
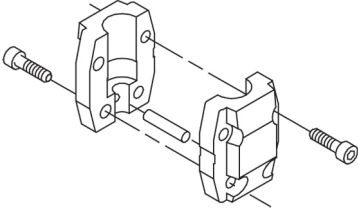
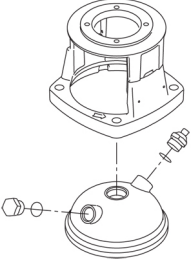
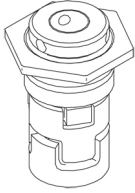


Count	Description
1	<p data-bbox="225 342 564 365"><b>CRN 10-12 A-FGJ-A-V-HQQV</b></p>  <p data-bbox="225 663 488 685">Product No.: <a href="#">96523291</a></p> <p data-bbox="225 723 1425 819">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. A 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 combined DIN-ANSI-JIS flanges.</p> <p data-bbox="225 864 959 887">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="225 925 544 947"><b>Further product details</b></p> <p data-bbox="225 958 1453 1055">Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:</p> <ol data-bbox="225 1070 719 1189" style="list-style-type: none"> <li>1) Alkaline-based cleaning.</li> <li>2) Zinc phosphating.</li> <li>3) Cathodic electro-deposition.</li> <li>4) Curing to a dry film thickness 18-22 my m.</li> </ol> <p data-bbox="225 1193 932 1216">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="225 1249 308 1272"><b>Pump</b></p> <p data-bbox="225 1283 1414 1335">A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.</p>  <p data-bbox="225 1585 1390 1637">The pump head and flange for motor mounting is made in one piece (cast iron). The pump head cover is a separate component (stainless steel). The pump head has a combined 1/2" priming plug and vent screw.</p>  <p data-bbox="225 1933 1425 2029">The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system. This seal type is assembled in a cartridge unit which makes replacement safe and easy. Due to the balancing, this seal type is suitable for high-pressure applications. The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.</p> <p data-bbox="225 2045 371 2067">Primary seal:</p> <ul data-bbox="264 2078 826 2101" style="list-style-type: none"> <li>• Rotating seal ring material: silicon carbide (SiC)</li> </ul>

Count	Description
	<ul style="list-style-type: none"> <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>  <p>The shaft seal is screwed into the pump head.</p> <p>The pump has a special air-cooled shaft-seal chamber generating the same insulation effect as that of a vacuum flask. No external cooling is necessary; the ambient temperature is sufficient. An automatic vent vents the pump seal chamber.</p> <p>The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.</p> <p>The pump has a stainless steel base mounted on a separate base plate. This base and base plate are kept in position by the tension of the staybolts which hold the pump together. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate. The flanges and base are cast in one piece and prepared for connection by means of DIN, ANSI or JIS.</p> <p><b>Motor</b></p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with free-hole flange (FF).</p> <p>Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II).</p> <p>Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as premium efficiency in accordance with EISA2007.</p> <p>The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.</p> <p>Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.</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>Liquid:</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/ft<sup>3</sup></p> <p><b>Technical:</b></p> <p>Rated pump speed: 3470 rpm</p> <p>Rated flow: 53.3 US gpm</p> <p>Rated head: 446.5 ft</p> <p>Actual impeller diameter: 3.66 in</p>

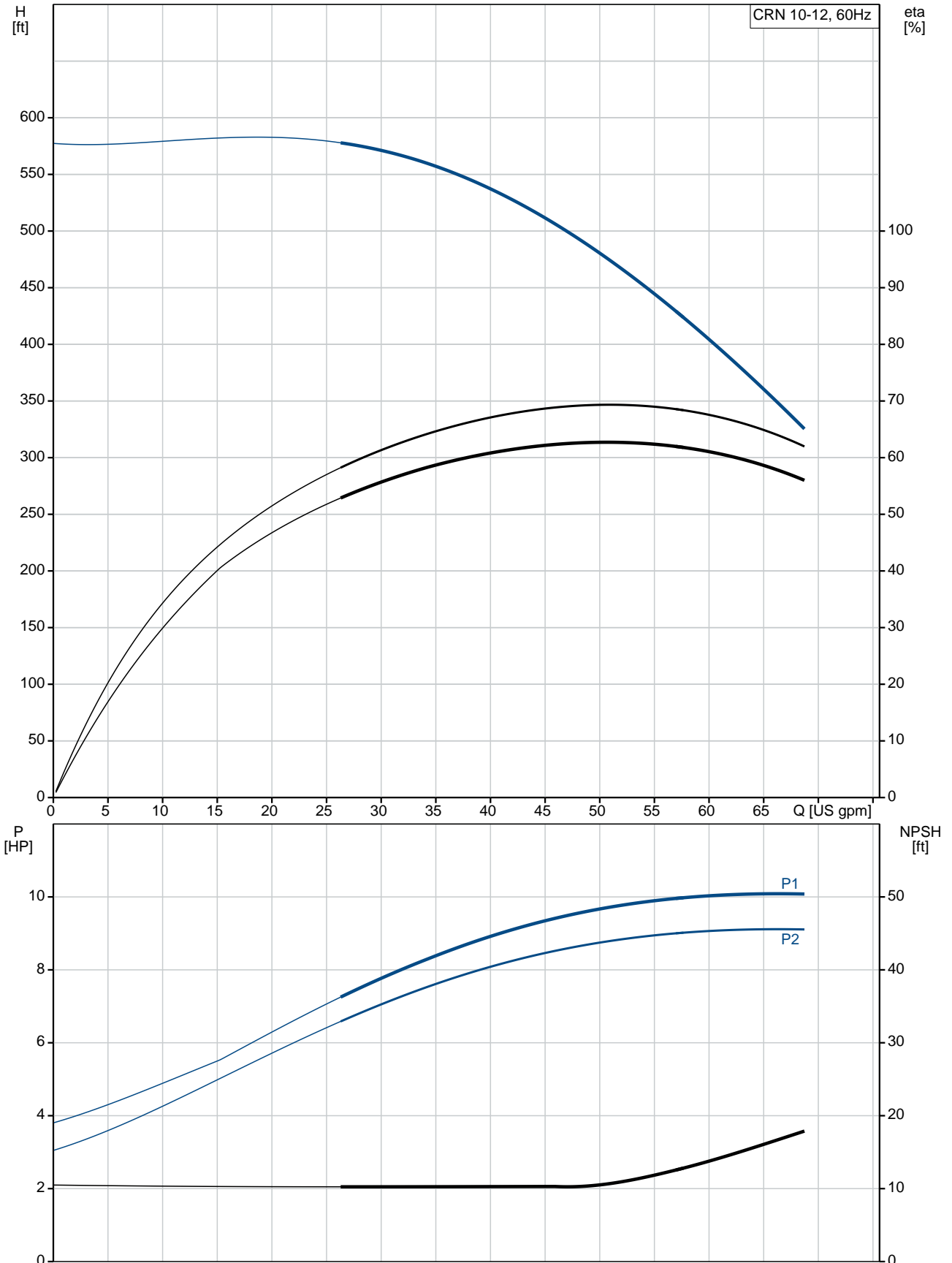
Count	Description
	<p>Pump orientation: Vertical</p> <p>Shaft seal arrangement: Single</p> <p>Code for shaft seal: HQQV</p> <p>Approvals on nameplate: CURUS</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b></p> <p>Base: Stainless steel EN 1.4408 AISI 316</p> <p>Impeller: Stainless steel EN 1.4401 AISI 316</p> <p>Bearing: SIC</p> <p><b>Installation:</b></p> <p>Maximum ambient temperature: 140 °F</p> <p>Maximum operating pressure: 362.59 psi</p> <p>Max pressure at stated temperature: 363 psi / 194 °F 363 psi / -4 °F</p> <p>Type of connection: DIN / ANSI / JIS</p> <p>Size of inlet connection: DN 50</p> <p>Size of outlet connection: DN 50</p> <p>Pressure rating for connection: PN 25</p> <p>Flange rating inlet: 300 lb</p> <p>Flange size for motor: 213TC</p> <p><b>Electrical data:</b></p> <p>Motor standard: NEMA</p> <p>Motor type: 132FA</p> <p>IE Efficiency class: NEMA Premium / IE3 60Hz</p> <p>Rated power - P2: 10 HP</p> <p>Power (P2) required by pump: 10 HP</p> <p>Main frequency: 60 Hz</p> <p>Rated voltage: 3 x 208-230YY/460Y V</p> <p>Service factor: 1.15</p> <p>Rated current: 26,5-24,6/12,4 A</p> <p>Starting current: 680-900 %</p> <p>Cos phi - power factor: 0.87</p> <p>Rated speed: 3480-3500 rpm</p> <p>IE efficiency: IE3 90,2%</p> <p>Motor efficiency at full load: 90.0-90.2 %</p> <p>Motor efficiency at 3/4 load: 90.8 %</p> <p>Motor efficiency at 1/2 load: 90.8 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): 55 Dust/Jetting</p> <p>Insulation class (IEC 85): F</p> <p>Motor Number: 85903410</p> <p><b>Controls:</b></p> <p>Frequency converter: NONE</p> <p><b>Others:</b></p> <p>DOE Pump Energy Index CL: 0.87</p> <p>Net weight: 225 lb</p> <p>Gross weight: 245 lb</p> <p>Shipping volume: 10.1 ft<sup>3</sup></p> <p>Country of origin: US</p> <p>Custom tariff no.: 8413.70.2040</p>



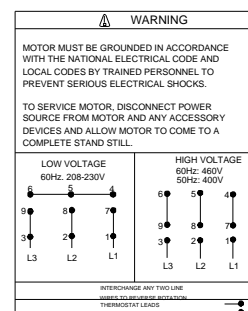
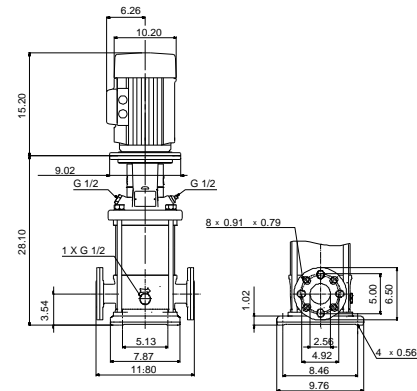
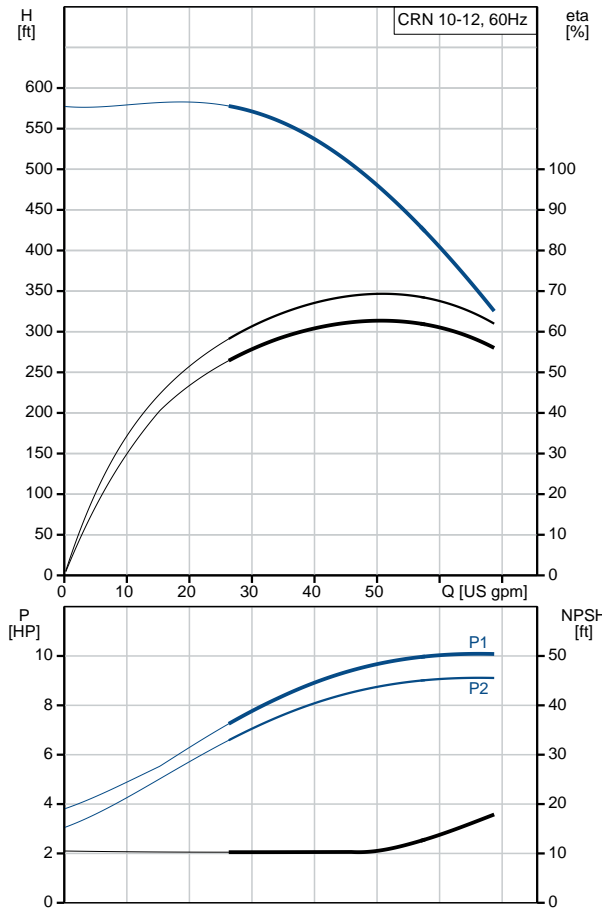
Company name:  
Created by:  
Phone:

Date: 5/4/2020

### 96523291 CRN 10-12 A-FGJ-A-V-HQQV 60 Hz



Description	Value
<b>General information:</b>	
Product name:	CRN 10-12 A-FGJ-A-V-HQQV
Product No.:	96523291
EAN:	5700396901794 5700396901794
<b>Technical:</b>	
Rated pump speed:	3470 rpm
Rated flow:	53.3 US gpm
Rated head:	446.5 ft
Maximum head:	577.5 ft
Actual impeller diameter:	3.66 in
Stages:	12
Impellers:	12
Number of reduced-diameter impellers:	0
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:	A
Cooling:	TEFC
<b>Materials:</b>	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4401 AISI 316
Material code:	A
Code for rubber:	V
Bearing:	SIC
<b>Installation:</b>	
Maximum ambient temperature:	140 °F
Maximum operating pressure:	362.59 psi
Max pressure at stated temperature:	363 psi / 194 °F 363 psi / -4 °F
Type of connection:	DIN / ANSI / JIS
Size of inlet connection:	DN 50
Size of outlet connection:	DN 50
Pressure rating for connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	213TC
Connect code:	FGJ
<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:	132FA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	10 HP
Power (P2) required by pump:	10 HP
Main frequency:	60 Hz





Company name:

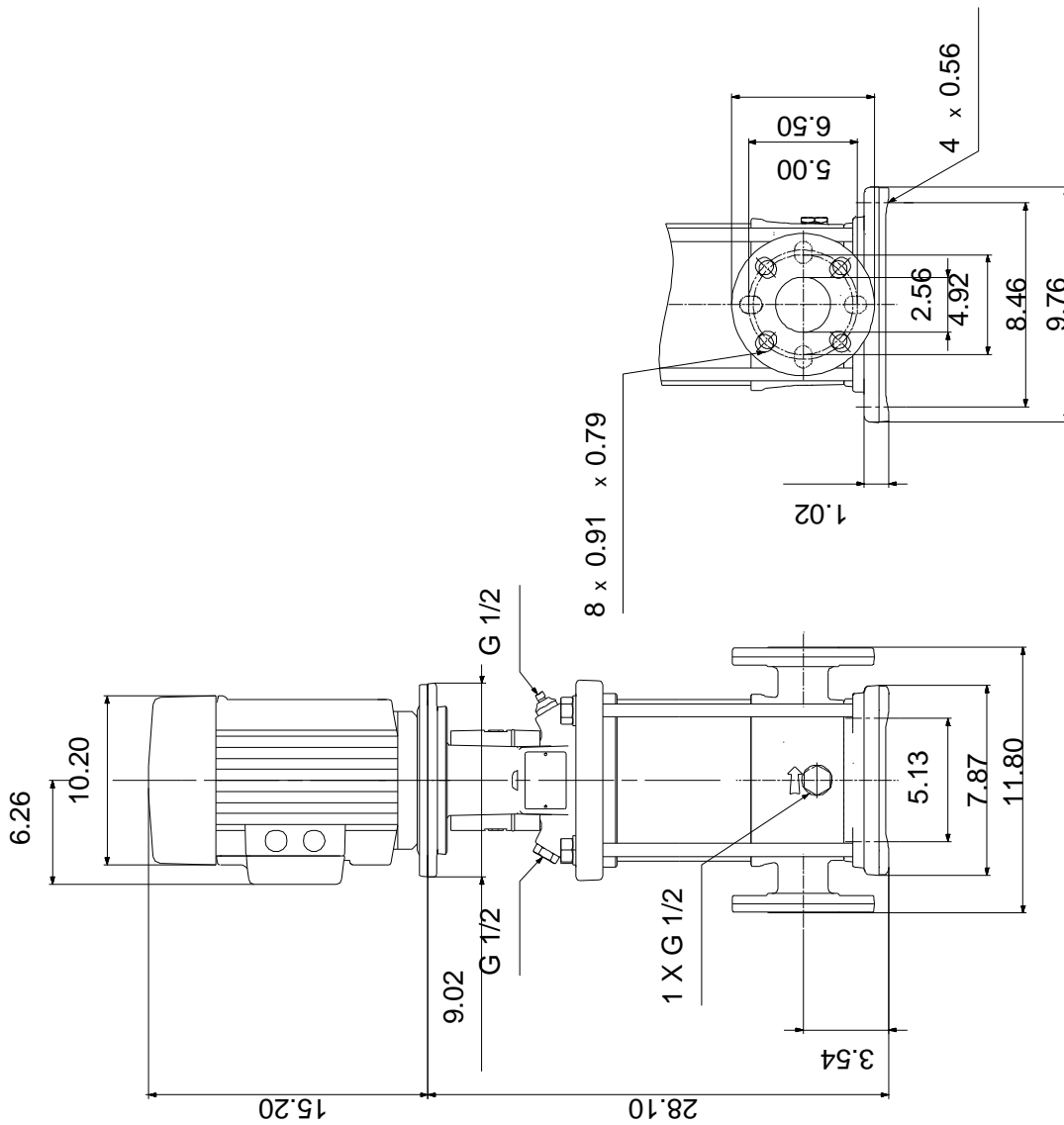
Created by:

Phone:

Date: 5/4/2020

Description	Value
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.15
Rated current:	26,5-24,6/12,4 A
Starting current:	680-900 %
Load current:	30,5-28,3/14,3 A
Cos phi - power factor:	0.87
Rated speed:	3480-3500 rpm
IE efficiency:	IE3 90,2%
Motor efficiency at full load:	90.0-90.2 %
Motor efficiency at 3/4 load:	90.8 %
Motor efficiency at 1/2 load:	90.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	PTC
Motor Number:	85903410
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
DOE Pump Energy Index CL:	0.87
Net weight:	225 lb
Gross weight:	245 lb
Shipping volume:	10.1 ft <sup>3</sup>
Country of origin:	US
Custom tariff no.:	8413.70.2040

**96523291 CRN 10-12 A-FGJ-A-V-HQQV 60 Hz**



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

## 96523291 CRN 10-12 A-FGJ-A-V-HQQV 60 Hz

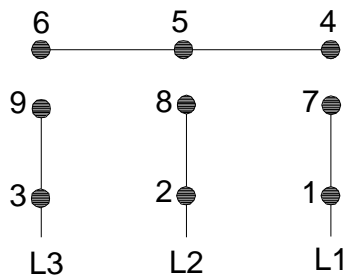


### WARNING

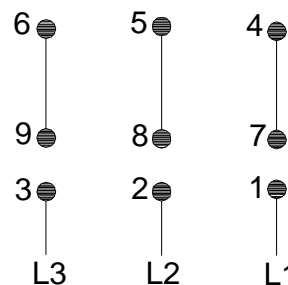
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

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



96553852

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

