

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

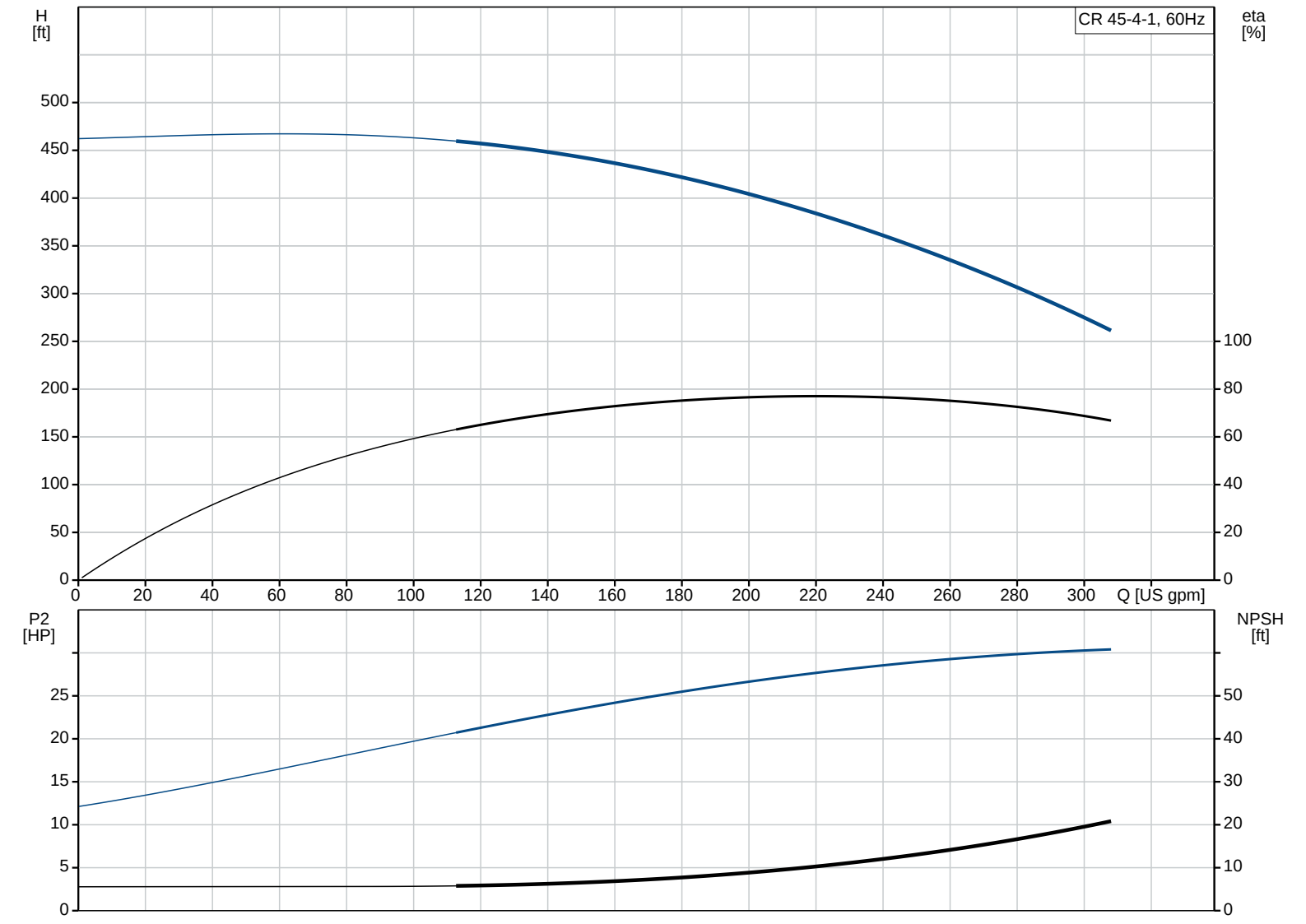


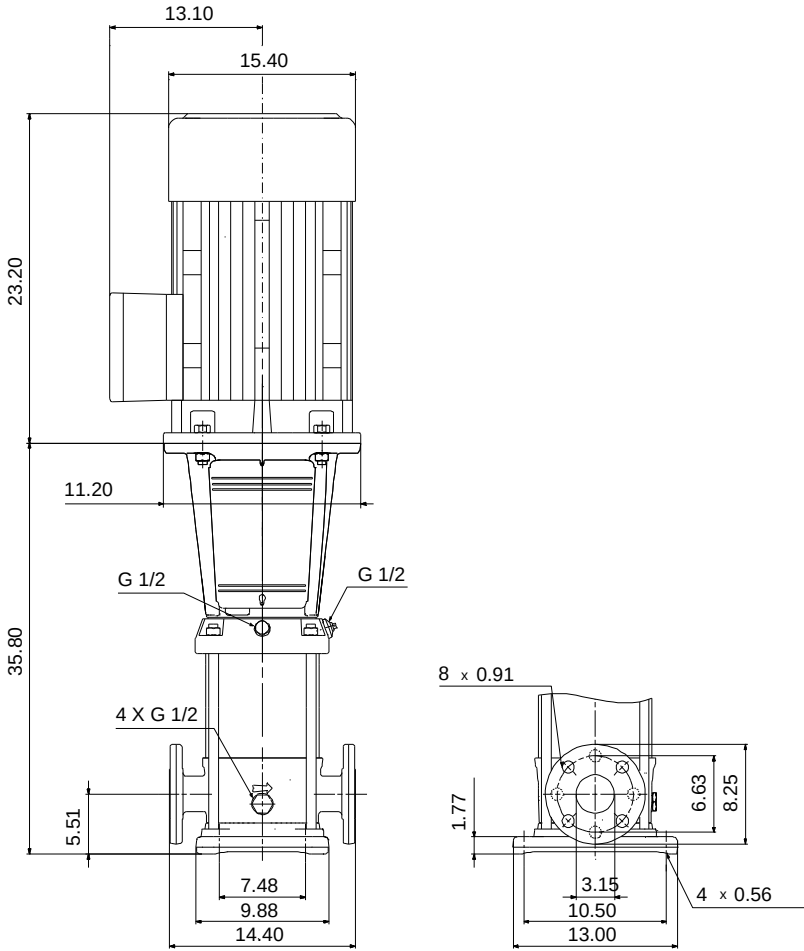
CR 45-4-1A-G-A-V-HQQV

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301) (AISI 304)

Product photo could vary from the actual product

| Conditions of Service   | Pump Data                                            | Motor Data               |
|-------------------------|------------------------------------------------------|--------------------------|
| Flow: _____             | Max pressure at stated temperature: 435 psi / 194 °F | Rated power - P2: 30 HP  |
| Head: _____             | Liquid temperature range: -4 .. 194 °F               | Rated voltage: 230/460 V |
| Efficiency: _____       | Maximum ambient temperature: 104 °F                  | Main frequency: 60 Hz    |
| Liquid: Water           | Approvals: CURUS                                     | Insulation class: F      |
| Temperature: 68 °F      | Shaft seal: HQQV                                     | Motor protection: NONE   |
| NPSH required: ft       | Product number: 96419248                             | Motor type: Baldor       |
| Viscosity: _____        |                                                      |                          |
| Specific Gravity: 1.000 |                                                      |                          |





**Materials:**

|                  |                                                         |
|------------------|---------------------------------------------------------|
| Base:            | Cast iron<br>EN 1563 EN-GJS-500-7<br>ASTM A536 80-55-06 |
| Impeller:        | Stainless steel<br>AISI 304<br>EN 1.4301                |
| Material code:   | A                                                       |
| Code for rubber: | V                                                       |

| Count | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | <p><b>CR 45-4-1A-G-A-V-HQQV</b></p>  <p>Product No.: <a href="#">96419248</a><br/>           Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.</p> <p>The pump has the following characteristics:</p> <ul style="list-style-type: none"> <li>- Impellers and intermediate chambers are made of</li> <li>- The shaft seal has assembly length according to EN 12756.</li> <li>- Power transmission is via cast iron split coupling.</li> </ul> <p>The motor is a 3-phase AC motor.</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water<br/>           Liquid temperature range: -4 .. 194 °F<br/>           Selected liquid temperature: 68 °F<br/>           Density: 62.29 lb/ft³</p> <p><b>Technical:</b></p> <p>Rated pump speed: 3541 rpm<br/>           Rated flow: 238 US gpm<br/>           Rated head: 367.8 ft<br/>           Pump orientation: Vertical<br/>           Shaft seal arrangement: Single<br/>           Code for shaft seal: HQQV<br/>           Approvals on nameplate: CURUS<br/>           Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b></p> <p>Base: Cast iron<br/>           EN 1563 EN-GJS-500-7<br/>           ASTM A536 80-55-06</p> <p>Impeller: Stainless steel<br/>           EN 1.4301<br/>           AISI 304</p> <p>Bearing: SIC<br/>           Support bearing: Grafflon</p> <p><b>Installation:</b></p> <p>Maximum ambient temperature: 104 °F<br/>           Maximum operating pressure: 435.11 psi<br/>           Max pressure at stated temperature: 435 psi / 194 °F<br/>           435 psi / -4 °F</p> <p>Type of connection: ANSI<br/>           Size of suction port: 3 inch<br/>           Size of outlet port: 3 inch<br/>           Pressure rating for pipe connection: PN 40<br/>           Flange rating inlet: 300 lb<br/>           Flange size for motor: 284TC</p> <p><b>Electrical data:</b></p> |

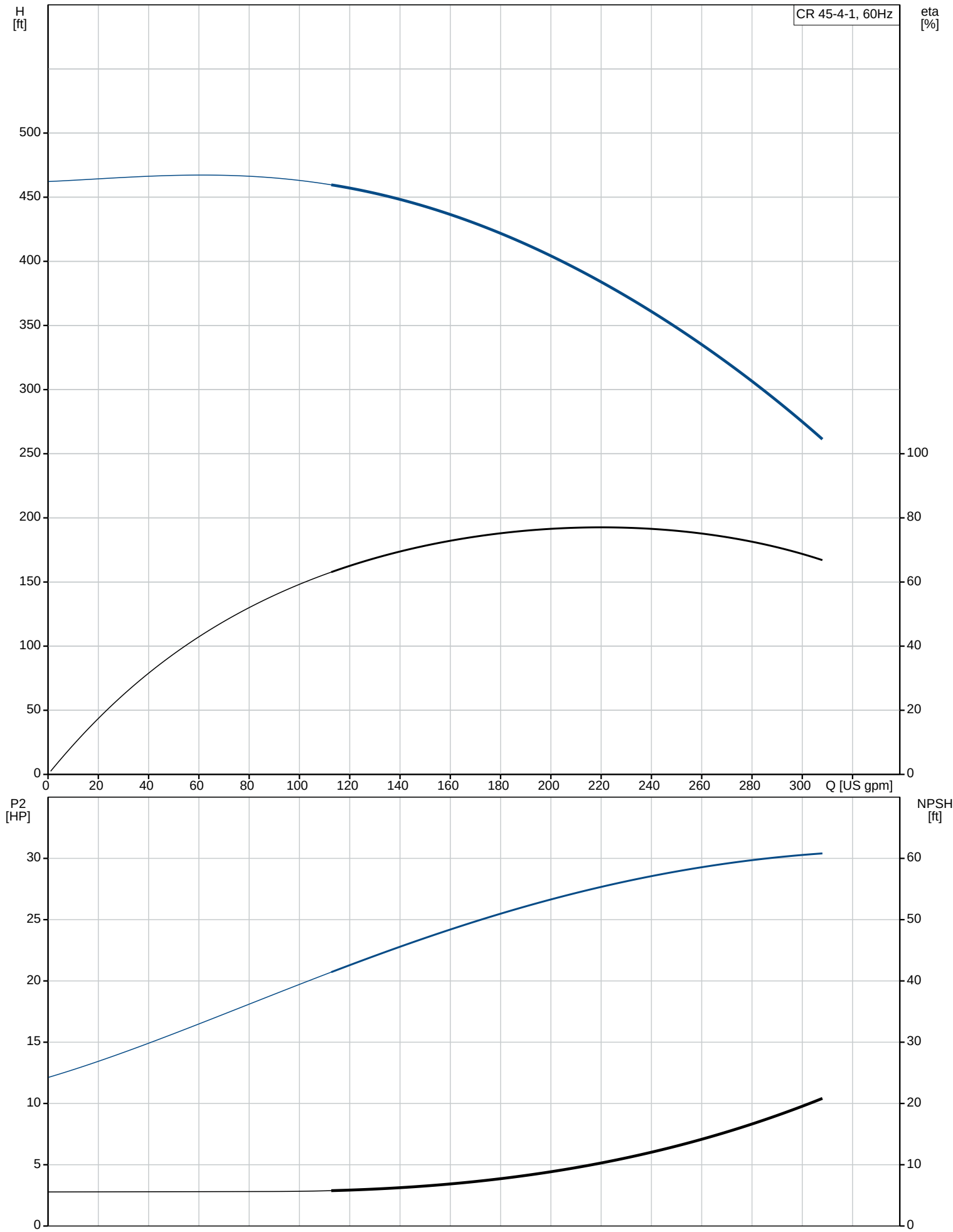


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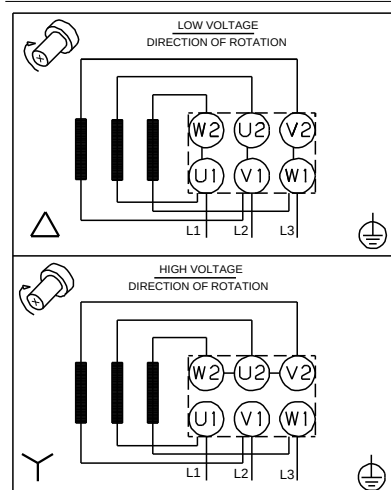
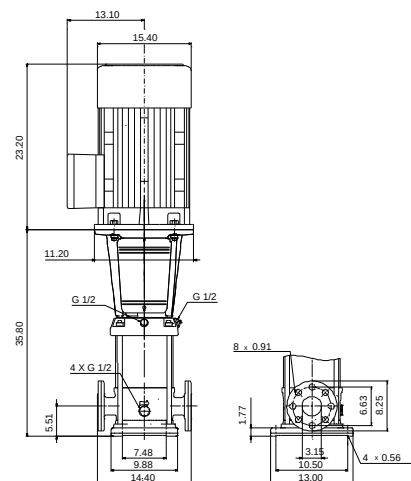
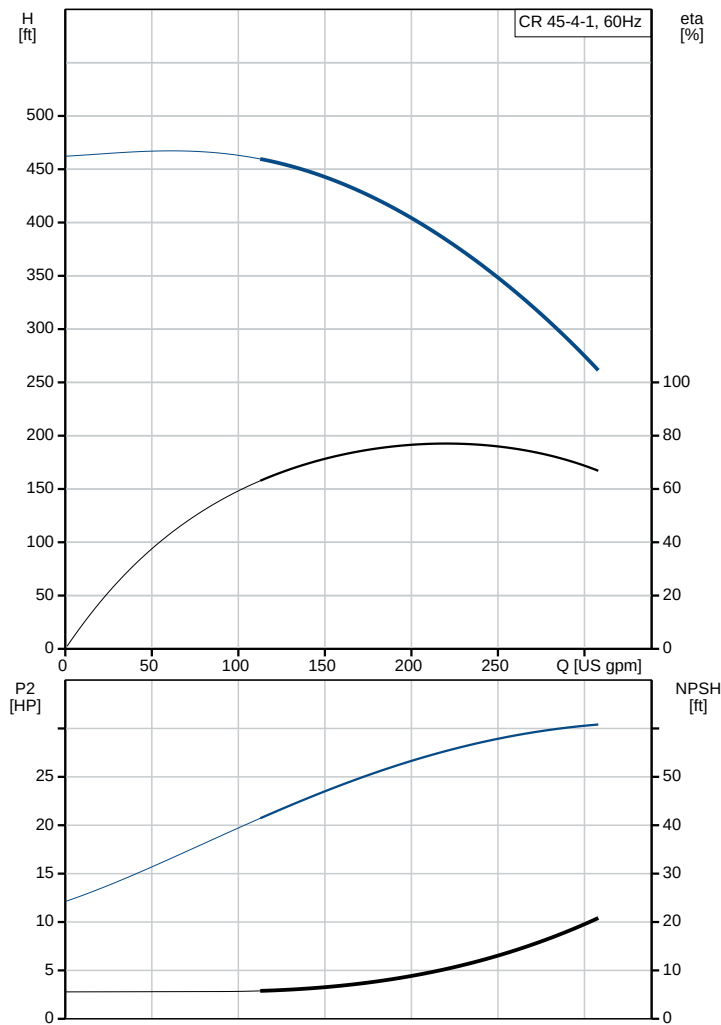
Date: 5/2/2019

| Count | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | <div><div>Motor standard:</div><div>NEMA</div></div> <div><div>Motor type:</div><div>Baldor</div></div> <div><div>IE Efficiency class:</div><div>NEMA Premium / IE3 60Hz</div></div> <div><div>Rated power - P2:</div><div>30 HP</div></div> <div><div>Power (P2) required by pump:</div><div>30 HP</div></div> <div><div>Main frequency:</div><div>60 Hz</div></div> <div><div>Rated voltage:</div><div>3 x 230/460 V</div></div> <div><div>Service factor:</div><div>1.15</div></div> <div><div>Rated current:</div><div>66/33 A</div></div> <div><div>Rated speed:</div><div>3520 rpm</div></div> <div><div>Number of poles:</div><div>2</div></div> <div><div>Insulation class (IEC 85):</div><div>F</div></div> <div><div>Motor Number:</div><div>84Z03091</div></div> <div><div>Others:</div><div></div></div> <div><div>Net weight:</div><div>550 lb</div></div> <div><div>Gross weight:</div><div>568 lb</div></div> <div><div>Shipping volume:</div><div>29 ft³</div></div> <div><div>Country of origin:</div><div>US</div></div> <div><div>Custom tariff no.:</div><div>8413.70.2040</div></div> |

**96419248 CR 45-4-1A-G-A-V-HQQV 60 Hz**



| Description                           | Value                    |
|---------------------------------------|--------------------------|
| <b>General information:</b>           |                          |
| Product name:                         | CR 45-4-1A-G-A-V-HQQV    |
| Product No.:                          | 96419248                 |
| EAN:                                  | 5700390752477            |
| <b>Technical:</b>                     |                          |
| Rated pump speed:                     | 3541 rpm                 |
| Rated flow:                           | 238 US gpm               |
| Rated head:                           | 367.8 ft                 |
| Head max:                             | 463.9 ft                 |
| Stages:                               | 4                        |
| Impellers:                            | 4                        |
| Number of reduced-diameter impellers: | 1                        |
| Low NPSH:                             | N                        |
| Pump orientation:                     | Vertical                 |
| Shaft seal arrangement:               | Single                   |
| Code for shaft seal:                  | HQQV                     |
| Approvals on nameplate:               | CURUS                    |
| Curve tolerance:                      | ISO9906:2012 3B          |
| Pump version:                         | A                        |
| Model:                                | B                        |
| Cooling:                              | TEFC                     |
| <b>Materials:</b>                     |                          |
| Base:                                 | Cast iron                |
|                                       | EN 1563 EN-GJS-500-7     |
|                                       | ASTM A536 80-55-06       |
| Impeller:                             | Stainless steel          |
|                                       | EN 1.4301                |
|                                       | AISI 304                 |
| Material code:                        | A                        |
| Code for rubber:                      | V                        |
| Bearing:                              | SIC                      |
| Support bearing:                      | Graffon                  |
| <b>Installation:</b>                  |                          |
| Maximum ambient temperature:          | 104 °F                   |
| Maximum operating pressure:           | 435.11 psi               |
| Max pressure at stated temperature:   | 435 psi / 194 °F         |
|                                       | 435 psi / -4 °F          |
| Type of connection:                   | ANSI                     |
| Size of suction port:                 | 3 inch                   |
| Size of outlet port:                  | 3 inch                   |
| Pressure rating for pipe connection:  | PN 40                    |
| Flange rating inlet:                  | 300 lb                   |
| Flange size for motor:                | 284TC                    |
| Connect code:                         | G                        |
| <b>Liquid:</b>                        |                          |
| Pumped liquid:                        | Water                    |
| Liquid temperature range:             | -4 .. 194 °F             |
| Selected liquid temperature:          | 68 °F                    |
| Density:                              | 62.29 lb/ft <sup>3</sup> |
| <b>Electrical data:</b>               |                          |
| Motor standard:                       | NEMA                     |
| Motor type:                           | Baldor                   |
| IE Efficiency class:                  | NEMA Premium / IE3 60Hz  |
| Rated power - P2:                     | 30 HP                    |
| Power (P2) required by pump:          | 30 HP                    |
| KVA code:                             | G                        |
| Main frequency:                       | 60 Hz                    |
| Rated voltage:                        | 3 x 230/460 V            |
| Service factor:                       | 1.15                     |
| Rated current:                        | 66/33 A                  |
| Load current:                         | 74/37 A                  |
| Rated speed:                          | 3520 rpm                 |
| Number of poles:                      | 2                        |
| Insulation class (IEC 85):            | F                        |
| Motor protection:                     | NONE                     |
| Motor Number:                         | 84Z03091                 |



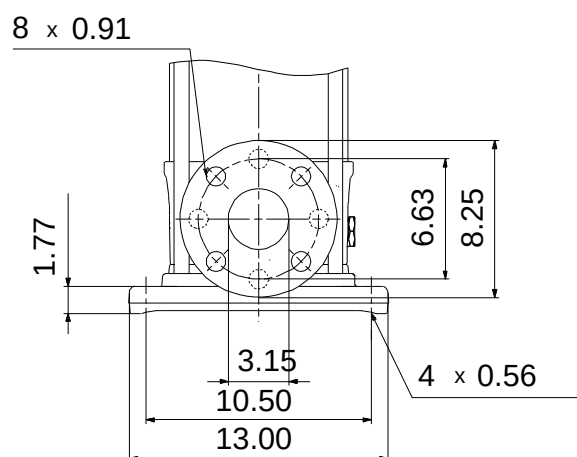
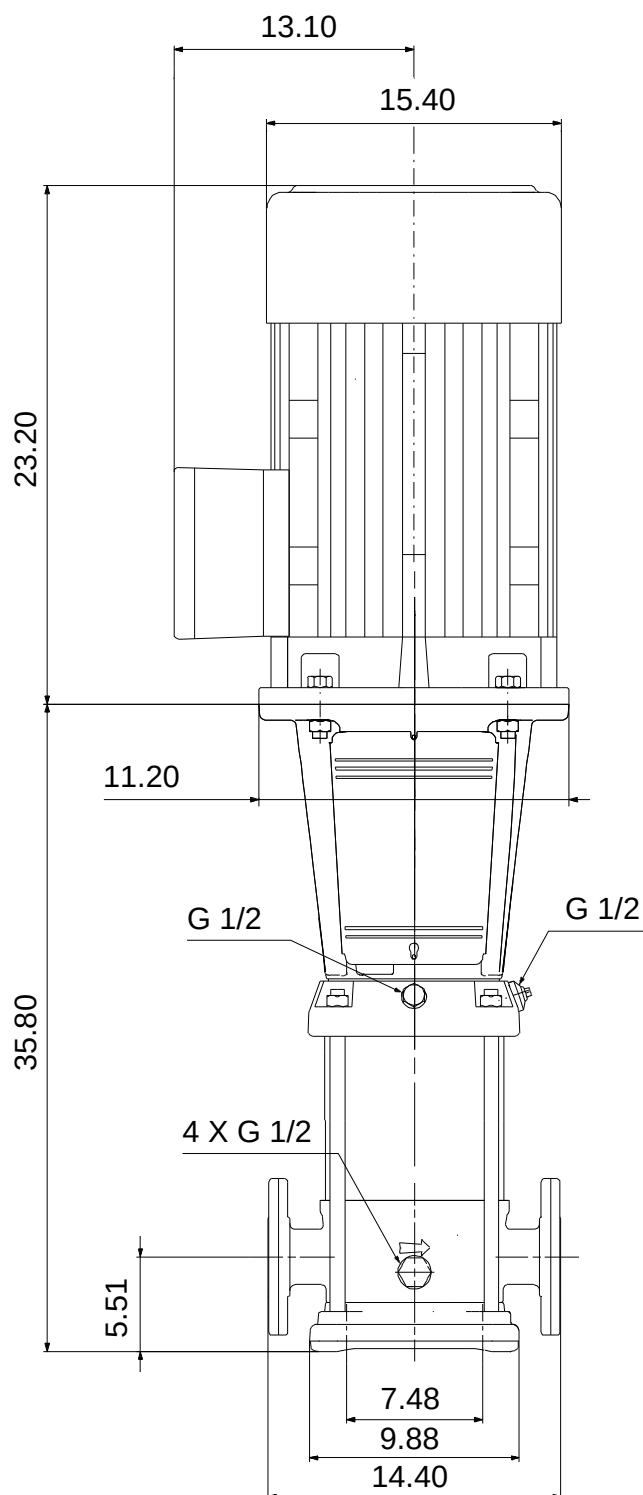


Company name:  
Created by:  
Phone:

Date: 5/2/2019

| Description          | Value        |
|----------------------|--------------|
| <b>Controls:</b>     |              |
| Frequency converter: | NONE         |
| <b>Others:</b>       |              |
| Net weight:          | 550 lb       |
| Gross weight:        | 568 lb       |
| Shipping volume:     | 29 ft³       |
| Sales region:        | Namreg       |
| Country of origin:   | US           |
| Custom tariff no.:   | 8413.70.2040 |

## 96419248 CR 45-4-1A-G-A-V-HQQV 60 Hz





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