

## Submittal Data

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



### TPE2 40-120 N-A-G-A-BQQE-DAB

Single-stage in-line pumps with frequency converters

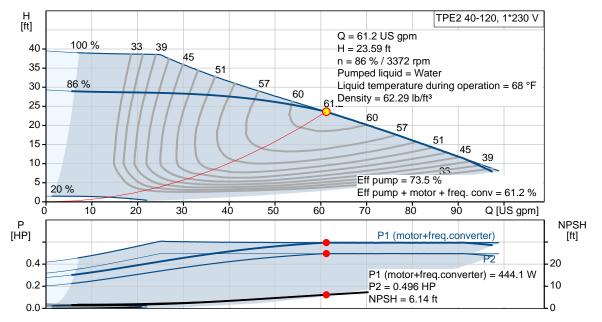
Product photo could vary from the actual product

Conditions of Service		
Flow:	61.2 US gpm	
Head:	23.59 ft	
Efficiency:	61.2 %	
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	6.14 ft	
Viscosity:		
Specific Gravity:	1.000	

	0
Viscosity:	
Specific Gravity:	1.000

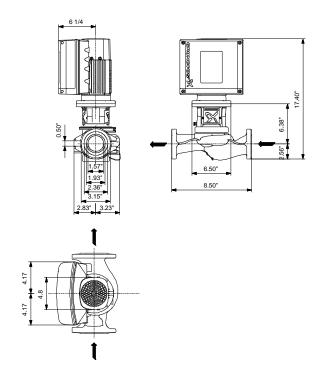
Pump Data	
Liquid temperature range:	-13 248 °F
Maximum ambient temperature:	122 °F
Shaft seal:	BQQE
Pipe connection:	DN 40
Product number:	98817685

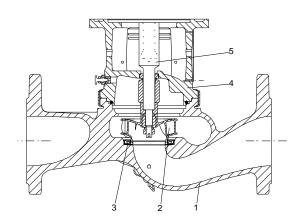
Motor Data		
Rated power - P2:	0.5 HP	
Rated voltage:	200-240 V	
Main frequency:	60 Hz	
Number of poles:	0	
Enclosure class:	IP55	
Insulation class:	F	
Motor protection:	YES	
Motor type:	71A	
Motor_efficiency:	84.0 %	





# Submittal Data





#### Materials:

Pump housing: Cast iron

**ASTM A48-40 B** 

Composite PES/PP 30% GF Impeller:

Material code:



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Project:

Client:

Reference number:

Client number: Contact:

Count

#### Description

TPE2 40-120 N-A-G-A-BQQE-DAB



Product photo could vary from the actual product

Product No.: 98817685

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.

The shaft seal is according to EN 12756. Pipework connection is via PN 16 ANSI flanges. Pipework connection is via PN 16 ANSI flanges.

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.

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.

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Water
Liquid temperature range: -13 .. 248 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Pump speed on which pump data is based: 3390 rpm

Actual calculated flow: 61.2 US gpm
Resulting head of the pump: 23.59 ft
Actual impeller diameter: 2.91 in
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Cast iron

**ASTM A48-40 B** 



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Contact:

Count | Description

EN 1561 EN-GJL-250

Impeller: Composite PES/PP 30% GF

Installation:

Range of ambient temperature: -4 .. 122 °F
Maximum operating pressure: PN 16 bar
Type of connection: ANSI
Pipe connection: DN 40
Pressure rating for pipe connection: PN 16

Flange size for motor: 56C

Electrical data:

Motor type: 71A
IE Efficiency class: IE5
Rated power - P2: 0.5 HP
Main frequency: 60 Hz

Rated voltage: 1 x 200-240 V Rated current: 2.40-2.10 A

Cos phi - power factor: 0.96

Rated speed: 360-4000 rpm

IE efficiency:84.0%Motor efficiency at full load:84.0 %Number of poles:0Enclosure class (IEC 34-5):IP55Insulation class (IEC 85):F

Motor Number: 99630319

Others:

Net weight: 46.1 lb Gross weight: 62 lb



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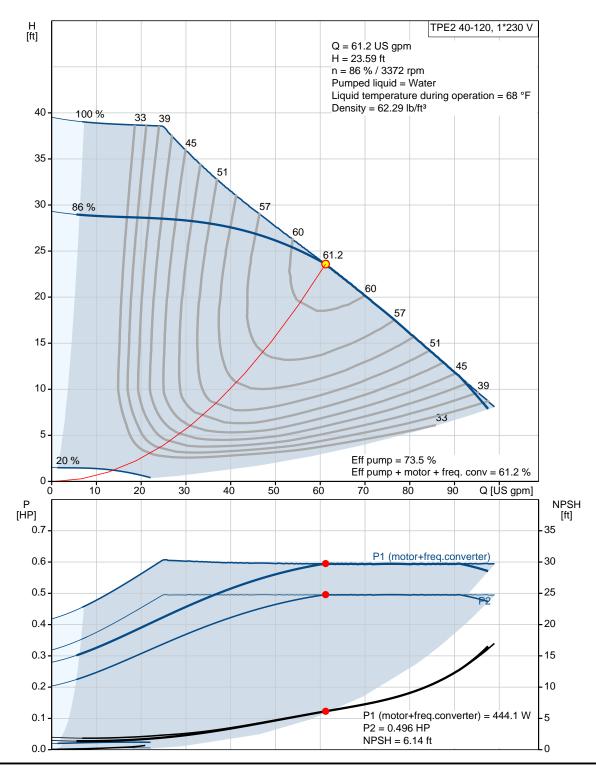
2/26/2020 Date:

Project: Client: Reference number:

Client number:

Contact:

## 98817685 TPE2 40-120 N-A-G-A-BQQE-DAB 60 Hz





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**Date:** 2/26/2020

Project:

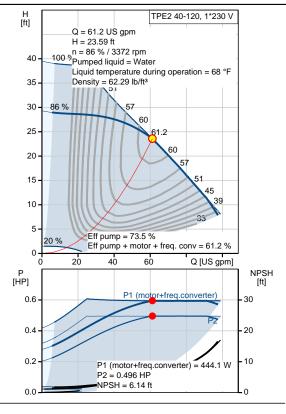
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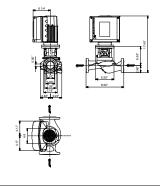
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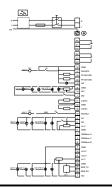
Client number:

Contact:

Description	Value
General information:	
Product name:	TPE2 40-120 N-A-G-A-BQQE-DAB
Product No.:	98817685
EAN:	5712601809320
	5712601809320
Technical:	
Pump speed on which pump data is based:	3390 rpm
Actual calculated flow:	61.2 US gpm
Resulting head of the pump:	23.59 ft
Head max:	39.37 ft
Actual impeller diameter:	2.91 in
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Materials:	
Pump housing:	Cast iron
	ASTM A48-40 B
	EN 1561 EN-GJL-250
Impeller:	Composite PES/PP 30% GF
Material code:	A
Installation:	
Range of ambient temperature:	-4 122 °F
Maximum operating pressure:	PN 16 bar
Type of connection:	ANSI
Pipe connection:	DN 40
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 <sup>3</sup>
Electrical data:	
Motor type:	71A
IE Efficiency class:	IE5
Rated power - P2:	0.5 HP
Main frequency:	60 Hz
Rated voltage:	1 x 200-240 V
Rated current:	2.40-2.10 A
Cos phi - power factor:	0.96
Rated speed:	360-4000 rpm
IE efficiency:	84.0%
Motor efficiency at full load:	84.0 %
·	0
Number of poles:	U









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**Date:** 2/26/2020

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Client:

Client number:

Contact:

Description	Value
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protection:	YES
Motor Number:	99630319
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Net weight:	46.1 lb
Gross weight:	62 lb
Config. file no:	98819169



Created by: Phone:

**Date:** 2/26/2020

### Project: Client: Reference number: Client number: Contact: 98817685 TPE2 40-120 N-A-G-A-BQQE-DAB 60 Hz TPE240-120 + 71A 0.37 kW 1\*230 V, 60 Hz Ι [A] cos phi eta 4.0 8.0 3.0 0.6 -2.0 0.4 0.2 1.0 P2 = 0.496 HP cos phi = 0.97 Eta = 83.3 % I = 1.99 A 0.0-0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 P2 [HP] n [rpm] [kW] 3000 0.6 P1 (motor+freq.converter) 2000 1000 -0.2 P1 (motor+freq.converter) = 0.444 kW n = 86 % / 3372 rpm 0.0



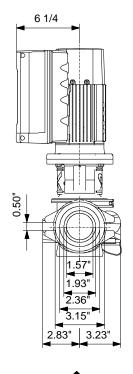
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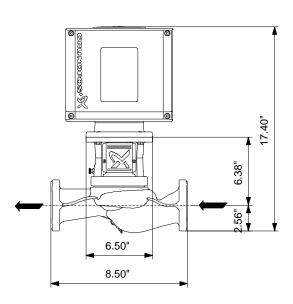
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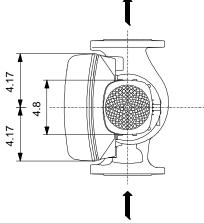
Project: Client:

Reference number: Client number: Contact:

## 98817685 TPE2 40-120 N-A-G-A-BQQE-DAB 60 Hz







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



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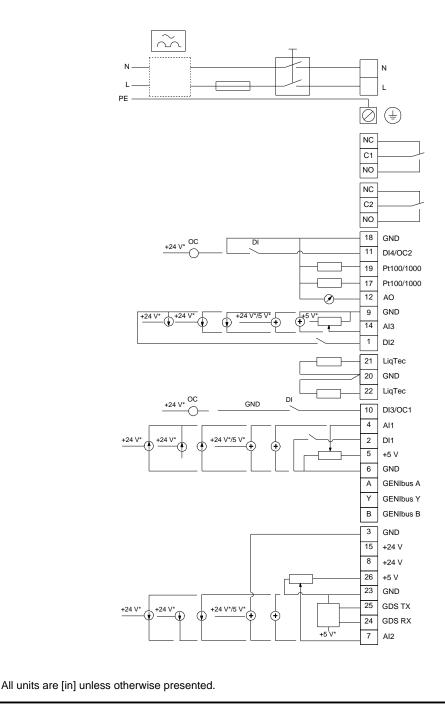
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Project: Client:

Reference number: Client number:

Contact:

## 98817685 TPE2 40-120 N-A-G-A-BQQE-DAB 60 Hz





Created by: Phone:

**Date:** 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

**Order Data:** 

Product name: TPE2 40-120 N-A-G-A-BQQE-DAB

Amount: 1

Product No.: 98817685

Total: Price on request