GRUNDFOS

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:	

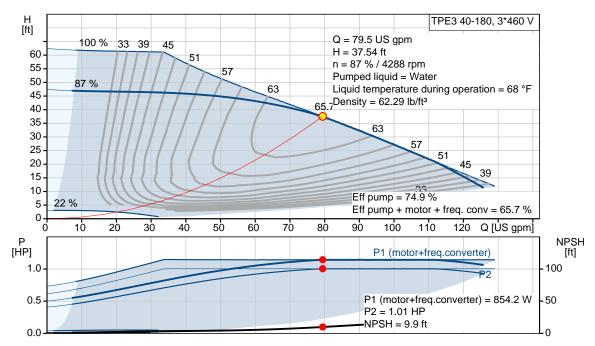


TPE3 40-180 S-A-G-I-BQQE-FCC

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

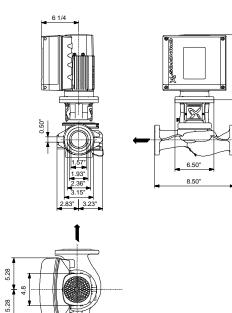
Product photo could vary from the actual product

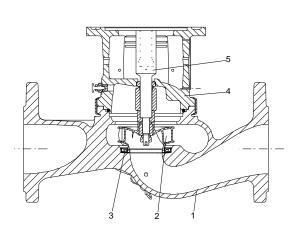
Conditions of Service		Pump Data		Motor Data	
Flow:	79.5 US gpm	Liquid temperature range:	-13 248 °F	Rated power - P2:	1 HP
Head:	37.54 ft	Maximum ambient temperature:	122 °F	Rated voltage:	440-480
Efficiency:	65.7 %	Shaft seal:	BQQE	Main frequency:	60 Hz
Liquid:	Water	Pipe connection:	DN 40	Number of poles:	0
Temperature:	68 °F	Product number:	98819567	Enclosure class:	IP55
NPSH required:	9.9 ft			Insulation class:	F
Viscosity:				Motor protection:	YES
Specific Gravity:	1.000			Motor type:	80A
				Motor_efficiency:	86.5 %





Submittal Data





Materials:

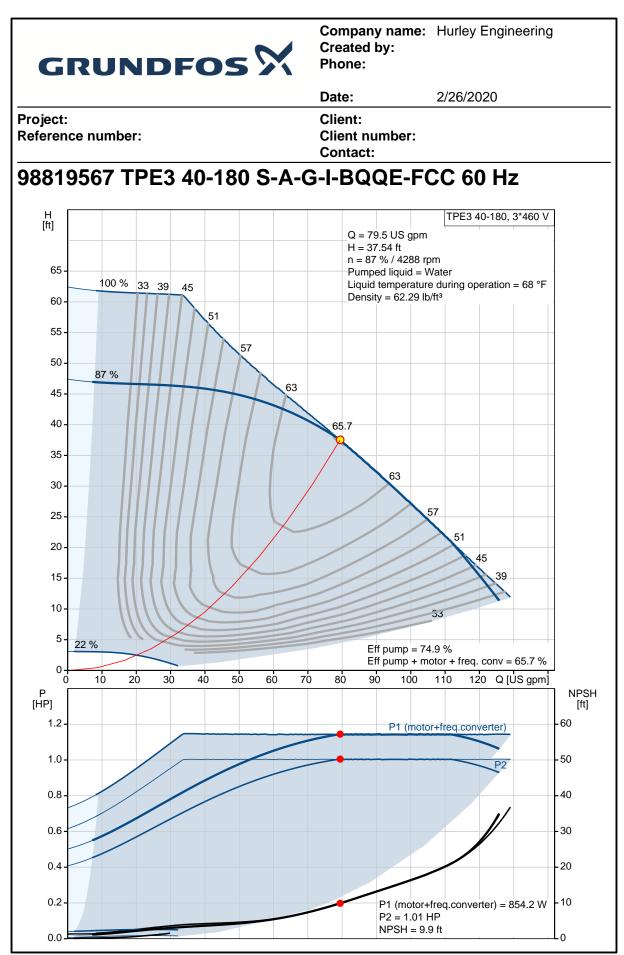
19.00"

6.38"

Pump housing:	Stainless steel ASTM CF8
Impeller:	Composite PES/PP 30% GF
Material code:	I

G	RUNDFOS	Created by	e: Hurley Engineering
		Date:	2/26/2020
Projec Refere	t: nce number:	Client: Client number: Contact:	
Count	Description		
1	TPE3 40-180 S-A-G-I-BQQE-F0	C	
	Product No.: 98819567		
	be removed for maintenance or The shaft seal is according to El Pipework connection is via PN 1 The pump is fitted with a fan-coo is classified as IE5 in accordance	service while the pump housing N 12756. Pipework connection is 6 ANSI flanges. oled, permanent-magnet synchro e with IEC 60034-30-2. converter and PI controller in the the motor speed, which again en	e motor terminal box. This enables
	Controls: Frequency converter:	Built-in	
	Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -13 248 °F 68 °F 62.29 lb/ft ³	
	Technical:	to in boards 1250 mm	
	Pump speed on which pump dat Actual calculated flow: Resulting head of the pump: Actual impeller diameter: Code for shaft seal: Curve tolerance:	79.5 US gpm 37.54 ft 2.91 in BQQE ISO9906:2012 3B2	
	Materials: Pump housing:	Stainless steel	
	Impeller:	ASTM CF8 EN 1.4308 Composite PES/PP 30% GF	
	Installation: Range of ambient temperature: Maximum operating pressure: Type of connection:	-4 122 °F PN 16 bar ANSI	

			Date:	2/26/2020
Project Refere	:: nce number:		Client: Client number: Contact:	
Count	Description			
	Pipe connection:	DN 40		
	Pressure rating for pipe connect			
	Flange size for motor:	56C		
	Electrical data:			
	Motor type:	80A		
	IE Efficiency class:	IE5		
	Rated power - P2:	1 HP		
	Main frequency:	60 Hz		
	Rated voltage:	3 x 440-480	V	
	Rated current:	1.65 A		
	Cos phi - power factor:	0.72		
	Rated speed:	480-5900 rp	m	
	IE efficiency:	86.5%		
	Motor efficiency at full load:	86.5 %		
	Number of poles:	0		
	Enclosure class (IEC 34-5):	IP55		
	Insulation class (IEC 85):	F		
	Motor Number:	99630344		
	Others:			
	DOE Pump Energy Index VL:	0.34		
	Net weight:	50.3 lb		
	Gross weight:	66.8 lb		
	Country of origin:	HU		
	Custom tariff no.:	8413.70.202	22	



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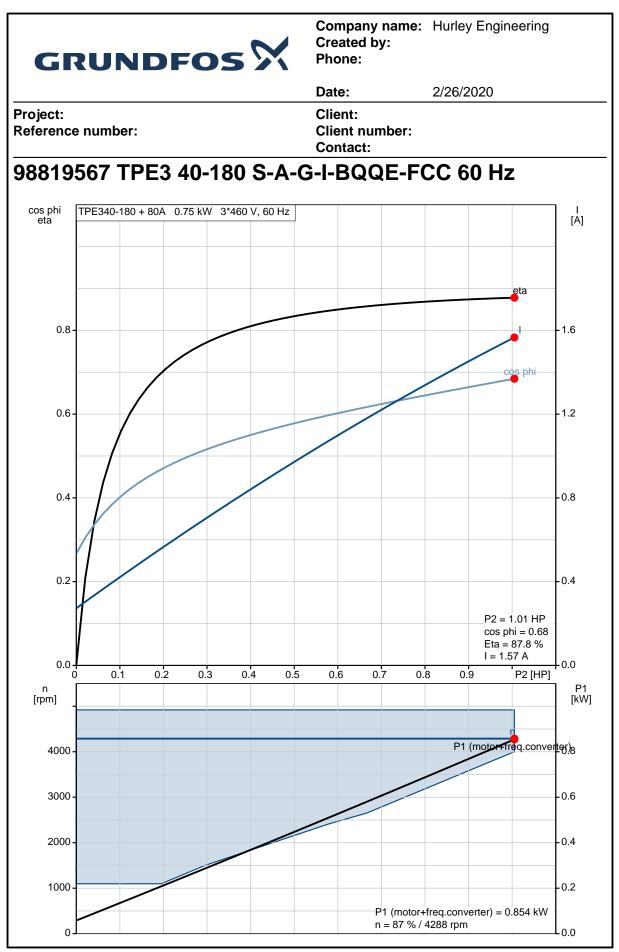


		-
Project:		Client:
Reference number:		Client number:
		Contact:
Description	Value	H [ft] TPE3 40-180, 3*460 V
General information:		Q = 79.5 US gpm 65 - $100 H = 37.54 ft$ 100 - 87 % / 4/28 mm
Product name:	TPE3 40-180	11 = 07 /87 4200 lplll
	S-A-G-I-BQQE-FCC	⁵⁰ Pumped liquid = Water 55 Liquid temperature during operation = 68 °F
Product No.:	98819567	Density = 62.29 lb/ft ³
EAN:	5712601842648	45 - 63
	5712601842648	
Price:	\$ 9,735.00	
Technical:		35-63
Pump speed on which pump data is based:	4350 rpm	30-25-57
Actual calculated flow:	79.5 US gpm	20-51
Resulting head of the pump:	37.54 ft	15
Head max:	59.06 ft	10-33
Actual impeller diameter:	2.91 in	5 - 22 % Eff pump = 74.9 %
Code for shaft seal:	BQQE	Eff pump + motor + freq. conv = 65.7 %
Curve tolerance:	ISO9906:2012 3B2	0 20 40 60 80 100 Q [US gpm]
Pump version:	A	P NPSH [HP] [ft]
Materials:		P1 (motor+freq.converter)
Pump housing:	Stainless steel	1.0
	ASTM CF8	
	EN 1.4308	
Impeller:	Composite PES/PP 30% GF	0.5 - 50 P1 (motor+freq.converter) = 854.2 W
Material code:		P2 = 1.01 HP NPSH = 9.9 ft
Installation:		
Range of ambient temperature:	-4 122 °F	► -1
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 ³	
Electrical data:	004	
Motor type:	80A	
IE Efficiency class:	IE5	
Rated power - P2:	1 HP	
Main frequency:	60 Hz	
Rated voltage:	3 x 440-480 V	
Rated current:	1.65 A	
Cos phi - power factor:	0.72	
Rated speed:	480-5900 rpm	
IE efficiency:	86.5%	
Motor efficiency at full load:	86.5 %	

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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:	99630344		
Controls:			
Control panel:	HMI300 - Graphical		
Function Module:	FM300 - Advanced		
Frequency converter:	Built-in		
Others:			
DOE Pump Energy Index VL:	0.34		
Net weight:	50.3 lb		
Gross weight:	66.8 lb		
Config. file no:	98484776		
Country of origin:	HU		
Custom tariff no .:	8413.70.2022		



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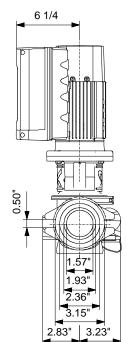


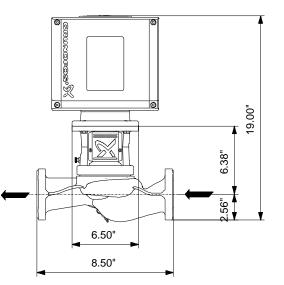
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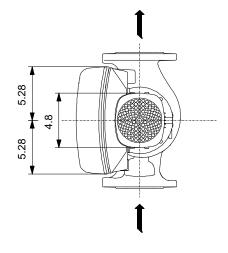
Project: Reference number: Date:

Client: Client number: Contact:

98819567 TPE3 40-180 S-A-G-I-BQQE-FCC 60 Hz







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

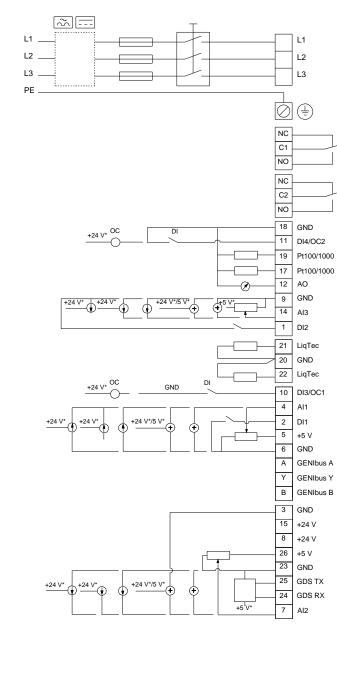


2/26/2020

Project: Reference number: Date:

Client: Client number: Contact:

98819567 TPE3 40-180 S-A-G-I-BQQE-FCC 60 Hz



All units are [in] unless otherwise presented.

GRUN	DFOS 🕅	Company name: Created by: Phone:	Hurley Engineering
		Date:	2/26/2020
Project: Reference number:		Client: Client number: Contact:	
Order Data:			
Product name: Amount: Product No.: Price:	TPE3 40-180 S-A-G-I-B 1 98819567 \$ 9,735.00	QQE-FCC	
Total: \$ 9,735.0	0		