

# 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:	



### TPE3 80-150 S-A-G-A-BQQE-HAB

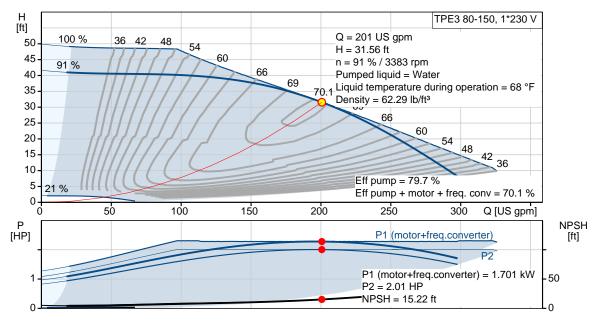
Single-stage in-line pumps with frequency converters

Product photo could vary from the actual product

Conditions of Service		
Flow:	201 US gpm	
Head:	31.56 ft	
Efficiency:	70.1 %	
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	15.22 ft	
Viscosity:		
Specific Gravity:	1.000	
I		

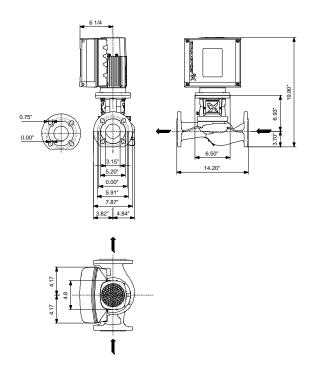
Pump Data	
Liquid temperature range:	-13 248 °F
Maximum ambient temperature:	122 °F
Shaft seal:	BQQE
Pipe connection:	DN 80
Product number:	98819757

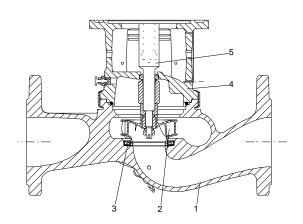
Motor Data			
Rated power - P2:	2 HP		
Rated voltage:	200-240 V		
Main frequency:	60 Hz		
Number of poles:	0		
Enclosure class:	IP55		
Insulation class:	F		
Motor protection:	YES		
Motor type:	90C		
Motor_efficiency:	87.4 %		





# Submittal Data





#### Materials:

Pump housing: Cast iron

**ASTM A48-40 B** 

Composite PES/PP 30% GF Impeller:

Material code:



Created by: Phone:

**Date:** 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

Count

#### Description

**TPE3 80-150 S-A-G-A-BQQE-HAB** 



Product photo could vary from the actual product

Product No.: 98819757

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: 3400 rpm

Actual calculated flow: 201 US gpm
Resulting head of the pump: 31.56 ft
Actual impeller diameter: 3.54 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 80
Pressure rating for pipe connection: PN 16

Flange size for motor: 56C

Electrical data:

Motor type:90CIE Efficiency class:IE5Rated power - P2:2 HPMain frequency:60 Hz

Rated voltage: 1 x 200-240 V Rated current: 9.10-7.60 A

Cos phi - power factor: 0.99

Rated speed: 360-4000 rpm

IE efficiency: 87.4%
Motor efficiency at full load: 87.4 %
Number of poles: 0
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F

Motor Number: 99630346

Others:

DOE Pump Energy Index VL: 0.42
Net weight: 79.8 lb
Gross weight: 79.8 lb
Country of origin: HU

Custom tariff no.: 8413.70.2022



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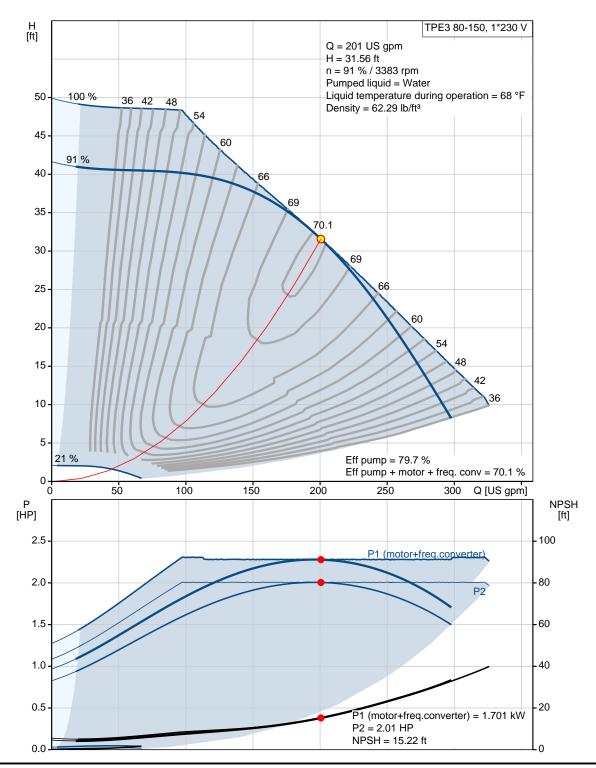
**Date:** 2/26/2020

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### 98819757 TPE3 80-150 S-A-G-A-BQQE-HAB 60 Hz





Created by: Phone:

**Date:** 2/26/2020

Project:

Reference number:

Pipe connection:

connection:

**Liquid:**Pumped liquid:

Pressure rating for pipe

Flange size for motor: Connect code:

Liquid temperature range:

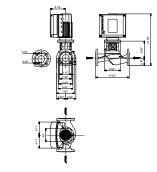
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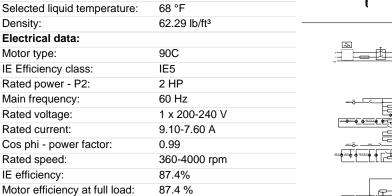
Client number:

Contact:

Description	Value
General information:	
Product name:	TPE3 80-150 S-A-G-A-BQQE-HAB
Product No.:	98819757
EAN:	5712601846370
	5712601846370
Technical:	
Pump speed on which pump data is based:	3400 rpm
Actual calculated flow:	201 US gpm
Resulting head of the pump:	31.56 ft
Head max:	49.22 ft
Actual impeller diameter:	3.54 in
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Model:	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

H [ft]	TPE3 80-150, 1*230 V
[14]	Q = 201 US gpm
50 -	H = 31.56 ft 100 %n = 91 % / 3383 rpm
45 -	Pumped liquid = Water
45 =	Liquid temperature during operation = 68 °F 91 % Density = 62.29 lb/ft³
40 -	66
35 -	69
30 -	69
	66
25 -	60
20 -	54
15 -	48 42
10 -	42/36
10 -	
5 <b>-</b>	21 % Eff pump = 79.7 %
0 -	Eff pump + motor + freq. conv = 70.1 %
0 <b>-</b> 0	Eff pump + motor + freq. conv = 70.1 %
0 -	Eff pump + motor + freq. conv = 70.1 % 50 100 150 200 250 Q [US gpm]
0 <b>-</b> 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %
0 <b>-</b> 0	Eff pump + motor + freq. conv = 70.1 % 50 100 150 200 250 Q [US gpm]
0 <b>-</b> 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)
0 <b>-</b> 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)
0 - 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)  P2  P1 (motor+freq.converter) = 1.701 kW
0 - 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)  P2  P1 (motor+freq.converter) = 1.701 kW P2 = 2.01 HP
0 - 0 P [HP]	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)  P2  P1 (motor+freq.converter) = 1.701 kW
0- P [HP] 2-	Eff pump + motor + freq. conv = 70.1 %  50 100 150 200 250 Q [US gpm]  P1 (motor+freq.converter)  P2  P1 (motor+freq.converter) = 1.701 kW P2 = 2.01 HP





**DN 80** 

PN 16

Water -13 .. 248 °F

56C

G

NPSH

100



Created by: Phone:

**Date:** 2/26/2020

Project:

Reference number:

Client:

Client number:

Contact:

Description	Value
Number of poles:	0
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protection:	YES
Motor Number:	99630346
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
DOE Pump Energy Index VL:	0.42
Net weight:	79.8 lb
Gross weight:	79.8 lb
Config. file no:	98481409
Country of origin:	HU
Custom tariff no.:	8413.70.2022



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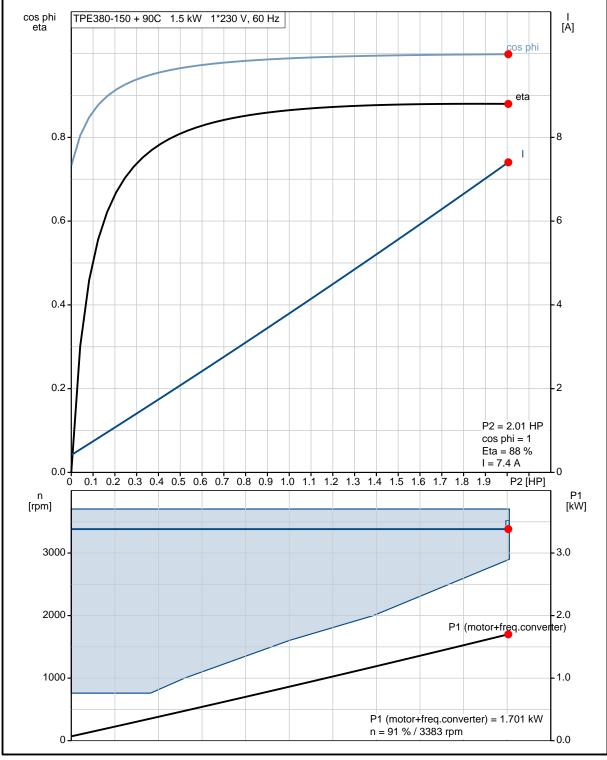
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### 98819757 TPE3 80-150 S-A-G-A-BQQE-HAB 60 Hz





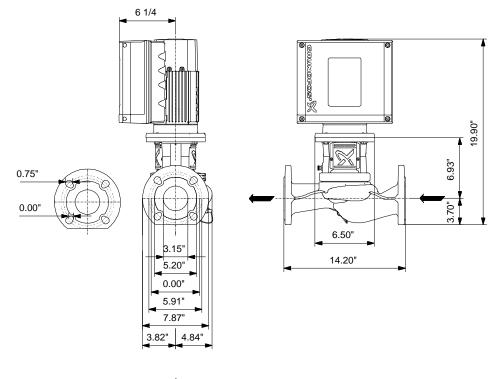
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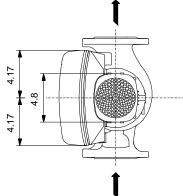
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Reference number: Client number: Contact:

# 98819757 TPE3 80-150 S-A-G-A-BQQE-HAB 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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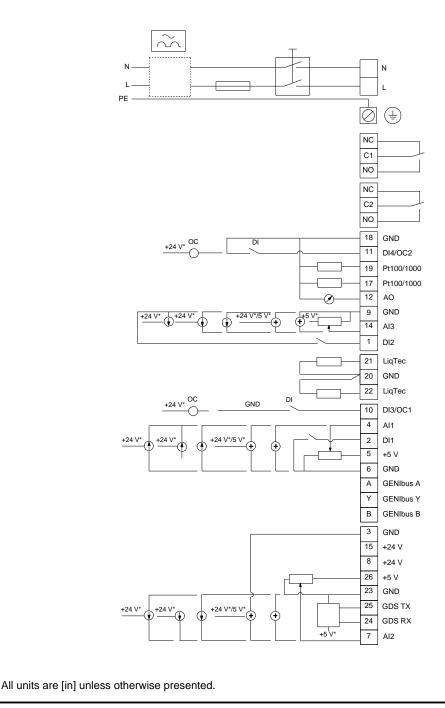
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Reference number: Client number:

Contact:

# 98819757 TPE3 80-150 S-A-G-A-BQQE-HAB 60 Hz





Created by: Phone:

**Date:** 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

**Order Data:** 

Product name: TPE3 80-150 S-A-G-A-BQQE-HAB

Amount: 1

Product No.: 98819757

Total: Price on request