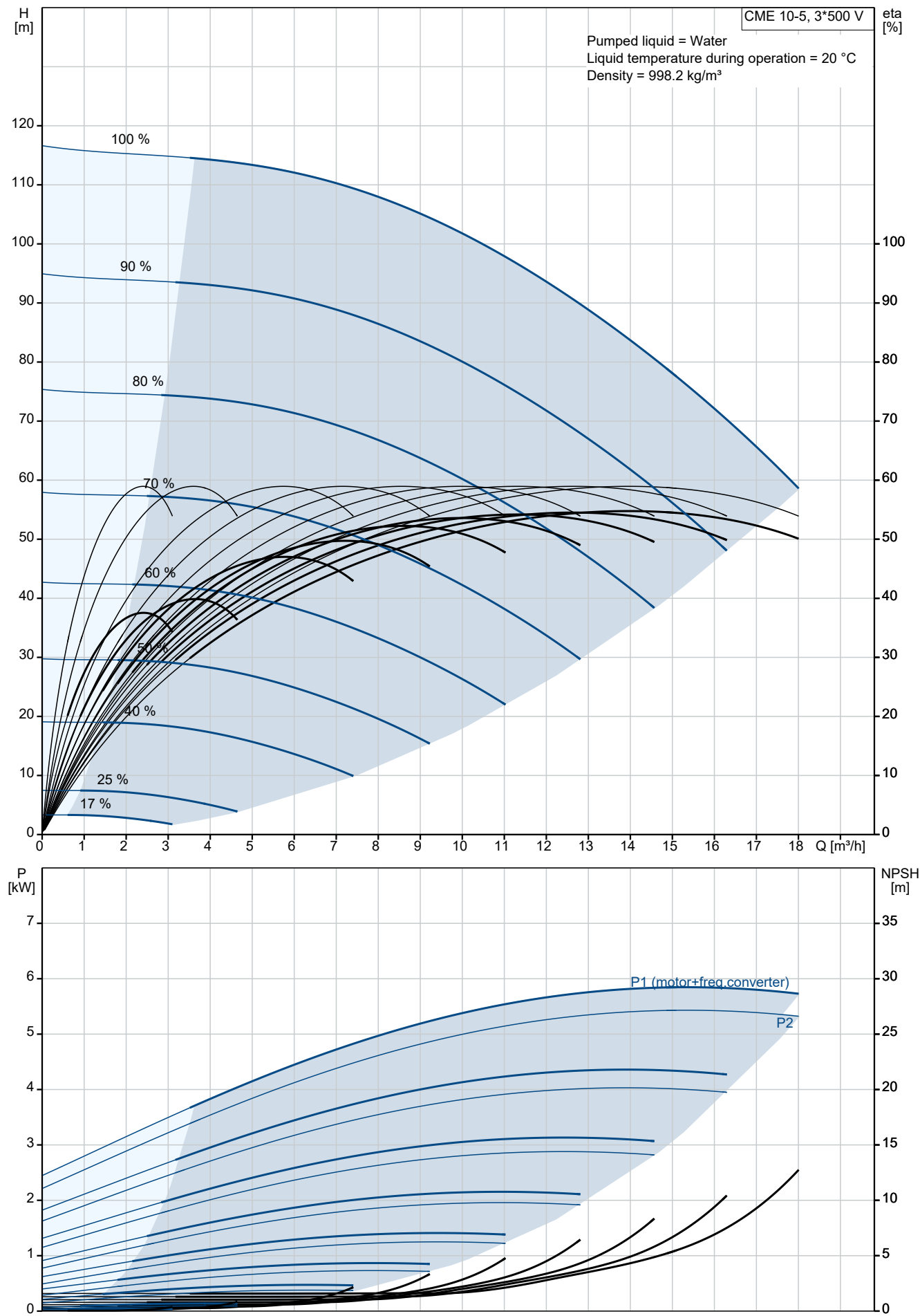


| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p data-bbox="204 163 579 185"><b>CME 10-5 A-R-I-E-AQQE S-A-D-N</b></p> <div data-bbox="284 271 497 398">  </div> <p data-bbox="204 483 464 506">Product No.: <a href="#">99073816</a></p> <p data-bbox="204 544 1445 616">Compact, reliable, horizontal, multistage, end-suction centrifugal pump with axial suction port and radial discharge port. Pump materials in contact with the liquid are in stainless steel. The mechanical shaft seal is a special designed, unbalanced O-ring seal. Pipework connection is via internal Whitworth pipe threads, Rp (ISO 7/1).</p> <p data-bbox="204 685 1126 707">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="204 714 1015 736">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="204 743 1394 792">The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.</p> <p data-bbox="204 831 1449 902">An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="240 916 1458 1059" style="list-style-type: none"> <li>• "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)</li> <li>• "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)</li> <li>• "Alarm": Motor has stopped (flashing red indicator lights).</li> </ul> <p data-bbox="204 1064 1422 1135">Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="204 1149 794 1171">The terminal box holds terminals for these connections:</p> <ul data-bbox="240 1178 880 1440" style="list-style-type: none"> <li>- one dedicated digital input</li> <li>- two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V</li> <li>- 5 V voltage supply to potentiometer and sensor</li> <li>- one configurable digital input or open-collector output</li> <li>- Grundfos Digital Sensor input and output</li> <li>- 24 V voltage supply for sensors</li> <li>- two signal-relay outputs (potential-free contacts)</li> <li>- GENIbus connection</li> <li>- interface for Grundfos CIM fieldbus module.</li> </ul> <p data-bbox="204 1476 512 1503"><b>Further product details</b></p> <p data-bbox="204 1512 1449 1561">Pump and motor are integrated in a compact and user-friendly design. The pump is fitted to a low base plate, making it ideal for installation in systems where compactness is important.</p> <p data-bbox="204 1568 1370 1617">The state-of-the-art design and materials of the shaft seal ensure high wear resistance, improved sticking and dry-running capabilities and long operating life.</p> <p data-bbox="204 1624 1453 1673">Servicing the pump requires no special service tools. Service parts are in stock for quick delivery and are available as kits, single parts or bulk. Service videos are available on <a href="http://www.youtube.com">www.youtube.com</a>.</p> <p data-bbox="204 1713 775 1736">Frequency converter operation offers these functions:</p> <ul data-bbox="240 1742 798 1830" style="list-style-type: none"> <li>- controlled operation, i.e. consumption fluctuates</li> <li>- constant pressure</li> <li>- communication with the pump.</li> </ul> <p data-bbox="204 1863 1198 1886">Adaption of performance through frequency-controlled speed offers obvious benefits such as:</p> <ul data-bbox="240 1892 968 1980" style="list-style-type: none"> <li>- energy savings</li> <li>- increased comfort</li> <li>- control and monitoring of the application and pump performance.</li> </ul> <p data-bbox="204 1984 1449 2056">An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="240 2069 256 2092" style="list-style-type: none"> <li>•</li> </ul> |

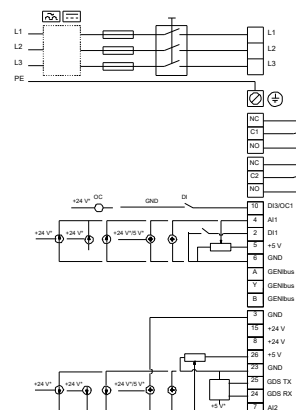
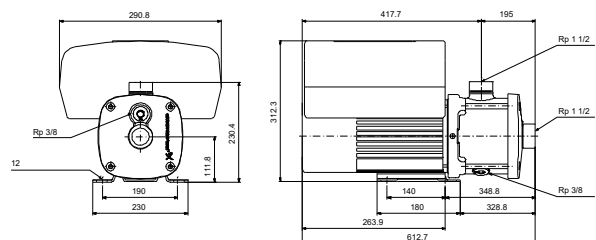
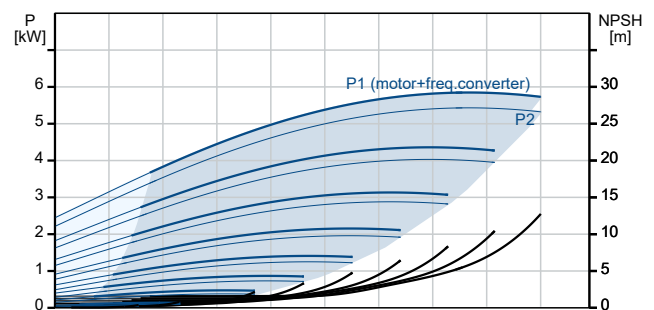
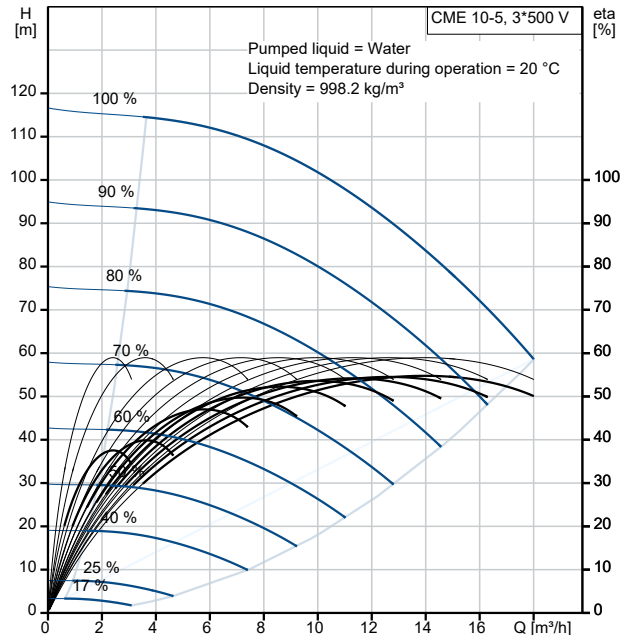
| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p>"Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)</p> <ul style="list-style-type: none"> <li>"Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)</li> <li>"Alarm": Motor has stopped (flashing red indicator lights).</li> </ul> <p>Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p><b>Pump</b></p> <p>A combination of a stop ring and a Nord-lock® washer secures a tight and reliable fixation of the impeller spacing pipes to the splined pump shaft. It is possible to remove and fit the hydraulic parts from the pump side. The inlet and outlet port are integrated in the pump sleeve. The inlet part, chambers and discharge part are hold together by four staybolts and a retaining flange.</p> <p>The pump is fitted with an unbalanced O-ring seal with a rigid torque-transmission system. It has a fixed seal driver ensuring a reliable rotation of all parts. The dynamic secondary seal is an O-ring.</p> <p>Seal faces:</p> <ul style="list-style-type: none"> <li>Rotating seal ring material: silicon carbide (SiC)</li> <li>Stationary seat material: silicon carbide (SiC)</li> </ul> <p>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</p> <p>Secondary seal material: EPDM (ethylene-propylene rubber)</p> <p>EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.</p>  <p>The pump shaft is connected to the motor shaft through a left thread and tight fit. The shaft cannot be dismantled.</p> <p><b>Motor</b></p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to EN 50347. Electrical tolerances comply with EN 60034.</p> <p>The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p>The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.</p> <p>The terminal box holds terminals for these connections:</p> <ul style="list-style-type: none"> <li>one dedicated digital input</li> <li>two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V</li> <li>5 V voltage supply to potentiometer and sensor</li> <li>one configurable digital input or open-collector output</li> <li>Grundfos Digital Sensor input and output</li> <li>24 V voltage supply for sensors</li> <li>two signal-relay outputs (potential-free contacts)</li> <li>GENIbus connection</li> <li>interface for Grundfos CIM fieldbus module.</li> </ul> <p><b>Technical data</b></p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -20 .. 90 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 3480 rpm</p> <p>Rated flow: 12 m³/h</p> <p>Rated head: 93.42 m</p> <p>Code for shaft seal: AQQE</p> |

| Qty. | Description                      |                                          |
|------|----------------------------------|------------------------------------------|
| 1    | Approvals and markings:          | CE,EAC,CURUS,UKCA                        |
|      | Approvals for drinking water:    | WRAS,ACS,UBA                             |
|      | Curve tolerance:                 | ISO9906:2012 3B                          |
|      | Materials:                       |                                          |
|      | Pump housing:                    | Stainless steel<br>EN 1.4301<br>AISI 304 |
|      | Impeller:                        | Stainless steel<br>EN 1.4301<br>AISI 304 |
|      | Installation:                    |                                          |
|      | Range of ambient temperature:    | -20 .. 55 °C                             |
|      | Maximum operating pressure:      | 16 bar                                   |
|      | Max pressure at stated temp:     | 16 bar / 90 °C<br>16 bar / 90 °C         |
|      | Type of connection:              | Rp                                       |
|      | Size of inlet connection:        | 1 1/2 inch                               |
|      | Size of outlet connection:       | 1 1/2 inch                               |
|      | Outlet position:                 | 12                                       |
|      | Electrical data:                 |                                          |
|      | Motor standard:                  | IEC                                      |
|      | Frame size:                      | 112E                                     |
|      | Rated power - P2:                | 5.5 kW                                   |
|      | Mains frequency:                 | 50 / 60 Hz                               |
|      | Suitable for 50/60 Hz:           | Y                                        |
|      | Rated voltage:                   | 3 x 380-500 V                            |
|      | Rated current:                   | 10.3-8.20 A                              |
|      | Rated speed:                     | 360-4000 rpm                             |
|      | Enclosure class (IEC 34-5):      | IP55                                     |
|      | Insulation class (IEC 85):       | F                                        |
|      | Others:                          |                                          |
|      | Terminal box position:           | 12                                       |
|      | Minimum efficiency index, MEI ≥: | 0.52                                     |
|      | Net weight:                      | 47.3 kg                                  |
|      | Gross weight:                    | 50.8 kg                                  |
|      | Country of origin:               | HU                                       |
|      | Custom tariff no.:               | 84137075                                 |

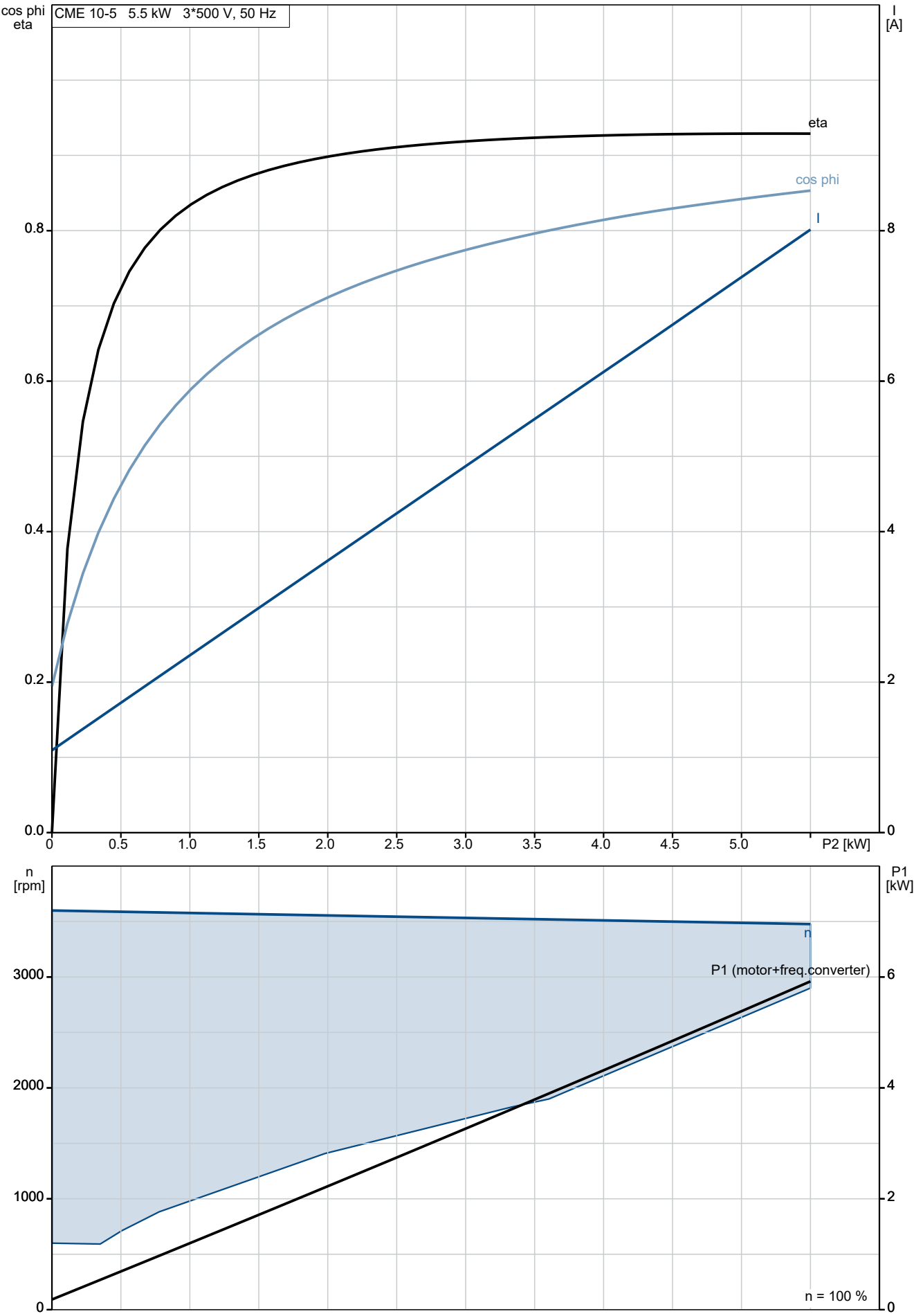
99073816 CME 10-5 A-R-I-E-AQQE S-A-D-N



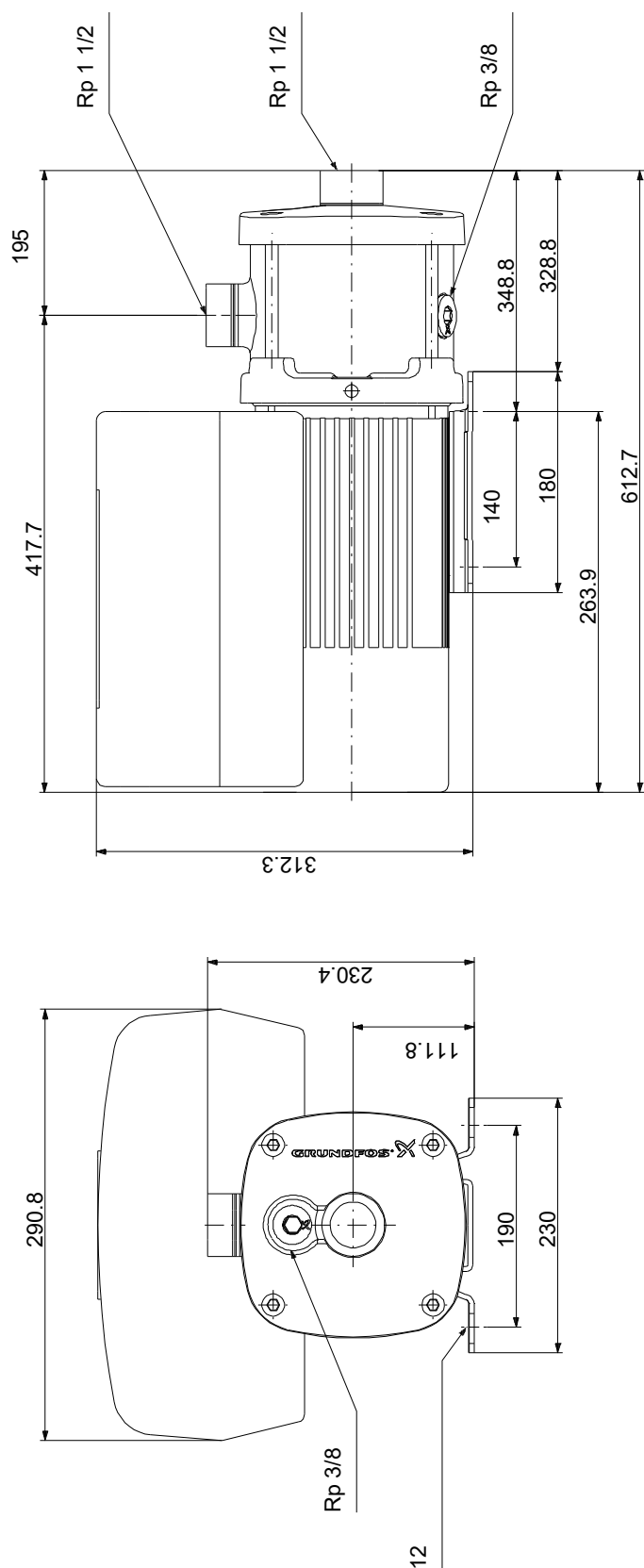
| Description                                                       | Value                         |
|-------------------------------------------------------------------|-------------------------------|
| <b>General information:</b>                                       |                               |
| Product name:                                                     | CME 10-5 A-R-I-E-AQGE S-A-D-N |
| Product No:                                                       | 99073816                      |
| EAN number:                                                       | 5712606234974                 |
| <b>Technical:</b>                                                 |                               |
| Pump speed on which pump data are based:                          | 3480 rpm                      |
| Rated flow:                                                       | 12 m³/h                       |
| Rated head:                                                       | 93.42 m                       |
| Impellers:                                                        | 5                             |
| Code for shaft seal:                                              | AQGE                          |
| Approvals and markings:                                           | CE,EAC,CURUS,UKCA             |
| Approvals for drinking water:                                     | WRAS,ACS,UBA                  |
| Curve tolerance:                                                  | ISO9906:2012 3B               |
| Pump version:                                                     | A                             |
| The first model is called A which is followed by model B, C etc.: | A                             |
| <b>Materials:</b>                                                 |                               |
| Pump housing:                                                     | Stainless steel               |
| Pump housing:                                                     | EN 1.4301                     |
| Pump housing:                                                     | AISI 304                      |
| Impeller:                                                         | Stainless steel               |
| Impeller:                                                         | EN 1.4301                     |
| Impeller:                                                         | AISI 304                      |
| Material code:                                                    | I                             |
| Code for rubber:                                                  | E                             |
| <b>Installation:</b>                                              |                               |
| Range of ambient temperature:                                     | -20 .. 55 °C                  |
| Maximum operating pressure:                                       | 16 bar                        |
| Max pressure at stated temp:                                      | 16 bar / 90 °C                |
| Max pressure at stated temp:                                      | 16 bar / 90 °C                |
| Type of connection:                                               | Rp                            |
| Size of inlet connection:                                         | 1 1/2 inch                    |
| Size of outlet connection:                                        | 1 1/2 inch                    |
| Outlet position:                                                  | 12                            |
| Connect code:                                                     | R                             |
| <b>Liquid:</b>                                                    |                               |
| Pumped liquid:                                                    | Water                         |
| Liquid temperature range:                                         | -20 .. 90 °C                  |
| Selected liquid temperature:                                      | 20 °C                         |
| Density:                                                          | 998.2 kg/m³                   |
| <b>Electrical data:</b>                                           |                               |
| Motor standard:                                                   | IEC                           |
| Frame size:                                                       | 112E                          |
| Rated power - P2:                                                 | 5.5 kW                        |
| Mains frequency:                                                  | 50 / 60 Hz                    |
| Suitable for 50/60 Hz:                                            | Y                             |
| Rated voltage:                                                    | 3 x 380-500 V                 |
| Rated current:                                                    | 10.3-8.20 A                   |
| Rated speed:                                                      | 360-4000 rpm                  |
| Enclosure class (IEC 34-5):                                       | IP55                          |
| Insulation class (IEC 85):                                        | F                             |
| <b>Controls:</b>                                                  |                               |
| Frequency converter:                                              | Built-in                      |
| <b>Others:</b>                                                    |                               |
| Terminal box position:                                            | 12                            |
| Minimum efficiency index, MEI ≥:                                  | 0.52                          |
| Net weight:                                                       | 47.3 kg                       |
| Gross weight:                                                     | 50.8 kg                       |
| Country of origin:                                                | HU                            |
| Custom tariff no.:                                                | 84137075                      |



# 99073816 CME 10-5 A-R-I-E-AQQE S-A-D-N

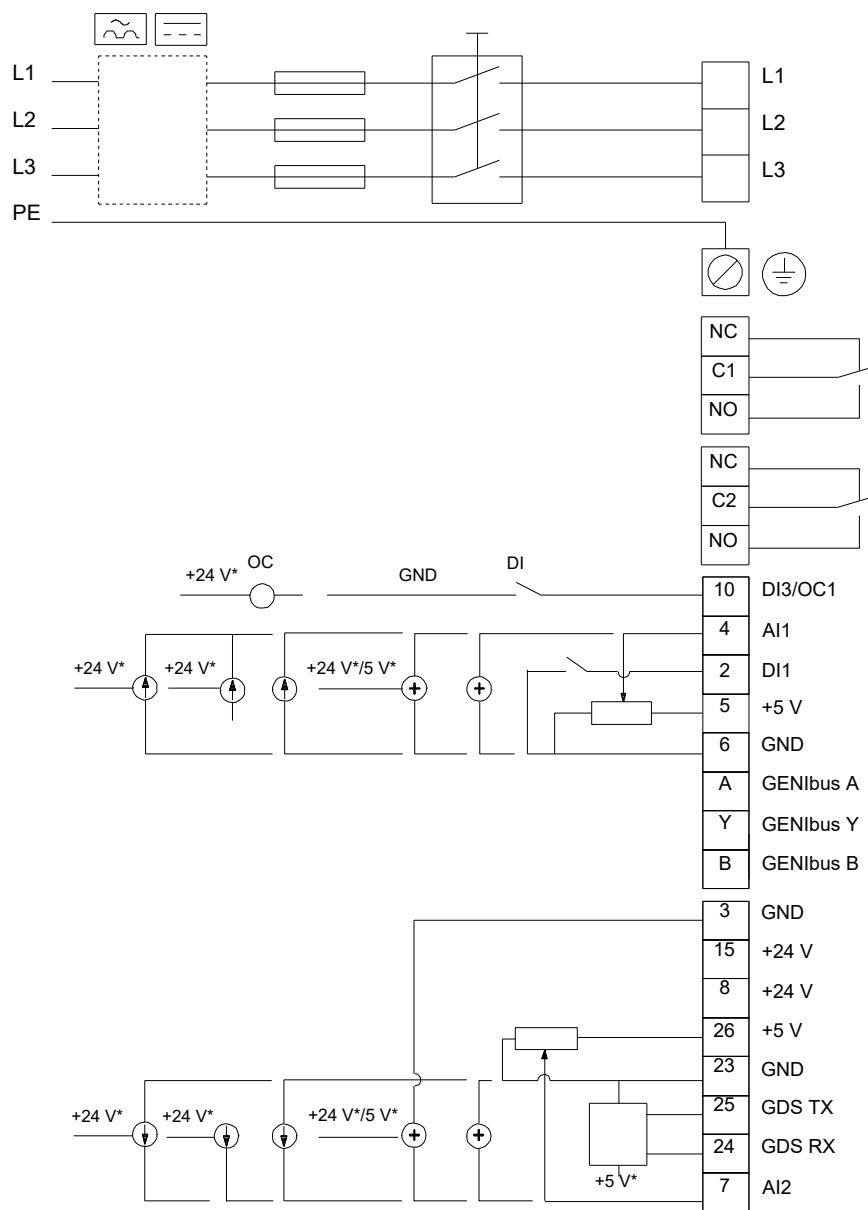


99073816 CME 10-5 A-R-I-E-AQQE S-A-D-N



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

# 99073816 CME 10-5 A-R-I-E-AQQE S-A-D-N



Note! All units are in [mm] unless others are stated.

|                    |  |
|--------------------|--|
| <b>Order Data:</b> |  |
|--------------------|--|

| Position | Your pos. | Product name | Amount | Product No | Total            |
|----------|-----------|--------------|--------|------------|------------------|
|          |           | CME 10-5     | 1      | 99073816   | Price on request |
|          |           |              |        |            |                  |