

|                       |                        |                 |
|-----------------------|------------------------|-----------------|
| PROJECT: _____        | UNIT TAG: _____        | QUANTITY: _____ |
| REPRESENTATIVE: _____ | TYPE OF SERVICE: _____ | DATE: _____     |
| ENGINEER: _____       | SUBMITTED BY: _____    | DATE: _____     |
| CONTRACTOR: _____     | APPROVED BY: _____     | DATE: _____     |
|                       | ORDER NO.: _____       | DATE: _____     |

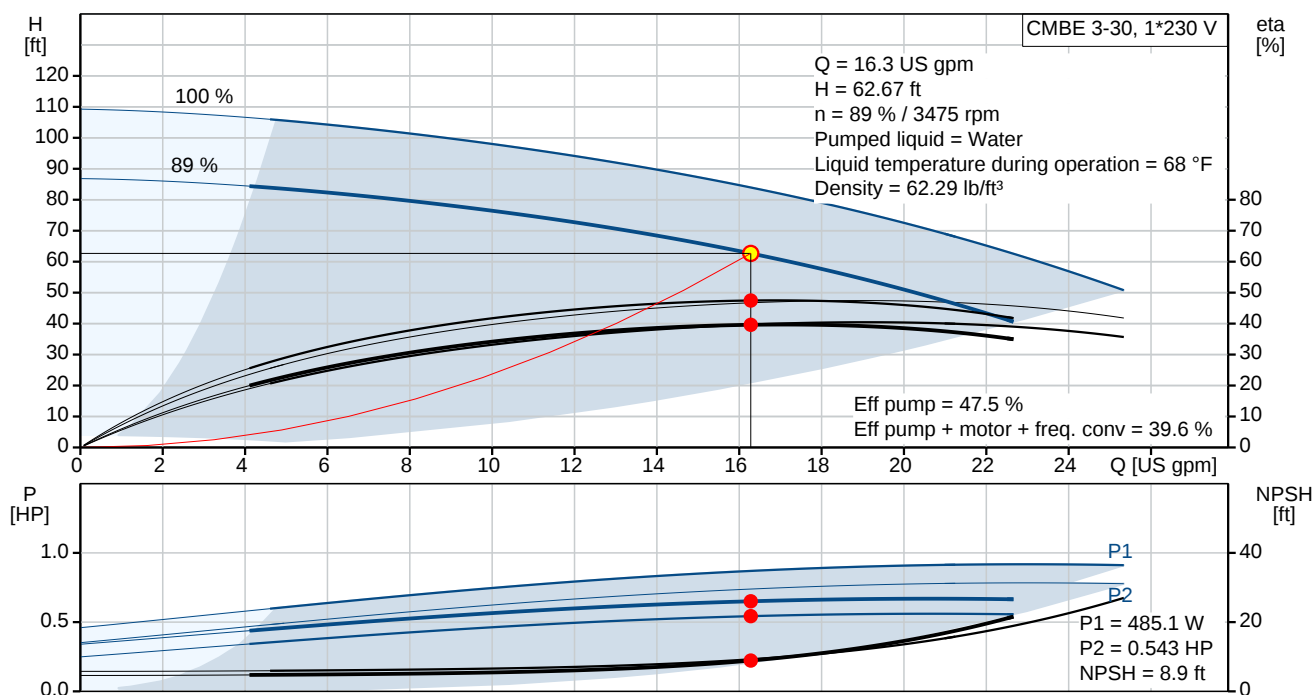
### CMBE 3-30

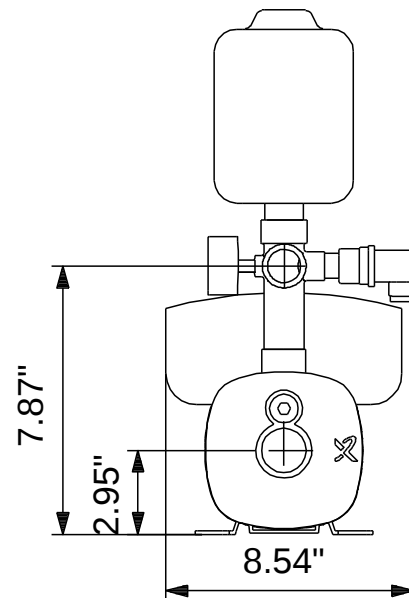
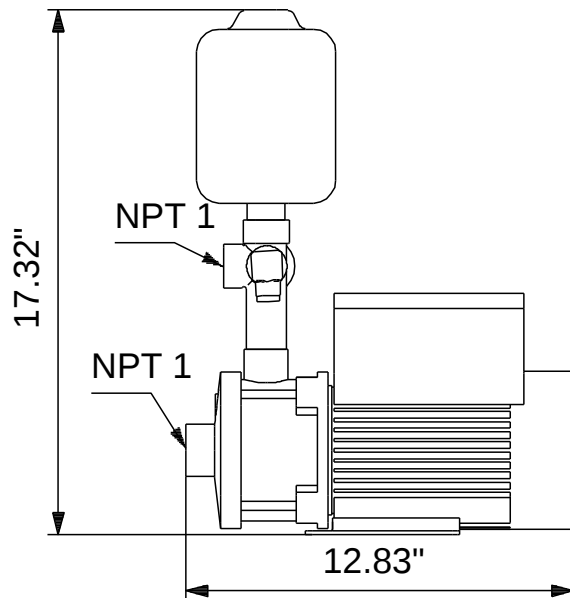


Compact booster set for water supply in light commercial applications. Pump materials in contact with the liquid are in stainless steel AISI 304 (EN 1.4301)

Product photo could vary from the actual product

| Conditions of Service   | Pump Data                              | Motor Data               |
|-------------------------|----------------------------------------|--------------------------|
| Flow: 16.3 US gpm       | Liquid temperature range: 32 .. 140 °F | Rated power - P2: 1.5 HP |
| Head: 62.67 ft          | Maximum ambient temperature: 122 °F    | Rated voltage: 200-240 V |
| Efficiency: 39.6 %      | Shaft seal: AQQE                       | Main frequency: 50 Hz    |
| Liquid: Water           | Flange standard: INTERNAL NPT THREAD   | Enclosure class: IP55    |
| Temperature: 68 °F      | Product number: 98548112               | Insulation class: F      |
| NPSH required: 8.9 ft   |                                        |                          |
| Viscosity: _____        |                                        |                          |
| Specific Gravity: 1.000 |                                        |                          |





**Materials:**

Pump housing: Stainless steel  
 DIN W.-Nr. 1.4301  
 AISI 304

Impeller: Stainless steel  
 DIN W.-Nr. 1.4301  
 AISI 304

Rubber: EPDM

## Tender Text

Product No.: [98548112](#)**CMBE 3-30 AQQE**

The Grundfos CME Booster is a compact booster system for water supply in domestic applications. The integrated speed controller enables the CME Booster to keep constant pressure in the pipe system. A pressure sensor monitoring changes in the water consumption will signal to the speed controller to change the motor speed to adapt performance to the new state.

The CME Booster is very easy to install. When the pipework has been installed, it is all a matter of plugging the unit into a socket, and the system is operational.

The CME Booster consists of:

- CME pump with integrated frequency converter
- 5-way valve
- expansion tank
- pressure gauge
- manometer

**Features**

- Constant pressure, integrated speed control
- compact
- robust, stainless steel
- easy installation
- dry run protection

**Thermal protection**

CME Booster pumps require no external motor protection.

The MGE motor incorporates thermal protection against slow overloading and blocking (IEC 34.11: TP 211).

**Liquid:**

Pumped liquid: Water  
Liquid temperature range: 32 .. 140 °F  
Liquid temperature during operation: 68 °F  
Density: 62.29 lb/ft<sup>3</sup>

**Technical:**

Speed for pump data: 3780 rpm  
Actual calculated flow: 16.3 US gpm  
Resulting head of the pump: 62.67 ft  
Primary shaft seal: AQQE  
Approvals and markings: CE,CULUS  
Curve tolerance: ISO9906:2012 3B  
Start pressure: Integrated Frequency converter

**Materials:**

Pump housing: Stainless steel  
DIN W.-Nr. 1.4301  
AISI 304  
Impeller: Stainless steel  
DIN W.-Nr. 1.4301  
AISI 304  
Rubber: EPDM

**Installation:**

Maximum ambient temperature: 122 °F  
Flange standard: INTERNAL NPT THREAD  
Pump inlet: NPT 1  
Pump outlet: NPT 1

**Electrical data:**

Rated power - P2: 1.5 HP  
Main frequency: 50 Hz  
Rated voltage: 1 x 200-240 V  
Maximum current consumption: 6,70-5,60 A  
Rated speed: 360-4000 rpm  
Enclosure class (IEC 34-5): IP55  
Insulation class (IEC 85): F  
Type of cable plug: NONE  
Mains cable: NO CABLE m

**Tank:**

Tank volume: 0.528 gal

**Others:**

Net weight: 36.7 lb  
Gross weight: 55.3 lb

| Position | Count | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | 1     | <p><b>CMBE 3-30 AQQE</b></p>  <p>Product No.: <a href="#">98548112</a></p> <p>The Grundfos CME Booster is a compact booster system for water supply in domestic applications. The integrated speed controller enables the CME Booster to keep constant pressure in the pipe system. A pressure sensor monitoring changes in the water consumption will signal to the speed controller to change the motor speed to adapt performance to the new state. The CME Booster is very easy to install. When the pipework has been installed, it is all a matter of plugging the unit into a socket, and the system is operational. The CME Booster consists of:</p> <ul style="list-style-type: none"> <li>• CME pump with integrated frequency converter</li> <li>• 5-way valve</li> <li>• expansion tank</li> <li>• pressure gauge</li> <li>• manometer</li> </ul> <p>Features</p> <ul style="list-style-type: none"> <li>• Constant pressure, integrated speed control</li> <li>• compact</li> <li>• robust, stainless steel</li> <li>• easy installation</li> <li>• dry run protection</li> </ul> <p>Thermal protection</p> <p>CME Booster pumps require no external motor protection. The MGE motor incorporates thermal protection against slow overloading and blocking (IEC 34.11: TP 211).</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: 32 .. 140 °F</p> <p>Liquid temperature during operation: 68 °F</p> <p>Density: 62.29 lb/ft<sup>3</sup></p> <p><b>Technical:</b></p> <p>Speed for pump data: 3780 rpm</p> <p>Actual calculated flow: 16.3 US gpm</p> <p>Resulting head of the pump: 62.67 ft</p> <p>Primary shaft seal: AQQE</p> <p>Approvals and markings: CE,CULUS</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p>Start pressure: Integrated Frequency converter</p> |



Company name:

Created by:

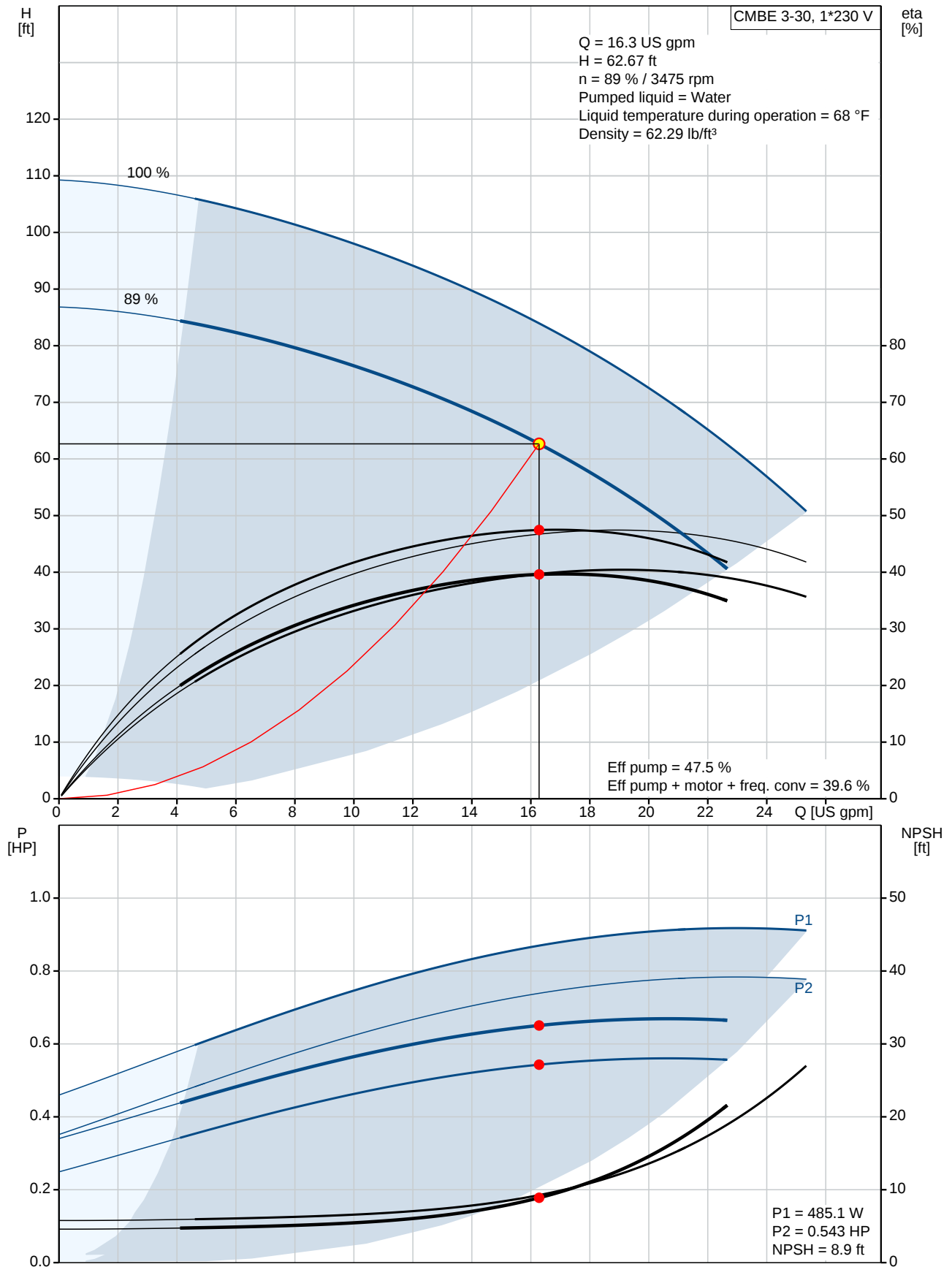
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Date:

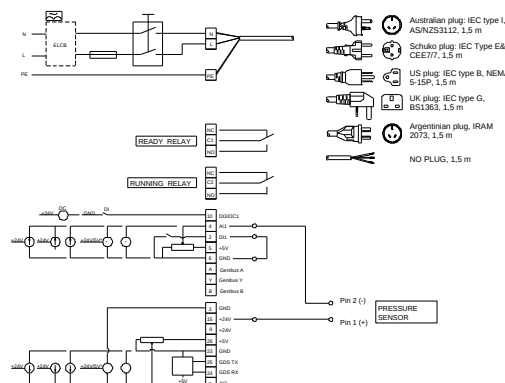
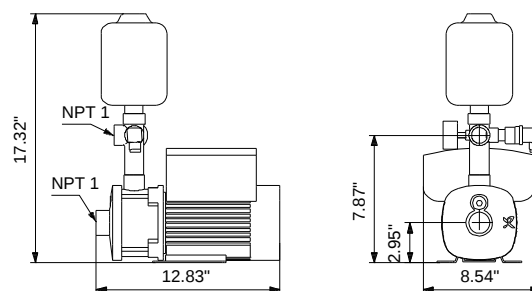
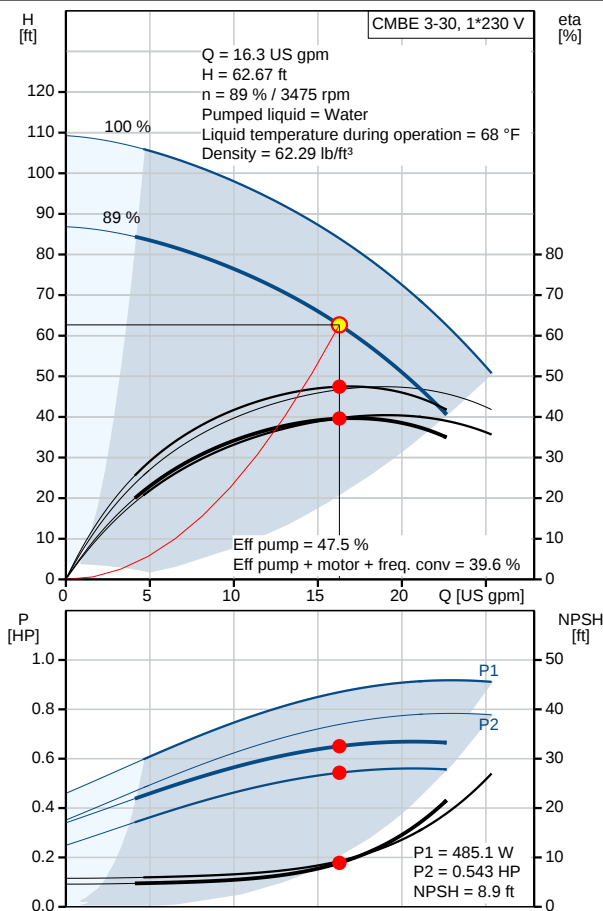
2/20/2018

| Position | Count | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |       | <b>Materials:</b><br>Pump housing: Stainless steel<br>DIN W.-Nr. 1.4301<br>AISI 304<br>Impeller: Stainless steel<br>DIN W.-Nr. 1.4301<br>AISI 304<br>Rubber: EPDM<br><br><b>Installation:</b><br>Maximum ambient temperature: 122 °F<br>Flange standard: INTERNAL NPT THREAD<br>Pump inlet: NPT 1<br>Pump outlet: NPT 1<br><br><b>Electrical data:</b><br>Rated power - P2: 1.5 HP<br>Main frequency: 50 Hz<br>Rated voltage: 1 x 200-240 V<br>Maximum current consumption: 6,70-5,60 A<br>Rated speed: 360-4000 rpm<br>Enclosure class (IEC 34-5): IP55<br>Insulation class (IEC 85): F<br>Type of cable plug: NONE<br>Mains cable: NO CABLE m<br><br><b>Tank:</b><br>Tank volume: 0.528 gal<br><br><b>Others:</b><br>Net weight: 36.7 lb<br>Gross weight: 55.3 lb |

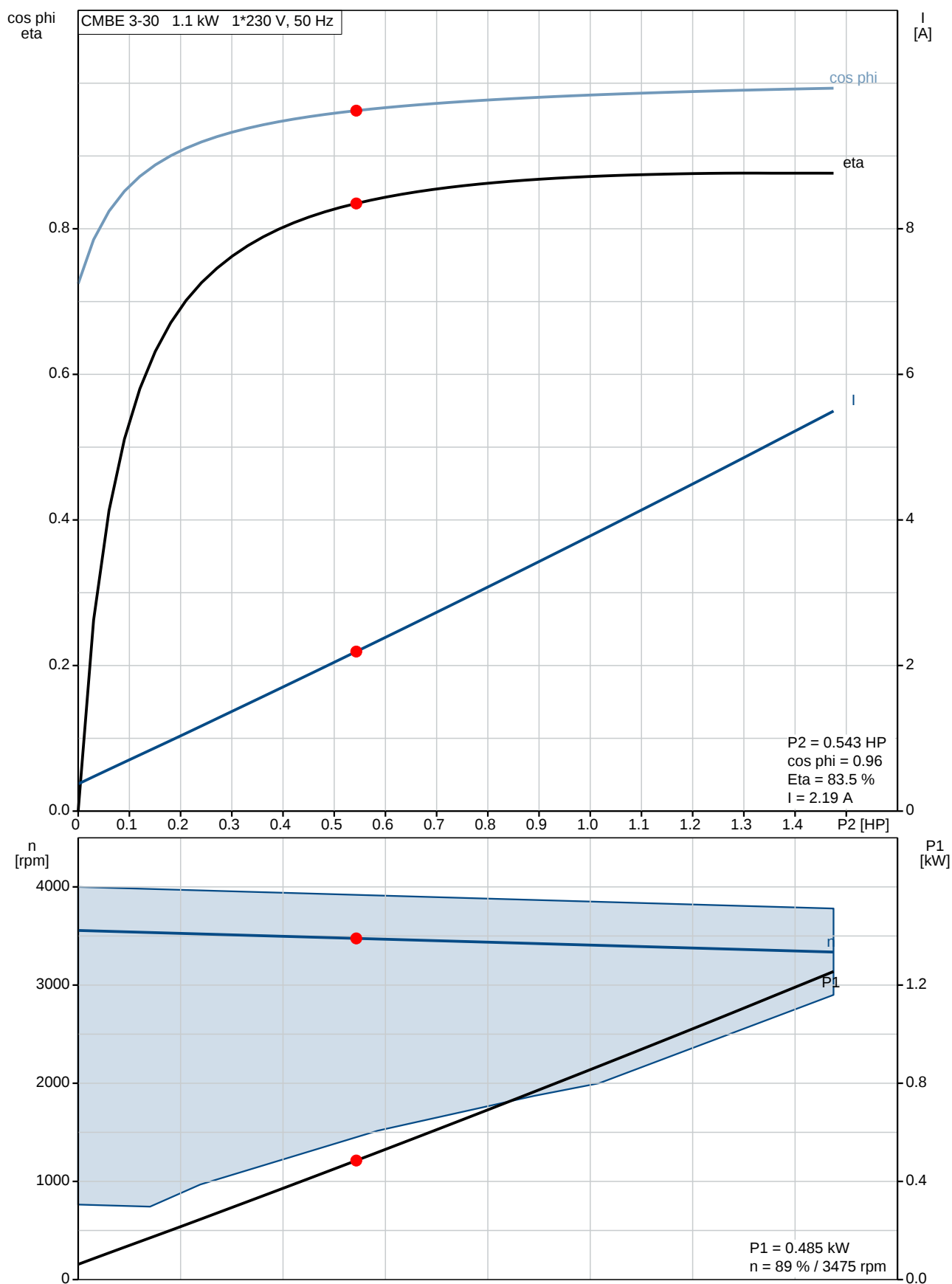
## 98548112 CMBE 3-30 50 Hz



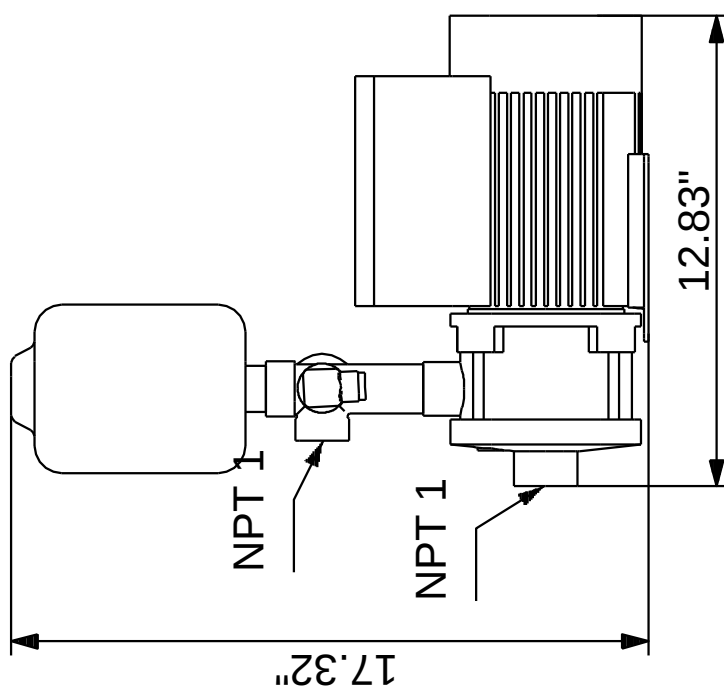
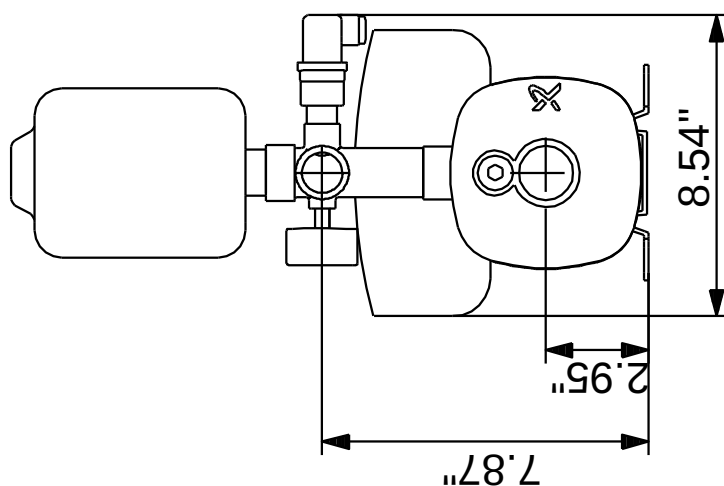
| Description                          | Value                          |
|--------------------------------------|--------------------------------|
| <b>General information:</b>          |                                |
| Product name:                        | CMBE 3-30 AQQE                 |
| Product No.:                         | 98548112                       |
| EAN:                                 | 5711496977497                  |
| <b>Technical:</b>                    |                                |
| Speed for pump data:                 | 3780 rpm                       |
| Actual calculated flow:              | 16.3 US gpm                    |
| Resulting head of the pump:          | 62.67 ft                       |
| Impellers:                           | 2                              |
| Primary shaft seal:                  | AQQE                           |
| Approvals and markings:              | CE,CULUS                       |
| Curve tolerance:                     | ISO9906:2012 3B                |
| Model:                               | A                              |
| Start pressure:                      | Integrated Frequency converter |
| <b>Materials:</b>                    |                                |
| Pump housing:                        | Stainless steel                |
|                                      | DIN W.-Nr. 1.4301              |
|                                      | AISI 304                       |
| Impeller:                            | Stainless steel                |
|                                      | DIN W.-Nr. 1.4301              |
|                                      | AISI 304                       |
| Rubber:                              | EPDM                           |
| <b>Installation:</b>                 |                                |
| Maximum ambient temperature:         | 122 °F                         |
| Flange standard:                     | INTERNAL NPT THREAD            |
| Pump inlet:                          | NPT 1                          |
| Pump outlet:                         | NPT 1                          |
| <b>Liquid:</b>                       |                                |
| Pumped liquid:                       | Water                          |
| Liquid temperature range:            | 32 .. 140 °F                   |
| Liquid temperature during operation: | 68 °F                          |
| Density:                             | 62.29 lb/ft³                   |
| <b>Electrical data:</b>              |                                |
| Rated power - P2:                    | 1.5 HP                         |
| Main frequency:                      | 50 Hz                          |
| Rated voltage:                       | 1 x 200-240 V                  |
| Maximum current consumption:         | 6,70-5,60 A                    |
| p max system:                        | 145 psi                        |
| Rated speed:                         | 360-4000 rpm                   |
| Enclosure class (IEC 34-5):          | IP55                           |
| Insulation class (IEC 85):           | F                              |
| Type of cable plug:                  | NONE                           |
| Mains cable:                         | NO CABLE m                     |
| <b>Tank:</b>                         |                                |
| Tank volume:                         | 0.528 gal                      |
| <b>Others:</b>                       |                                |
| Net weight:                          | 36.7 lb                        |
| Gross weight:                        | 55.3 lb                        |
| Config. file no:                     | 98498683                       |



## 98548112 CMBE 3-30 50 Hz

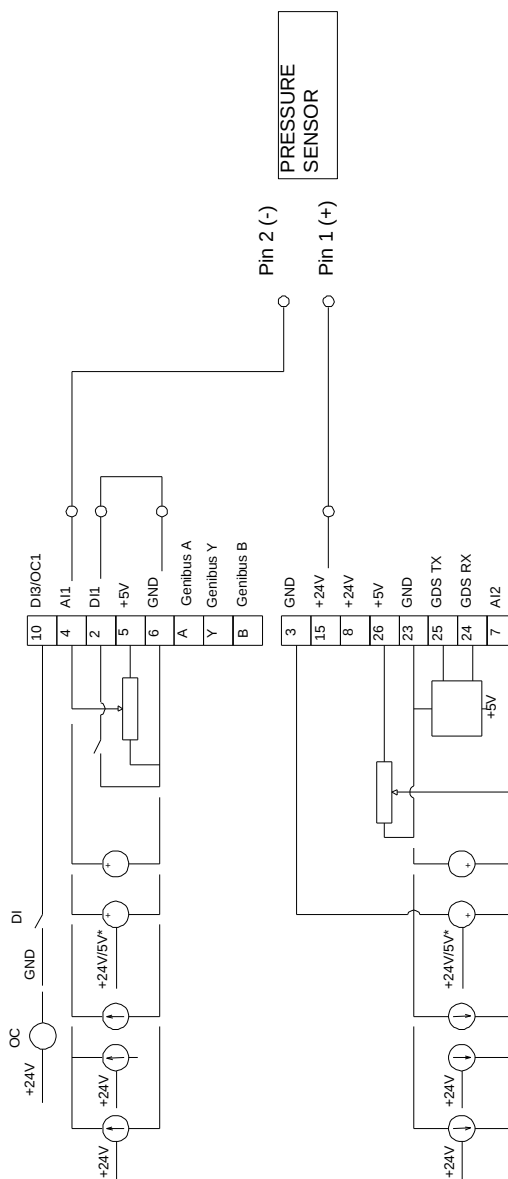
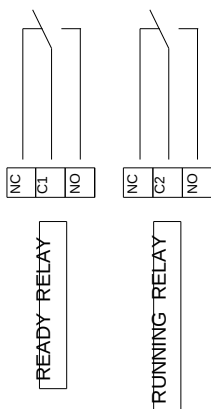
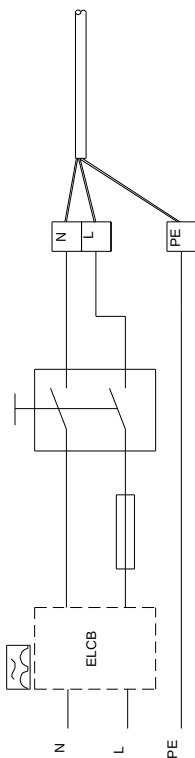
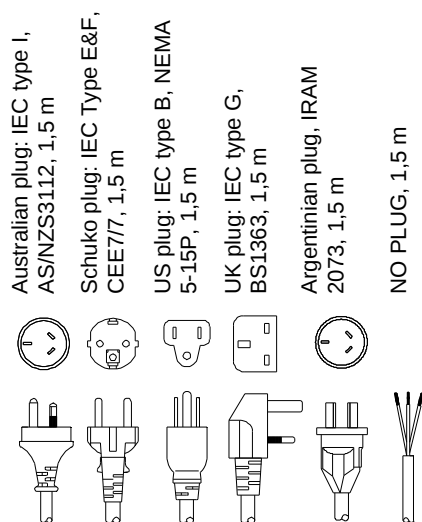


## 98548112 CMBE 3-30 50 Hz



Note! All units are in [mm] unless otherwise stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## 98548112 CMBE 3-30 50 Hz





Company name:

Created by:

Phone:

Date:

2/20/2018

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**Order Data:**

Product name: CMBE 3-30 AQQE

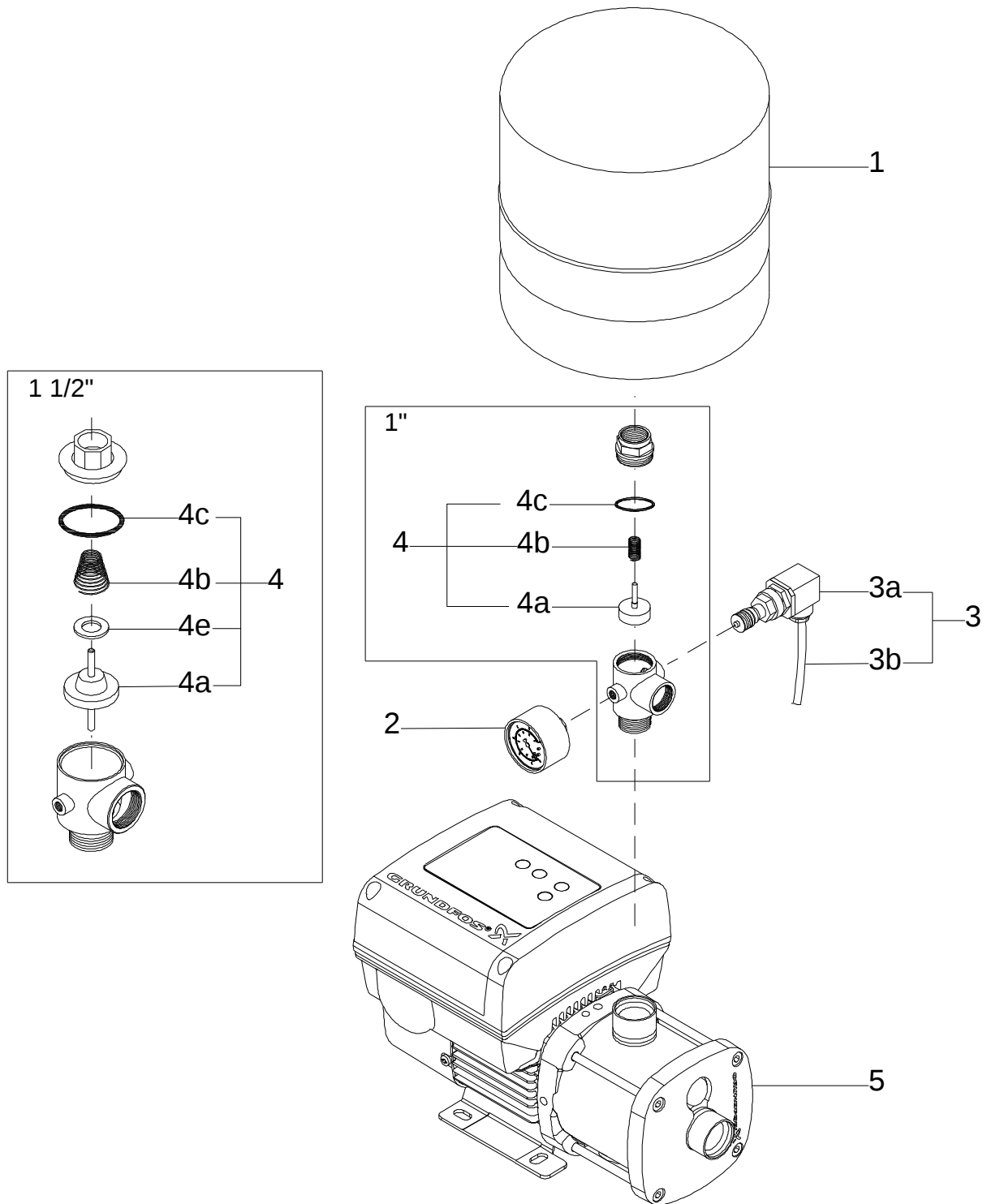
Amount: 1

Product No.: 98548112

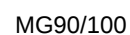
Total: Price on request

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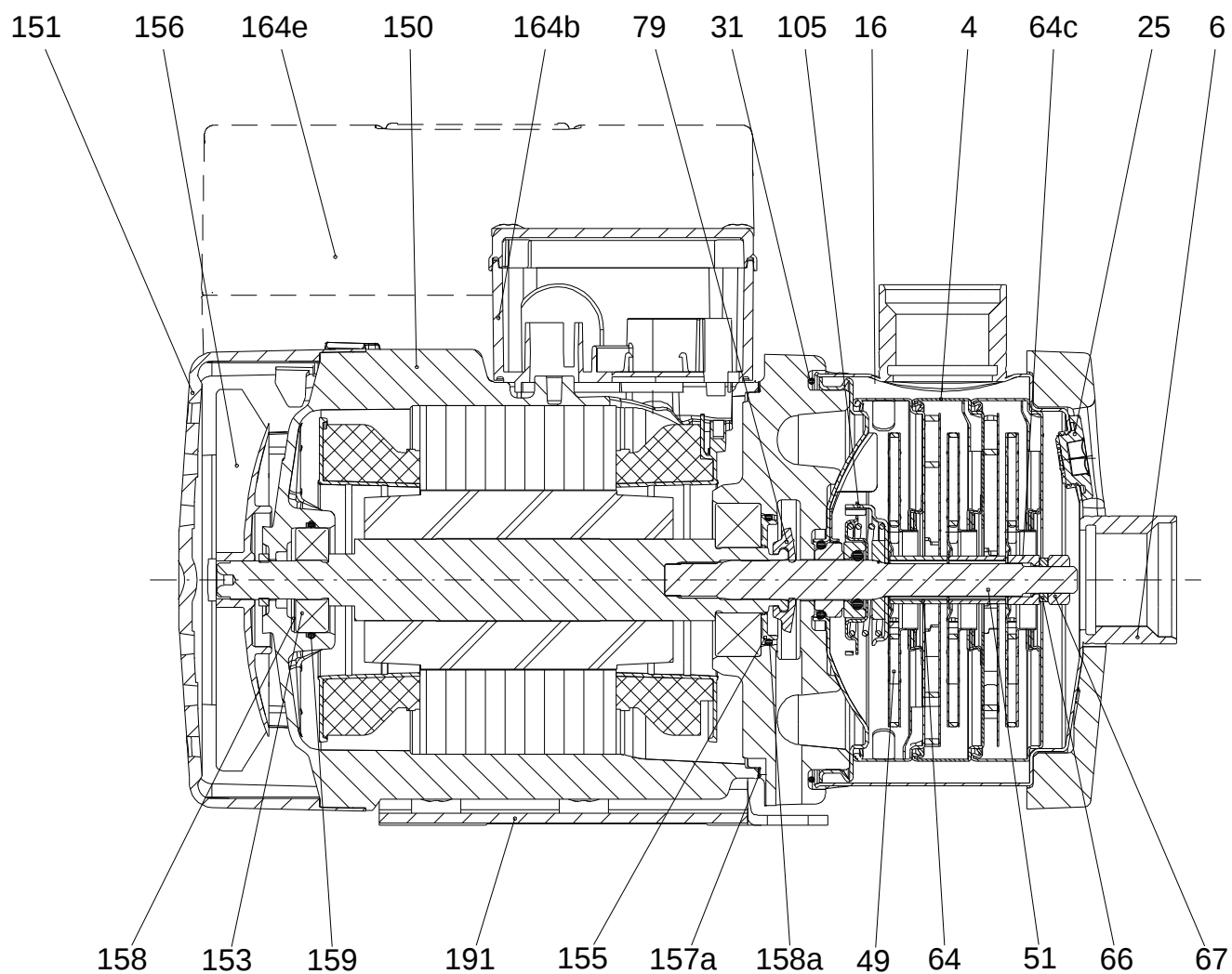
## Exploded view ( TM064097 for CMBE )



## MG71/80



## Sectional drawing



165x100

**Parts list CMBE 3-30, Prod number 98548112**

**Valid from 2.1.2013 (1301)**

| Position | Description                    | Annotation | Classification data | Part No. | Count | Unit |
|----------|--------------------------------|------------|---------------------|----------|-------|------|
| -        | Pump                           |            |                     |          | 1     | pcs  |
|          | Plug                           |            |                     |          | 2     |      |
| -        | Drain plug cpl.                |            |                     |          | 2     |      |
| 11       | O-ring                         |            | Diameter: 18,5      |          |       |      |
|          |                                |            | Material type: EPDM |          |       |      |
|          |                                |            | Thickness: 2        |          |       |      |
| 25       | Plug                           |            |                     |          | 1     |      |
|          | MGE80B                         |            |                     |          |       |      |
| - 4.d    | Chamber cpl.                   |            |                     |          | 1     |      |
|          | Chamber                        |            |                     |          |       |      |
|          | Retainer for seal ring         |            |                     |          |       |      |
|          | Guide vane                     |            |                     |          |       |      |
|          | Plate                          |            |                     |          |       |      |
|          | Vane                           |            |                     |          |       |      |
| 45       | Neck ring                      |            |                     |          |       |      |
| 65       | Neck ring retainer             |            |                     |          |       |      |
| - 5a     | Chamber cpl.                   |            |                     |          | 2     |      |
|          | Retainer                       |            |                     |          |       |      |
|          | Intermediate chamber           |            |                     |          |       |      |
|          | Vane                           |            |                     |          |       |      |
| 45       | Neck ring                      |            |                     |          |       |      |
| 65       | Retainer                       |            |                     |          |       |      |
| 6.a      | Flange                         |            |                     |          | 1     |      |
| 16       | Collar sleeve cpl.             |            |                     |          | 1     |      |
| 26       | Hex socket head cap screw      |            | Length: 80          |          | 4     |      |
|          |                                |            | Thread: M8          |          |       |      |
| 28g      | Cross recess countersunk screw |            | Designation: TORX   |          | 4     |      |
| 31       | O-ring                         |            | Diameter: 114       |          | 1     |      |
|          |                                |            | Material type: EPDM |          |       |      |
|          |                                |            | Thickness: 3,9      |          |       |      |
| - 32     | Cover plate                    |            |                     |          | 1     |      |
|          | Cover plate                    |            |                     |          |       |      |
|          | Plate                          |            |                     |          |       |      |
| 36       | Lock nut                       |            | Thread: M8          |          | 1     |      |
| 49       | Impeller cpl.                  |            |                     |          | 2     |      |
| 51       | Pump shaft                     |            | Diameter: D12       |          | 1     |      |
| 64       | Spacing pipe                   |            |                     |          | 1     |      |
| 64.c     | Clamp                          |            |                     |          | 1     |      |
| 66       | Wedge lock washer              |            |                     |          | 1     |      |
| - 105    | Shaft seal                     |            |                     |          | 1     |      |
| 102      | O-ring                         |            | Diameter: 17,86     |          |       |      |
|          |                                |            | Material type: EPDM |          |       |      |
|          |                                |            | Thickness: 2,62     |          |       |      |
| 103      | Seal ring, stationary          |            |                     |          |       |      |
| 104      | Seal ring, rotating            |            |                     |          |       |      |
| 107      | O-ring                         |            |                     |          |       |      |
| 108      | Compression spring             |            |                     |          |       |      |
| 111      | Retainer                       |            |                     |          |       |      |
| 112      | Driver for shaft seal          |            |                     |          |       |      |
| 111.a    | Stop ring                      |            |                     |          | 1     |      |
| 151      | Fan cover                      |            |                     |          | 1     |      |
| 152      | Pan head thread forming screw  |            |                     |          | 4     |      |
| 156      | Fan                            |            |                     |          | 1     |      |



Company name:

Created by:

Phone:

Date: 2/20/2018

| Position | Description          | Annotation | Classification data | Part No. | Count | Unit |
|----------|----------------------|------------|---------------------|----------|-------|------|
| 191      | Base plate           |            |                     |          | 1     |      |
|          | Cable gland          |            |                     |          | 1     | pcs  |
| -        | Valve cpl.           |            |                     |          | 1     | pcs  |
|          | Valve                |            |                     |          | 1     |      |
|          | Sensor               |            |                     |          | 1     |      |
| 1        | Tank                 |            |                     |          | 1     |      |
| 2        | Pressure gauge       |            |                     |          | 1     |      |
| 3a       | Pressure transmitter |            |                     |          | 1     |      |