## Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:



#### MTRE 5-8/8 A-WB-A-HUUV

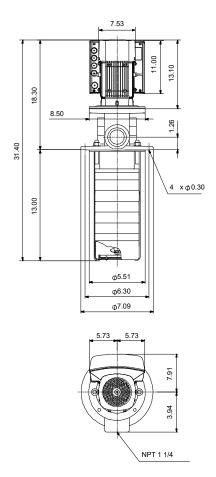
Vertical multistage centrifugal pump with integrated frequency converter designed for tank top mounting and for pumping of cooling lubricants and cutting oils for machine tools, cooling applications, industrial liquid transfer and similar applications.

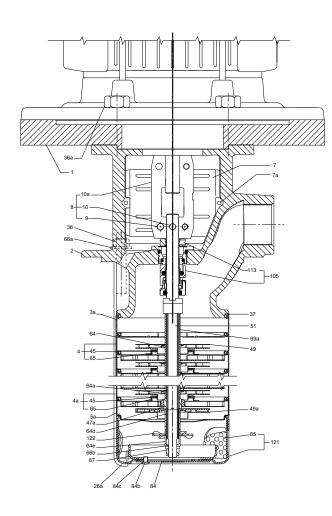
Note! Product picture may differ from actual product

Conditions of	of Service	Pump Data			Motor Data				
Efficiency: Liquid: Temperature: NPSH required: Specific Gravity:	% Emulsion 68 °F ft 1.000	Max pressure at stated temp:363 psi / 194 °FLiquid temperature range:14 194 °FMaximum ambient temperature:104 °FShaft seal:HUUVProduct number:99528827		4 °F	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:			240 V z	
H [ft] 350 - 100 % 300 - 90 % 250 - 80 % 200 - 70 % 150 - 60 % 100 - 50 % 40 %					Liqui	ped liquid = d temperatu sity = 62.29	Emulsion Ire during oper	5-8/8, 3*240 V ation = 68 °F	
25 % 15 % 0 2 4 6 P2 [HP] 3.0 2.5 2.0 1.5 1.0 0.5 0.0	8 10 12		0 22 24 26		4 36 38	40 4:	2 44 46	Q (US GPM)	NPSH [ft] -60 -50 -40 -30 -20 -10 -0



### Submittal Data





#### Materials:

Impeller:
Impeller:
Impeller:
Material code:

Stainless steel AISI 304 EN 1.4301 A

Company name: Created by: Phone:

07/03/2023

Date:

Qty. | Description

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MTRE 5-8/8 A-WB-A-HUUV



Note! Product picture may differ from actual product

Product No.: 99528827

Multistage, immersible, self-priming, centrifugal pump for vertical installation in tanks etc. The pump head and base are in cast iron – all other wetted parts are in stainless steel. The pump has the following characteristics:

- Dimensions according to DIN 5440.
- Impellers, intermediate chambers and spline shaft are made of Stainless steel.
- Mechanical shaft seal according to EN 12756.
- · Power transmission via sintered metal split coupling.

A cartridge shaft seal ensures high reliability, safe handling, and easy access and service.

The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.

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. The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.

The display gives an intuitive and user-friendly interface to all functions.

The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".

The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)
- "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)
- "Alarm": Motor has stopped (flashing red indicator lights).

Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".

The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:

- two dedicated digital inputs
- three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5-3.5 V
- 5 V voltage supply to potentiometer and sensor
- one analog output, 0-10 V, 0(4)-20 mA
- · two configurable digital inputs or open-collector outputs
- two Pt100/Pt1000 inputs
- LiqTec, dry-running protection sensor input
- · Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- two signal-relay outputs (potential-free contacts)
- GENIbus connection
- interface for Grundfos CIM fieldbus module.

Immersion depth:	13 in
Controls: Frequency converter:	Built-in
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Emulsion 14 194 °F 68 °F 62.29 lb/ft <sup>3</sup>
Technical:	ata ara basad: 346

Pump speed on which pump data are based: 3461 rpm Rated flow: 30.4 US GPM



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#### Qty. | Description

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Rated head: 194.6 ft Chambers: 8 Drainage back to tank: Ν Pump orientation: Vertical HUUV Code for shaft seal: Approvals: CE CE, RCM, cURus, IE5, IES2, UKCA, SEPRO Approvals for motor: Energy approvals for motor: CE Curve tolerance: ISO9906:2012 3B 5 x NPT 1/2" Cable gland entry: Materials: Pump head: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Impeller: Stainless steel EN 1.4301 AISI 304 Installation: 104 °F t max amb: Maximum operating pressure: 362.59 psi 363 psi / 194 °F Max pressure at stated temp: Type of connection: NPT(F) Size of outlet connection: 1 1/4 inch Immersion depth: 13 in Flange size for motor: 182TC Electrical data: Motor standard: NEMA Motor type: 100A IE Efficiency class: IE5 Rated power - P2: 3 HP Mains frequency: 60 Hz Suitable for 50/60 Hz: Ν Rated voltage: 3 x 200-240 V Service factor: 1.15 Rated current: 7.90-6.60 A Cos phi - power factor: 0.94 Rated speed: 360-4000 rpm Motor efficiency at full load: 88.7 % Enclosure class (IEC 34-5): IP55

Others:

Motor No:

Insulation class (IEC 85):

Cable gland entry:

Others:	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.57
Net weight:	74.2 lb
Gross weight:	115 lb
Shipping volume:	8.12 ft³
Country of origin:	US
Custom tariff no.:	8413.70.2040

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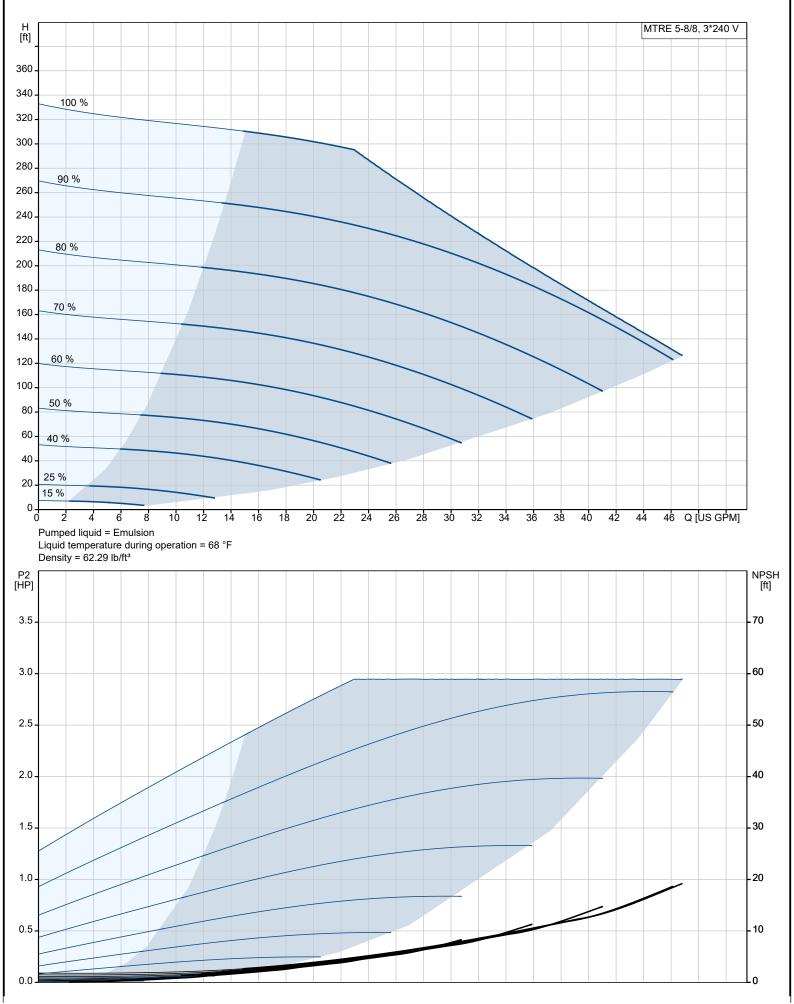
99302693

5 x NPT 1/2"



07/03/2023

Date:



#### Company name: Created by: Phone:

		Date: 07/03/2023
Description	Value	H [ft] MTRE 5-8/8, 3*240 V
General information:	- ardo	
Product name:	MTRE 5-8/8 A-WB-A-HUUV	350 100 %
Product No:	99528827	
EAN number:	5713830566046	300
Technical:	57 13850500040	90 %
Pump speed on which pump data are	3461 rpm	250-
based:		200 -
Rated flow:	30.4 US GPM	200-
Rated head:	194.6 ft	70 %
Chambers:	8	150
Impellers:	8	60 %
Number of reduced-diameter impellers:	0	100 50 %
Drainage back to tank:	Ν	40 %
-		50
Pump orientation:	Vertical	25 % 15 %
Code for shaft seal:		0
Approvals:	CE	
Approvals for motor:	CE, RCM, cURus, IE5, IES2,UKCA, SEPRO	Pumped liquid = Emulsion Liquid temperature during operation = 68 °F
Energy approvals for motor:	CE	Density = 62.29 lb/ft <sup>3</sup> P2
Curve tolerance:	ISO9906:2012 3B	(HP)
Pump version:	A	
Model:	A	3.0
Cable gland entry:	5 x NPT 1/2"	
	JANI I 1/2	2.5
Materials:	O	
Pump head:	Cast iron	2.0 41
Pump head:	EN 1561 EN-GJL-200	
Pump head:	ASTM A48-25B	- 1.5 - 31
Impeller:	Stainless steel	1.0
Impeller:	EN 1.4301	
Impeller:	AISI 304	0.5
Material code:	A	
	~	0.0
Installation:	104.85	
t max amb:	104 °F	
Maximum operating pressure:	362.59 psi	
Max pressure at stated temp:	363 psi / 194 °F	
Type of connection:	NPT(F)	
Size of outlet connection:	1 1/4 inch	
Immersion depth:	13 in	
Flange size for motor:	182TC	
Connect code:	WB	
Liquid:	Faculation	
Pumped liquid:	Emulsion	<b>6</b> 51
Liquid temperature range:	14 194 °F	
Selected liquid temperature:	68 °F	1 <sup>573</sup> 10 <sup>573</sup>
Density:	62.29 lb/ft <sup>3</sup>	
Electrical data:		
Motor standard:	NEMA	He H
	100A	
Motor type:		NPT 1 14
IE Efficiency class:	IE5	
Rated power - P2:	3 HP	
Mains frequency:	60 Hz	
Suitable for 50/60 Hz:	Ν	
Rated voltage:	3 x 200-240 V	
Service factor:	1.15	
Rated current:	7.90-6.60 A	
Cos phi - power factor:	0.94	
Rated speed:	360-4000 rpm	
Motor efficiency at full load:	88.7 %	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	ELEC	
Motor No:	99302693	
Cable gland entry:	5 x NPT 1/2"	
Controls:		
Control panel:	Graphical	



Date:

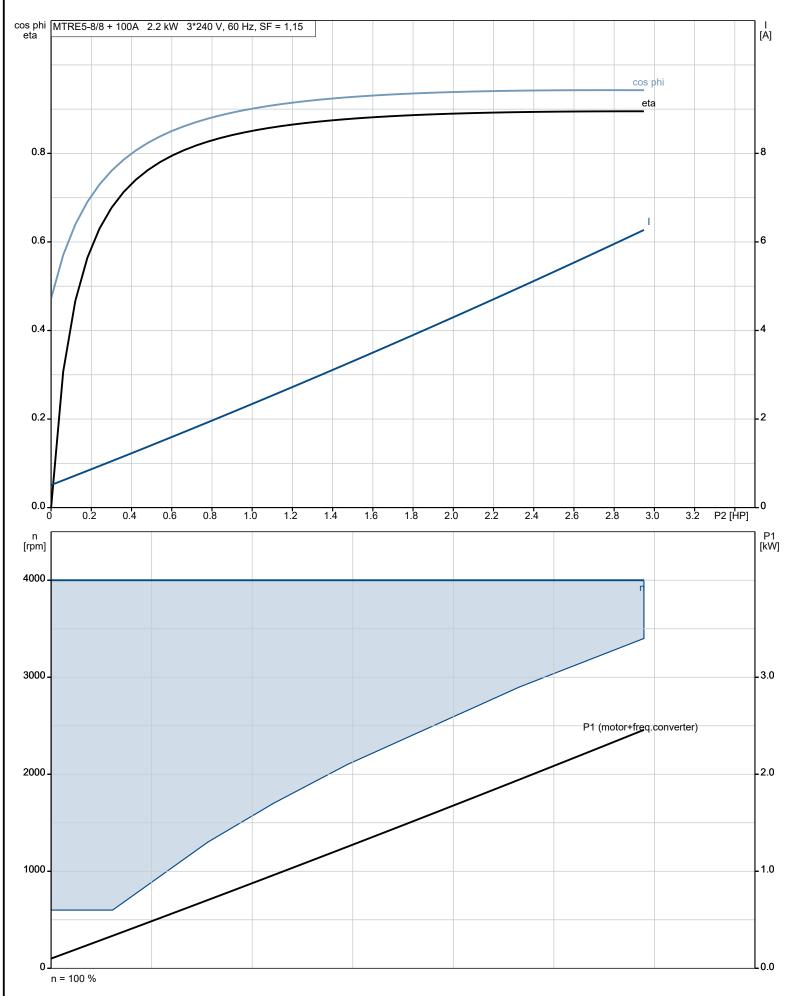
07/03/2023

Description	Value
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.57
Net weight:	74.2 lb
Gross weight:	115 lb
Shipping volume:	8.12 ft <sup>3</sup>
Country of origin:	US
Custom tariff no.:	8413.70.2040



Date:

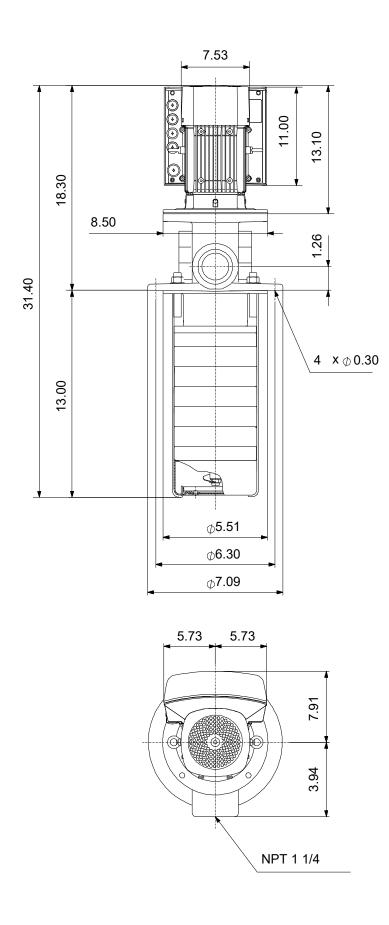
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