

# GEA Bock Condensing Units

Assembly instructions

09600-05.2018-Gb

Translation of the original instructions

SHA(X)12P...L  
SHA(X)22e...L  
SHA(X)34e...L  
SHA(X)4...L  
SHA(X)44e...L

SHG(X)12P...L  
SHG(X)22e...L  
SHG(X)34e...L  
SHG(X)44e...L

SHG(X)5...L  
SHG(X)56e...L  
SHG(X)6...L  
SHGZ(X)7...L

# About these instructions

Read these instructions before assembly and before using the condensing unit. This will avoid misunderstandings and prevent damage. Improper assembly and use can result in serious or fatal injury. Observe the safety instructions contained in these instructions and in the compressor instructions. These instructions must be passed onto the end customer along with the unit in which the condensing unit is installed.

Observe also the other documentation included with the condensing unit.

## **Manufacturer**

GEA Bock GmbH  
72636 Frickenhausen

## **Contact**

GEA Bock GmbH  
Benzstraße 7  
72636 Frickenhausen  
Germany

Telefon +49 7022 9454-0  
Telefax +49 7022 9454-137  
info@gea.com  
www.gea.com

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## Note:

According to Commission Regulation (EU) 2015/1095 of May 5th 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional condensing units, starting 2016 July 1st in the EU only products may be sold which fulfill minimum efficiency requirements. These minimum efficiency requirements must be documented by a certificate.

The matching certificate for your condensing unit can be created on the Internet on our software (VAP) under <http://vap.gea.com/stationaryapplication/>

# 1 | Safety

## 1.1 Identification of safety instructions:



**DANGER**

Indicates a dangerous situation which, if not avoided, will cause immediate fatal or serious injury.



**WARNING**

Indicates a dangerous situation which, if not avoided, may cause fatal or serious injury.



**CAUTION**

Indicates a dangerous situation which, if not avoided, may cause fairly severe or minor injury.



**ATTENTION**

Indicates a situation which, if not avoided, may cause property damage.



**INFO**

Important information or tips on simplifying work.

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## 1.2 Qualifications required of personnel



**WARNING**

**Inadequately qualified personnel poses the risk of accidents, the consequence being serious or fatal injury. Work on compressors is therefore reserved for personnel which is qualified to work on pressurized refrigerant systems:**

- For example, a refrigeration technician, refrigeration mechatronic engineer. As well as professions with comparable training, which enables personnel to assemble, install, maintain and repair refrigeration and air-conditioning systems. Personnel must be capable of assessing the work to be carried out and recognising any potential dangers.

# 1 | Safety

## 1.3 Safety instructions



### WARNING

**Risk of accidents.**

Refrigerating compressors are pressurised machines and as such call for heightened caution and care in handling.

The maximum permissible overpressure must not be exceeded, even for testing purposes.

**Risk of burns!**

- Depending on the operating conditions, surface temperatures of over 60°C on the discharge side or below 0°C on the suction side can be reached.

- Avoid contact with refrigerant necessarily.

Contact with refrigerant can cause severe burns and skin damage.

## 1.4 Intended use



### WARNING

**The condensing unit may not be used in potentially explosive environments!**

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These assembly instructions describe the standard version of the condensing units named in the title manufactured by GEA. The condensing unit is intended for installation in a machine (within the EU according to the EU Directives 2006/42/EC Machinery Directive, 2014/68/EU Pressure Equipment Directive).

Commissioning is permissible only if the condensing unit has been installed in accordance with these assembly instructions and the entire system into which it is integrated has been inspected and approved in accordance with legal regulations.

Only refrigerants may be used which are released on

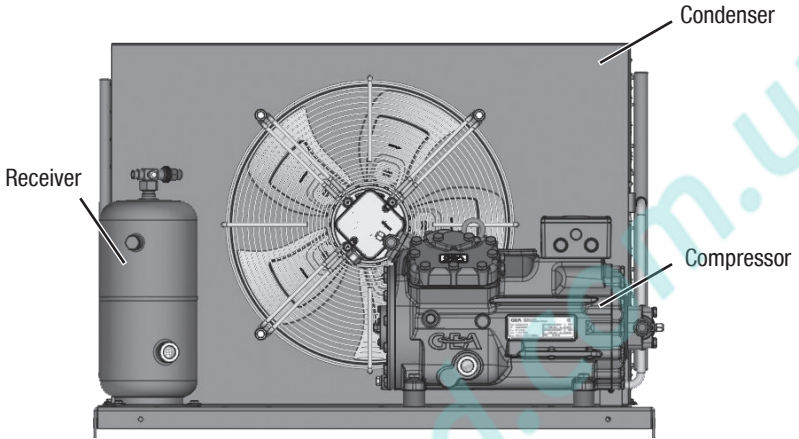
**<http://vap.gea.com/stationaryapplication/>**

**Any other use of the condensing unit is prohibited!**

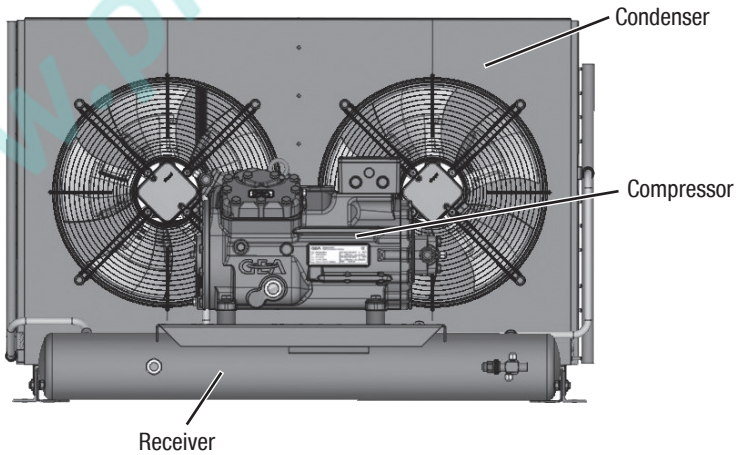
## 2 | Product description

### 2.1 Short description

#### Condensing unit with vertical receiver



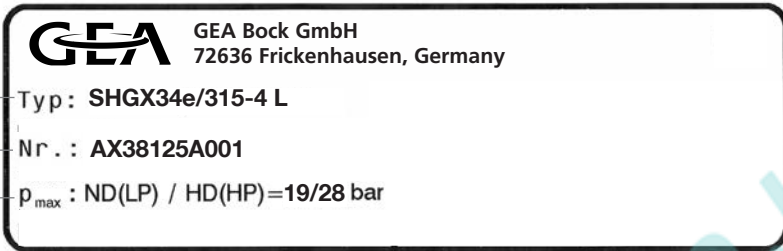
#### Condensing unit with horizontal receiver



Dimension and connection values can be found in Chapter 7

## 2 | Product description

### 2.2 Name plate (example)



- 1 Type designation
- 2 Machine number
- 3 ND (LP): Max. admissible operating pressure suction side  
HD (HP): Max. admissible operating pressure high-pressure side

### 2.3 Type key (example)

**SHG X 34 e / 380-4 S L**

- Aircooled <sup>4)</sup>
- Motor variant <sup>3)</sup>
- Number of poles
- Swept volume
- e-Series
- Number of cylinders
- Size
- Oil charge <sup>2)</sup>
- Series <sup>1)</sup>

- <sup>1)</sup> HG - Hermetic Gas-Cooled (suction gas-cooled)
- <sup>2)</sup> X - Ester oil charge
- <sup>3)</sup> S - Stronger motor
- <sup>4)</sup> L = Aircooled condensing unit

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# 3 | Areas of application

## 3.1 Areas of application

- The operating limits of the condensing units differ to the respective compressor.  
The really operating limits can be found on the Internet on our software (VAP) under **vap.gea.com**.

# 4 | Assembly



### INFO

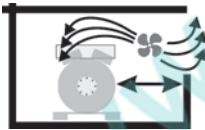
- **New compressors are factory-filled with inert gas. Leave this service charge in the compressor for as long as possible and prevent the ingress of air.**
- **Immediately after connecting the Plusbox to the refrigeration system, close the shut-off valves in the suction, discharge lines etc. and evacuate the compressor.**
- **Check the condensing unit for transport damage before starting any work.**

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## 4.1 Setting up



- Do not lift manually
- Use lifting gear
- Transport preferably via forklift truck, alternatively bolted to a pallet



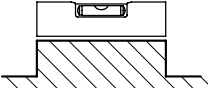
- Provide adequate clearance for maintenance work.
- Distance from wall to condenser minimum 300 mm.



- Do not use in a dusty, damp atmosphere or a combustible environment.



## 4 | Assembly



- Set up on an even surface or frame with sufficient load-bearing capacity. Only set up on a slant after following consulting.
- Preferably on vibration damper or mounting rubbers.



- Sun protection: If the condensing unit is set up outdoors, it has to be protected from direct sunlight.

## 5 | Maintenance

### 5.1 Preparation



#### WARNING

**Before starting any work on the compressor:**

- **Switch off the compressor and secure it to prevent a restart.**
- **Relieve compressor of system pressure.**
- **Prevent air from infiltrating the system!**

**After maintenance has been performed:**

- **Connect safety switch.**
- **Evacuate compressor.**
- **Release switch-on lock.**

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### 5.2 Work to be carried out

To avoid system-related problems, the following service work must be carried out on the Plusbox:

- **Cleaning:** A dirty condenser leads to performance losses!  
Visual inspections and possible condenser cleaning therefore required on a monthly base.  
We recommend using compressed air and a soft brush for cleaning.
- Further maintenance work in accordance with the instructions for assembly on the compressor.

## 6 | Technical Data

| Type            | Fan / Condenser (230 V - 1- 50 Hz) |                              |                | Receiver capacity | Weight |
|-----------------|------------------------------------|------------------------------|----------------|-------------------|--------|
|                 | Max. working current 50 Hz         | Max. power consumption 50 Hz | Air flow 50 Hz |                   |        |
|                 | A                                  | W                            | m³/h           | Ltr.              | kg     |
| SHG12P/60-4 SL  | 1.22                               | 280                          | 3550           | 6.0               | 88     |
| SHG12P/75-4 L   | 1.22                               | 280                          | 3550           | 6.0               | 88     |
| SHG12P/75-4 SL  | 1.22                               | 280                          | 3550           | 6.0               | 91     |
| SHG12P/90-4 L   | 1.22                               | 280                          | 3550           | 6.0               | 91     |
| SHG12P/90-4 SL  | 1.22                               | 280                          | 3550           | 6.0               | 94     |
| SHG12P/110-4 L  | 1.22                               | 280                          | 3550           | 6.0               | 94     |
| SHG12P/110-4 SL | 1.22                               | 280                          | 3550           | 6.0               | 94     |
| SHG22e/125-4 L  | 1.22                               | 280                          | 3550           | 6.0               | 122    |
| SHG22e/125-4 SL | 1.22                               | 280                          | 3410           | 6.0               | 126    |
| SHG22e/160-4 L  | 1.22                               | 280                          | 3410           | 6.0               | 126    |
| SHG22e/160-4 SL | 1.22                               | 280                          | 3410           | 6.0               | 128    |
| SHG22e/190-4 L  | 2.50                               | 580                          | 5950           | 8.0               | 149    |
| SHG22e/190-4 SL | 2.50                               | 580                          | 5950           | 8.0               | 150    |
| SHG34e/215-4 L  | 2.50                               | 580                          | 5950           | 8.0               | 167    |
| SHG34e/215-4 SL | 2.50                               | 580                          | 5950           | 10.0              | 174    |
| SHG34e/255-4 L  | 2.50                               | 580                          | 5950           | 8.0               | 166    |
| SHG34e/255-4 SL | 2.50                               | 580                          | 5950           | 10.0              | 173    |
| SHG34e/315-4 L  | 2.50                               | 580                          | 5950           | 8.0               | 169    |
| SHG34e/315-4 SL | 2 x 2.50                           | 2 x 500                      | 8740           | 14.0              | 180    |
| SHG34e/380-4 L  | 2 x 2.50                           | 2 x 500                      | 8740           | 14.0              | 176    |
| SHG34e/380-4 SL | 2 x 2.50                           | 2 x 500                      | 9490           | 14.0              | 185    |

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## 6 | Technical Data

| Type             | Fan / Condenser (230 V - 1- 50 Hz) |                              |                | Receiver capacity | Weight |
|------------------|------------------------------------|------------------------------|----------------|-------------------|--------|
|                  | Max. working current 50 Hz         | Max. power consumption 50 Hz | Air flow 50 Hz |                   |        |
|                  | A                                  | W                            | m³/h           | Ltr.              | kg     |
| SHG44e/475-4 L   | 2 x 2.50                           | 2 x 500                      | 9490           | 14.0              | 256    |
| SHG44e/475-4 SL  | 4 x 2.50                           | 4 x 500                      | 16280          | 14.0              | 312    |
| SHG44e/565-4 L   | 2 x 2.50                           | 2 x 500                      | 9490           | 14.0              | 256    |
| SHG44e/565-4 SL  | 4 x 2.50                           | 4 x 500                      | 14880          | 23.0              | 329    |
| SHG44e/665-4 L   | 4 x 2.50                           | 4 x 500                      | 16280          | 23.0              | 321    |
| SHG44e/665-4 SL  | 4 x 2.50                           | 4 x 500                      | 14880          | 23.0              | 327    |
| SHG44e/770-4 L   | 4 x 3.00                           | 4 x 680                      | 23850          | 23.0              | 328    |
| SHG44e/770-4 SL  | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 351    |
| SHG5/830-4 L     | 4 x 2.50                           | 4 x 500                      | 14880          | 23.0              | 356    |
| SHG5/830-4 SL    | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 385    |
| SHG5/945-4 L     | 4 x 2.50                           | 4 x 500                      | 14880          | 23.0              | 360    |
| SHG5/945-4 SL    | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 386    |
| SHG56e/850-4 L   | 4 x 2.50                           | 4 x 500                      | 14880          | 23.0              | 357    |
| SHG56e/850-4 SL  | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 395    |
| SHG56e/995-4 L   | 4 x 3.00                           | 4 x 680                      | 23850          | 23.0              | 385    |
| SHG56e/995-4 SL  | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 394    |
| SHG56e/1155-4 L  | 4 x 3.00                           | 4 x 680                      | 23850          | 23.0              | 388    |
| SHG56e/1155-4 SL | 4 x 3.00                           | 4 x 680                      | 21210          | 35.0              | 402    |
| SHG6/1080-4 L    | 4 x 3.00                           | 4 x 680                      | 23850          | 23.0              | 393    |
| SHG6/1080-4 SL   | 4 x 3.00                           | 4 x 680                      | 23850          | 35.0              | 406    |
| SHG6/1240-4 L    | 4 x 3.00                           | 4 x 680                      | 23850          | 23.0              | 398    |
| SHG6/1240-4 SL   | 4 x 3.00                           | 4 x 680                      | 21210          | 35.0              | 407    |

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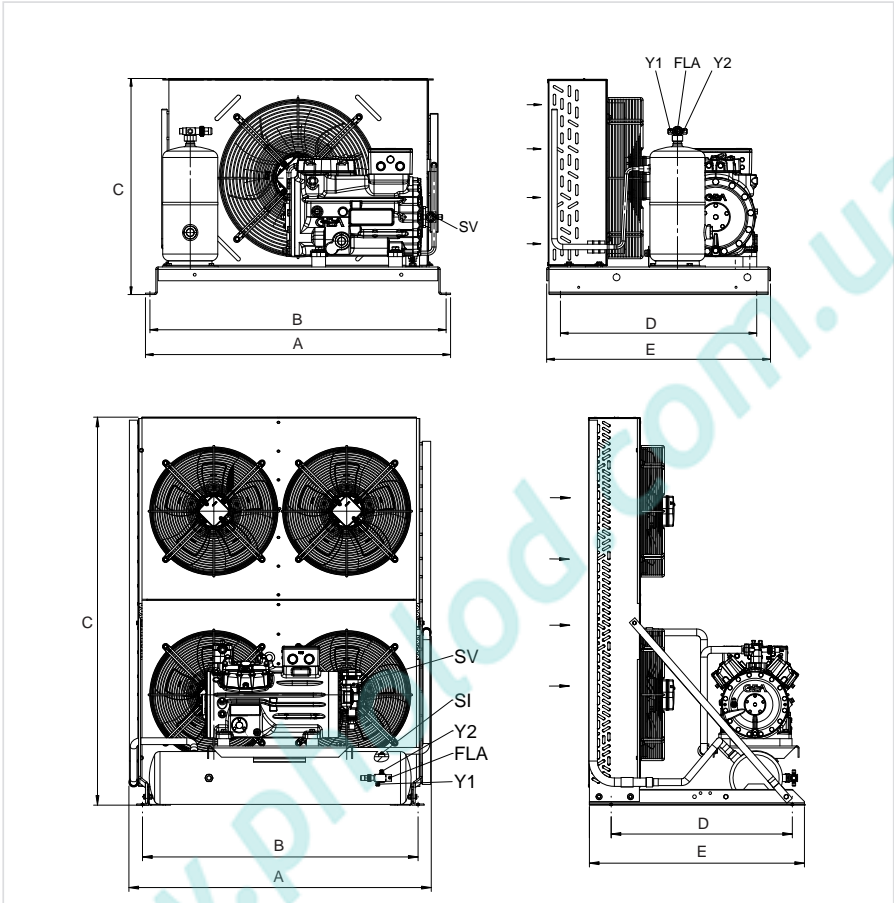
## 6 | Technical Data

| Type           | Fan / Condenser (230 V - 1- 50 Hz) |                              |                   | Receiver capacity | Weight |
|----------------|------------------------------------|------------------------------|-------------------|-------------------|--------|
|                | Max. working current 50 Hz         | Max. power consumption 50 Hz | Air flow 50 Hz    |                   |        |
|                | A                                  | W                            | m <sup>3</sup> /h | Liter             | kg     |
| SHG6/1410-4 L  | 4 x 3.00                           | 4 x 680                      | 23850             | 23.0              | 396    |
| SHG6/1410-4 SL | 4 x 3.00                           | 4 x 680                      | 21210             | 35.0              | 405    |
| SHGZ7/1620-4 L | 4 x 3.00                           | 4 x 680                      | 21210             | 35.0              | 489    |
| SHGZ7/1860-4 L | 4 x 3.00                           | 4 x 680                      | 21210             | 35.0              | 486    |
| SHGZ7/2110-4 L | 4 x 3.00                           | 4 x 680                      | 21210             | 35.0              | 486    |
| SHA12P/60-4 L  | 1.22                               | 280                          | 3550              | 6.0               | 92     |
| SHA12P/75-4 L  | 1.22                               | 280                          | 3550              | 6.0               | 93     |
| SHA12P/90-4 L  | 1.22                               | 280                          | 3550              | 6.0               | 95     |
| SHA12P/110-4 L | 1.22                               | 280                          | 3550              | 6.0               | 98     |
| SHA22e/125-4 L | 1.22                               | 280                          | 3550              | 6.0               | 124    |
| SHA22e/160-4 L | 1.22                               | 280                          | 3270              | 6.0               | 130    |
| SHA22e/190-4 L | 2.50                               | 580                          | 5950              | 8.0               | 151    |
| SHA34e/215-4 L | 2.50                               | 580                          | 5950              | 8.0               | 169    |
| SHA34e/255-4 L | 2.50                               | 580                          | 5950              | 8.0               | 169    |
| SHA34e/315-4 L | 2.50                               | 580                          | 5950              | 8.0               | 172    |
| SHA34e/380-4 L | 2 x 2.50                           | 2 x 500                      | 8740              | 14.0              | 178    |
| SHA4/465-4 L   | 2 x 2.50                           | 2 x 500                      | 9490              | 14.0              | 245    |
| SHA4/555-4 L   | 2 x 2.50                           | 2 x 500                      | 9490              | 14.0              | 246    |
| SHA4/650-4 L   | 4 x 2.50                           | 4 x 500                      | 16280             | 23.0              | 307    |
| SHA44e/475-4 L | 2 x 2.50                           | 2 x 500                      | 9490              | 14.0              | 264    |
| SHA44e/565-4 L | 2 x 2.50                           | 2 x 500                      | 9490              | 14.0              | 269    |
| SHA44e/655-4 L | 4 x 2.50                           | 4 x 500                      | 16280             | 23.0              | 320    |

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# 7 | Dimensions and connections



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| SHG<br>Type     | Dimensions |     |     |     |     |
|-----------------|------------|-----|-----|-----|-----|
|                 | A          | B   | C   | D   | E   |
|                 | mm         |     |     |     |     |
| SHG12P/60-4 SL  | 885        | 860 | 630 | 570 | 650 |
| SHG12P/75-4 L   | 885        | 860 | 630 | 570 | 650 |
| SHG12P/75-4 SL  | 885        | 860 | 630 | 570 | 650 |
| SHG12P/90-4 L   | 885        | 860 | 630 | 570 | 650 |
| SHG12P/90-4 SL  | 885        | 860 | 630 | 570 | 650 |
| SHG12P/110-4 L  | 885        | 860 | 630 | 570 | 650 |
| SHG12P/110-4 SL | 885        | 860 | 630 | 570 | 650 |

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# 7 | Dimensions

| SHG              | Dimensions |      |      |     |     |
|------------------|------------|------|------|-----|-----|
|                  | A          | B    | C    | D   | E   |
| Type             | mm         |      |      |     |     |
| SHG22e/125-4 L   | 885        | 860  | 630  | 570 | 650 |
| SHG22e/125-4 SL  | 885        | 860  | 630  | 570 | 650 |
| SHG22e/160-4 L   | 885        | 860  | 630  | 570 | 650 |
| SHG22e/160-4 SL  | 885        | 860  | 630  | 570 | 650 |
| SHG22e/190-4 L   | 1085       | 1060 | 745  | 570 | 650 |
| SHG22e/190-4 SL  | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/215-4 L   | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/215-4 SL  | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/255-4 L   | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/255-4 SL  | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/315-4 L   | 1085       | 1060 | 745  | 570 | 650 |
| SHG34e/315-4 SL  | 1220       | 1140 | 700  | 750 | 890 |
| SHG34e/380-4 L   | 1220       | 1140 | 700  | 750 | 890 |
| SHG34e/380-4 SL  | 1220       | 1140 | 800  | 750 | 890 |
| SHG44e/475-4 L   | 1225       | 1140 | 800  | 750 | 890 |
| SHG44e/475-4 SL  | 1300       | 1140 | 1310 | 750 | 890 |
| SHG44e/565-4 L   | 1225       | 1140 | 800  | 750 | 890 |
| SHG44e/565-4 SL  | 1300       | 1140 | 1310 | 750 | 890 |
| SHG44e/665-4 L   | 1300       | 1140 | 1310 | 750 | 890 |
| SHG44e/665-4 SL  | 1300       | 1140 | 1310 | 750 | 890 |
| SHG44e/770-4 L   | 1300       | 1140 | 1310 | 750 | 890 |
| SHG44e/770-4 SL  | 1300       | 1140 | 1610 | 750 | 890 |
| SHG5/830-4 L     | 1300       | 1140 | 1310 | 750 | 890 |
| SHG5/830-4 SL    | 1300       | 1140 | 1610 | 750 | 890 |
| SHG5/945-4 L     | 1300       | 1140 | 1310 | 750 | 890 |
| SHG5/945-4 SL    | 1300       | 1140 | 1610 | 750 | 890 |
| SHG56e/850-4 L   | 1250       | 1140 | 1307 | 750 | 890 |
| SHG56e/850-4 SL  | 1250       | 1140 | 1606 | 750 | 890 |
| SHG56e/995-4 L   | 1250       | 1140 | 1606 | 750 | 890 |
| SHG56e/995-4 SL  | 1250       | 1140 | 1606 | 750 | 890 |
| SHG56e/1155-4 L  | 1250       | 1140 | 1606 | 750 | 890 |
| SHG56e/1155-4 SL | 1250       | 1140 | 1606 | 750 | 890 |
| SHG6/1080-4 L    | 1300       | 1140 | 1610 | 750 | 890 |
| SHG6/1080-4 SL   | 1300       | 1140 | 1610 | 750 | 890 |
| SHG6/1240-4 L    | 1300       | 1140 | 1610 | 750 | 890 |

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# 7 | Dimensions

| SHG / SHGZ / SHA | Dimensions |      |      |     |      |
|------------------|------------|------|------|-----|------|
|                  | A          | B    | C    | D   | E    |
| Type             | mm         |      |      |     |      |
| SHG6/1240-4 SL   | 1300       | 1140 | 1610 | 750 | 890  |
| SHG6/1410-4 L    | 1300       | 1140 | 1610 | 750 | 890  |
| SHG6/1410-4 SL   | 1300       | 1140 | 1610 | 750 | 890  |
| SHGZ7/1620-4 L   | 1300       | 1140 | 1610 | 750 | 1090 |
| SHGZ7/1860-4 L   | 1300       | 1140 | 1610 | 750 | 1090 |
| SHGZ7/2110-4 L   | 1300       | 1140 | 1610 | 750 | 1090 |
| SHA12P/60-4 L    | 885        | 860  | 630  | 570 | 650  |
| SHA12P/75-4 L    | 885        | 860  | 630  | 570 | 650  |
| SHA12P/90-4 L    | 885        | 860  | 630  | 570 | 650  |
| SHA12P/110-4 L   | 885        | 860  | 630  | 570 | 650  |
| SHA22e/125-4 L   | 885        | 860  | 630  | 570 | 650  |
| SHA22e/160-4 L   | 885        | 860  | 630  | 570 | 650  |
| SHA22e/190-4 L   | 1085       | 1060 | 745  | 570 | 650  |
| SHA34e/215-4 L   | 1085       | 1060 | 745  | 570 | 650  |
| SHA34e/255-4 L   | 1085       | 1060 | 745  | 570 | 650  |
| SHA34e/315-4 L   | 1085       | 1060 | 745  | 570 | 650  |
| SHA34e/380-4 L   | 1220       | 1140 | 700  | 750 | 890  |
| SHA4/465-4 L     | 1220       | 1140 | 800  | 750 | 890  |
| SHA4/555-4 L     | 1220       | 1140 | 800  | 750 | 890  |
| SHA4/650-4 L     | 1300       | 1140 | 1310 | 750 | 890  |
| SHA44e/475-4 L   | 1223       | 1140 | 796  | 750 | 890  |
| SHA44e/565-4 L   | 1223       | 1140 | 796  | 750 | 890  |
| SHA44e/655-4 L   | 1243       | 1141 | 1306 | 750 | 894  |

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# 7 | Connections

| SHG             | Connections ①       |                    |                    |                    |                    |
|-----------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|                 | SV                  | FLA                | SI                 | Y1                 | Y2                 |
|                 | mm   Inch           | mm   Inch          | Inch               | Inch               | Inch               |
| SHG12P/60-4 SL  | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/75-4 L   | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/75-4 SL  | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/90-4 L   | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/90-4 SL  | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/110-4 L  | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG12P/110-4 SL | 16 / $\frac{5}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/125-4 L  | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/125-4 SL | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/160-4 L  | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/160-4 SL | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | -                  | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/190-4 L  | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG22e/190-4 SL | 22 / $\frac{7}{8}$  | 12 / $\frac{1}{2}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/215-4 L  | 28 / $1\frac{1}{8}$ | 12 / $\frac{1}{2}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/215-4 SL | 28 / $1\frac{1}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/255-4 L  | 28 / $1\frac{1}{8}$ | 12 / $\frac{1}{2}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/255-4 SL | 28 / $1\frac{1}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/315-4 L  | 28 / $1\frac{1}{8}$ | 12 / $\frac{1}{2}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/315-4 SL | 28 / $1\frac{1}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/380-4 L  | 28 / $1\frac{1}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG34e/380-4 SL | 28 / $1\frac{1}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/475-4 L  | 35 / $1\frac{3}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/475-4 SL | 35 / $1\frac{3}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/565-4 L  | 35 / $1\frac{3}{8}$ | 16 / $\frac{5}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/565-4 SL | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/665-4 L  | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/665-4 SL | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/770-4 L  | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG44e/770-4 SL | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG5/830-4 L    | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG5/830-4 SL   | 42 / $1\frac{5}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG5/945-4 L    | 54 / $2\frac{1}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG5/945-4 SL   | 54 / $2\frac{1}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG56e/850-4 L  | 54 / $2\frac{1}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |
| SHG56e/850-4 SL | 54 / $2\frac{1}{8}$ | 22 / $\frac{7}{8}$ | $\frac{1}{2}$ NPTF | $\frac{7}{16}$ UNF | $\frac{7}{16}$ UNF |

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# 7 | Connections

| SHG<br>SHGZ<br>SHA<br>Type | Connections ① |           |          |          |          |
|----------------------------|---------------|-----------|----------|----------|----------|
|                            | SV            | FLA       | SI       | Y1       | Y2       |
|                            | mm   Inch     | mm   Inch | Inch     | Inch     | Inch     |
| SHG56e/995-4 L             | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG56e/995-4 SL            | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG56e/1155-4 L            | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG56e/1155-4 SL           | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1080-4 L              | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1080-4 SL             | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1240-4 L              | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1240-4 SL             | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1410-4 L              | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHG6/1410-4 SL             | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHGZ7/1620-4 R...L         | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHGZ7/1860-4 R...L         | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHGZ7/2110-4 R...L         | 54 / 2 1/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA12P/60-4 L              | 12 / 1/2      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA12P/75-4 L              | 12 / 1/2      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA12P/90-4 L              | 12 / 1/2      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA12P/110-4 L             | 12 / 1/2      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA22e/125-4 L             | 16 / 5/8      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA22e/160-4 L             | 16 / 5/8      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA22e/190-4 L             | 16 / 5/8      | 12 / 1/2  | -        | 7/16 UNF | 7/16 UNF |
| SHA34e/215-4 L             | 22 / 7/8      | 12 / 1/2  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA34e/255-4 L             | 22 / 7/8      | 12 / 1/2  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA34e/315-4 L             | 22 / 7/8      | 12 / 1/2  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA34e/380-4 L             | 22 / 7/8      | 16 / 5/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA4/465-4 L               | 35 / 1 3/8    | 16 / 5/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA4/555-4 L               | 35 / 1 3/8    | 16 / 5/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA4/650-4 L               | 35 / 1 3/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA44e/475-4 L             | 35 / 1 3/8    | 16 / 5/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA44e/565-4 L             | 35 / 1 3/8    | 16 / 5/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |
| SHA44e/655-4 L             | 35 / 1 3/8    | 22 / 7/8  | 1/2 NPTF | 7/16 UNF | 7/16 UNF |

**GB**

- SV = Suction line shut off valve
- FLA = Liquid outlet
- SI = Connection safety valve
- Y1 = Connection liquid side, lockable
- Y2 = Connection liquid side, not lockable
- Y3 = Schrader-Connection speed controller for fan

① Further compressor connections can be found in the assembly instructions of the compressor

## 8 | Service

Dear customer,

GEA compressors are top-quality, reliable and service-friendly quality products.

If you have any questions about installation, operation and accessories, please contact our technical service or specialist wholesaler and/or our representative. The GEA service team can be contacted by phone with a **toll-free hotline 00 800 / 800 000 88** or via **e-mail:**

**info@gea.com**

Yours faithfully

**GEA Bock GmbH**

**Benzstraße 7**

**72636 Frickenhausen**

**Germany**

GB

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