

Date: 12/09/2018

**Position** Description Qty.

> 1 CR 45-1-1 A-F-A-V-HQQV



Product No.: 96122771

Vertical, multistage centrifugal pump with suction and discharge ports on same the level (in-line) enabling installation in a horizontal one-pipe system. The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling and easy service and access. Power transmission is via a rigid split coupling. Pipework connection is via DIN flanges.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

Liquid:

Pumped liquid: Water -20 .. 90 °C Liquid temperature range: Liquid temperature during operation: 20 °C Density: 998.2 kg/m<sup>3</sup>

Technical:

Rated flow: 45 m<sup>3</sup>/h Rated head: 15 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CE, EAC

Curve tolerance: ISO9906:2012 3B

Materials:

Cast iron Base:

> EN 1563 EN-GJS-500-7 ASTM A536 80-55-06

Impeller: Stainless steel

> EN 1.4301 **AISI 304**

Bearing: SIC Support bearing: Graflon

Installation:

Maximum ambient temperature: 60 °C Maximum operating pressure: 16 bar Max pressure at stated temp:

16 bar / 90 °C

16 bar / -20 °C

Type of connection: DIN Size of inlet connection: **DN 80** Size of outlet connection: **DN 80** Pressure rating for pipe connection: PN 40 Flange size for motor: FT130

**Electrical data:** 

Motor standard: **IEC** 



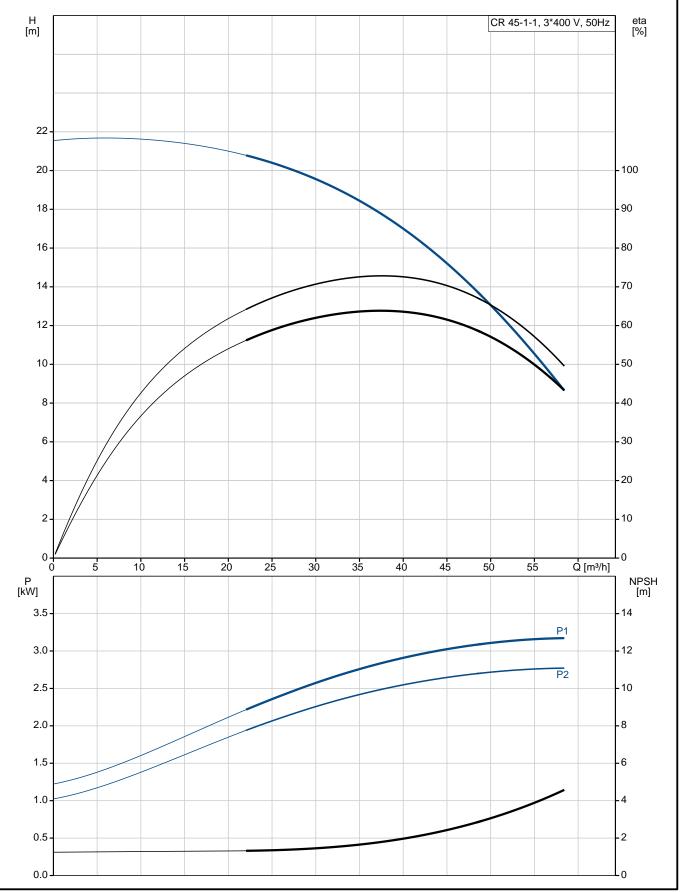
**Date:** 12/09/2018

| Motor type:   100LC       Efficiency class:   E3   3 kW   Power (P2) required by pump:   3 kW   Mains frequency:   50 Hz   Rated voltage:   3 x 220-240D/380-415Y V   Rated current:   11.0/6.30 A   34.0-920 %   Rated speed:   2900-2920 pm   Efficiency:   E3 87.1 %   Motor efficiency at 1/2 load:   S5. Dust/Jetting   F   |          |      |                                | 2002      |
|--|----------|------|--------------------------------|-----------|
| IE Efficiency class: Rated power - P2: 3 kW  | Position | Qty. | Description                    |           |
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| Others:  Minimum efficiency index, MEI: 0.7  Net weight: 81.6 kg  Gross weight: 105 kg  Shipping volume: 0.309 m³  Country of origin: GB   |          |      |                                |           |
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| Country of origin: GB  |          |      |                                |           |
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|  |          |      | Custom tariff no.:             | 84137075  |
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**Date:** 12/09/2018

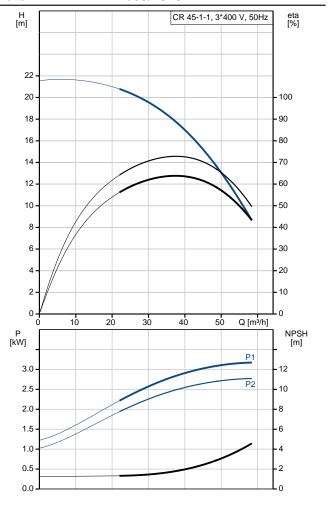
## 96122771 CR 45-1-1 A-F-A-V-HQQV 50 Hz





**Date:** 12/09/2018

| Description                           | Value                   |
|---------------------------------------|-------------------------|
| General information:                  |                         |
| Product name:                         | CR 45-1-1 A-F-A-V-HQQV  |
| Product No:                           | 96122771                |
| EAN number:                           | 5700396688152           |
| Price:                                | 1.823,00 GBP            |
| Technical:                            | ·                       |
| Rated flow:                           | 45 m³/h                 |
| Rated head:                           | 15 m                    |
| Stages:                               | 1                       |
| Impellers:                            | 1                       |
|                                       |                         |
| Number of reduced-diameter impellers: |                         |
| Low NPSH:                             | N                       |
| Pump orientation:                     | Vertical                |
| Shaft seal arrangement:               | Single                  |
| Code for shaft seal:                  | HQQV                    |
| Approvals on nameplate:               | CE, EAC                 |
| Curve tolerance:                      | ISO9906:2012 3B         |
| Pump version:                         | A                       |
| Model:                                | В                       |
| Materials:                            |                         |
| Base:                                 | Cast iron               |
|                                       | EN 1563 EN-GJS-500-7    |
|                                       | ASTM A536 80-55-06      |
| Impeller:                             | Stainless steel         |
| 1                                     | EN 1.4301               |
|                                       | AISI 304                |
| Material code:                        | A                       |
| Code for rubber:                      | V                       |
| Bearing:                              | SIC                     |
| Support bearing:                      | Graflon                 |
| Installation:                         | Gianon                  |
|                                       | 60 °C                   |
| Maximum ambient temperature:          |                         |
| Maximum operating pressure:           | 16 bar                  |
| Max pressure at stated temp:          | 16 bar / 90 °C          |
| <del></del>                           | 16 bar / -20 °C         |
| Type of connection:                   | DIN                     |
| Size of inlet connection:             | DN 80                   |
| Size of outlet connection:            | DN 80                   |
| Pressure rating for pipe connection:  | PN 40                   |
| Flange size for motor:                | FT130                   |
| Connect code:                         | <u>F</u>                |
| Liquid:                               |                         |
| Pumped liquid:                        | Water                   |
| Liquid temperature range:             | -20 90 °C               |
| Liquid temperature during operation:  | 20 °C                   |
| Density:                              | 998.2 kg/m³             |
| Electrical data:                      |                         |
| Motor standard:                       | IEC                     |
| Motor type:                           | 100LC                   |
| IE Efficiency class:                  | IE3                     |
| Rated power - P2:                     | 3 kW                    |
| Power (P2) required by pump:          | 3 kW                    |
| Mains frequency:                      | 50 Hz                   |
| Rated voltage:                        | 3 x 220-240D/380-415Y V |
| Rated current:                        | 11.0/6.30 A             |
| Starting current:                     | 840-920 %               |
| Cos phi - power factor:               | 0.87-0.82               |
| Doo prii power ractor.                | 0.07 0.02               |





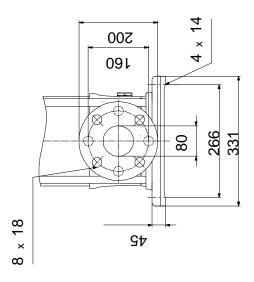
**Date:** 12/09/2018

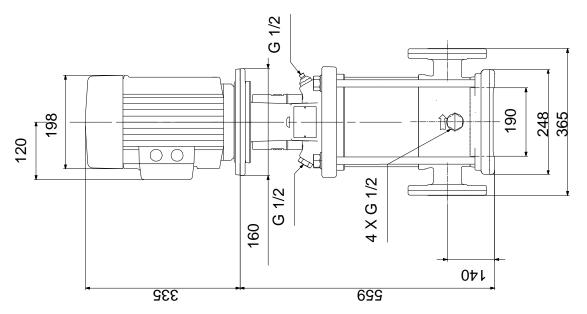
| Description                    | Value           |
|--------------------------------|-----------------|
| Rated speed:                   | 2900-2920 rpm   |
| Efficiency:                    | IE3 87,1%       |
| Motor efficiency at full load: | 87.1 %          |
| Motor efficiency at 3/4 load:  | 88.0 %          |
| Motor efficiency at 1/2 load:  | 87.7 %          |
| Number of poles:               | 2               |
| Enclosure class (IEC 34-5):    | 55 Dust/Jetting |
| Insulation class (IEC 85):     | F               |
| Motor protec:                  | PTC             |
| Motor No:                      | 85U05510        |
| Controls:                      |                 |
| Frequency converter:           | NONE            |
| Others:                        |                 |
| Minimum efficiency index, MEI: | 0.7             |
| Net weight:                    | 81.6 kg         |
| Gross weight:                  | 105 kg          |
| Shipping volume:               | 0.309 m³        |
| Country of origin:             | GB              |
| Custom tariff no.:             | 84137075        |



Date: 12/09/2018

## 96122771 CR 45-1-1 A-F-A-V-HQQV 50 Hz



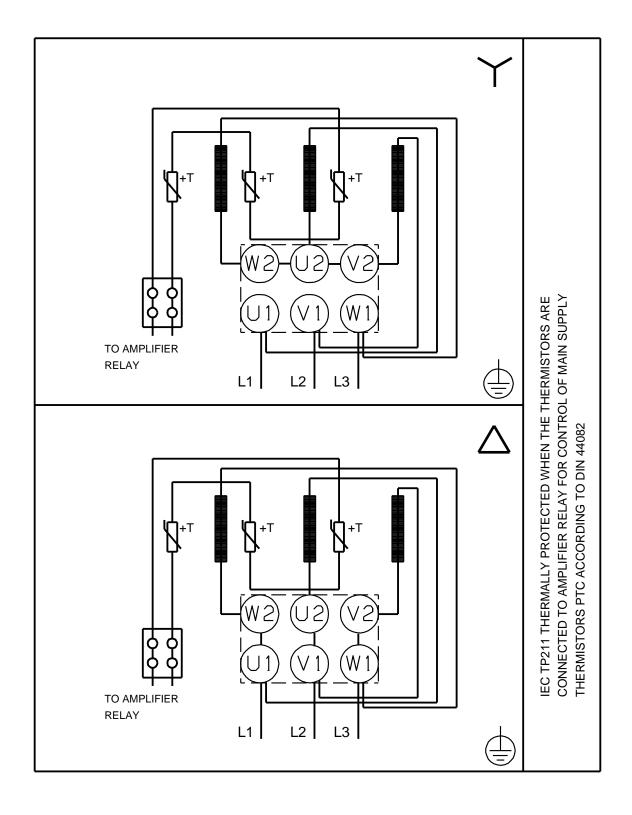


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



**Date:** 12/09/2018

## 96122771 CR 45-1-1 A-F-A-V-HQQV 50 Hz



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