

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

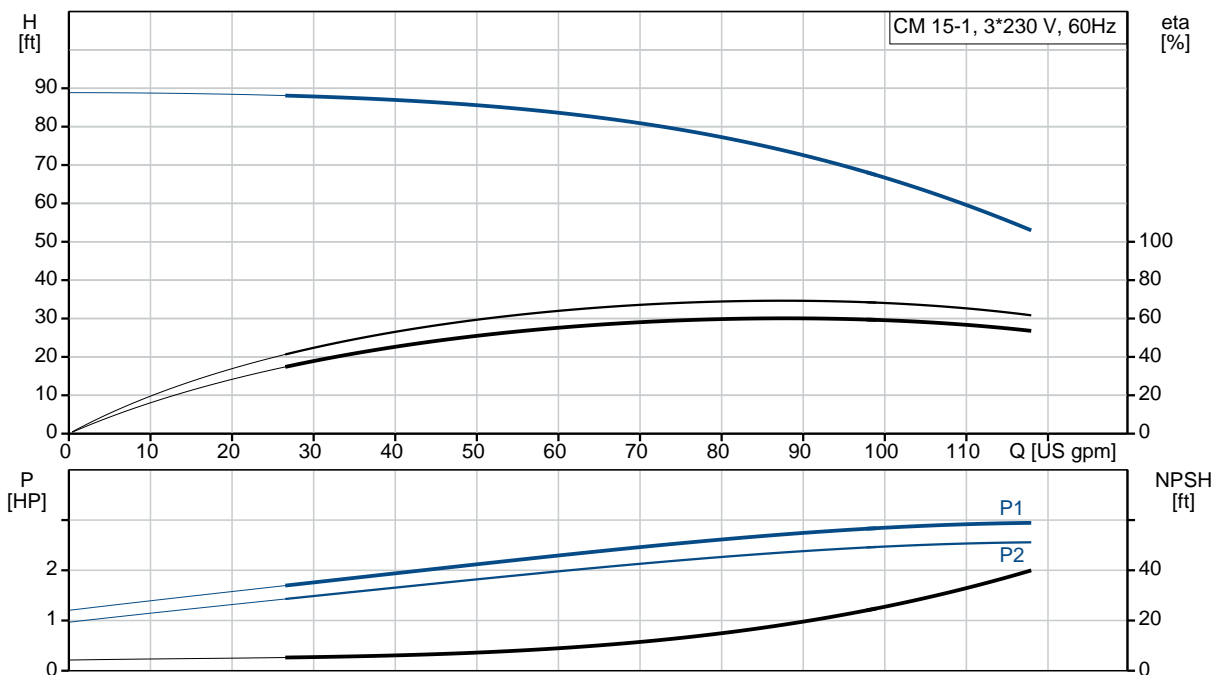
### CM 15-1 A-S-A-V-AQQV E-A-A-N

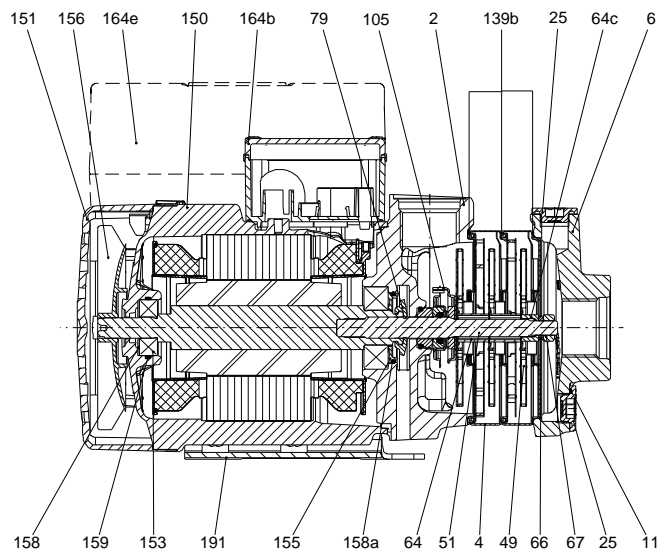
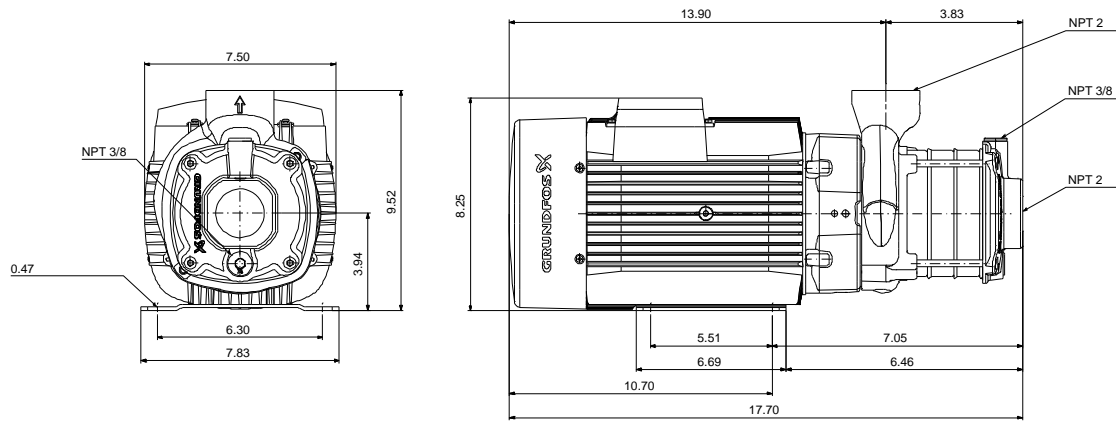


CM are reliable, quiet and compact horizontal end-suction pumps. The modular pump design makes it easy to make customised solutions. The CM pumps are available in cast iron and stainless steel

Product photo could vary from the actual product

| Conditions of Service   | Pump Data  | Motor Data            |
|-------------------------|--|-----------------------|
| Flow: _____             | Max pressure at stated temperature: 145 psi / 194 °F | Main frequency: 60 Hz |
| Head: _____             | Liquid temperature range: -4 .. 194 °F               | Enclosure class: IP55 |
| Efficiency: _____       | Maximum ambient temperature: 131 °F                  |                       |
| Liquid: Water           | Shaft seal: AQQV                                     |                       |
| Temperature: 68 °F      | Product number: 97568558                             |                       |
| NPSH required: ft       |  |                       |
| Viscosity: _____        |  |                       |
| Specific Gravity: 1.000 |  |                       |





165x100



**Materials:**

Pump housing: Cast iron  
ASTM A48-25A

Impeller: Stainless steel  
AISI 304  
EN 1.4301

Material code: A

Code for rubber: V

| Count | Description   |
|-------|---|
| 1     | <p><b>CM 15-1 A-S-A-V-AQQV E-A-A-N</b></p>  <p>Product photo could vary from the actual product</p> <p>Product No.: <a href="#">97568558</a></p> <p>Compact, reliable, horizontal, multistage, end-suction centrifugal pump with axial suction port and radial discharge port. The shaft, impellers and chambers are made of stainless steel. The inlet and discharge parts are made of cast iron. The mechanical shaft seal is a special designed, unbalanced O-ring seal. Pipework connection is via internal NPT pipe threads.</p> <p>The pump is fitted with a 3-phase, foot-mounted, fan-cooled asynchronous motor.</p> <p><b>Further product details</b></p> <p>Pump and motor are integrated in a compact and user-friendly design. The pump is fitted to a low base plate, making it ideal for installation in systems where compactness is important.</p> <p>The state-of-the-art design and materials of the shaft seal ensure high wear resistance, improved sticking and dry-running capabilities and long operating life.</p> <p>Servicing the pump requires no special service tools. Service parts are in stock for quick delivery and are available as kits, single parts or bulk. Service videos are available on <a href="http://www.youtube.com">www.youtube.com</a>.</p> <p><b>Pump</b></p> <p>A combination of a stop ring and a Nord-lock® washer secures a tight and reliable fixation of the impeller spacing pipes to the splined pump shaft. It is possible to remove and fit the hydraulic parts from the pump side. The inlet part, chambers and discharge part are held together by four staybolts.</p> <p>The pump is fitted with an unbalanced O-ring seal with a rigid torque-transmission system. It has a fixed seal driver ensuring a reliable rotation of all parts. The dynamic secondary seal is an O-ring.</p> <p>Primary seal:</p> <ul style="list-style-type: none"> <li>Rotating seal ring material: silicon carbide (SiC)</li> <li>Stationary seat material: silicon carbide (SiC)</li> </ul> <p>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</p> <p>Secondary seal material: FKM (fluorocarbon rubber)</p> <p>FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.</p>  |



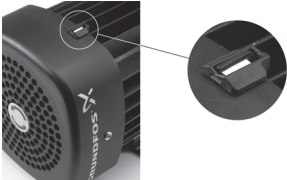
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| Count | Description  |
|-------|--|
|       | <p>The pump shaft is connected to the motor shaft through a left thread and tight fit. The shaft cannot be dismantled.</p> <p><b>Motor</b></p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to EN 50347. Electrical tolerances comply with EN 60034.</p> <p>The motor efficiency is classified as IE2-IE3 in accordance with IEC 60034-30. The efficiency class and actual efficiency are related to the motor's voltage range, 208-230YY/440-480Y V, and thus dependent on the supply voltage available at the installation site.</p> <p>The motor is IE2 in the lower end and IE3 in the upper end of the voltage range.</p> <p>An installation indicator is fitted to the motor fan cover. Based on the motor cooling air, it indicates the direction of rotation of the motor. The motor is fitted with a directional sticker.</p>  <p>The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p><b>Technical data</b></p> <p><b>Controls:</b></p> <p>Frequency converter: NONE</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -4 .. 194 °F</p> <p>Selected liquid temperature: 68 °F</p> <p>Density: 62.29 lb/ft³</p> <p><b>Technical:</b></p> <p>Pump speed on which pump data are based: 3480 rpm</p> <p>Rated flow: 89.8 US gpm</p> <p>Rated head: 69.52 ft</p> <p>Code for shaft seal: AQQV</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b></p> <p>Pump housing: Cast iron</p> <p>EN-GJL-200</p> <p>ASTM A48-25A</p> <p>Impeller: Stainless steel</p> <p>EN 1.4301</p> <p>AISI 304</p> |



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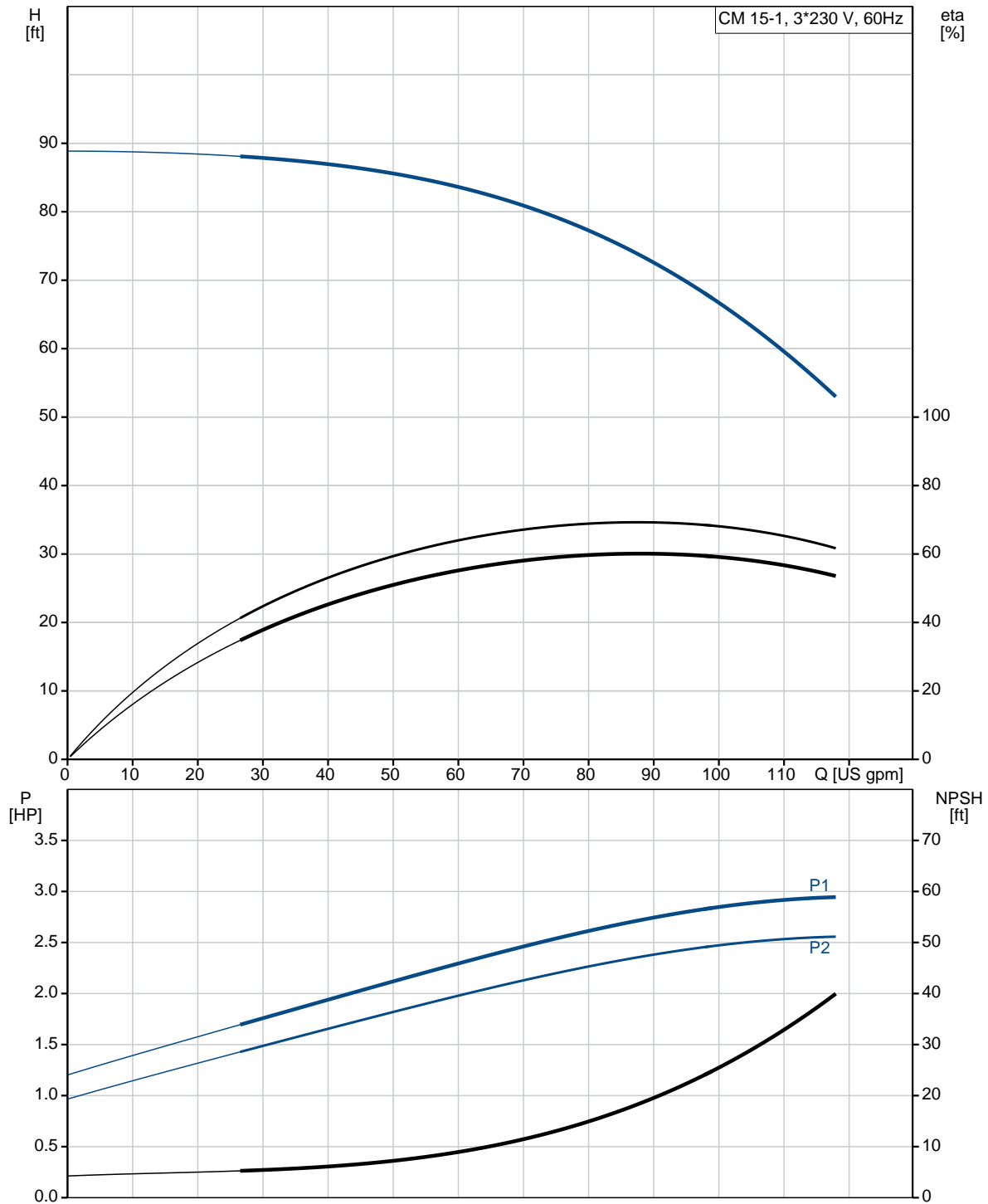
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|-------|--|
|       | <b>Installation:</b><br>Range of ambient temperature: -4 .. 131 °F<br>Maximum operating pressure: 145.04 psi<br>Max pressure at stated temperature: 145 psi / 194 °F<br>145 psi / 194 °F<br>Type of connection: NPT(F)<br>Size of suction port: 2 inch<br>Size of outlet port: 2 inch<br>Outlet position: 12<br><br><b>Electrical data:</b><br>Motor standard: NEMA<br>Frame size: 90B<br>IE efficiency class: IE2 - IE3<br>Rated power - P2: 3.35 HP<br>Main frequency: 60 Hz<br>Suitable for 50/60 Hz: N<br>Phase: 3<br>Rated voltage: 208-230YY/440-480Y V<br>Service factor: 1.00<br>Rated current: 8,95-8,5/4,3-4 A<br>Rated speed: 3490-3520 rpm<br>Enclosure class (IEC 34-5): IP55<br>Insulation class (IEC 85): F<br>Built-in motor protection: NONE<br><br><b>Others:</b><br>Terminal box position: 12<br>Minimum efficiency index, MEI $\eta_{\%}$ : 0.7<br>Net weight: 79 lb<br>Gross weight: 84.5 lb<br>Approvals: CE,CULUS,WRAS,ACS,TR,EAC<br>Country of origin: US<br>Custom tariff no.: 8413.70.2040 |



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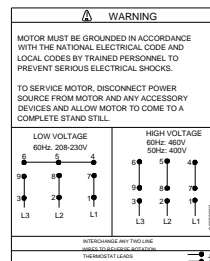
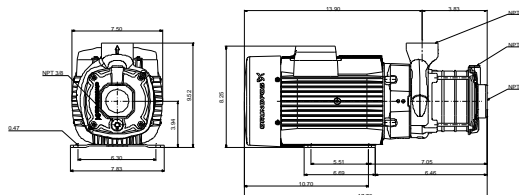
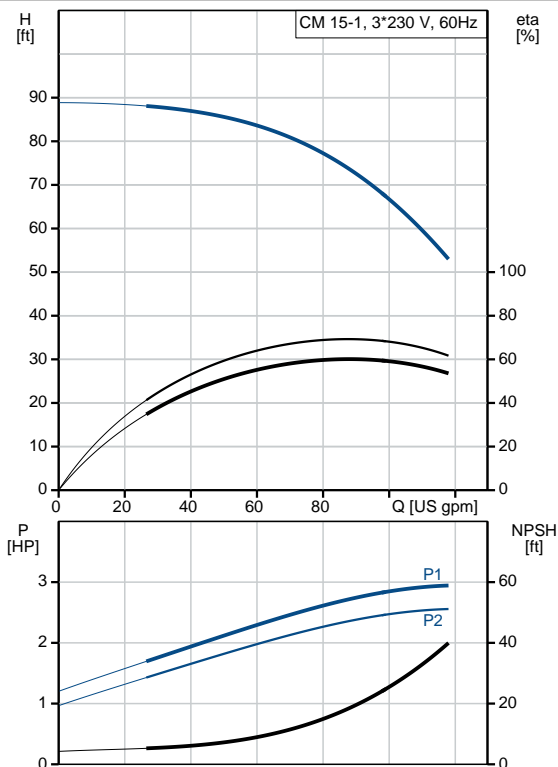
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## 97568558 CM 15-1 A-S-A-V-AQQV E-A-A-N 60 Hz



Date: 3/27/2020

| Description                              | Value                        |
|--|------------------------------|
| <b>General information:</b>              |                              |
| Product name:                            | CM 15-1 A-S-A-V-AQQV E-A-A-N |
| Product No.:                             | 97568558                     |
| EAN:                                     | 5700318671194                |
|  | 5700318671194                |
| <b>Technical:</b>                        |                              |
| Pump speed on which pump data are based: | 3480 rpm                     |
| Rated flow:                              | 89.8 US gpm                  |
| Rated head:                              | 69.52 ft                     |
| Impellers:                               | 1                            |
| Code for shaft seal:                     | AQQV                         |
| Curve tolerance:                         | ISO9906:2012 3B              |
| Pump version:                            | A                            |
| Model:                                   | A                            |
| <b>Materials:</b>                        |                              |
| Pump housing:                            | Cast iron                    |
|  | EN-GJL-200                   |
|  | ASTM A48-25A                 |
| Impeller:                                | Stainless steel              |
|  | EN 1.4301                    |
|  | AISI 304                     |
| Material code:                           | A                            |
| Code for rubber:                         | V                            |
| <b>Installation:</b>                     |                              |
| Range of ambient temperature:            | -4 .. 131 °F                 |
| Maximum operating pressure:              | 145.04 psi                   |
| Max pressure at stated temperature:      | 145 psi / 194 °F             |
|  | 145 psi / 194 °F             |
| Type of connection:                      | NPT(F)                       |
| Size of suction port:                    | 2 inch                       |
| Size of outlet port:                     | 2 inch                       |
| Outlet position:                         | 12                           |
| Connect code:                            | S                            |
| <b>Liquid:</b>                           |                              |
| Pumped liquid:                           | Water                        |
| Liquid temperature range:                | -4 .. 194 °F                 |
| Selected liquid temperature:             | 68 °F                        |
| Density:                                 | 62.29 lb/ft³                 |
| <b>Electrical data:</b>                  |                              |
| Motor standard:                          | NEMA                         |
| Frame size:                              | 90B                          |
| IE efficiency class:                     | IE2 - IE3                    |
| Rated power - P2:                        | 3.35 HP                      |
| Main frequency:                          | 60 Hz                        |
| Suitable for 50/60 Hz:                   | N                            |
| Phase:                                   | 3                            |





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3/27/2020

| Description                               | Value                        |
|---|------------------------------|
| Rated voltage:                            | 208-230YY/440-480Y V         |
| Service factor:                           | 1.00                         |
| Rated current:                            | 8,95-8,5/4,3-4 A             |
| Rated speed:                              | 3490-3520 rpm                |
| Enclosure class (IEC 34-5):               | IP55                         |
| Insulation class (IEC 85):                | F                            |
| Built-in motor protection:                | NONE                         |
| <b>Controls:</b>                          |                              |
| Frequency converter:                      | NONE                         |
| <b>Others:</b>                            |                              |
| Terminal box position:                    | 12                           |
| Minimum efficiency index, MEI<br>â‰¥%â‰¥: | 0.7                          |
| Net weight:                               | 79 lb                        |
| Gross weight:                             | 84.5 lb                      |
| Approvals:                                | CE,CULUS,WRAS,ACS,T<br>R,EAC |
| Country of origin:                        | US                           |
| Custom tariff no.:                        | 8413.70.2040                 |





Company name:

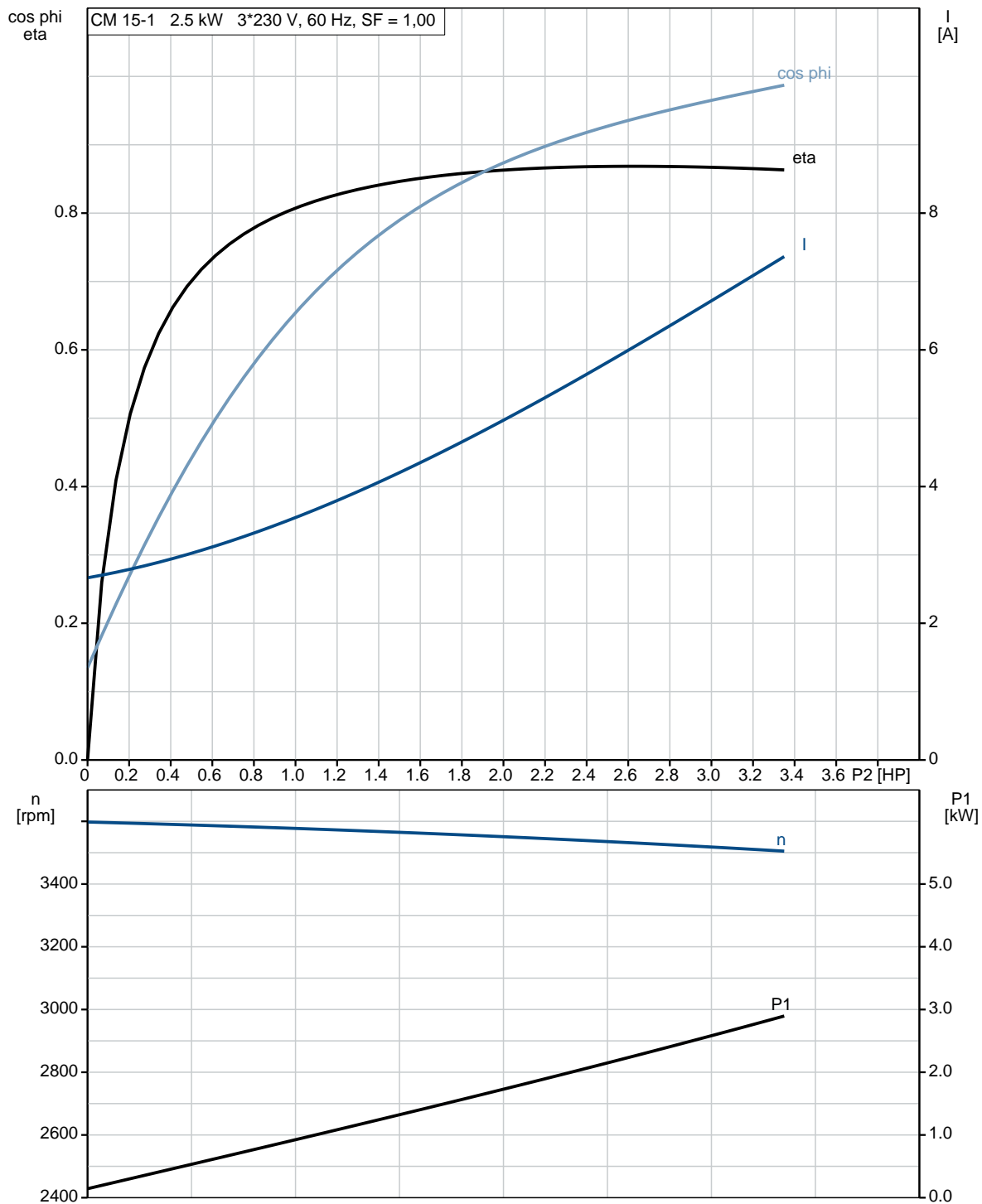
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## 97568558 CM 15-1 A-S-A-V-AQQV E-A-A-N 60 Hz

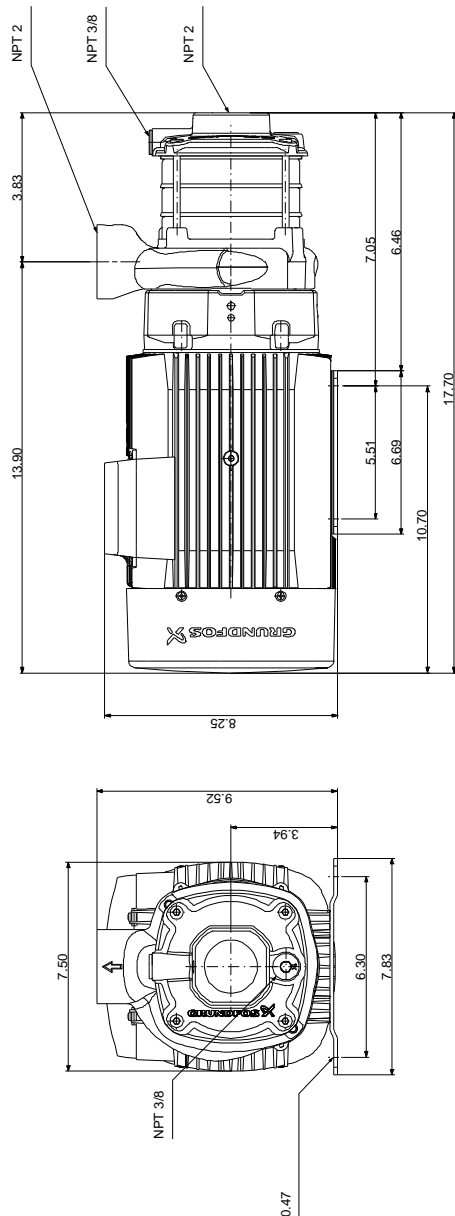




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Phone:

Date: 3/27/2020

## 97568558 CM 15-1 A-S-A-V-AQQV E-A-A-N 60 Hz



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

## 97568558 CM 15-1 A-S-A-V-AQQV E-A-A-N 60 Hz

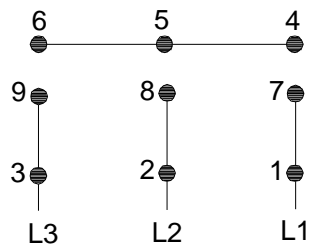


### WARNING

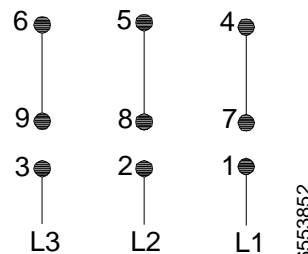
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

TO SERVICE MOTOR, DISCONNECT POWER SOURCE FROM MOTOR AND ANY ACCESSORY DEVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL.

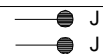
#### LOW VOLTAGE 60Hz. 208-230V



#### HIGH VOLTAGE 60Hz: 460V 50Hz: 400V



INTERCHANGE ANY TWO LINE  
WIRES TO REVERSE ROTATION  
THERMOSTAT LEADS  
(WHEN PROVIDED)



All units are [in] unless otherwise presented.