

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 40-200 S-A-G-A-BQQE-GCC

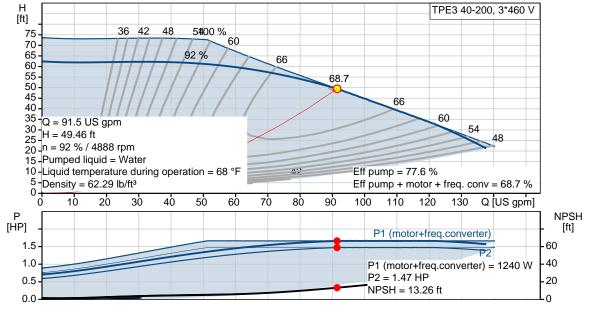
Single-stage in-line pumps with frequency converters

Product photo could vary from the actual product

Conditions of Service		
Flow:	91.5 US gpm	
Head:	49.46 ft	
Efficiency:	68.7 %	
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	13.26 ft	
Viscosity:		
Specific Gravity:	1.000	

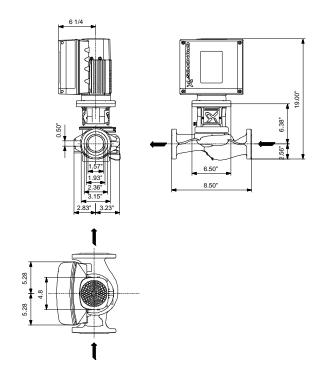
Pump Data		
Liquid temperature range:	-13 248 °F	
Maximum ambient temperature:	122 °F	
Shaft seal:	BQQE	
Pipe connection:	DN 40	
Product number:	98819540	

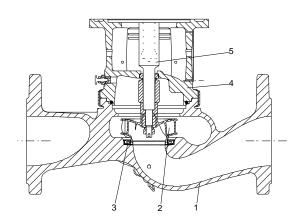
Motor Data		
Rated power - P2:	1.5 HP	
Rated voltage:	440-480 V	
Main frequency:	60 Hz	
Number of poles:	0	
Enclosure class:	IP55	
Insulation class:	F	
Motor protection:	YES	
Motor type:	80A	
Motor_efficiency:	87.8 %	





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 40-200 S-A-G-A-BQQE-GCC



Product photo could vary from the actual product

Product No.: 98819540

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: 5000 rpm

Actual calculated flow: 91.5 US gpm
Resulting head of the pump: 49.46 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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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: 80A
IE Efficiency class: IE5
Rated power - P2: 1.5 HP
Main frequency: 60 Hz

Rated voltage: 3 x 440-480 V

Rated current: 2.15 A
Cos phi - power factor: 0.82

Rated speed: 480-5900 rpm

IE efficiency: 87.8%

Motor efficiency at full load: 87.8 %

Number of poles: 0

Enclosure class (IEC 34-5): IP55

Insulation class (IEC 85): F

Motor Number: 99630345

Others:

DOE Pump Energy Index VL: 0.37
Net weight: 49.8 lb
Gross weight: 66.4 lb
Country of origin: HU

Custom tariff no.: 8413.70.2022



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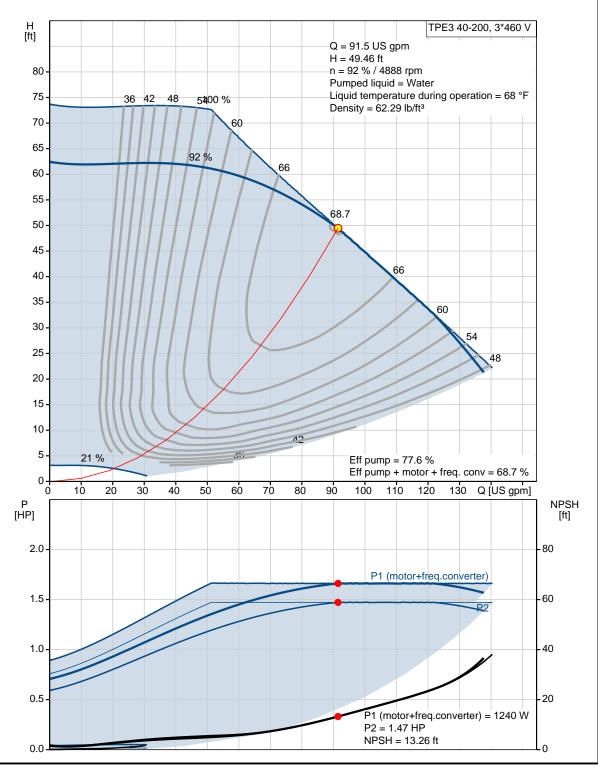
Date: 2/26/2020

Project: Client:

Reference number: Client number:

Contact:

98819540 TPE3 40-200 S-A-G-A-BQQE-GCC 60 Hz





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Project:

Reference number:

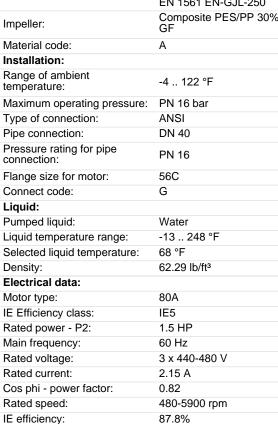
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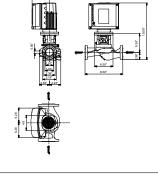
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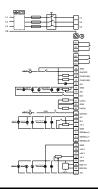
Contact:

Description	Value
General information:	
Product name:	TPE3 40-200 S-A-G-A-BQQE-GCC
Product No.:	98819540
EAN:	5712601842198
	5712601842198
Technical:	
Pump speed on which pump data is based:	5000 rpm
Actual calculated flow:	91.5 US gpm
Resulting head of the pump:	49.46 ft
Head max:	65.62 ft
Actual impeller diameter:	2.91 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

H [ft]	TPE3 40-200, 3*460 V	
	Q = 91.5 US gpm	
80 -	H = 49.46 ft	
75 -	n = 92 % / 4888 rpm	
70 -	Pumped liquid = Water	
65 -	Liquid temperature during operation = 68 °F Density = 62.29 lb/ft³	
60 -		
55 -	68.7	
50 -	00.7	
45 -		
40 -	66	
35 -	60	
30 -	54	
25 -	48	
20 -		
15 -		
10 -	<u></u>	
5 -	21 % Eff pump = 77.6 %	
0 -	Eff pump + motor + freq. conv = 68.7 %	
C	20 40 60 80 100 Q [US gpm]	
P [HP]		NPSH [ft]
2.0 -		- 80
2.0	P1 (motor+freq.converter)	00
1.5 -		-60
	P2	
1.0 -		- 40
0.5 -	P1 (motor+freq.converter) = 1240 W	- 20
	P2 = 1.47 HP NPSH = 13.26 ft	
0.0 -		- 0







87.8 %

Motor efficiency at full load:



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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:	99630345
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
DOE Pump Energy Index VL:	0.37
Net weight:	49.8 lb
Gross weight:	66.4 lb
Config. file no:	98484778
Country of origin:	HU
Custom tariff no.:	8413.70.2022



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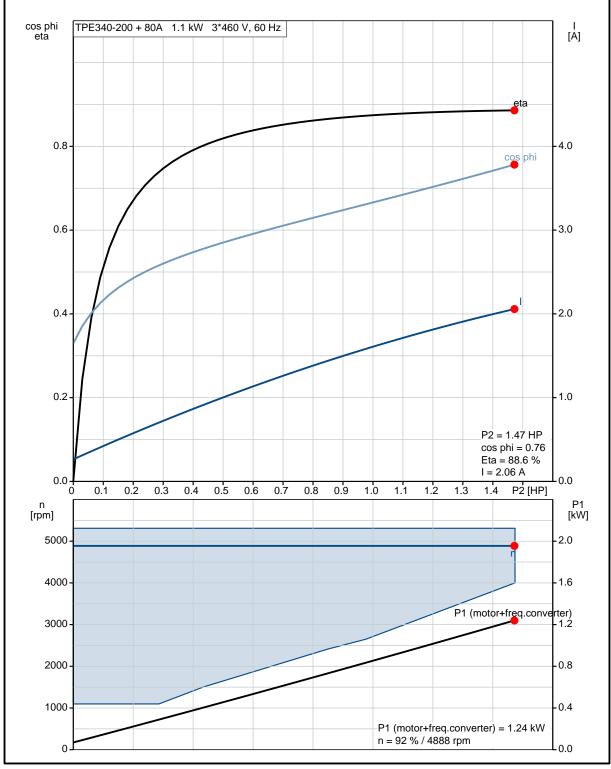
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Reference number: Client number:

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98819540 TPE3 40-200 S-A-G-A-BQQE-GCC 60 Hz





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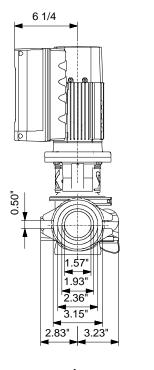
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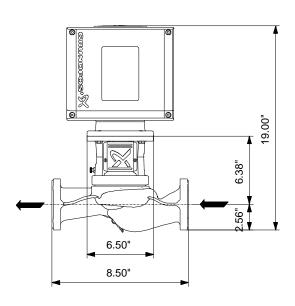
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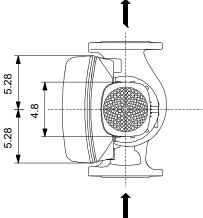
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Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



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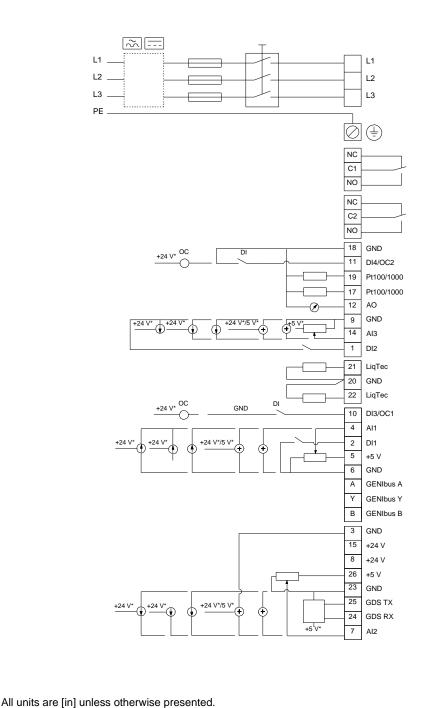
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Date: 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

Order Data:

Product name: TPE3 40-200 S-A-G-A-BQQE-GCC

Amount: 1

Product No.: 98819540

Total: Price on request