

## Inventflow: Grundfos A-partner

### Grundfos CRN 95-3 A-F-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/crn/grundfos-crn-95-3-a-f-a-e-hqqe>

#### Contact

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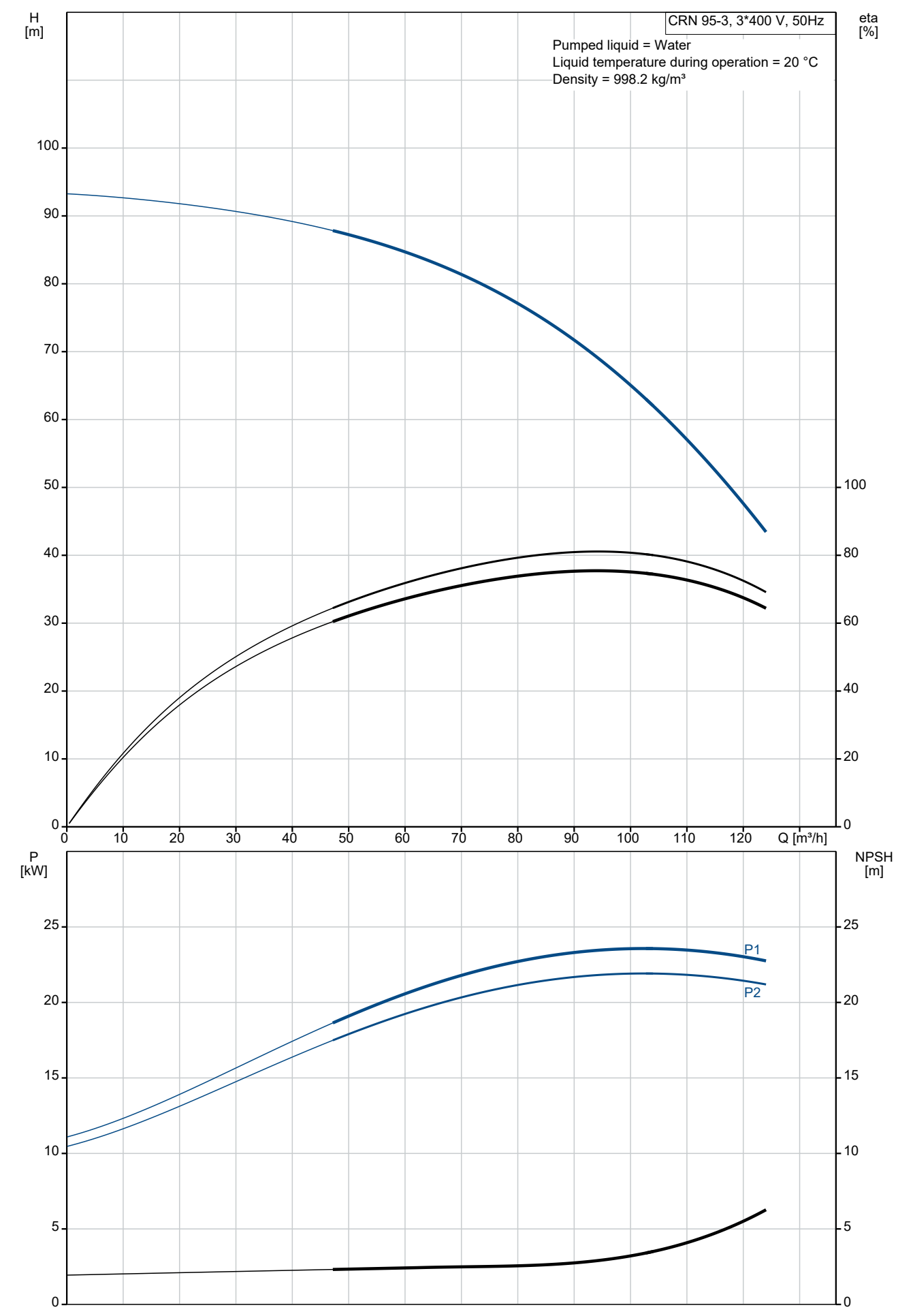
#### Datasheet



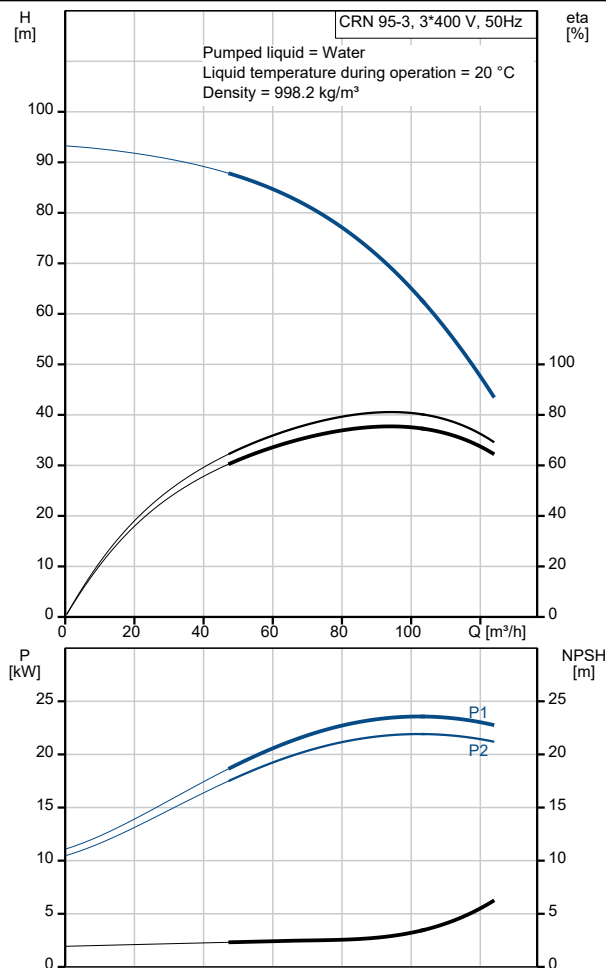
| Qty.                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
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| 1                                        | <p><b>CRN 95-3 A-F-A-E-HQQE</b></p>  <p style="text-align: center;"><b>Note! Product picture may differ from actual product</b></p> <p>Product No.: <a href="#">99141762</a></p> <p>Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. The Grundfos cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via DIN flanges.</p> <p>The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p>Liquid:</p> <table> <tr> <td>Pumped liquid:</td><td>Water</td></tr> <tr> <td>Liquid temperature range:</td><td>-40 .. 120 °C</td></tr> <tr> <td>Selected liquid temperature:</td><td>20 °C</td></tr> <tr> <td>Density:</td><td>998.2 kg/m<sup>3</sup></td></tr> </table> <p>Technical:</p> <table> <tr> <td>Pump speed on which pump data are based:</td><td>2960 rpm</td></tr> <tr> <td>Rated flow:</td><td>95 m<sup>3</sup>/h</td></tr> <tr> <td>Rated head:</td><td>69.3 m</td></tr> <tr> <td>Pump orientation:</td><td>Vertical</td></tr> <tr> <td>Shaft seal arrangement:</td><td>Single</td></tr> <tr> <td>Code for shaft seal:</td><td>HQQE</td></tr> <tr> <td>Approvals:</td><td>CE,EAC,UKCA,ACS,WRAS</td></tr> <tr> <td>Curve tolerance:</td><td>ISO9906:2012 3B</td></tr> </table> <p>Materials:</p> <table> <tr> <td>Base:</td><td>Stainless steel<br/>EN 1.4408</td></tr> <tr> <td>Impeller:</td><td>Stainless steel<br/>EN 1.4401</td></tr> <tr> <td>Bearing:</td><td>WC/WC</td></tr> <tr> <td>Support bearing:</td><td>Graflon</td></tr> <tr> <td>Material certified according to:</td><td>European standards</td></tr> </table> <p>Installation:</p> <table> <tr> <td>Maximum ambient temperature:</td><td>60 °C</td></tr> <tr> <td>Maximum operating pressure:</td><td>16 bar</td></tr> <tr> <td>Max pressure at stated temp:</td><td>16 bar / 120 °C</td></tr> <tr> <td>Type of connection:</td><td>DIN</td></tr> <tr> <td>Size of inlet connection:</td><td>DN 100</td></tr> <tr> <td>Size of outlet connection:</td><td>DN 100</td></tr> <tr> <td>Pressure rating for connection:</td><td>PN 16</td></tr> <tr> <td>Flange size for motor:</td><td>FF300</td></tr> </table> <p>Electrical data:</p> <table> <tr> <td>Motor standard:</td><td>IEC</td></tr> <tr> <td>Motor type:</td><td>180MB</td></tr> <tr> <td>IE Efficiency class:</td><td>IE3</td></tr> </table> | Pumped liquid: | Water | Liquid temperature range: | -40 .. 120 °C | Selected liquid temperature: | 20 °C | Density: | 998.2 kg/m <sup>3</sup> | Pump speed on which pump data are based: | 2960 rpm | Rated flow: | 95 m <sup>3</sup> /h | Rated head: | 69.3 m | Pump orientation: | Vertical | Shaft seal arrangement: | Single | Code for shaft seal: | HQQE | Approvals: | CE,EAC,UKCA,ACS,WRAS | Curve tolerance: | ISO9906:2012 3B | Base: | Stainless steel<br>EN 1.4408 | Impeller: | Stainless steel<br>EN 1.4401 | Bearing: | WC/WC | Support bearing: | Graflon | Material certified according to: | European standards | Maximum ambient temperature: | 60 °C | Maximum operating pressure: | 16 bar | Max pressure at stated temp: | 16 bar / 120 °C | Type of connection: | DIN | Size of inlet connection: | DN 100 | Size of outlet connection: | DN 100 | Pressure rating for connection: | PN 16 | Flange size for motor: | FF300 | Motor standard: | IEC | Motor type: | 180MB | IE Efficiency class: | IE3 |
| Pumped liquid:                           | Water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Liquid temperature range:                | -40 .. 120 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Selected liquid temperature:             | 20 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Density:                                 | 998.2 kg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Pump speed on which pump data are based: | 2960 rpm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Rated flow:                              | 95 m <sup>3</sup> /h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Rated head:                              | 69.3 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Pump orientation:                        | Vertical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Shaft seal arrangement:                  | Single                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Code for shaft seal:                     | HQQE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Approvals:                               | CE,EAC,UKCA,ACS,WRAS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Curve tolerance:                         | ISO9906:2012 3B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Base:                                    | Stainless steel<br>EN 1.4408                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Impeller:                                | Stainless steel<br>EN 1.4401                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Bearing:                                 | WC/WC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Support bearing:                         | Graflon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Material certified according to:         | European standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Maximum ambient temperature:             | 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Maximum operating pressure:              | 16 bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Max pressure at stated temp:             | 16 bar / 120 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Type of connection:                      | DIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Size of inlet connection:                | DN 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Size of outlet connection:               | DN 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Pressure rating for connection:          | PN 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Flange size for motor:                   | FF300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Motor standard:                          | IEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| Motor type:                              | 180MB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |
| IE Efficiency class:                     | IE3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |       |                           |               |                              |       |          |                         |                                          |          |             |                      |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |       |                        |       |                 |     |             |       |                      |     |

| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <p>Rated power - P2: 22 kW</p> <p>Power (P2) required by pump: 22 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-415D/660-690Y V</p> <p>Rated current: 39.5/22.8 A</p> <p>Starting current: 830 %</p> <p>Cos phi - power factor: 0.90-0.90</p> <p>Rated speed: 2950 rpm</p> <p>Efficiency: IE3 92,7%</p> <p>Motor efficiency at full load: 92.7-92.7 %</p> <p>Motor efficiency at 3/4 load: 93.7 %</p> <p>Motor efficiency at 1/2 load: 94.4 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): 55 Dust/Jetting</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 85U17530</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Others:</p> <p>Net weight: 239 kg</p> <p>Gross weight: 303 kg</p> <p>Shipping volume: 1.14 m<sup>3</sup></p> <p>Finnish LVI No.: 4925617</p> <p>Thrust handling device: N</p> <p>Country of origin: DK</p> <p>Custom tariff no.: 84137075</p> |

99141762 CRN 95-3 A-F-A-E-HQQE 50 Hz

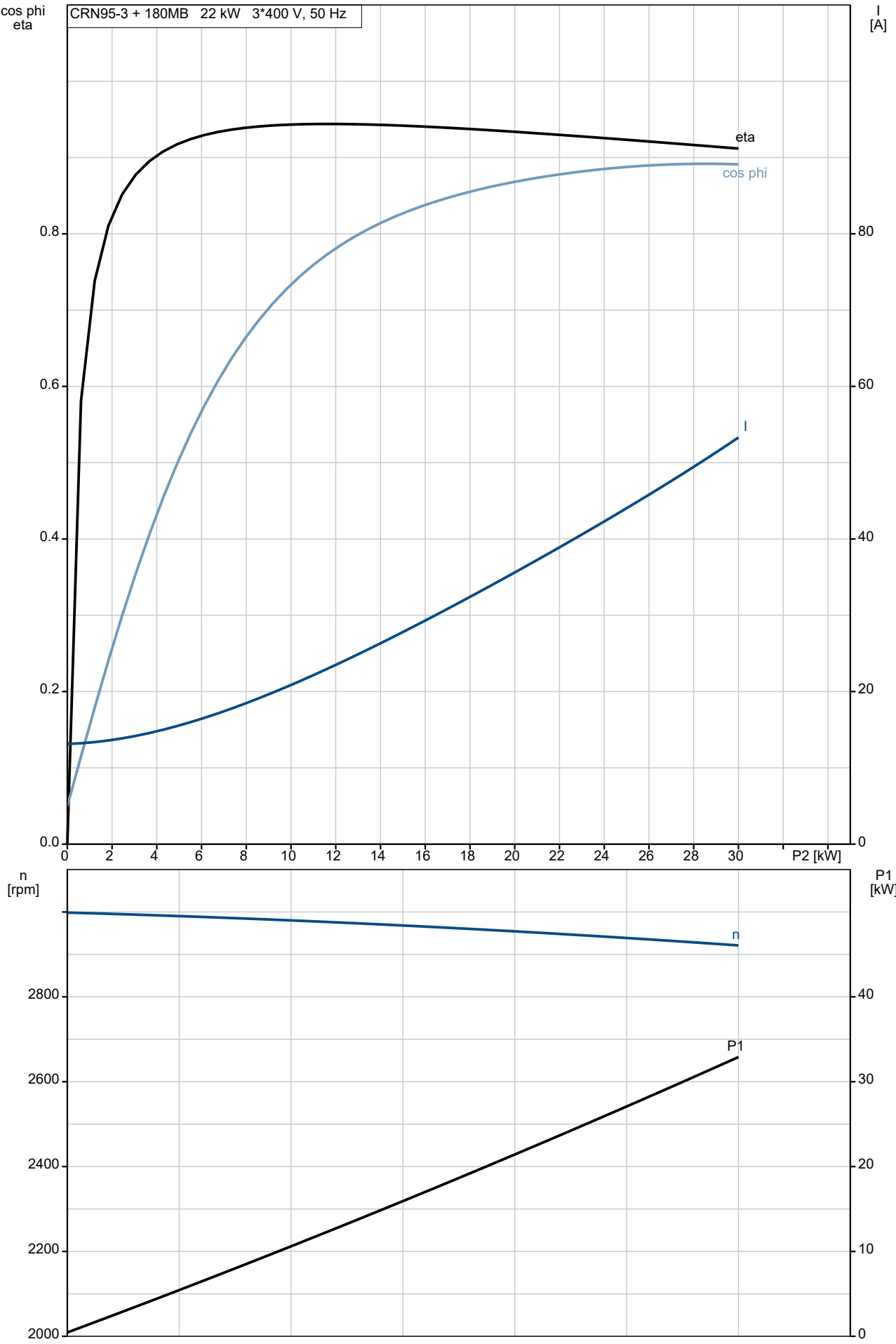


| Description                              | Value                      |
|------------------------------------------|----------------------------|
| <b>General information:</b>              |                            |
| Product name:                            | CRN 95-3<br>A-F-A-E-HQQE   |
| Product No:                              | 99141762                   |
| EAN number:                              | 5712607527679              |
| <b>Technical:</b>                        |                            |
| Pump speed on which pump data are based: | 2960 rpm                   |
| Rated flow:                              | 95 m³/h                    |
| Rated head:                              | 69.3 m                     |
| Maximum head:                            | 93.4 m                     |
| Stages:                                  | 3                          |
| Impellers:                               | 3                          |
| Low NPSH:                                | N                          |
| Pump orientation:                        | Vertical                   |
| Shaft seal arrangement:                  | Single                     |
| Code for shaft seal:                     | HQQE                       |
| Approvals:                               | CE,EAC,UKCA,ACS,WRAS       |
| Curve tolerance:                         | ISO9906:2012 3B            |
| Pump version:                            | A                          |
| Model:                                   | A                          |
| Cooling:                                 | IC 411                     |
| <b>Materials:</b>                        |                            |
| Base:                                    | Stainless steel            |
| Base:                                    | EN 1.4408                  |
| Impeller:                                | Stainless steel            |
| Impeller:                                | EN 1.4401                  |
| Material code:                           | A                          |
| Code for rubber:                         | E                          |
| Bearing:                                 | WC/WC                      |
| Support bearing:                         | Graflon                    |
| Material certified according to:         | European standards         |
| <b>Installation:</b>                     |                            |
| Maximum ambient temperature:             | 60 °C                      |
| Maximum operating pressure:              | 16 bar                     |
| Max pressure at stated temp:             | 16 bar / 120 °C            |
| Type of connection:                      | DIN                        |
| Size of inlet connection:                | DN 100                     |
| Size of outlet connection:               | DN 100                     |
| Pressure rating for connection:          | PN 16                      |
| Flange size for motor:                   | FF300                      |
| Connect code:                            | F                          |
| <b>Liquid:</b>                           |                            |
| Pumped liquid:                           | Water                      |
| Liquid temperature range:                | -40 .. 120 °C              |
| Selected liquid temperature:             | 20 °C                      |
| Density:                                 | 998.2 kg/m³                |
| <b>Electrical data:</b>                  |                            |
| Motor standard:                          | IEC                        |
| Motor type:                              | 180MB                      |
| IE Efficiency class:                     | IE3                        |
| Rated power - P2:                        | 22 kW                      |
| Power (P2) required by pump:             | 22 kW                      |
| Mains frequency:                         | 50 Hz                      |
| Rated voltage:                           | 3 x 380-415D/660-690Y<br>V |
| Rated current:                           | 39.5/22.8 A                |
| Starting current:                        | 830 %                      |
| Cos phi - power factor:                  | 0.90-0.90                  |
| Rated speed:                             | 2950 rpm                   |
| Efficiency:                              | IE3 92,7%                  |
| Motor efficiency at full load:           | 92.7-92.7 %                |
| Motor efficiency at 3/4 load:            | 93.7 %                     |
| Motor efficiency at 1/2 load:            | 94.4 %                     |

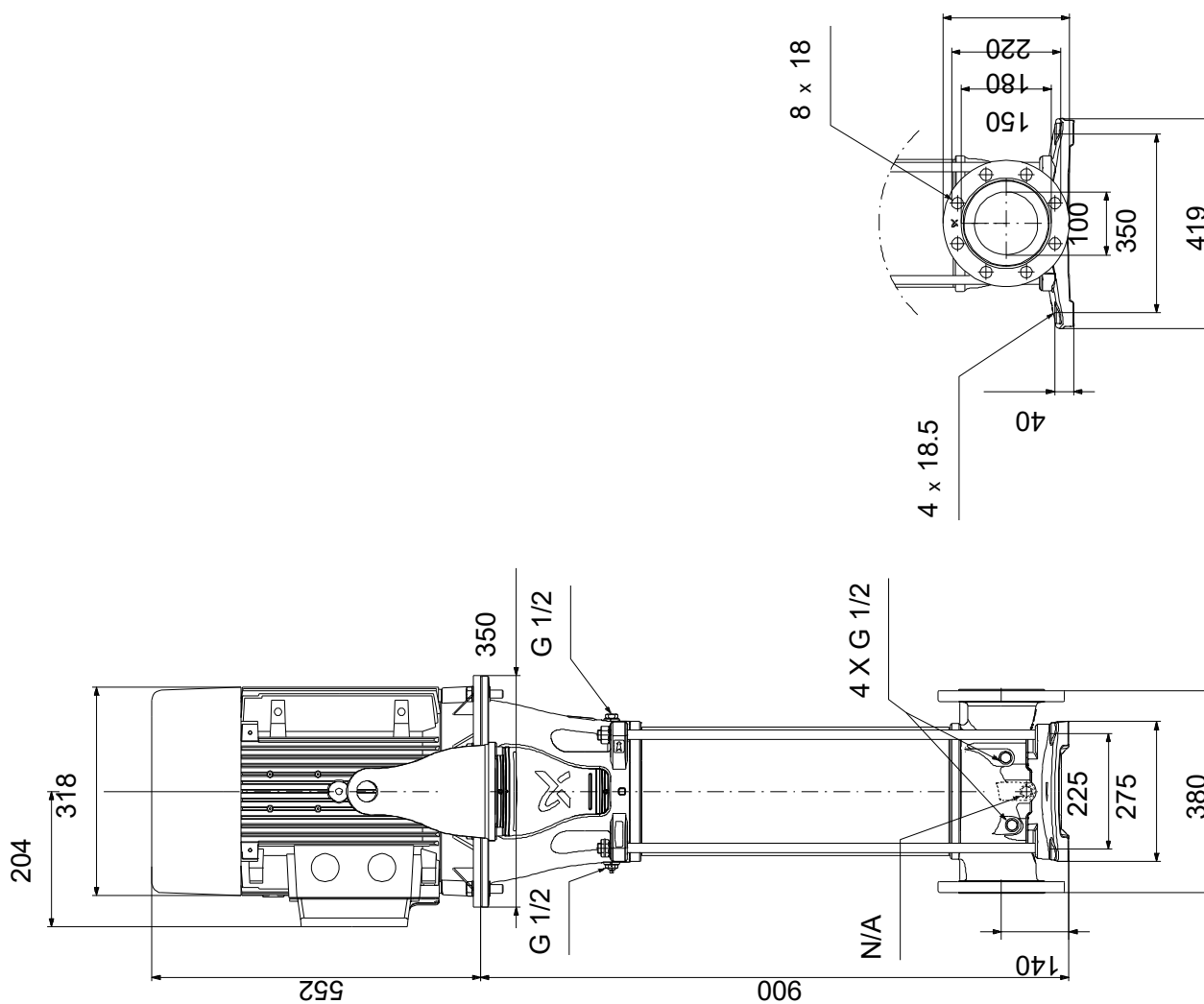


| Description                 | Value               |
|-----------------------------|---------------------|
| Number of poles:            | 2                   |
| Enclosure class (IEC 34-5): | 55 Dust/Jetting     |
| Insulation class (IEC 85):  | F                   |
| Motor protec:               | PTC                 |
| Motor No:                   | 85U17530            |
| <b>Controls:</b>            |                     |
| Frequency converter:        | NONE                |
| <b>Others:</b>              |                     |
| Net weight:                 | 239 kg              |
| Gross weight:               | 303 kg              |
| Shipping volume:            | 1.14 m <sup>3</sup> |
| Finnish LVI No.:            | 4925617             |
| Thrust handling device:     | N                   |
| Country of origin:          | DK                  |
| Custom tariff no.:          | 84137075            |

# 99141762 CRN 95-3 A-F-A-E-HQQE 50 Hz



**99141762 CRN 95-3 A-F-A-E-HQQE 50 Hz**



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

**Spare parts CRN 95-3, Product No. 99141762**  
**Produced After 1827 (production year and week number)**

| Pos   | Omschrijving              | Opmerking tekst       | Classificatie Gegevens | Onderdeelnr. | Aantal | Eenheid |
|-------|---------------------------|-----------------------|------------------------|--------------|--------|---------|
| -     | Kit, bearing              |                       |                        | 99415812     | 1      | pcs     |
| - 47a | Bearing cpl.              |                       |                        |              | 1      |         |
|       | Driver                    |                       |                        |              | 1      |         |
|       | Retainer                  |                       |                        |              | 1      |         |
| -     | Kit, coupling             |                       |                        | 99190038     | 1      | pcs     |
| - 7   | Coupling cpl.             |                       |                        |              | 1      |         |
| 10a   | Coupling                  |                       |                        |              | 2      |         |
| 9     | Hex socket head cap screw | Designation: DIN 912  |                        |              | 4      |         |
|       |                           | Length (mm): 25       |                        |              |        |         |
|       |                           | Thread: M10           |                        |              |        |         |
| 10    | Parallel pin              |                       |                        |              | 1      |         |
| -     | Kit, coupling guard       |                       |                        | 99196379     | 2      | pcs     |
| 7b    | Lock washer               |                       |                        |              | 2      |         |
| 7a    | Screw                     |                       |                        |              | 2      |         |
| 7     | Coupling guard            |                       |                        |              | 1      |         |
| -     | Kit, flange               |                       |                        | 99432754     | 1      | pcs     |
| 440b  | Lock ring                 |                       |                        |              | 1      |         |
| 440a  | Flange                    | Diameter: DN 100      |                        |              | 1      |         |
|       |                           | Pressure: PN 16       |                        |              |        |         |
| -     | Kit, impeller             |                       |                        | 99124955     | 3      | pcs     |
| 48    | Nut                       |                       |                        |              | 1      |         |
| 49b   | Split cone                |                       |                        |              | 1      |         |
| 49    | Impeller                  |                       |                        |              | 1      |         |
| -     | Kit, O-rings              |                       |                        | 99262378     | 1      | pcs     |
| 37    | O-ring                    |                       |                        |              | 2      |         |
| 38    | O-ring                    |                       |                        |              | 8      |         |
| 109   | O-ring                    |                       |                        |              | 1      |         |
| 110   | O-ring                    | Diameter: 21,5        |                        |              | 1      |         |
|       |                           | Material type: EPDM   |                        |              |        |         |
|       |                           | Thickness: 4,25       |                        |              |        |         |
| -     | Kit, plug                 |                       |                        | 99262366     | 1      | pcs     |
| -     | Plug cpl.                 |                       |                        |              | 5      |         |
| 25    | Plug                      |                       |                        |              | 1      |         |
| 38    | O-ring                    |                       |                        |              | 1      |         |
| -     | Air vent screw            |                       |                        |              | 1      |         |
| - 18  | Air vent screw            |                       |                        |              | 1      |         |
|       | Spindle                   |                       |                        |              |        |         |
|       | Plug                      |                       |                        |              |        |         |
| 38    | O-ring                    |                       |                        |              | 1      |         |
| -     | Kit, shaft seal HQQE      |                       |                        | 99262346     | 1      | pcs     |
|       | Grinding device           |                       |                        |              | 1      |         |
| 105   | Shaft seal                |                       |                        |              | 1      |         |
| -     | Kit, staybolts            |                       |                        | 99190080     | 4      | pcs     |
| 26    | Staybolt                  |                       |                        |              | 1      |         |
| 36    | Nut                       |                       |                        |              | 1      |         |
| 66a   | Washer                    |                       |                        |              | 1      |         |
| -     | Kit, strap                |                       |                        | 99190048     | 2      | pcs     |
| 26c   | Washer                    | Designation: DIN 125A |                        |              | 1      |         |
|       |                           | Thickness: 1,6        |                        |              |        |         |
| 26b   | Hex head screw            |                       |                        |              | 1      |         |
| 26a   | Strap                     |                       |                        |              | 1      |         |
| -     | Kit, wear parts           |                       |                        | 99262415     | 1      | pcs     |
|       | Adjusting fork            |                       |                        |              | 1      |         |
| 45    | Neck ring                 |                       |                        |              | 4      |         |
| 47d   | Lock ring                 |                       |                        |              | 3      |         |
| 47c   | Bush                      |                       |                        |              | 3      |         |
| 65    | Neck ring retainer        |                       |                        |              | 4      |         |
| -     | Motor                     |                       |                        |              | 1      | pcs     |
| -     | Kit, bearing cpl.         |                       |                        | 96796812     | 1      |         |

| Pos   | Omschrijving                  | Opmerking tekst | Classificatie Gegevens | Onderdeelnr. | Aantal | Eenheid |
|-------|-------------------------------|-----------------|------------------------|--------------|--------|---------|
| 153   | Angular-contact bearing       |                 | Designation: 7310B     |              | 1      |         |
| 154   | Ball bearing                  |                 |                        |              | 1      |         |
| 158   | Waved washer                  |                 |                        |              | 2      |         |
| 159   | V-ring                        |                 |                        |              | 1      |         |
| -     | Kit, bearing plate            |                 |                        | 96796809     | 1      |         |
| 155.a | Cover                         |                 |                        |              | 1      |         |
| 208a  | Gasket                        |                 |                        |              | 3      |         |
| 208   | Hex socket head cap screw     |                 | Designation: DIN912    |              | 3      |         |
|       |                               |                 | Length (mm): 40        |              |        |         |
|       |                               |                 | Thread: M5             |              |        |         |
| -     | Kit, eyebolt                  |                 |                        | 96796712     | 1      |         |
| 189   | Eyebolt                       |                 |                        |              | 2      |         |
| -     | Kit, fan                      |                 |                        | 96796650     | 1      |         |
| 156.c | Retaining ring                |                 |                        |              | 1      |         |
| 156   | Fan                           |                 |                        |              | 1      |         |
| -     | Kit, fan cover                |                 |                        | 96796647     | 1      |         |
| 151   | Fan cover                     |                 |                        |              | 1      |         |
| 152.a | Rubber bush                   |                 |                        |              | 4      |         |
| 152   | Hex head cap screw            |                 |                        |              | 4      |         |
| 196   | Diaphragm                     |                 |                        |              | 1      |         |
| -     | Kit, flange                   |                 |                        | 96796807     | 1      |         |
| 156.b | Flange                        |                 |                        |              | 1      |         |
| 159.b | Seal ring                     |                 |                        |              | 1      |         |
| 185   | Hex socket head cap screw     |                 |                        |              | 4      |         |
| 186   | Drain plug                    |                 |                        |              | 4      |         |
| 195.a | Grease nipple                 |                 |                        |              | 1      |         |
| -     | Kit, gaskets                  |                 |                        | 96798508     | 1      |         |
| 184   | O-ring                        |                 | Diameter: 235          |              | 2      |         |
| -     | Kit, lubrication nipple       |                 |                        | 96796671     | 1      |         |
| 195.b | Grease nipple                 |                 |                        |              | 2      |         |
| 195.a | Grease nipple                 |                 |                        |              | 1      |         |
| -     | Kit, ND-end shield cpl.       |                 |                        | 96796810     | 1      |         |
| 156a  | End shield NDE                |                 |                        |              | 1      |         |
| 158   | Waved washer                  |                 |                        |              | 1      |         |
| 159   | V-ring                        |                 |                        |              | 1      |         |
| 185.c | Nut                           |                 |                        |              | 4      |         |
| 185.a | Hex socket head cap screw     |                 |                        |              | 4      |         |
| 195.b | Grease nipple                 |                 |                        |              | 1      |         |
| -     | Kit, shaft seal               |                 |                        | 96843460     | 1      |         |
| 159.b | V-ring                        |                 |                        |              | 1      |         |
| 159   | V-ring                        |                 |                        |              | 1      |         |
| -     | Kit, terminal board           |                 |                        | 96796657     | 1      |         |
|       | Terminal connection           |                 |                        |              | 3      |         |
|       | Washer                        |                 |                        |              | 12     |         |
| 36    | Hex nut                       |                 |                        |              | 12     |         |
| 173   | Torx Screw                    |                 |                        |              | 1      |         |
| 176.d | Terminal board                |                 |                        |              | 1      |         |
| 176   | Terminal board                |                 |                        |              | 1      |         |
| 177   | Torx Screw                    |                 |                        |              | 1      |         |
| -     | Kit, terminal box cover       |                 |                        | 96796659     | 1      |         |
| 164   | Terminal box cover            |                 |                        |              | 1      |         |
| 273a  | Pan head thread forming screw |                 |                        |              | 4      |         |
| 1a    | Motor stool                   |                 |                        | 99759902     | 1      | pcs     |
| 2     | Cover                         |                 |                        | 99196494     | 1      | pcs     |
| + 3   | Chamber                       |                 |                        | 99262581     | 1      | pcs     |
| - 3   | Chamber                       |                 |                        | 99262629     | 1      | pcs     |
| 47c   | Bush                          |                 |                        | 99321194     | 1      |         |
| + 3   | Chamber                       |                 |                        | 99196631     | 1      | pcs     |
| + 4a  | Chamber                       |                 |                        | 99446222     | 1      | pcs     |
| + 4a  | Chamber                       |                 |                        | 99446253     | 1      | pcs     |
| + 4a  | Chamber                       |                 |                        | 99415871     | 1      | pcs     |
| + 4   | Chamber                       |                 |                        | 99262577     | 1      | pcs     |
| + 4   | Chamber                       |                 |                        | 99262625     | 1      | pcs     |
| + 4   | Chamber                       |                 |                        | 99196627     | 1      | pcs     |

| Pos  | Omschrijving   | Opmerking tekst | Classificatie Gegevens | Onderdeelnr. | Aantal | Eenheid |
|------|----------------|-----------------|------------------------|--------------|--------|---------|
| 6    | Base           |                 |                        | 99196467     | 1      | pcs     |
| 26c  | Washer         |                 | Designation: DIN 125A  | 99262704     | 2      | pcs     |
|      |                |                 | Thickness: 1,6         |              |        |         |
| 26c  | Washer         |                 | Designation: DIN 125A  | 99886930     | 2      | pcs     |
|      |                |                 | Thickness: 1,6         |              |        |         |
| 28a  | Hex head screw |                 |                        | 96620478     | 4      | pcs     |
| 32   | Washer         |                 | Designation: DIN 125 A | 98923051     | 8      | pcs     |
|      |                |                 | Internal diameter: 17  |              |        |         |
|      |                |                 | Outer diameter: 30     |              |        |         |
|      |                |                 | Thickness: 3           |              |        |         |
| 36   | Nut            |                 |                        | 99262692     | 4      | pcs     |
| + 44 | Suction part   |                 |                        | 99196613     | 1      | pcs     |
| 44a  | Discharge part |                 |                        | 99196621     | 1      | pcs     |
| 48   | Nut            |                 |                        | 99262680     | 3      | pcs     |
| 48   | Nut            |                 |                        | 99262683     | 3      | pcs     |
| 48   | Nut            |                 |                        | 96536016     | 3      | pcs     |
| 49   | Impeller       |                 |                        | 99721389     | 3      | pcs     |
| 49b  | Split cone     |                 |                        | 99262686     | 3      | pcs     |
| 49b  | Split cone     |                 |                        | 99262689     | 3      | pcs     |
| 51   | Shaft          |                 |                        | 99196538     | 1      | pcs     |
| 55   | Sleeve         |                 |                        | 99196421     | 1      | pcs     |
| 56   | Base plate     |                 |                        | 99196483     | 1      | pcs     |
| 66a  | Washer         |                 |                        | 99262699     | 4      | pcs     |