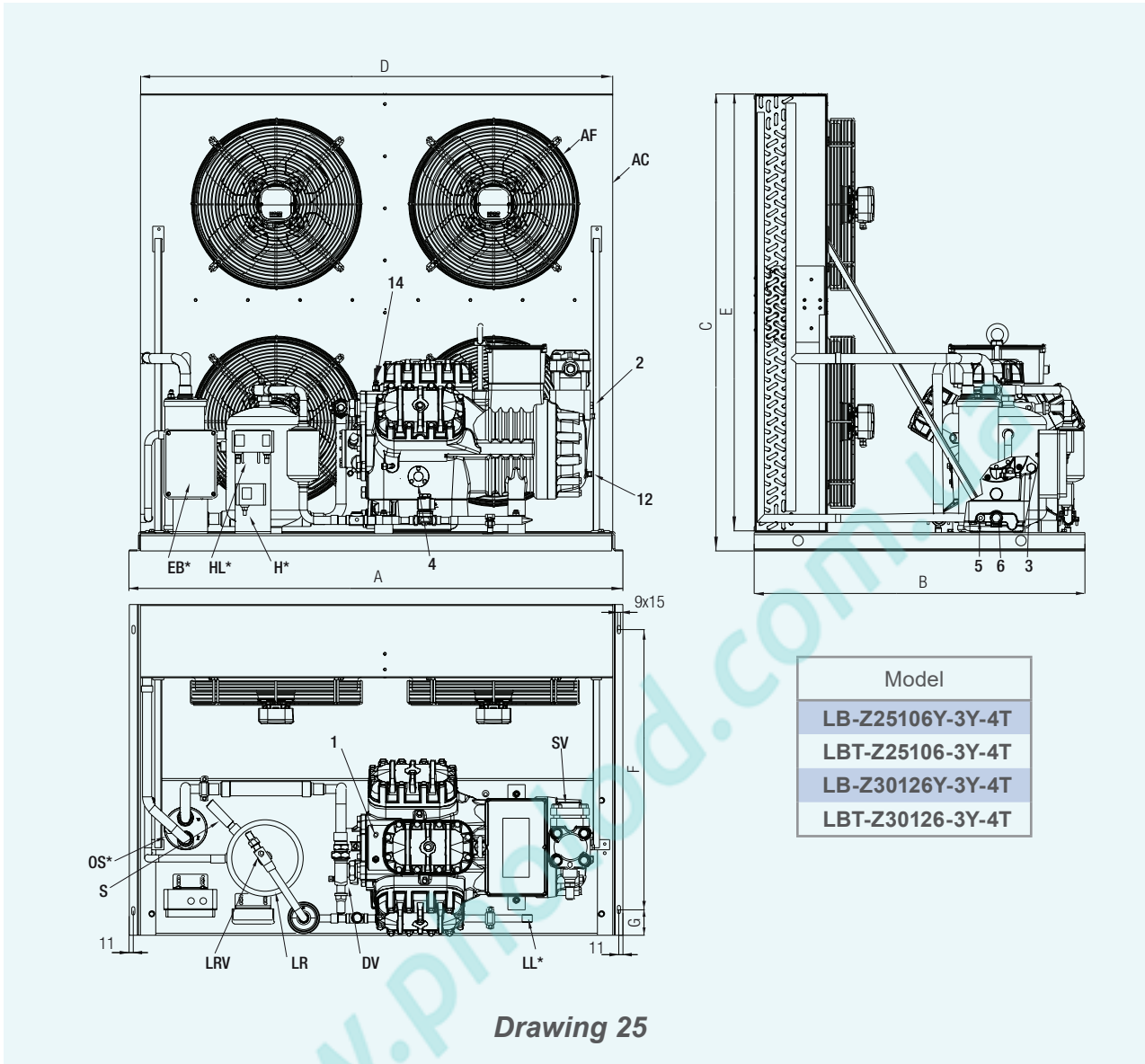
## Dimensional drawings



| Model           |
|-----------------|
| LBT-V2059-3Y-4T |
| LBT-V2571-3Y-4T |
| LBT-V2084-3Y-4T |
| LB-V3084-3Y-4T  |

Drawing 24

## Dimensional drawings



Drawing 25



# Two-stage air-cooled condensing units

## Technical data

| Condensing units          |             | Compressor ①                          |      |                     |              |         | Condenser |                                      |        |              |                     |                          |      |   |
|---------------------------|-------------|---------------------------------------|------|---------------------|--------------|---------|-----------|--------------------------------------|--------|--------------|---------------------|--------------------------|------|---|
| Model                     | Model       | Displacement (m <sup>3</sup> /h 50Hz) |      | Oil charge (liters) | Motor ②      |         | Model     | Fan motors (with thermal protection) |        |              |                     |                          |      |   |
|                           |             |                                       |      |                     | Power supply | MRA (A) |           | Quantity                             | Model  | Power supply | Installed power (W) | Max absorbed current (A) |      | Condenser air flow (m <sup>3</sup> /h 50Hz) |
|                           |             | LP                                    | HP   | ③                   |              |         |           |                                      |        |              |                     | ④                        | ⑤    |   |
| <b>LB-S526.16-3Y-2T</b>   | S5-26.16Y   | 25,2                                  | 16,4 | 3                   | B            | 14      | USAC16M   | 2                                    | USAF4  | T            | 630                 | 2,26                     | 1,30 | 11400                                       |
| <b>LB-S727.19-3Y-2T</b>   | S7-27.19Y   | 26,9                                  | 19,1 | 3                   | B            | 18      | USAC17M   | 2                                    | USAF4  | T            | 630                 | 2,26                     | 1,30 | 10400                                       |
| <b>LB-V1042.29-3Y-2T</b>  | V10-42.29Y  | 41,9                                  | 29,4 | 4                   | B            | 23      | USAC18M   | 2                                    | USAF10 | T            | 1500                | 6,00                     | 3,50 | 17400                                       |
| <b>LB-Z1560.30-3Y-2T</b>  | Z15-60.30Y  | 58,8                                  | 29,4 | 7                   | B            | 31      | USAC18M   | 2                                    | USAF10 | T            | 1500                | 6,00                     | 3,50 | 17400                                       |
| <b>LB-Z2072.36-3Y-2T</b>  | Z20-72.36Y  | 70,0                                  | 35,4 | 7                   | B            | 37      | USAC19M   | 2                                    | USAF10 | T            | 1500                | 6,00                     | 3,50 | 16400                                       |
| <b>LB-Z2584.42-3Y-2T</b>  | Z25-84.42Y  | 41,9                                  | 41,9 | 7                   | B            | 45      | USAC19M   | 2                                    | USAF10 | T            | 1500                | 6,00                     | 3,50 | 16400                                       |
| <b>LB-Z30102.51-3Y-4T</b> | Z30-102-51Y | 51,5                                  | 51,5 | 7                   | B            | 53      | USAC14M   | 4                                    | USAF4  | T            | 1260                | 4,52                     | 2,60 | 20800                                       |

| Condensing units          |           | Liquid receiver ⑨                |      |                         |                          | Piping connections |                   |        |                 | Installation / Transport |  |      | Drawing |     |
|---------------------------|-----------|----------------------------------|------|-------------------------|--------------------------|--------------------|-------------------|--------|-----------------|--------------------------|--|------|---------|-----|
| Model                     | Model     | R404A<br>R507A<br>R448A<br>R449A | R22  | Safety valve connection | Compressor suction valve |                    | Liquid line valve |        | Net Weight (kg) | Gross weight (kg)        | Volume with packaging (dm <sup>3</sup> ) | Ref. | Page    |     |
|                           |           |                                  |      |                         | Ø mm                     | Ø inch             | Ø mm              | Ø inch |                 |                          |  |      |         |     |
|                           |           |                                  |      |                         | ⑩                        |                    |                   |        |                 |                          |  | ⑪    |         | Nr. |
| <b>LB-S526.16-3Y-2T</b>   | USLR06-M  | 5,5                              | 6,2  | 1/4"                    | 35                       | 1" 3/8             | 19,0              | 3/4"   | 208             | 233                      | 1102                                     | 26   | 43      |     |
| <b>LB-S727.19-3Y-2T</b>   | USLR6.6-M | 6,1                              | 6,9  | 1/4"                    | 35                       | 1" 3/8             | 19,0              | 3/4"   | 225             | 250                      | 1102                                     | 26   | 43      |     |
| <b>LB-V1042.29-3Y-2T</b>  | USLR12-M  | 10,6                             | 12,0 | 1/2"                    | 35                       | 1" 3/8             | 22,2              | 7/8"   | 275             | 300                      | 1487                                     | 27   | 43      |     |
| <b>LB-Z1560.30-3Y-2T</b>  | USLR12-M  | 10,6                             | 12,0 | 1/2"                    | 42                       | 1" 5/8             | 22,2              | 7/8"   | 322             | 347                      | 2252                                     | 28   | 44      |     |
| <b>LB-Z2072.36-3Y-2T</b>  | USLR12-M  | 10,6                             | 12,0 | 1/2"                    | 42                       | 1" 5/8             | 22,2              | 7/8"   | 327             | 352                      | 2252                                     | 28   | 44      |     |
| <b>LB-Z2584.42-3Y-2T</b>  | USLR12-M  | 10,6                             | 12,0 | 1/2"                    | 42                       | 1" 5/8             | 22,2              | 7/8"   | 332             | 357                      | 2252                                     | 28   | 44      |     |
| <b>LB-Z30102.51-3Y-4T</b> | 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 crantckcase 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-Z2072-36-3Y-2T | LB-Z2584.42-3Y-2T | LB-Z30102.51-3Y-4T |
|--|------------------|------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Two-stage semi-hermetic compressor with integrated PWS electric motor with AMS sensors<br>380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz<br>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<br>380-420V / 3 / 50 Hz <> 440-480V / 3 / 60 Hz<br>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<br>→ (models V and Z only for Diagnostic Control version)   | ●                | ●                | ●                 | ●                 | ●                 | ●                 | ●                  |
| INT69TML Diagnose control and protection device<br>→ (Direct Control version only)   |                  |                  | ●                 | ●                 | ●                 | ●                 | ●                  |
| DeltaP-II electronic pressure switch-Lubrication pressure control<br>→ (Standard Control and Diagnostic Control versions only)   |                  |                  | ●                 | ●                 | ●                 | ●                 | ●                  |
| INT250FR electronic pressure switch for lubrication pressure control<br>→ (Direct Control version only)  |                  |                  | ●                 | ●                 | ●                 | ●                 | ●                  |
| Liquid receiver (PED certified) with large volume, brazing Rotalock valve,<br>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 "Packege")  | ○                | ○                | ○                 | ○                 | ○                 | ○                 | ○                  |
| Oil separator (1)  | ○                | ○                | ○                 | ○                 | ○                 | ○                 | ○                  |
| Factory mounted Check-valve for compressor discharge line (2)  | ○                | ○                | ○                 | ○                 | ○                 | ○                 | ○                  |
| Electrical wiring of "Package" components<br>(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

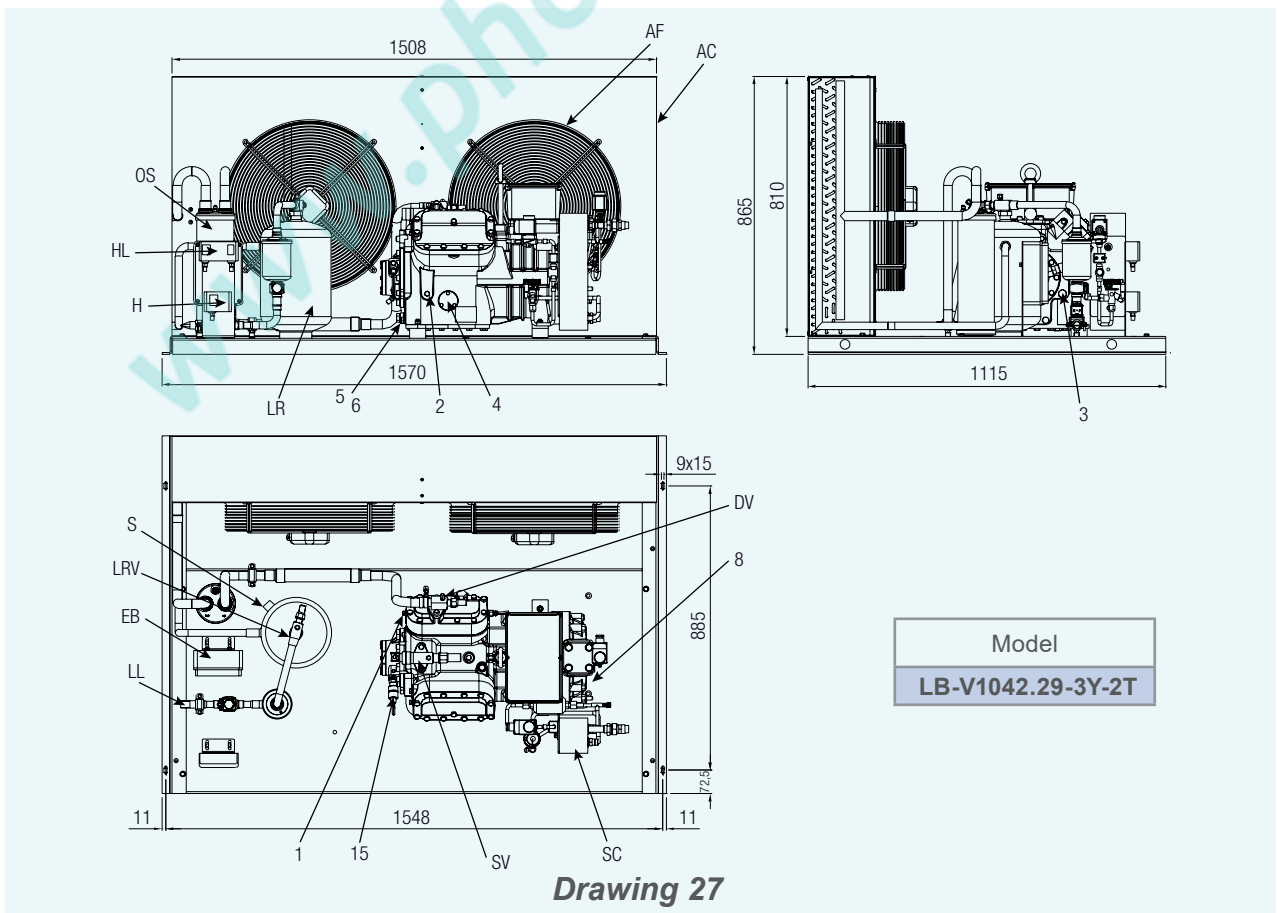
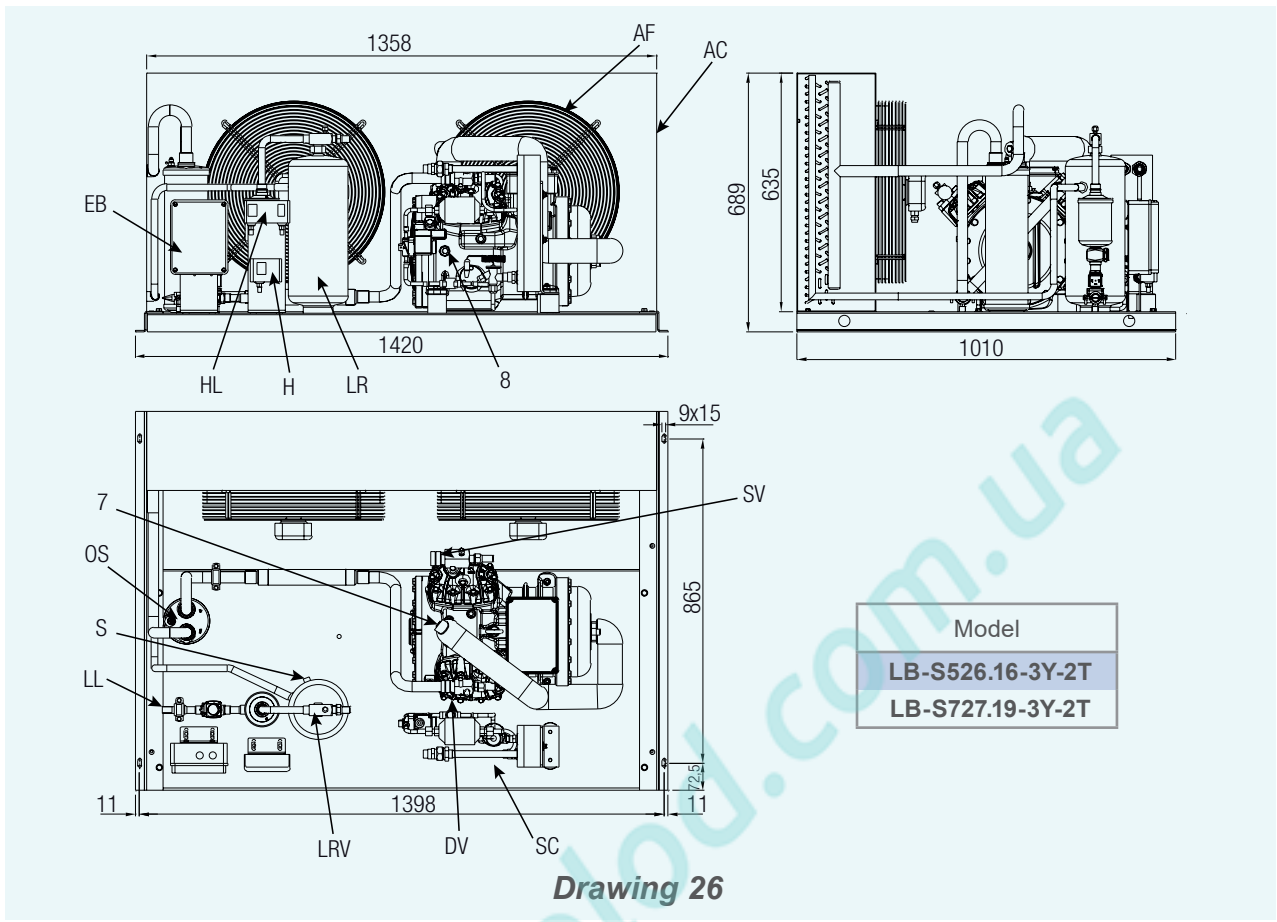
## Dimensional drawings - Positions and dimensions

| 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                  |

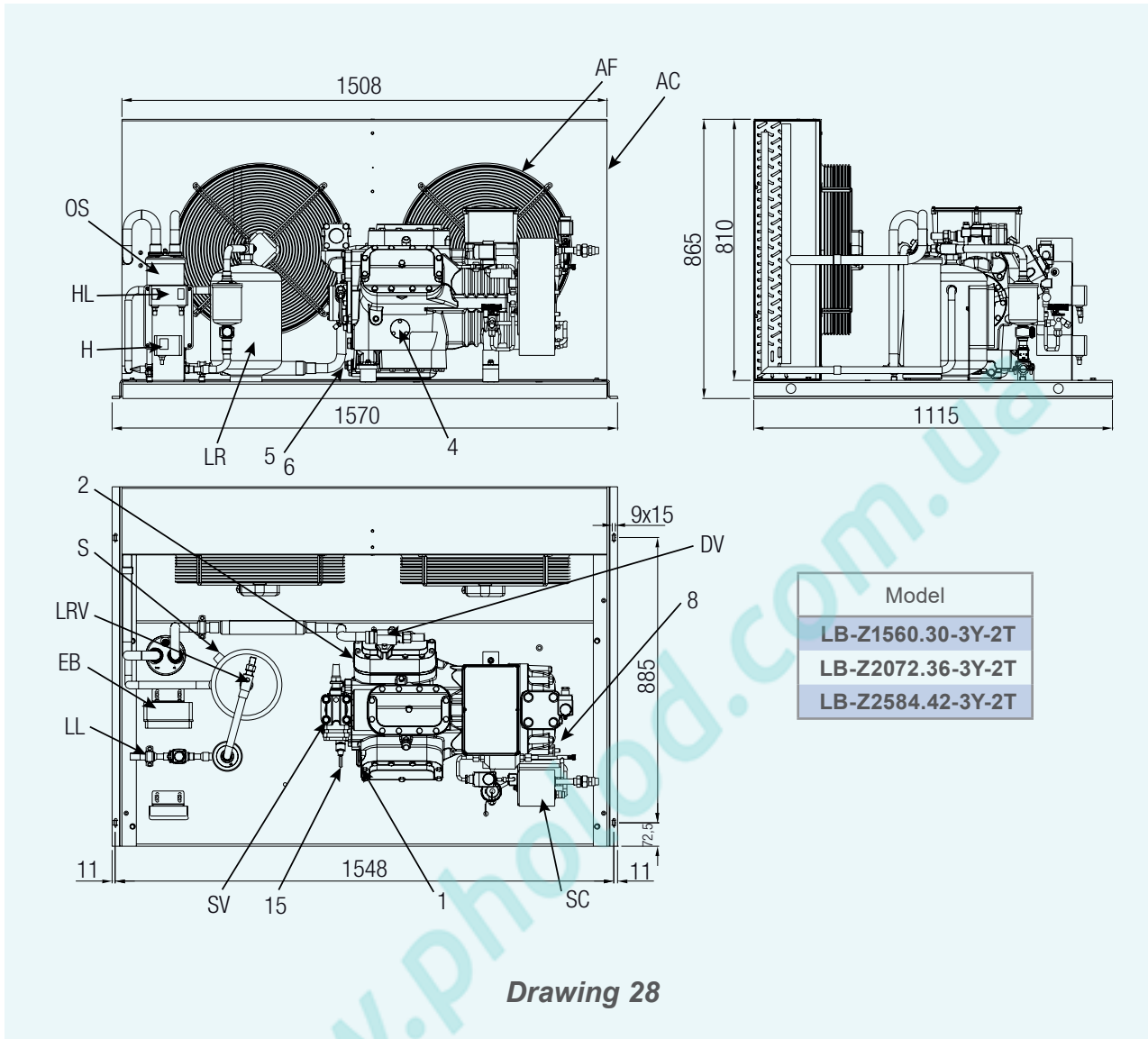
① Technical data on page 40.

② Optional components, supplied on request.

## Dimensional drawings

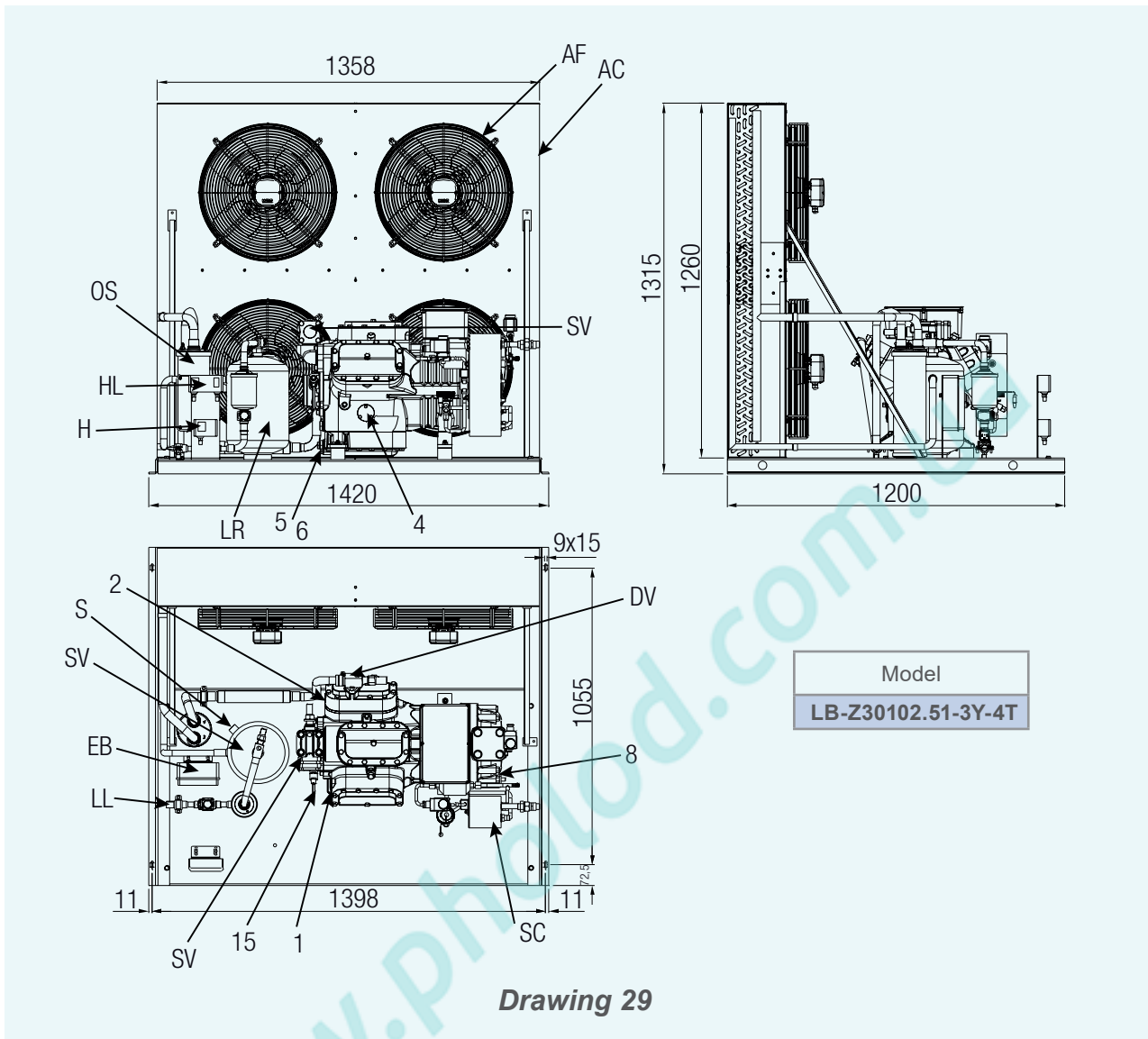


## Dimensional drawings





## Dimensional drawings





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