

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: | |



Product photo could vary from the actual product

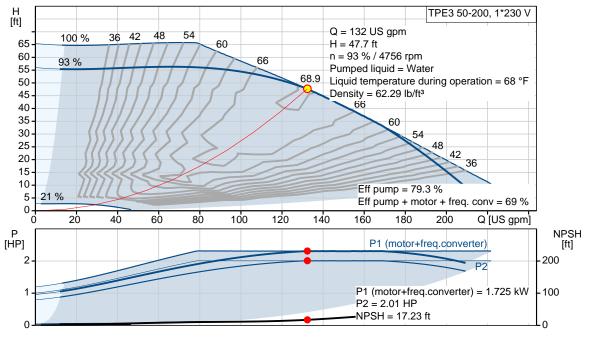
TPE3 50-200 S-A-G-I-BQQE-HAC

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

| Conditions of Service | | |
|-----------------------|------------|--|
| Flow: | 132 US gpm | |
| Head: | 47.7 ft | |
| Efficiency: | 69 % | |
| Liquid: | Water | |
| Temperature: | 68 °F | |
| NPSH required: | 17.23 ft | |
| Viscosity: | | |
| Specific Gravity: | 1.000 | |
| | | |

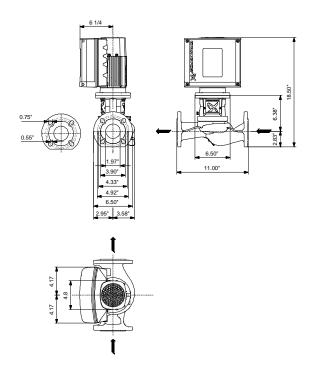
| Pump Data | |
|------------------------------|------------|
| Liquid temperature range: | -13 248 °F |
| Maximum ambient temperature: | 122 °F |
| Shaft seal: | BQQE |
| Pipe connection: | DN 50 |
| Product number: | 98819614 |
| | |
| | |
| | |

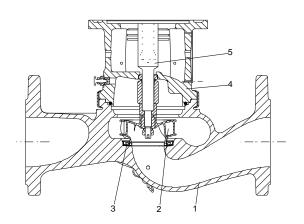
| Motor Data | | |
|-------------------|-----------|--|
| Rated power - P2: | 2 HP | |
| Rated voltage: | 200-240 V | |
| Main frequency: | 60 Hz | |
| Number of poles: | 0 | |
| Enclosure class: | IP55 | |
| Insulation class: | F | |
| Motor protection: | YES | |
| Motor type: | 90B | |
| Motor_efficiency: | 87.5 % | |





Submittal Data





Materials:

Pump housing: Stainless steel

ASTM CF8

Composite PES/PP 30% GF Impeller:

Material code:



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Project:

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Count | Description

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TPE3 50-200 S-A-G-I-BQQE-HAC



Product No.: 98819614

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: 4800 rpm

Actual calculated flow: 132 US gpm
Resulting head of the pump: 47.7 ft
Actual impeller diameter: 2.91 in
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Stainless steel

ASTM CF8 EN 1.4308

Impeller: Composite PES/PP 30% GF

Installation:

Range of ambient temperature: -4 .. 122 °F Maximum operating pressure: PN 16 bar Type of connection: ANSI



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Pipe connection: DN 50
Pressure rating for pipe connection: PN 16
Flange size for motor: 56C

Electrical data:

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

Rated voltage: 1 x 200-240 V Rated current: 9.20-7.60 A

Cos phi - power factor: 0.99

Rated speed: 480-5900 rpm

IE efficiency:87.5%Motor efficiency at full load:87.5 %Number of poles:0Enclosure class (IEC 34-5):IP55Insulation class (IEC 85):F

Motor Number: 99630347

Others:

DOE Pump Energy Index VL: 0.38
Net weight: 60.9 lb
Gross weight: 60.9 lb
Country of origin: HU

Custom tariff no.: 8413.70.2022



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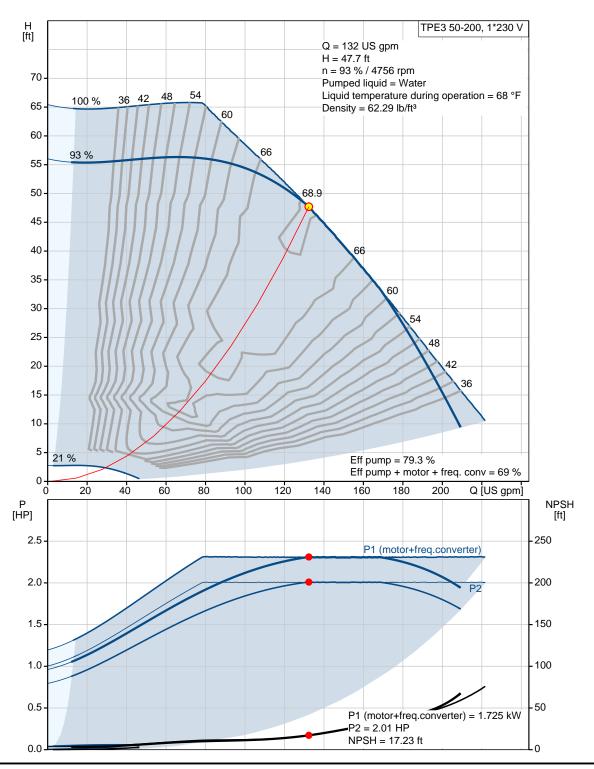
Date: 2/26/2020

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Reference number: Client number:

Contact:

98819614 TPE3 50-200 S-A-G-I-BQQE-HAC 60 Hz





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Project:

Reference number:

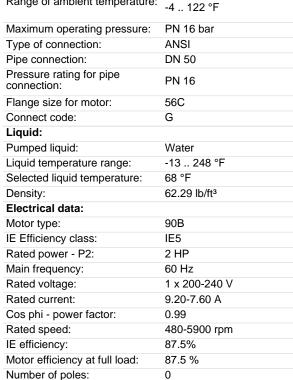
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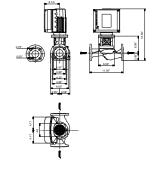
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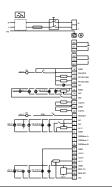
Contact:

| Description | Value |
|---|---------------------------------|
| General information: | |
| Product name: | TPE3 50-200 S-A-G-I-BQQE-HAC |
| Product No.: | 98819614 |
| EAN: | 5712601843638 |
| | 5712601843638 |
| Technical: | |
| Pump speed on which pump data is based: | 4800 rpm |
| Actual calculated flow: | 132 US gpm |
| Resulting head of the pump: | 47.7 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 |
| 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 |

| H [ft] | TPE3 50-200, 1*230 V | |
|-------------|--|--------------|
| 70 - | Q = 132 US gpm H = 47.7 ft | |
| 65 - | 100 %n = 93 % / 4756 rpm | |
| | Pumped liquid = Water | |
| 60 - | Liquid temperature during operation = 68 °F Density = 62.29 lb/ft³ | |
| 55 - | | |
| 50 - | 68.9 | |
| 45 - | | |
| 40 - | 66 | |
| 35 - | 60 | |
| 30 - | 54 | |
| 25 - | 48 | |
| 20 - | 42 36 | |
| 15 - | 30 | |
| 10 - | | |
| 5 - | 21 % Eff pump = 79.3 % | |
| 0 - | Eff pump + motor + freq. conv = 69 % | |
| Ö | 50 100 150 Q [US gpm] | |
| P [HP] | | NPSH [ft] |
| [111] | P1 (motor+freq.converter) | լույ |
| 2- | | - 200 |
| Z - | P2 | - 200 |
| | | |
| 1- | | - 100 |
| '- | 74/ / / / / / / / / / / / / / / / / / / | - 100 |
| | P1 (motor+freq.converter) = 1.725 kW P2 = 2.01 HP | |
| | NPSH = 17.23 ft | |
| 0- | | L 0 |









Created by: Phone:

Date: 2/26/2020

Project:

Reference number: Client number:

Contact:

Client:

| Description | Value |
|-----------------------------|--------------------|
| Enclosure class (IEC 34-5): | IP55 |
| Insulation class (IEC 85): | F |
| Motor protection: | YES |
| Motor Number: | 99630347 |
| Controls: | |
| Control panel: | HMI300 - Graphical |
| Function Module: | FM300 - Advanced |
| Frequency converter: | Built-in |
| Others: | |
| DOE Pump Energy Index VL: | 0.38 |
| Net weight: | 60.9 lb |
| Gross weight: | 60.9 lb |
| Config. file no: | 98481401 |
| Country of origin: | HU |
| Custom tariff no.: | 8413.70.2022 |



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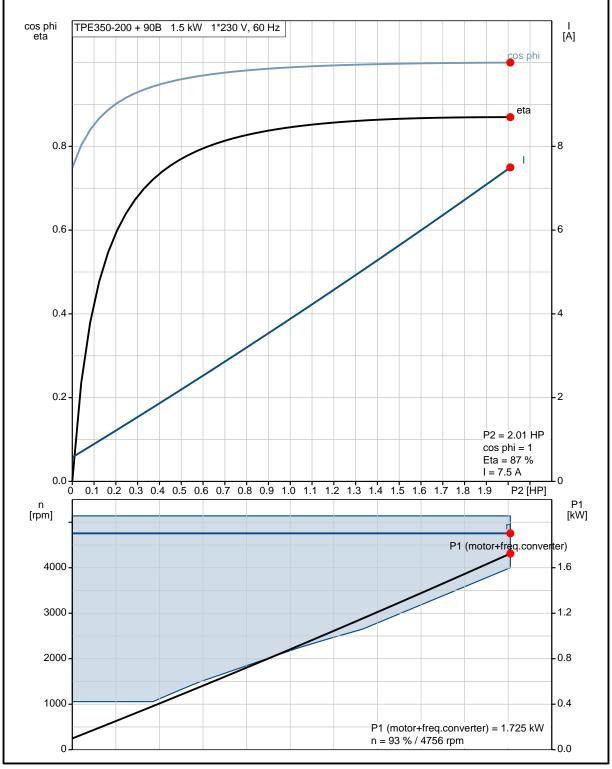
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98819614 TPE3 50-200 S-A-G-I-BQQE-HAC 60 Hz





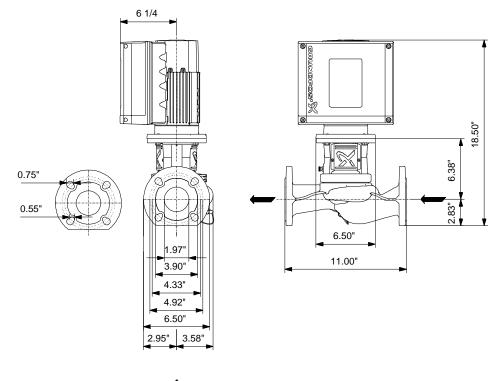
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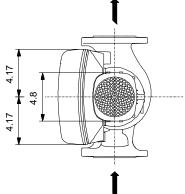
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Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



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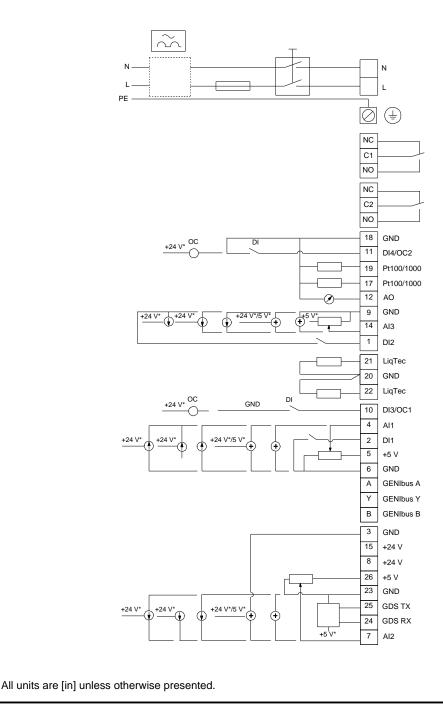
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Date: 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

Order Data:

Product name: TPE3 50-200 S-A-G-I-BQQE-HAC

Amount: 1

Product No.: 98819614

Total: Price on request