GRUNDFOS

Submittal Data

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

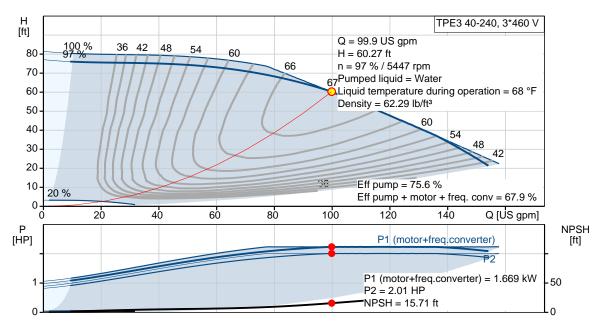


TPE3 40-240 S-A-G-A-BQBE-HCC

Single-stage in-line pumps with frequency converters

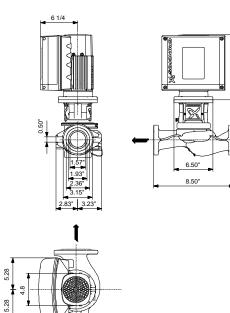
Product photo could vary from the actual product

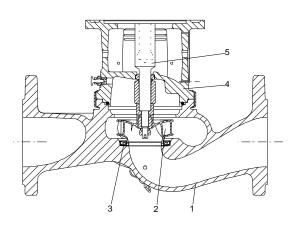
Conditions of Service		Pump Data		Motor Data	
Flow:	99.9 US gpm	Liquid temperature range:	32 248 °F	Rated power - P2:	2 HP
Head:	60.27 ft	Maximum ambient temperature:	122 °F	Rated voltage:	440-480 V
Efficiency:	67.9 %	Shaft seal:	BQBE	Main frequency:	60 Hz
Liquid:	Water	Pipe connection:	DN 40	Number of poles:	0
Temperature:	68 °F	Product number:	99223970	Enclosure class:	IP55
NPSH required:	15.71 ft			Insulation class:	F
Viscosity:				Motor protection:	YES
Specific Gravity:	1.000			Motor type:	90B
				Motor_efficiency:	88.4 %





Submittal Data





Materials:

19.80"

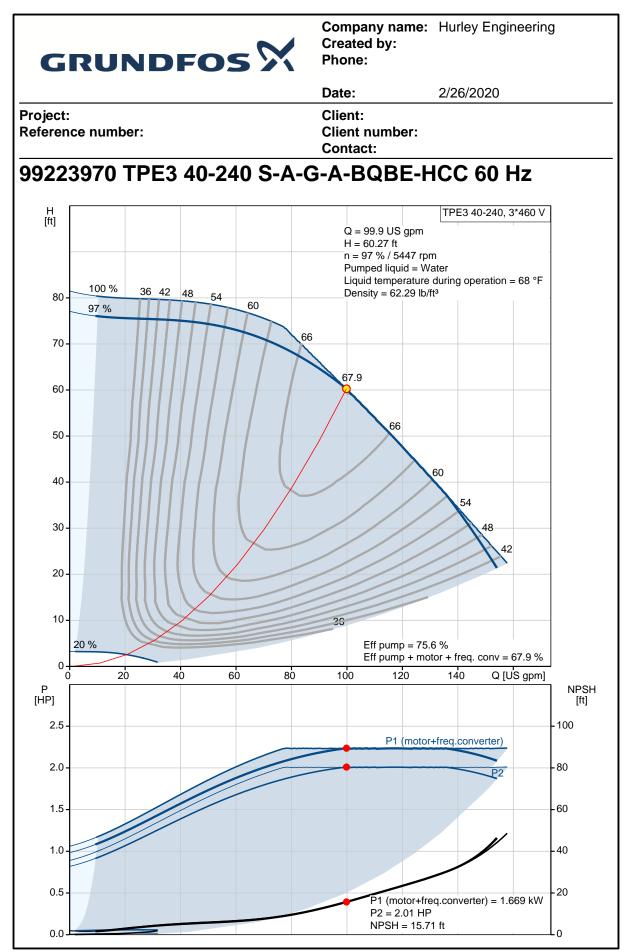
6.38"

Pump housing:	Cast iron ASTM A48-40 B
Impeller:	Composite PES/PP 30% GF
Material code:	А

G	RUNDFOS	Created by	me: Hurley Engineering		
		Date:	2/26/2020		
Projec Refere	t: nce number:	Client: Client numbe Contact:	er:		
Count	Description				
1	TPE3 40-240 S-A-G-A-BQBE-	нсс			
	be removed for maintenance o The shaft seal is according to E Pipework connection is via PN The pump is fitted with a fan-co is classified as IE5 in accordan	r service while the pump housin N 12756. Pipework connection 16 ANSI flanges. poled, permanent-magnet sync ce with IEC 60034-30-2. y converter and PI controller in the motor speed, which again	notor, pump head and impeller) can ng remains in the pipework. n is via PN 16 ANSI flanges. hronous motor. The motor efficiency the motor terminal box. This enables		
	Controls: Frequency converter:	Built-in			
	Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water 32 248 °F 68 °F 62.29 lb/ft ³			
	Technical:Pump speed on which pump data is based: 5500 rpmActual calculated flow:99.9 US gpmResulting head of the pump:60.27 ftActual impeller diameter:2.91 inCode for shaft seal:BQBECurve tolerance:ISO9906:2012 3B2				
	Materials: Pump housing:	Cast iron ASTM A48-40 B			



		D	Date:	2/26/2020
	Project: Reference number:		Client: Client number: Contact:	
Count	Description			
	Impeller:	EN 1561 EN-G Composite PE		
	Inpenet. Installation: Range of ambient temperature: Maximum operating pressure: Type of connection: Pipe connection: Pressure rating for pipe connecti Flange size for motor: Electrical data: Motor type: IE Efficiency class: Rated power - P2: Main frequency: Rated voltage: Rated current: Cos phi - power factor: Rated speed: IE efficiency: Motor efficiency at full load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor Number: Others: DOE Pump Energy Index VL: Net weight: Gross weight: Country of origin: Custom tariff no.:	-4 122 °F PN 16 bar ANSI DN 40		



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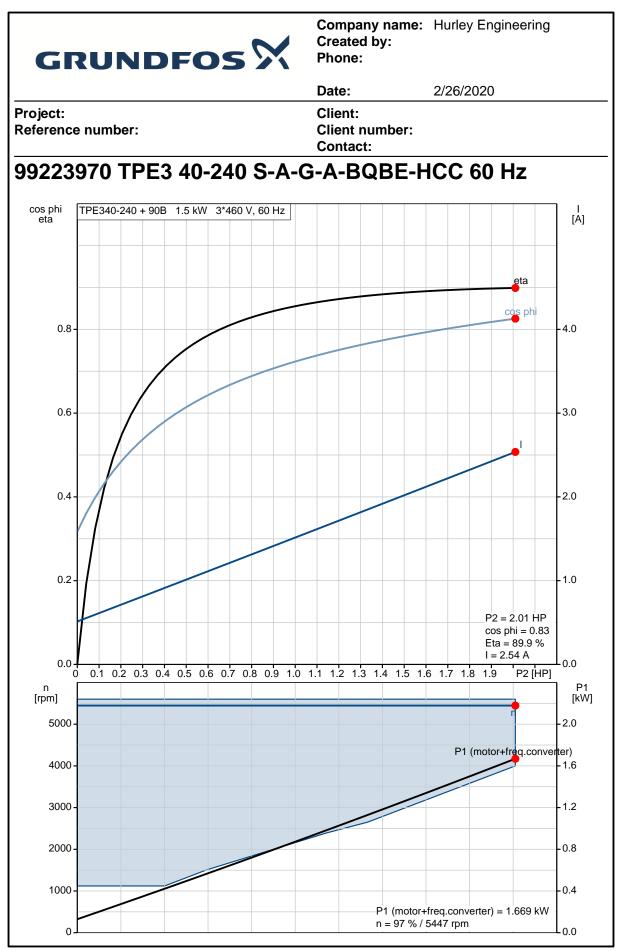


Project: Reference number:DescriptionValueGeneral information:Product name:TPE3 40-240 S-A-G-A-BQBE-HProduct name:99223970EAN:99223970EAN:5712608991080Technical:Fump speed on which pump data is based:Pump speed on which pump data is based:5500 rpmActual calculated flow:99.9 US gpm	Client: Client number: Contact: H [ft] Q = 99.9 US gpm
General information:Product name:TPE3 40-240 S-A-G-A-BQBE-HProduct No.:99223970EAN:571260899108057126089910805712608991080Technical:Pump speed on which pump data is based:5500 rpm	[ft]
General information:Product name:TPE3 40-240 S-A-G-A-BQBE-HProduct No.:99223970EAN:571260899108057126089910805712608991080Technical:Pump speed on which pump data is based:5500 rpm	Q = 99 9 US gpm
Product name:S-A-G-A-BQBE-HProduct No.:99223970EAN:571260899108057126089910805712608991080Technical:Pump speed on which pump data is based:5500 rpm	H = 60.27 ft
Product No.: 99223970 EAN: 5712608991080 5712608991080 5712608991080 Technical: Pump speed on which pump data is based:	100 %n = 97 % / 5447 rpm
EAN: 5712608991080 5712608991080 5712608991080 Technical: Pump speed on which pump data is based: 5500 rpm	CC 97 % Pumped liquid = Water Liquid temperature during operation = 68 °F
5712608991080Technical:Pump speed on which pump data is based:5500 rpm	70 - Density = 62.29 lb/ft ³
Technical:Pump speed on which pump data is based:5500 rpm	60-67.9
Pump speed on which pump data is based: 5500 rpm	
data is based: 5500 Ipin	50 - 66
Actual calculated flow: 99.9 US gpm	40 - 60
	54
Resulting head of the pump: 60.27 ft	30 - 48
Head max: 78.74 ft	20
Actual impeller diameter: 2.91 in	
Code for shaft seal: BQBE	10-20 % Eff pump = 75.6 %
Curve tolerance: ISO9906:2012 3B	Eff pump + motor + freq. conv = 67.9%
Pump version: A	0 50 100 Q [US gpm]
Model: A	P NPSH [HP] [ft]
Materials:	P1 (motor+freq.converter)
Pump housing: Cast iron	2- 100
ASTM A48-40 B	
EN 1561 EN-GJL	-250
Impeller: Composite PES/P GF	P1 (motor+freq.converter) = 1.669 kW
Material code: A	P2 = 2.01 HP NPSH = 15.71 ft
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 PN 16	
Flange size for motor: 56C	<u>58.172</u> Fan:-
Connect code: G	
Liquid:	
Pumped liquid: Water	
Liquid temperature range: 32 248 °F	
Selected liquid temperature: 68 °F	· · · · · · · · · · · · · · · · · · ·
Density: 62.29 lb/ft ³	
Electrical data:	
Motor type: 90B	
IE Efficiency class: IE5	
Rated power - P2: 2 HP	
Main frequency: 60 Hz	
Rated voltage: 3 x 440-480 V	
Rated current: 2.8 A Cos phil power factor: 0.82	
Cos phi - power factor: 0.83	
Rated speed: 480-5900 rpm	
IE efficiency: 88.4%	
Motor efficiency at full load: 88.4 %	

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		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:	99630350		
Controls:			
Control panel:	HMI300 - Graphical		
Function Module:	FM300 - Advanced		
Frequency converter:	Built-in		
Others:			
DOE Pump Energy Index VL:	0.35		
Net weight:	56 lb		
Gross weight:	72.5 lb		
Config. file no:	98484777		
Country of origin:	HU		
Custom tariff no.:	8413.70.2022		



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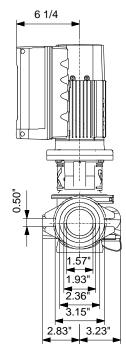


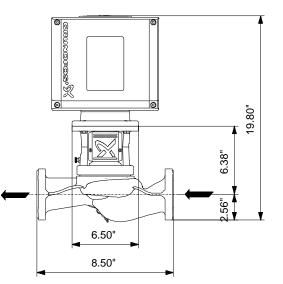
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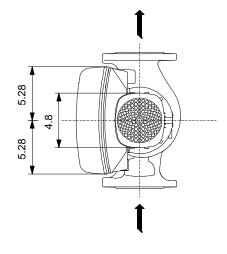
Project: Reference number: Date:

Client: Client number: Contact:

99223970 TPE3 40-240 S-A-G-A-BQBE-HCC 60 Hz







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

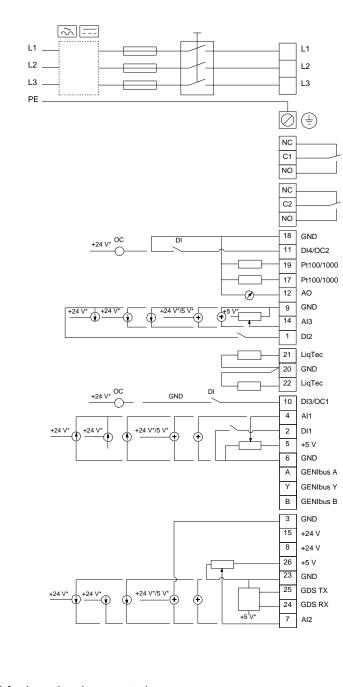


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Project: Reference number: Date:

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99223970 TPE3 40-240 S-A-G-A-BQBE-HCC 60 Hz



All units are [in] unless otherwise presented.

GRUNDFOS

		Date:	2/26/2020
Project: Reference number:		Client: Client number: Contact:	
Order Data:			
Product name: Amount: Product No.:	TPE3 40-240 S-A-G-A-B 1 99223970	QBE-HCC	
Total: Price on r	equest		