

## Inventflow: Grundfos A-partner

### Grundfos CRN 185-3-3 A-P-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/crn/grundfos-crn-185-3-3-a-p-a-e-hqqe>

#### Contact

[info@inventflow.nl](mailto:info@inventflow.nl)

+31 (0) 546 45 80 72

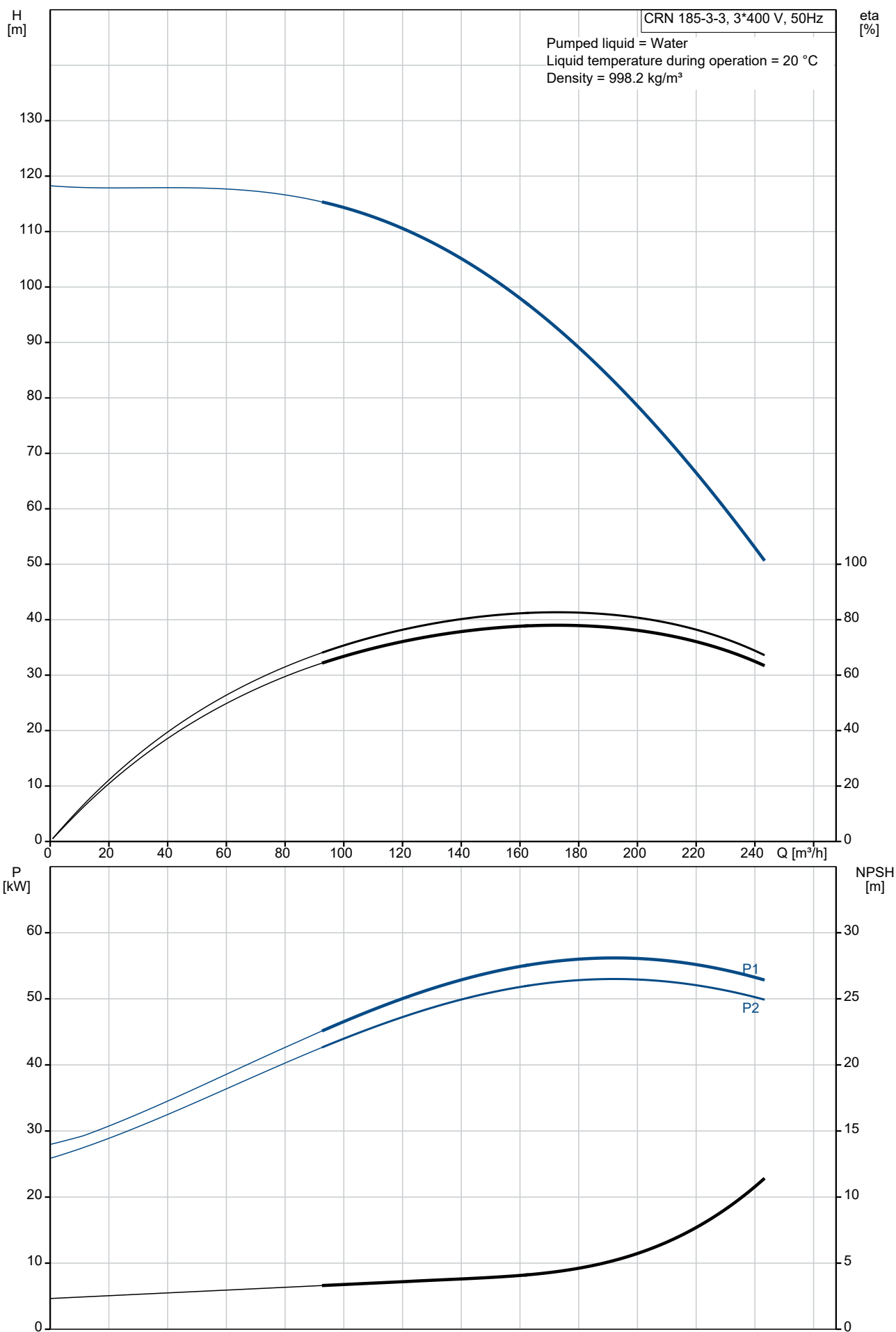
#### Datasheet



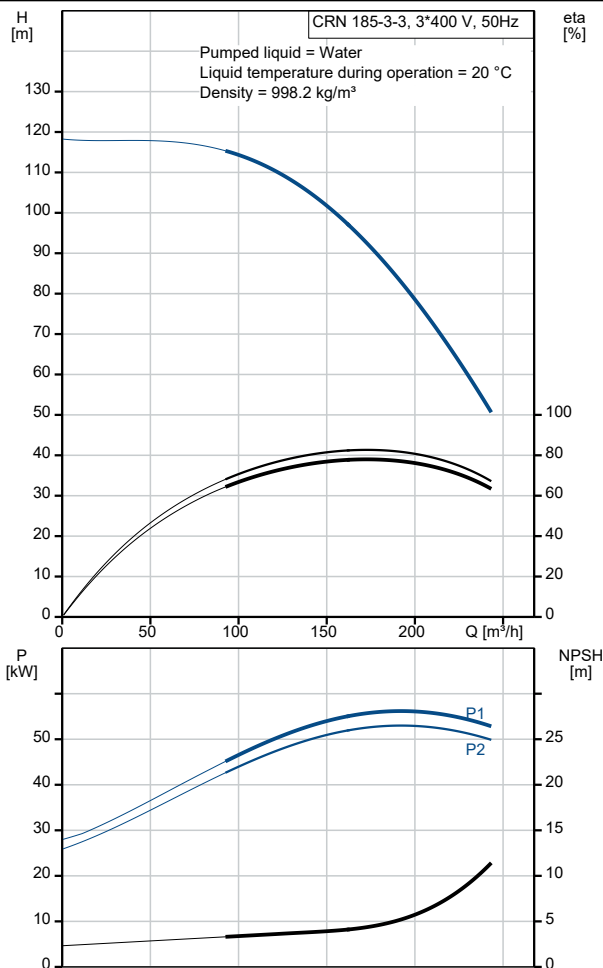
| Qty.                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|---------------------------|---------------|------------------------------|-------|----------|-------------------------|------------------------------------------|----------|-------------|-----------------------|-------------|--------|-------------------|----------|-------------------------|--------|----------------------|------|------------|----------------------|------------------|-----------------|-------|------------------------------|-----------|------------------------------|----------|-------|------------------|---------|----------------------------------|--------------------|------------------------------|-------|-----------------------------|--------|------------------------------|-----------------|---------------------|-----|---------------------------|--------|----------------------------|--------|---------------------------------|--------|------------------------|-------|-----------------|-----|-------------|---------|----------------------|-----|
| 1                                        | <p><b>CRN 185-3-3 A-P-A-E-HQQE</b></p>  <p><b>Note! Product picture may differ from actual product</b></p> <p>Product No.: <a href="#">99143771</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 PJE (Victaulic®) couplings.</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>2976 rpm</td></tr> <tr> <td>Rated flow:</td><td>185 m<sup>3</sup>/h</td></tr> <tr> <td>Rated head:</td><td>86.5 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>55 °C</td></tr> <tr> <td>Maximum operating pressure:</td><td>25 bar</td></tr> <tr> <td>Max pressure at stated temp:</td><td>25 bar / 120 °C</td></tr> <tr> <td>Type of connection:</td><td>PJE</td></tr> <tr> <td>Size of inlet connection:</td><td>DN 200</td></tr> <tr> <td>Size of outlet connection:</td><td>DN 200</td></tr> <tr> <td>Pressure rating for connection:</td><td>55 bar</td></tr> <tr> <td>Flange size for motor:</td><td>FF500</td></tr> </table> <p>Electrical data:</p> <table> <tr> <td>Motor standard:</td><td>IEC</td></tr> <tr> <td>Motor type:</td><td>SIEMENS</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: | 2976 rpm | Rated flow: | 185 m <sup>3</sup> /h | Rated head: | 86.5 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: | 55 °C | Maximum operating pressure: | 25 bar | Max pressure at stated temp: | 25 bar / 120 °C | Type of connection: | PJE | Size of inlet connection: | DN 200 | Size of outlet connection: | DN 200 | Pressure rating for connection: | 55 bar | Flange size for motor: | FF500 | Motor standard: | IEC | Motor type: | SIEMENS | 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: | 2976 rpm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Rated flow:                              | 185 m <sup>3</sup> /h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Rated head:                              | 86.5 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:             | 55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Maximum operating pressure:              | 25 bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Max pressure at stated temp:             | 25 bar / 120 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Type of connection:                      | PJE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Size of inlet connection:                | DN 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Size of outlet connection:               | DN 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Pressure rating for connection:          | 55 bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Flange size for motor:                   | FF500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Motor standard:                          | IEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| Motor type:                              | SIEMENS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |
| IE Efficiency class:                     | IE3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |       |                           |               |                              |       |          |                         |                                          |          |             |                       |             |        |                   |          |                         |        |                      |      |            |                      |                  |                 |       |                              |           |                              |          |       |                  |         |                                  |                    |                              |       |                             |        |                              |                 |                     |     |                           |        |                            |        |                                 |        |                        |       |                 |     |             |         |                      |     |

| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <p>Rated power - P2: 55 kW</p> <p>Power (P2) required by pump: 55 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-420D/660-725Y V</p> <p>Rated current: 99,0-90,0/57,0-52,0 A</p> <p>Starting current: 670-670 %</p> <p>Cos phi - power factor: 0.89</p> <p>Rated speed: 2975 rpm</p> <p>Efficiency: IE3 94,3%</p> <p>Motor efficiency at full load: 94.3-94.3 %</p> <p>Motor efficiency at 3/4 load: 94.5-94.5 %</p> <p>Motor efficiency at 1/2 load: 93.9-93.9 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 81U15338</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Others:</p> <p>Net weight: 707 kg</p> <p>Gross weight: 852 kg</p> <p>Shipping volume: 2.04 m<sup>3</sup></p> <p>Thrust handling device: N</p> <p>Country of origin: DK</p> <p>Custom tariff no.: 84137075</p> |

# 99143771 CRN 185-3-3 A-P-A-E-HQQE 50 Hz

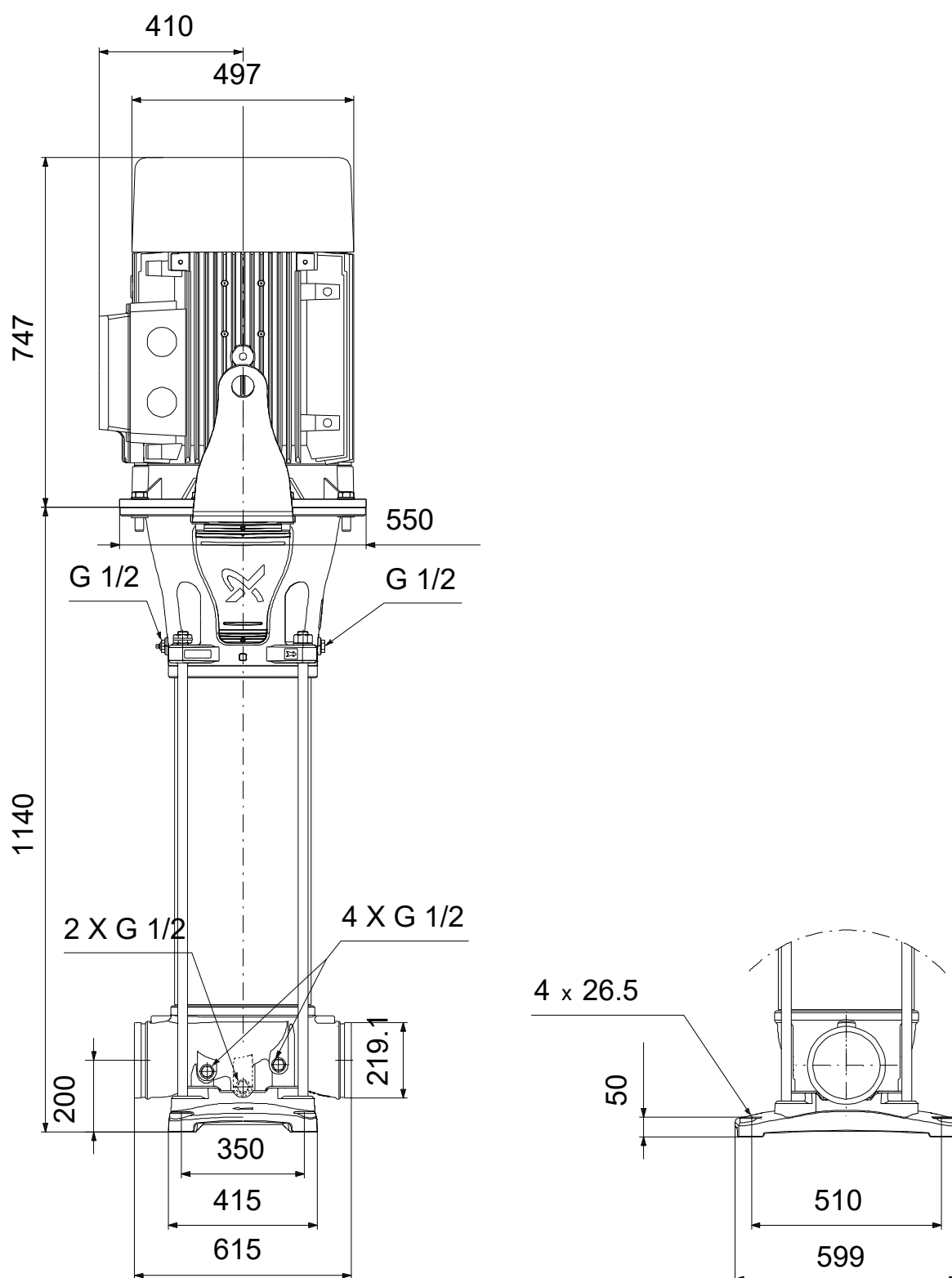


| Description                              | Value                       |  |  |
|------------------------------------------|-----------------------------|--|--|
| <b>General information:</b>              |                             |  |  |
| Product name:                            | CRN 185-3-3<br>A-P-A-E-HQQE |  |  |
| Product No:                              | 99143771                    |  |  |
| EAN number:                              | 5712607562700               |  |  |
| <b>Technical:</b>                        |                             |  |  |
| Pump speed on which pump data are based: | 2976 rpm                    |  |  |
| Rated flow:                              | 185 m³/h                    |  |  |
| Rated head:                              | 86.5 m                      |  |  |
| Maximum head:                            | 118.2 m                     |  |  |
| Stages:                                  | 3                           |  |  |
| Impellers:                               | 3                           |  |  |
| Number of reduced-diameter impellers:    | 3                           |  |  |
| Low NPSH:                                | N                           |  |  |
| Pump orientation:                        | Vertical                    |  |  |
| Shaft seal arrangement:                  | Single                      |  |  |
| Code for shaft seal:                     | HQQE                        |  |  |
| Approvals:                               | CE,EAC,UKCA,ACS,WRA<br>S    |  |  |
| 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:             | 55 °C                       |  |  |
| Maximum operating pressure:              | 25 bar                      |  |  |
| Max pressure at stated temp:             | 25 bar / 120 °C             |  |  |
| Type of connection:                      | PJE                         |  |  |
| Size of inlet connection:                | DN 200                      |  |  |
| Size of outlet connection:               | DN 200                      |  |  |
| Pressure rating for connection:          | 55 bar                      |  |  |
| Flange size for motor:                   | FF500                       |  |  |
| Connect code:                            | P                           |  |  |
| <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:                              | SIEMENS                     |  |  |
| IE Efficiency class:                     | IE3                         |  |  |
| Rated power - P2:                        | 55 kW                       |  |  |
| Power (P2) required by pump:             | 55 kW                       |  |  |
| Mains frequency:                         | 50 Hz                       |  |  |
| Rated voltage:                           | 3 x 380-420D/660-725Y V     |  |  |
| Rated current:                           | 99,0-90,0/57,0-52,0 A       |  |  |
| Starting current:                        | 670-670 %                   |  |  |
| Cos phi - power factor:                  | 0.89                        |  |  |
| Rated speed:                             | 2975 rpm                    |  |  |
| Efficiency:                              | IE3 94,3%                   |  |  |
| Motor efficiency at full load:           | 94.3-94.3 %                 |  |  |
| Motor efficiency at 3/4 load:            | 94.5-94.5 %                 |  |  |



| Description                   | Value       |
|-------------------------------|-------------|
| Motor efficiency at 1/2 load: | 93.9-93.9 % |
| Number of poles:              | 2           |
| Enclosure class (IEC 34-5):   | IP55        |
| Insulation class (IEC 85):    | F           |
| Motor protec:                 | PTC         |
| Motor No:                     | 81U15338    |
| <b>Controls:</b>              |             |
| Frequency converter:          | NONE        |
| <b>Others:</b>                |             |
| Net weight:                   | 707 kg      |
| Gross weight:                 | 852 kg      |
| Shipping volume:              | 2.04 m³     |
| Thrust handling device:       | N           |
| Country of origin:            | DK          |
| Custom tariff no.:            | 84137075    |

# 99143771 CRN 185-3-3 A-P-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 185-3-3, Product No. 99143771**  
**Produced After 2040 (production year and week number)**

| Pos  | Omschrijving              | Opmerking tekst       | Classificatie Gegevens | Onderdeelnr. | Aantal | Eenheid |
|------|---------------------------|-----------------------|------------------------|--------------|--------|---------|
| -    | Kit, bearing              |                       |                        | 99415824     | 1      | pcs     |
| 47g  | Lock ring                 |                       |                        |              | 1      |         |
| 47a  | Bearing                   |                       |                        |              | 1      |         |
| 48a  | Nut                       |                       |                        |              | 1      |         |
| -    | Kit, coupling             |                       |                        | 99190040     | 1      | pcs     |
| -    | Coupling cpl.             |                       |                        |              | 1      |         |
|      | Cable clip.               |                       |                        |              | 2      |         |
| 10a  | Coupling                  |                       |                        |              | 1      |         |
| 9    | Hex socket head cap screw | Designation: DIN 912  |                        |              | 4      |         |
|      |                           | Length (mm): 45       |                        |              |        |         |
|      |                           | Thread: M16           |                        |              |        |         |
| 10   | Parallel pin              |                       |                        |              | 1      |         |
| -    | Kit, coupling guard       |                       |                        | 99196381     | 2      | pcs     |
| 7b   | Lock washer               |                       |                        |              | 2      |         |
| 7a   | Screw                     |                       |                        |              | 2      |         |
| 7    | Coupling guard            |                       |                        |              | 1      |         |
| -    | Kit, impeller,red.bearing |                       |                        | 99432583     | 1      | pcs     |
| 48   | Nut                       |                       |                        |              | 1      |         |
| 49b  | Split cone                |                       |                        |              | 1      |         |
| 49a  | Impeller                  |                       |                        |              | 1      |         |
| -    | Kit, impeller,red.bush    |                       |                        | 99124977     | 2      | pcs     |
| 48   | Nut                       |                       |                        |              | 1      |         |
| 49b  | Split cone                |                       |                        |              | 1      |         |
| 49a  | Impeller                  |                       |                        |              | 1      |         |
| -    | Kit, O-rings              |                       |                        | 99262382     | 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                 |                       |                        | 99262370     | 1      | pcs     |
| -    | Plug cpl.                 |                       |                        |              | 7      |         |
| 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            |                       |                        | 99190119     | 4      | pcs     |
| 26   | Staybolt                  |                       |                        |              | 1      |         |
| 36   | Nut                       |                       |                        |              | 1      |         |
| 66a  | Washer                    |                       |                        |              | 1      |         |
| -    | Kit, strap                |                       |                        | 99190071     | 2      | pcs     |
| 26c  | Washer                    | Designation: DIN 125A |                        |              | 1      |         |
|      |                           | Thickness: 1,6        |                        |              |        |         |
| 26b  | Hex head screw            |                       |                        |              | 1      |         |
| 26a  | Strap                     |                       |                        |              | 1      |         |
| -    | Kit, wear parts           |                       |                        | 99262421     | 1      | pcs     |
|      | Adjusting fork            |                       |                        |              | 1      |         |
| 45   | Neck ring                 |                       |                        |              | 4      |         |
| 47d  | Lock washer               |                       |                        |              | 3      |         |
| 47c  | Bush                      |                       |                        |              | 3      |         |
| 65   | Neck ring retainer        |                       |                        |              | 4      |         |
| -    | Motor                     |                       |                        |              | 1      | pcs     |

| Pos  | Omschrijving            | Opmerking tekst        | Classificatie Gegevens | Onderdeelnr. | Aantal | Eenheid |
|------|-------------------------|------------------------|------------------------|--------------|--------|---------|
| 156  | Fan                     |                        |                        | 96766619     | 1      |         |
| 151  | Kit, fan cover          |                        |                        | 98062277     | 1      |         |
| 156b | Kit, flange             |                        |                        | 98062294     | 1      |         |
|      | Kit, lubrication nipple |                        |                        | 98062533     | 1      |         |
| 156a | Kit, ND-end shield cpl. |                        |                        | 98062519     | 1      |         |
| 159b | Kit, seal ring          |                        |                        | 98062553     | 1      |         |
| 176  | Kit, terminal board     |                        |                        | 98062239     | 1      |         |
| 164a | Kit, terminal box       |                        |                        | 98062264     | 1      |         |
| 2    | Cover                   |                        |                        | 99196501     | 1      | pcs     |
| + 3  | Chamber                 |                        |                        | 99262613     | 1      | pcs     |
| + 3  | Chamber                 |                        |                        | 99262671     | 1      | pcs     |
| + 3  | Chamber                 |                        |                        | 99196663     | 1      | pcs     |
| + 4a | Chamber                 |                        |                        | 99446246     | 1      | pcs     |
| + 4a | Chamber                 |                        |                        | 99446267     | 1      | pcs     |
| + 4a | Chamber                 |                        |                        | 99415895     | 1      | pcs     |
| + 4  | Chamber                 |                        |                        | 99262611     | 1      | pcs     |
| + 4  | Chamber                 |                        |                        | 99262669     | 1      | pcs     |
| + 4  | Chamber                 |                        |                        | 99196661     | 1      | pcs     |
| 6    | Base                    |                        |                        | 99445743     | 1      | pcs     |
| 26c  | Washer                  | Designation: DIN 125A  |                        | 99262704     | 2      | pcs     |
|      |                         | Thickness: 1,6         |                        |              |        |         |
| 26c  | Washer                  | Designation: DIN 125A  |                        | 99886930     | 2      | pcs     |
|      |                         | Thickness: 1,6         |                        |              |        |         |
| 32   | Washer                  | Designation: DIN 125 A |                        | 98923051     | 16     | pcs     |
|      |                         | Internal diameter: 17  |                        |              |        |         |
|      |                         | Outer diameter: 30     |                        |              |        |         |
|      |                         | Thickness: 3           |                        |              |        |         |
| 36   | Nut                     |                        |                        | 99262695     | 4      | pcs     |
| + 44 | Suction part            |                        |                        | 99196617     | 1      | pcs     |
| 44a  | Discharge part          |                        |                        | 99196623     | 1      | pcs     |
| 48   | Nut                     |                        |                        | 99446218     | 1      | pcs     |
| 48   | Nut                     |                        |                        | 99262682     | 2      | pcs     |
| 48   | Nut                     |                        |                        | 99446220     | 1      | pcs     |
| 48   | Nut                     |                        |                        | 99262685     | 2      | pcs     |
| 49a  | Impeller                |                        |                        | 99262547     | 3      | pcs     |
| 49a  | Impeller                |                        |                        | 99262571     | 3      | pcs     |
| 49b  | Split cone              |                        |                        | 99262688     | 3      | pcs     |
| 49b  | Split cone              |                        |                        | 99262691     | 3      | pcs     |
| 51   | Shaft                   |                        |                        | 99196589     | 1      | pcs     |
| 56   | Base plate              |                        |                        | 99196492     | 1      | pcs     |
| 66a  | Washer                  |                        |                        | 99262698     | 4      | pcs     |