GRUNDFOS

Submittal Data

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

Product photo could vary from the actual product

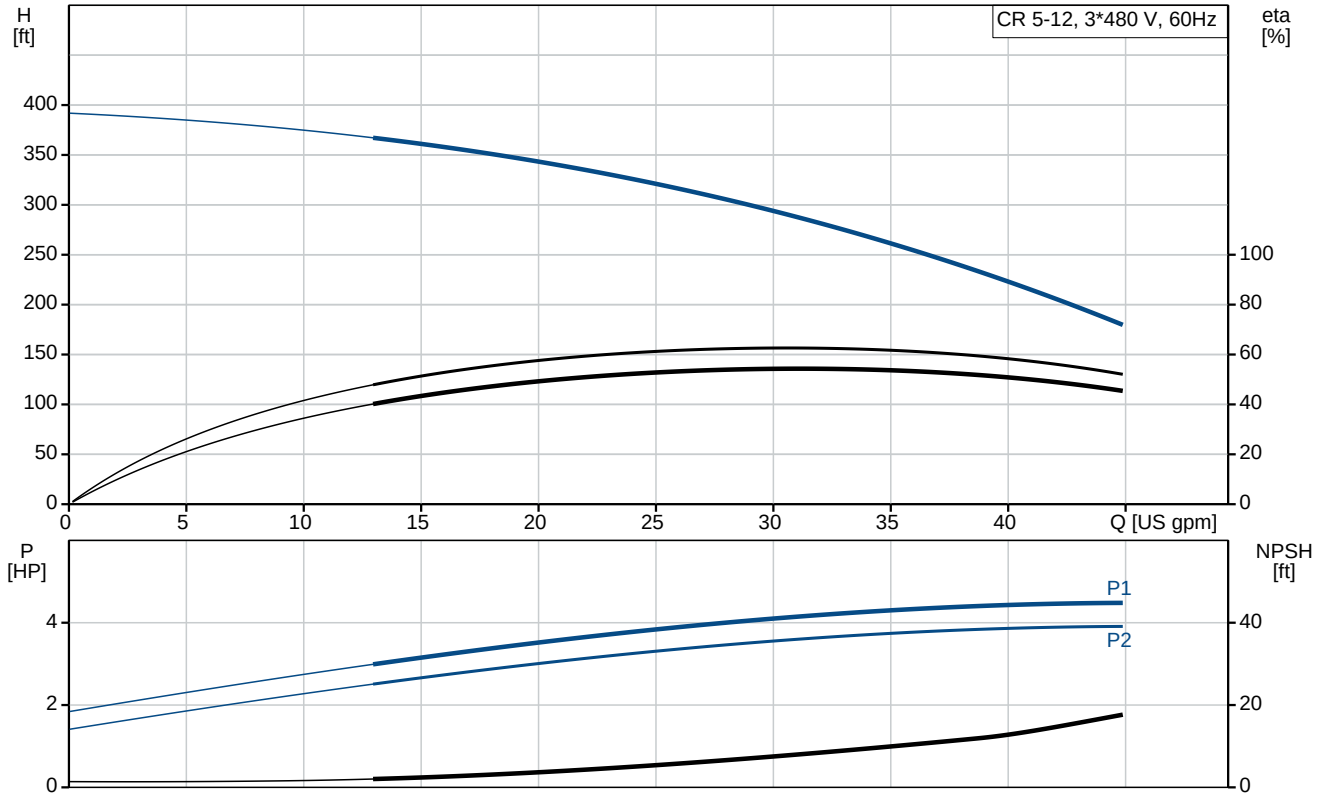
CR 5-12A-B-A-E-HQQE

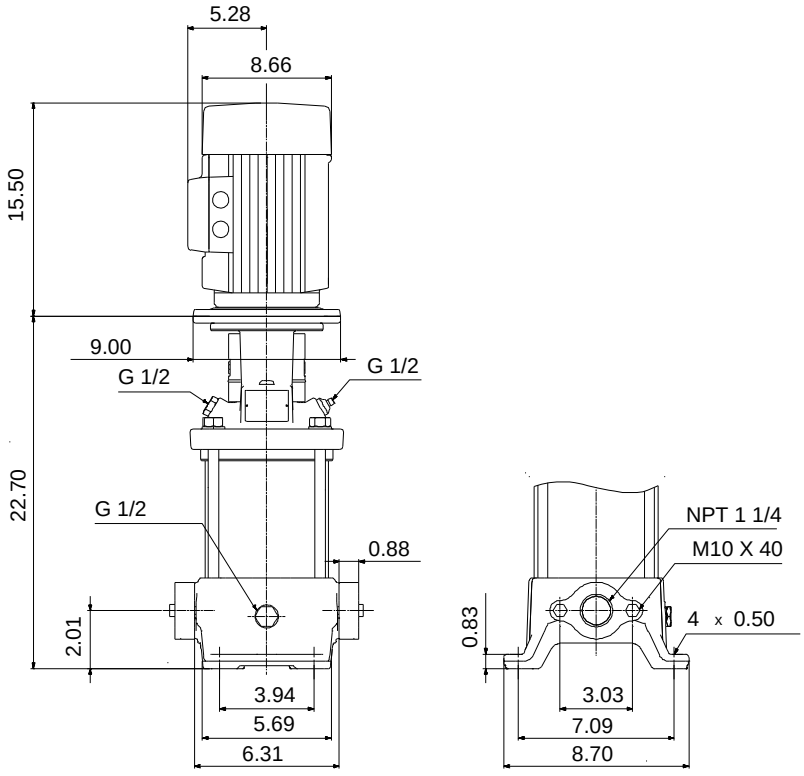
Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301)(AISI 304)

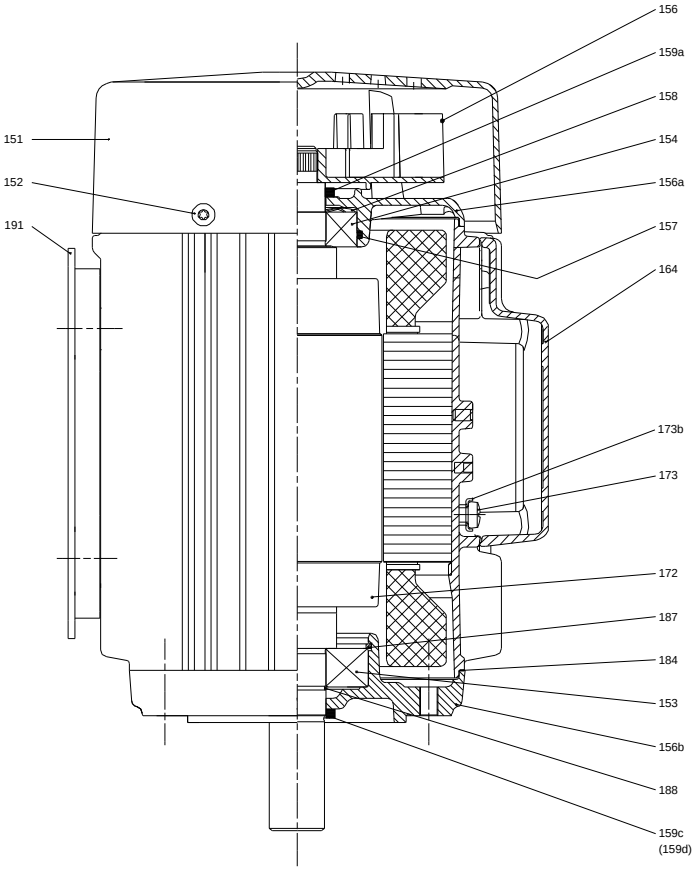
Conditions of Service	
Flow:	
Head:	
Efficiency:	
Liquid:	Water
Temperature:	68 °F
NPSH required:	ft
Viscosity:	
Specific Gravity:	1.000

Pump Data	
Max pressure at stated temperature:	232 psi / 250 °F
Liquid temperature range:	-4 .. 248 °F
Maximum ambient temperature:	140 °F
Approvals:	CURUS,NSF61
Shaft seal:	HQQE
Product number:	96084117

Motor Data	
Rated power - P2:	5 HP
Rated voltage:	208-230YY/460Y V
Main frequency:	60 Hz
Enclosure class:	55 Dust/Jetting
Insulation class:	F
Motor protection:	PTC
Motor type:	112CA
Motor_efficiency:	88.5 %







Materials:

Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B
Impeller:	Stainless steel AISI 304 EN 1.4301
Material code:	A
Code for rubber:	E

GRUNDFOS

Company name:
Created by:
Phone:

Date: 5/6/2019

Count	Description
1	**CR 5-12A-B-A-E-HQQE**

Product photo could vary from the actual product

Product No.: 96084117
Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:
- Impellers and intermediate chambers are made of
- The shaft seal has assembly length according to EN 12756.
- Power transmission is via cast iron split coupling.

The motor is a 3-phase AC motor.

Controls:

Frequency converter:	NONE

Liquid:

Pumped liquid:	Water
Liquid temperature range:	-4 .. 248 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³

Technical:

Rated pump speed:	3461 rpm
Rated flow:	30.4 US gpm
Rated head:	291.7 ft
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CURUS,NSF61
Curve tolerance:	ISO9906:2012 3B

Materials:

Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B
Impeller:	Stainless steel EN 1.4301 AISI 304
Bearing:	SIC

Installation:

Maximum ambient temperature:	140 °F

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Company name:
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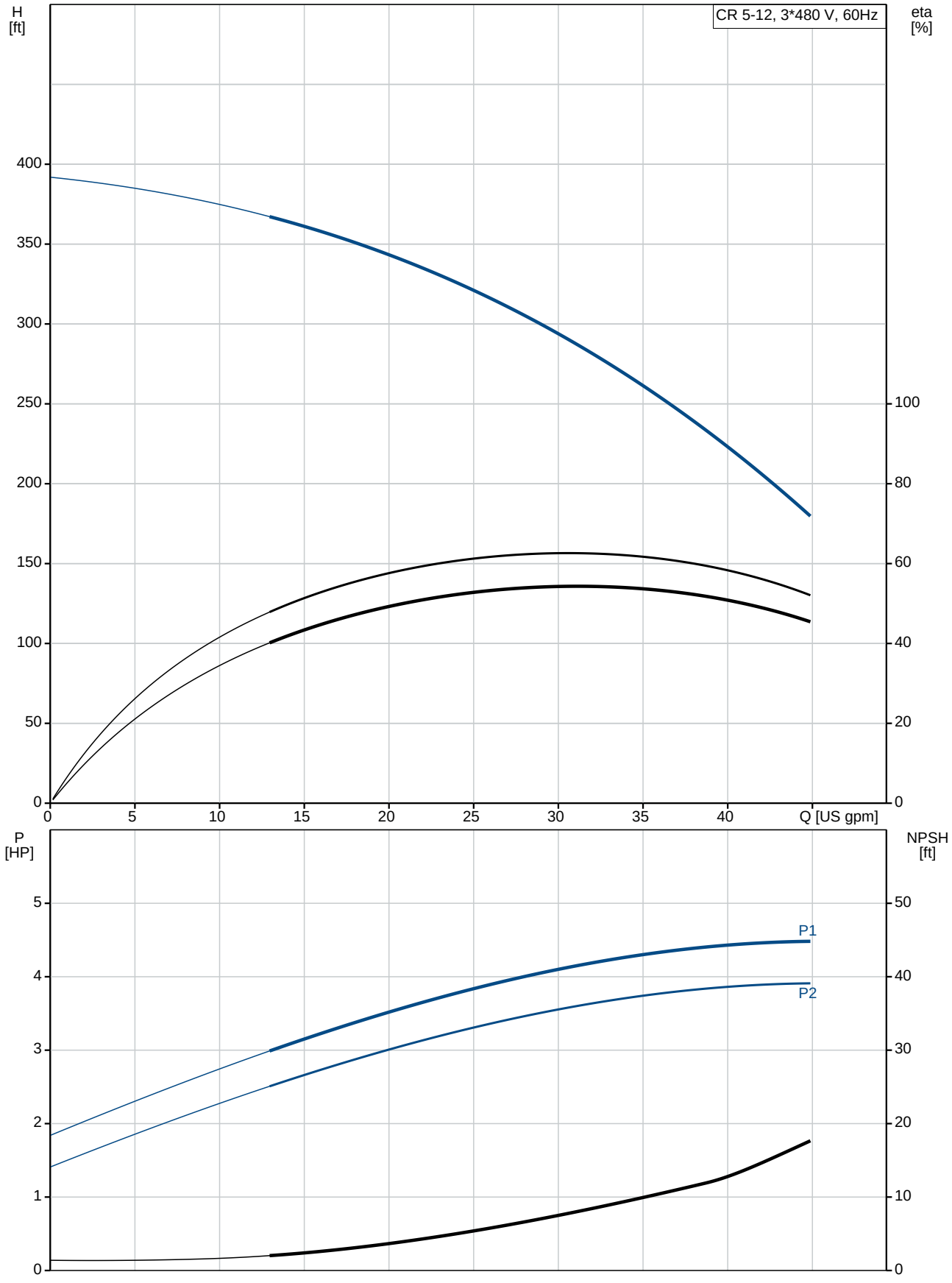
Date: 5/6/2019

Count	Description	
	Maximum operating pressure:	232.06 psi
	Max pressure at stated temperature:	232 psi / 250 °F
		232 psi / -4 °F
	Type of connection:	Oval / NPT(F)
	Size of suction port:	1 1/4 inch
	Size of outlet port:	1 1/4 inch
	Pressure rating for pipe connection:	PN 16
	Flange size for motor:	182TC
	Electrical data:	
	Motor standard:	NEMA
	Motor type:	112CA
	IE Efficiency class:	NEMA Premium / IE3 60Hz
	Rated power - P2:	5 HP
	Power (P2) required by pump:	5 HP
	Main frequency:	60 Hz
	Rated voltage:	3 x 208-230YY/460Y V
	Service factor:	1.15
	Rated current:	14,1-13,1/7,29 A
	Starting current:	1000-1470 %
	Cos phi - power factor:	0.89-0.86
	Rated speed:	3525-3540 rpm
	IE efficiency:	IE3 88,5%
	Motor efficiency at full load:	88.5 %
	Motor efficiency at 3/4 load:	88.6 %
	Motor efficiency at 1/2 load:	85.2 %
	Number of poles:	2
	Enclosure class (IEC 34-5):	55 Dust/Jetting
	Insulation class (IEC 85):	F
	Motor Number:	85904389
	Others:	
	Net weight:	136 lb
	Gross weight:	151 lb
	Shipping volume:	10.1 ft³
	Country of origin:	US
	Custom tariff no.:	8413.70.2040

Company name:
Created by:
Phone:

Date: 5/6/2019

96084117 CR 5-12A-B-A-E-HQQE 60 Hz



Company name:
Created by:
Phone:

Date: 5/6/2019

Description	Value
General information:	
Product name:	CR 5-12A-B-A-E-HQQE
Product No.:	96084117
EAN:	5700395189551
Technical:	
Rated pump speed:	3461 rpm
Rated flow:	30.4 US gpm
Rated head:	291.7 ft
Head max:	391.8 ft
Stages:	12
Impellers:	12
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CURUS,NSF61
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC
Materials:	
Base:	Cast iron
	EN 1561 EN-GJL-200
	ASTM A48-25B
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Material code:	A
Code for rubber:	E
Bearing:	SIC
Installation:	
Maximum ambient temperature:	140 °F
Maximum operating pressure:	232.06 psi
Max pressure at stated temperature:	232 psi / 250 °F
	232 psi / -4 °F
Type of connection:	Oval / NPT(F)
Size of suction port:	1 1/4 inch
Size of outlet port:	1 1/4 inch
Pressure rating for pipe connection:	PN 16
Flange size for motor:	182TC
Connect code:	B
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 248 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	NEMA
Motor type:	112CA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	5 HP
Power (P2) required by pump:	5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.15
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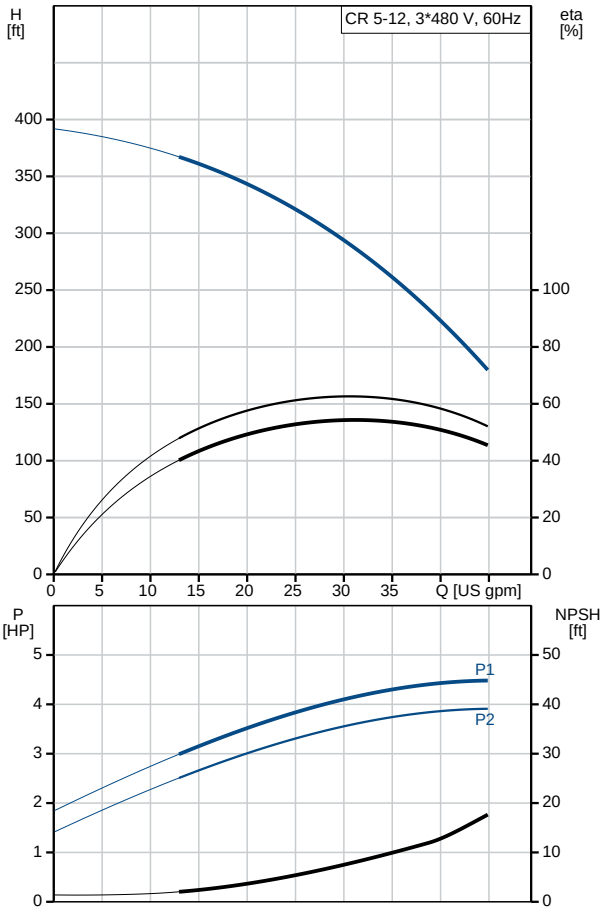

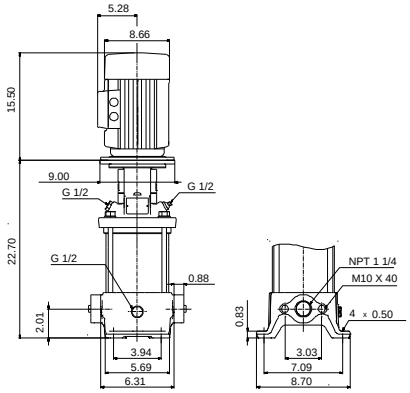

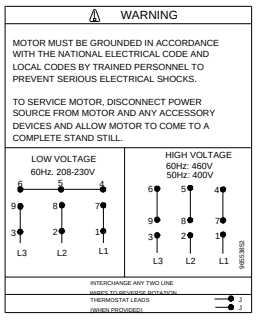

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Created by:
Phone:

Date: 5/6/2019

Description	Value
Starting current:	1000-1470 %
Load current:	16,2-15,0/8,40 A
Cos phi - power factor:	0.89-0.86
Rated speed:	3525-3540 rpm
IE efficiency:	IE3 88,5%
Motor efficiency at full load:	88.5 %
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Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	PTC
Motor Number:	85904389
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	136 lb
Gross weight:	151 lb
Shipping volume:	10.1 ft^3
Country of origin:	US
Custom tariff no.:	8413.70.2040

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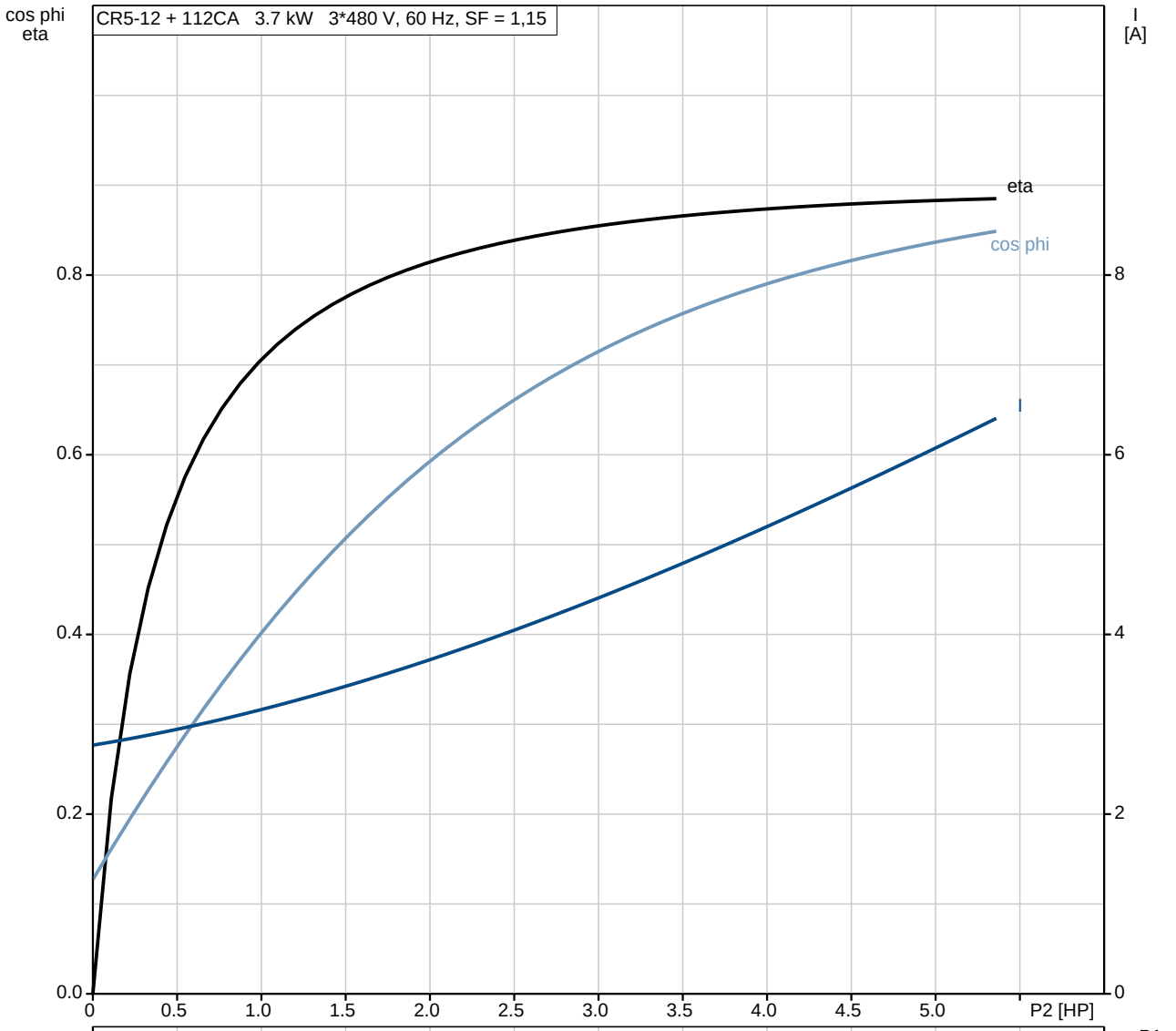
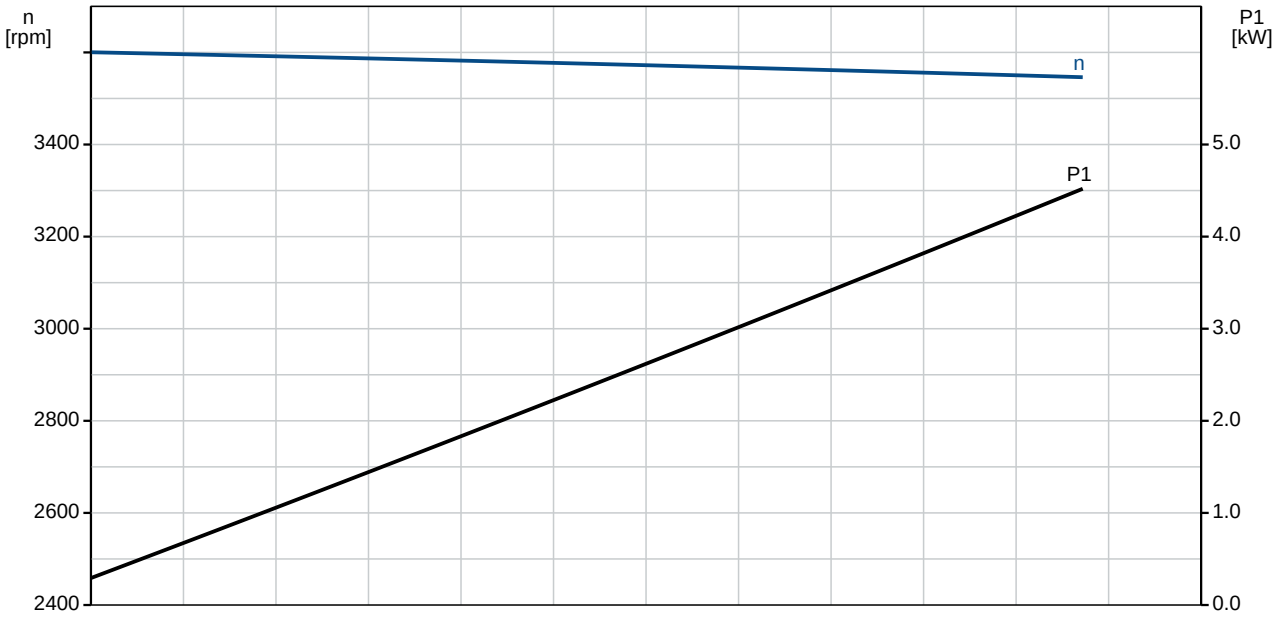
96084117 CR 5-12A-B-A-E-HQQE 60 Hz





Company name:
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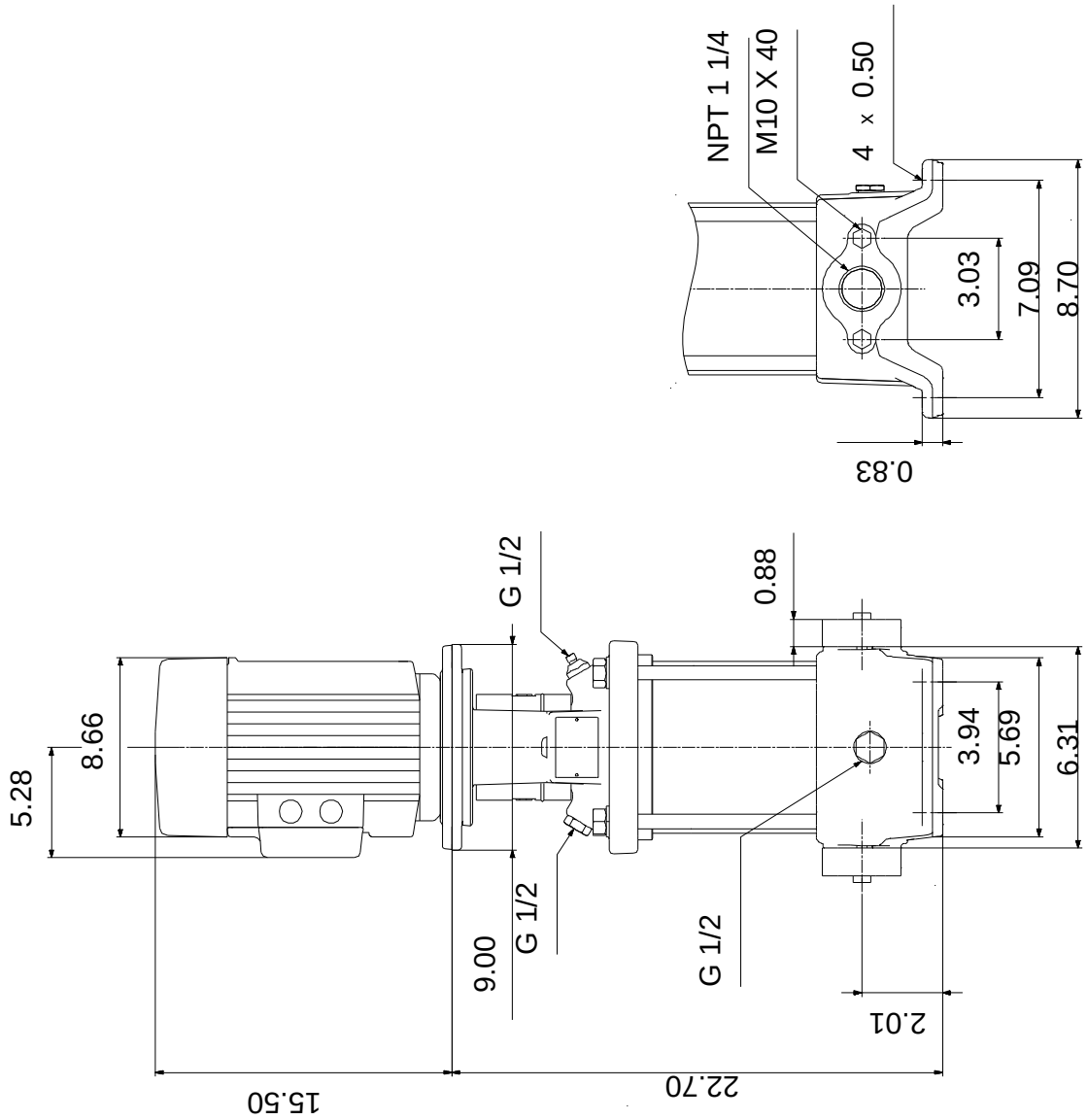
96084117 CR 5-12A-B-A-E-HQQE 60 Hz



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

Company name:
Created by:
Phone:

Date: 5/6/2019

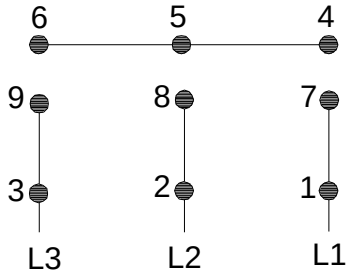
96084117 CR 5-12A-B-A-E-HQQE 60 Hz

WARNING

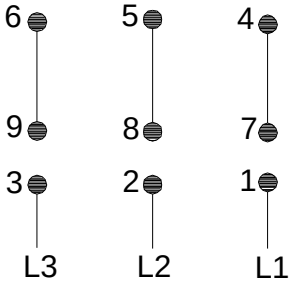
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

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) — J — J

All units are [in] unless otherwise presented.