

PROJECT:	TPE3 READY TO SHIP	UNIT TAG:	_____	QUANTITY:	1
REPRESENTATIVE:	Hurley Engineering	TYPE OF SERVICE:	_____	DATE:	2/10/2020
ENGINEER:	_____	SUBMITTED BY:	Devin Carle	DATE:	_____
CONTRACTOR:	To Be Determined	APPROVED BY:	_____	DATE:	_____
		ORDER NO.:	_____	DATE:	_____

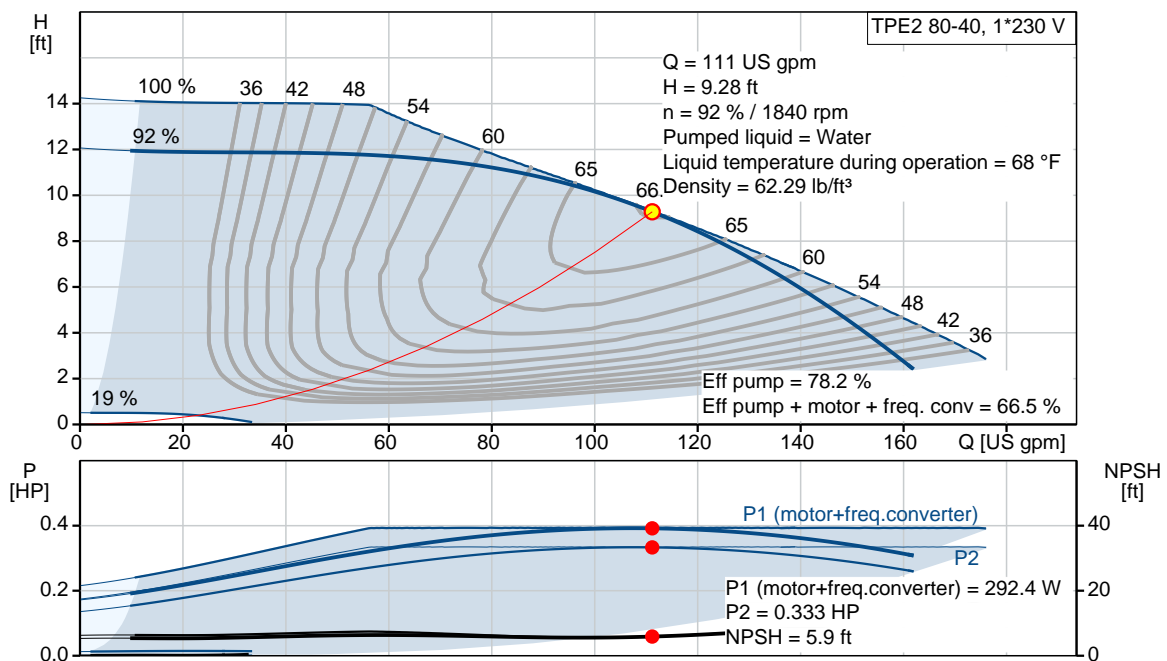


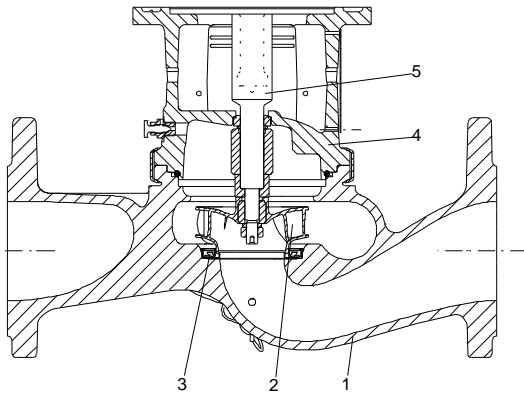
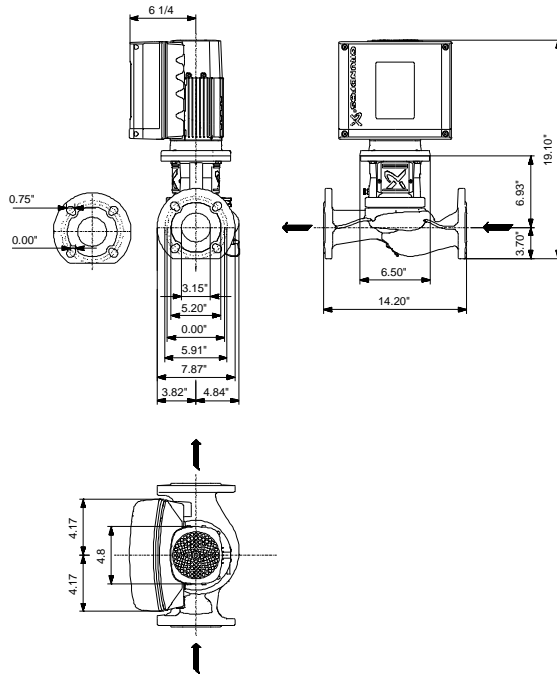
TPE2 80-40 N-A-G-I-BQQE-CAA

Single-stage stainless steel in-line pumps with frequency converters

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data	
Flow:	111 US gpm	Liquid temperature range:	-13 .. 248 °F	Rated power - P2:	0.33 HP
Head:	9.28 ft	Maximum ambient temperature:	122 °F	Rated voltage:	200-240 V
Efficiency:	66.5 %	Shaft seal:	BQQE	Main frequency:	60 Hz
Liquid:	Water	Pipe connection:	DN 80	Number of poles:	0
Temperature:	68 °F	Product number:	98817834	Enclosure class:	IP55
NPSH required:	5.9 ft			Insulation class:	F
Viscosity:	_____			Motor protection:	YES
Specific Gravity:	1.000			Motor type:	71A
				Motor_efficiency:	83.4 %



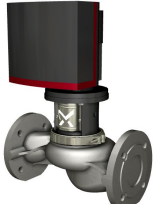


Materials:

Pump housing: Stainless steel
ASTM CF8

Impeller: Composite PES/PP 30%
GF

Material code: I

Count	Description
1	<p data-bbox="300 414 670 436">TPE2 80-40 N-A-G-I-BQQE-CAA</p> <div data-bbox="422 481 574 683" style="text-align: center;">  </div> <p data-bbox="300 728 566 761">Product No.: 98817834</p> <p data-bbox="300 795 1356 840">The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.</p> <p data-bbox="300 851 1276 884">The shaft seal is according to EN 12756. Pipework connection is via PN 16 ANSI flanges.</p> <p data-bbox="300 884 829 907">Pipework connection is via PN 16 ANSI flanges.</p> <p data-bbox="300 907 1372 963">The pump is fitted with a fan-cooled, permanent-magnet synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="300 974 1380 1041">The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.</p> <p data-bbox="300 1086 622 1108">Further product details</p> <p data-bbox="300 1120 1252 1142">The stainless-steel pump housing makes the pump suitable for circulation of hot water.</p> <p data-bbox="300 1209 1372 1254">The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.</p> <p data-bbox="300 1299 1348 1388">The display gives an intuitive and user-friendly interface to all functions. The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".</p> <p data-bbox="300 1444 1380 1512">Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="300 1556 1316 1579">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="335 1579 1348 1724" style="list-style-type: none"> • "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights) • "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) • "Alarm": Motor has stopped (flashing red indicator lights). <p data-bbox="300 1758 383 1780">Pump</p> <p data-bbox="300 1792 1236 1814">Pump housing and pump head are electrocoated to improve the corrosion resistance.</p> <p data-bbox="300 1825 566 1848">Electrocoating includes:</p> <ol data-bbox="300 1859 790 1971" style="list-style-type: none"> 1) Alkaline-based cleaning. 2) Pretreatment with zinc phosphate coating. 3) Cathodic electrocoating (epoxy). 4) Curing of paint film at 200-250 °C.



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Count	Description
	<p>The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.</p> <p>Primary seal:</p> <ul style="list-style-type: none">• Rotating seal ring material: silicon carbide (SiC)• Stationary seat material: silicon carbide (SiC) <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: EPDM (ethylene-propylene rubber) EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.</p> <p>A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.</p> <p>Motor</p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p>Technical data</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Liquid:</p> <p>Pumped liquid: Water Liquid temperature range: -13 .. 248 °F Selected liquid temperature: 68 °F Density: 62.29 lb/ft³</p> <p>Technical:</p> <p>Pump speed on which pump data is based: 1860 rpm Actual calculated flow: 111 US gpm Resulting head of the pump: 9.28 ft Actual impeller diameter: 3.54 in Code for shaft seal: BQQE Curve tolerance: ISO9906:2012 3B2</p> <p>Materials:</p> <p>Pump housing: Stainless steel ASTM CF8 EN 1.4308 Impeller: Composite PES/PP 30% GF</p> <p>Installation:</p> <p>Range of ambient temperature: -4 .. 122 °F Maximum operating pressure: PN 16 bar Type of connection: ANSI Pipe connection: DN 80 Pressure rating for pipe connection: PN 16 Flange size for motor: 56C</p> <p>Electrical data:</p>



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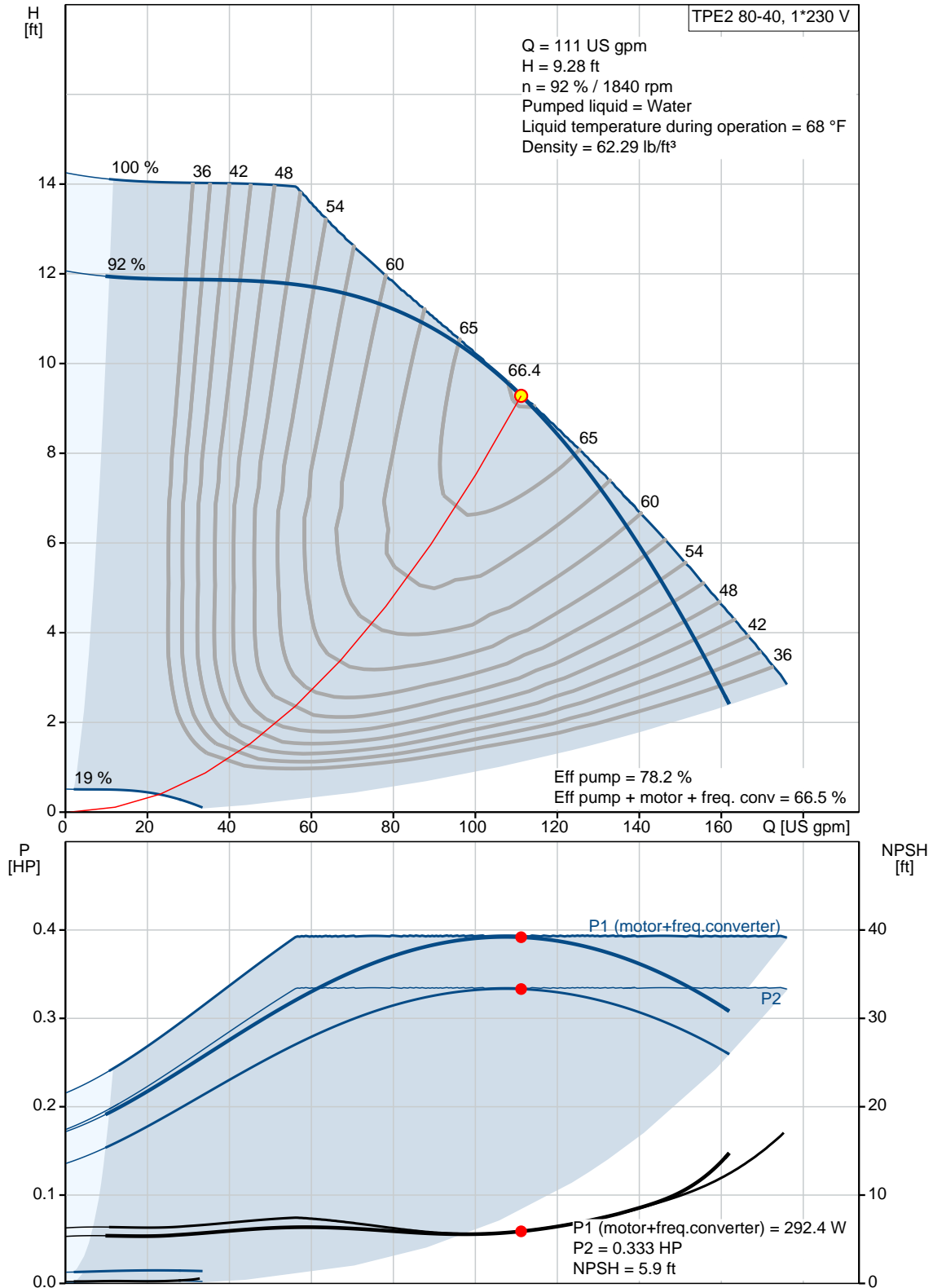
Count	Description
	Motor type: 71A
	IE Efficiency class: IE5
	Rated power - P2: 0.33 HP
	Main frequency: 60 Hz
	Rated voltage: 1 x 200-240 V
	Rated current: 1.65-1.40 A
	Cos phi - power factor: 0.95
	Rated speed: 180-2000 rpm
	IE efficiency: 83.4%
	Motor efficiency at full load: 83.4 %
	Number of poles: 0
	Enclosure class (IEC 34-5): IP55
	Insulation class (IEC 85): F
	Motor Number: 99630321
	Others:
	Net weight: 62.2 lb
	Gross weight: 62.2 lb



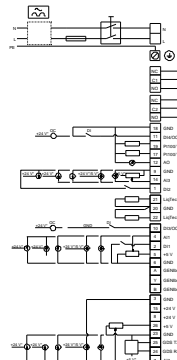
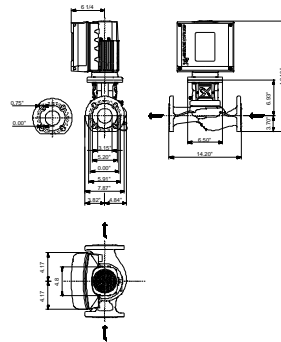
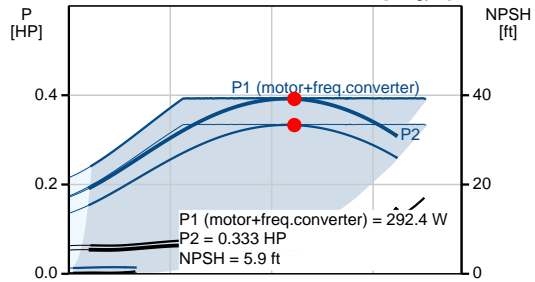
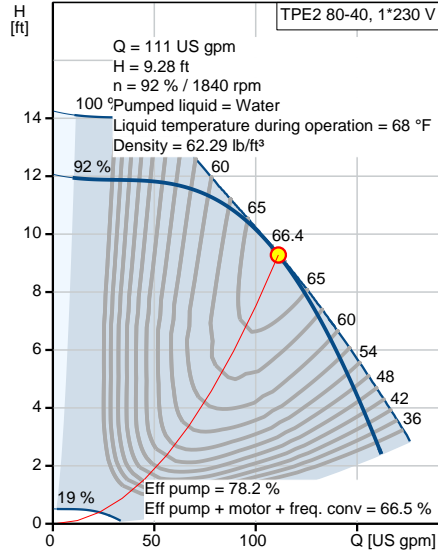
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Date: 2/28/2020

98817834 TPE2 80-40 N-A-G-I-BQQE-CAA 60 Hz



Description	Value
General information:	
Product name:	TPE2 80-40 N-A-G-I-BQQE-CAA
Product No.:	98817834
EAN:	5712601812337 5712601812337
Technical:	
Pump speed on which pump data is based:	1860 rpm
Actual calculated flow:	111 US gpm
Resulting head of the pump:	9.28 ft
Head max:	13.12 ft
Actual impeller diameter:	3.54 in
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Materials:	
Pump housing:	Stainless steel ASTM CF8 EN 1.4308
Impeller:	Composite PES/PP 30% GF
Material code:	I
Installation:	
Range of ambient temperature:	-4 .. 122 °F
Maximum operating pressure:	PN 16 bar
Type of connection:	ANSI
Pipe connection:	DN 80
Pressure rating for pipe connection:	PN 16
Flange size for motor:	56C
Connect code:	G
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-13 .. 248 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft ³
Electrical data:	
Motor type:	71A
IE Efficiency class:	IE5
Rated power - P2:	0.33 HP
Main frequency:	60 Hz
Rated voltage:	1 x 200-240 V
Rated current:	1.65-1.40 A
Cos phi - power factor:	0.95
Rated speed:	180-2000 rpm
IE efficiency:	83.4%
Motor efficiency at full load:	83.4 %
Number of poles:	0
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protection:	YES
Motor Number:	99630321
Controls:	



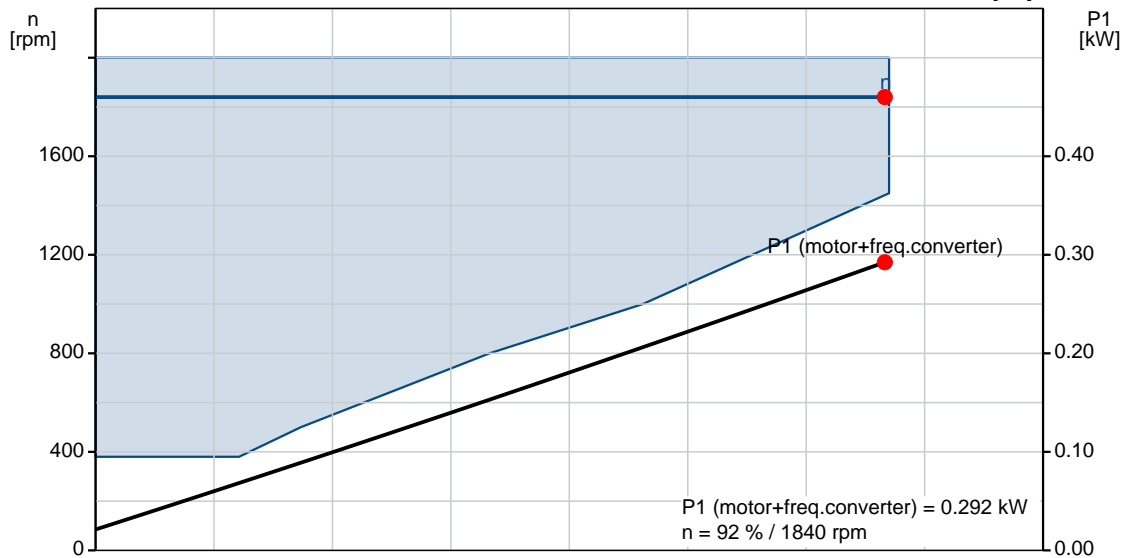
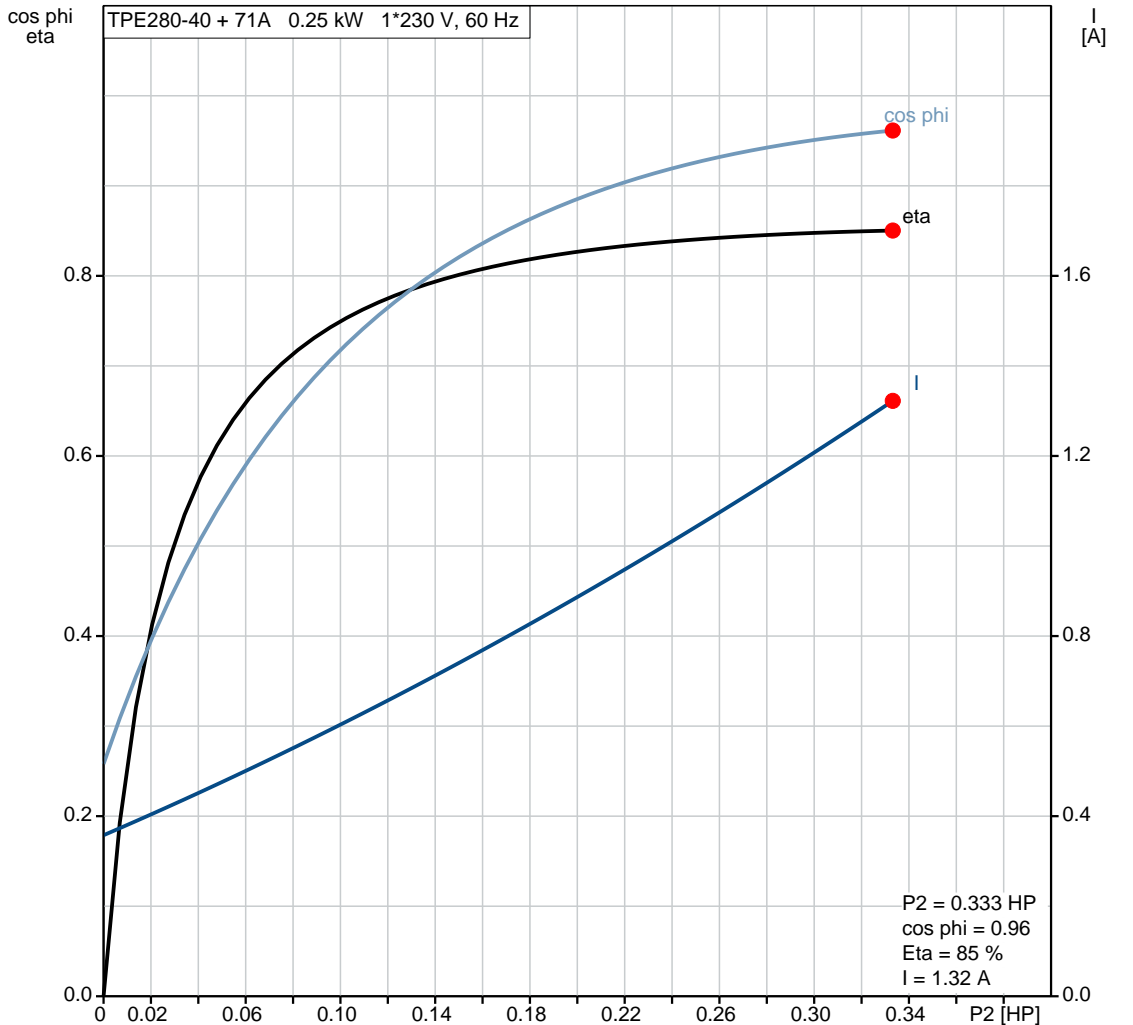


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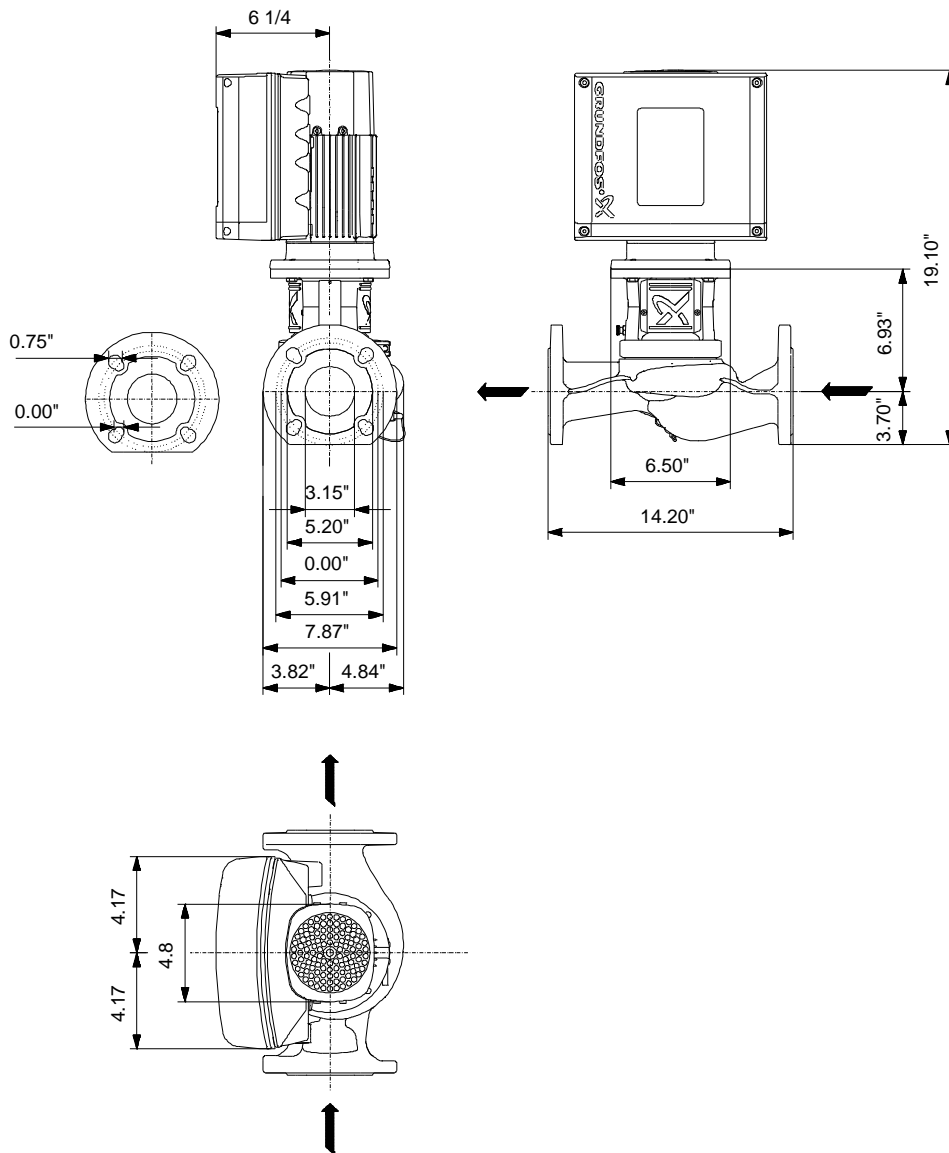
Date: 2/28/2020

Description	Value
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Net weight:	62.2 lb
Gross weight:	62.2 lb
Config. file no:	98819184

98817834 TPE2 80-40 N-A-G-I-BQQE-CAA 60 Hz

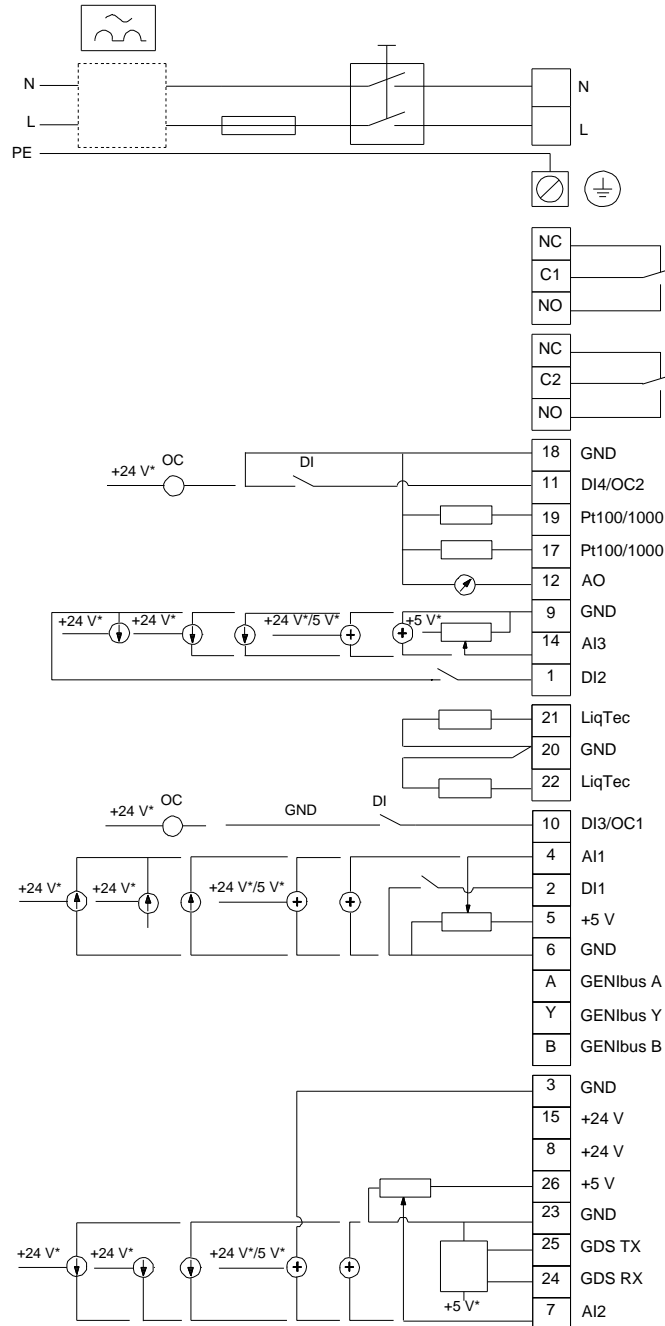


98817834 TPE2 80-40 N-A-G-I-BQQE-CAA 60 Hz



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

98817834 TPE2 80-40 N-A-G-I-BQQE-CAA 60 Hz



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Company name: Hurley Engineering
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Order Data:

Product name: TPE2 80-40 N-A-G-I-BQQE-CAA
Amount: 1
Product No.: 98817834

Total: Price on request
