Submittal Data

UNIT TAG:	QUANTITY:
TYPE OF SERVICE:	
SUBMITTED BY:	DATE:
APPROVED BY:	DATE:
ORDER NO.:	DATE:
	TYPE OF SERVICE: SUBMITTED BY: APPROVED BY:

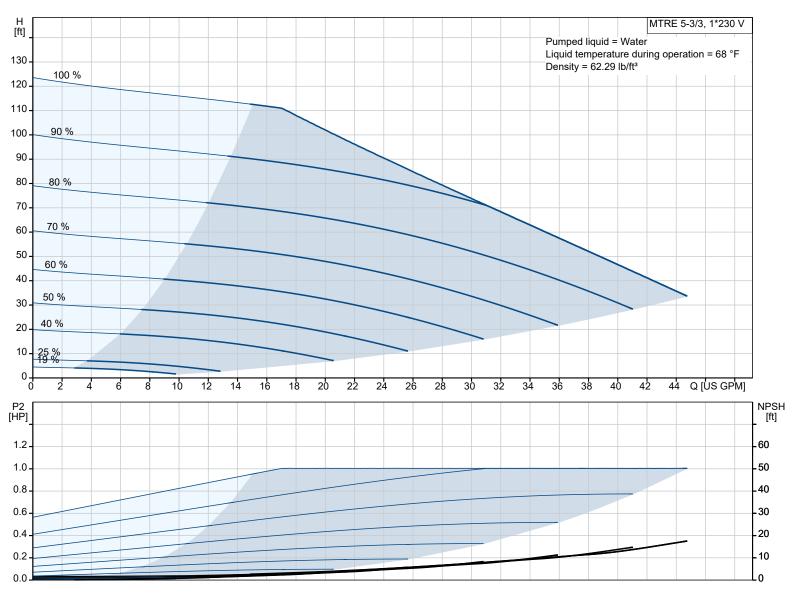


MTRE 5-3/3 A-WB-A-HUUV

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.

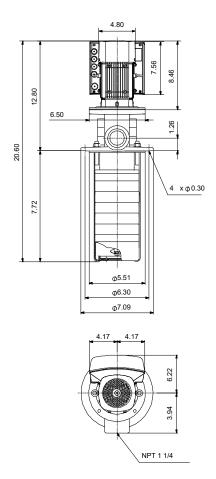
Note! Product picture may differ from actual product

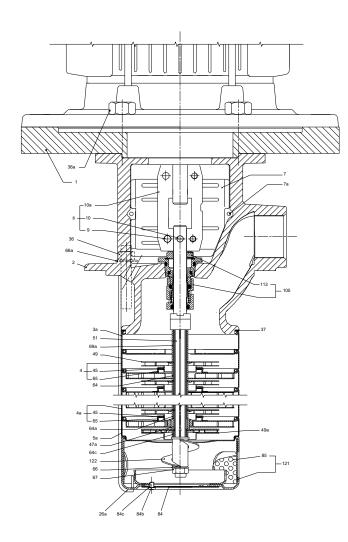
Conditions of	of Service	Pump Data		Motor Da	ata
Efficiency: Liquid: Temperature: NPSH required: Specific Gravity:	% Water 68 °F ft 1.000	Max pressure at stated temp: Liquid temperature range: Maximum ambient temperature: Shaft seal: Product number:	363 psi / 194 °F 14 194 °F 122 °F HUUV 98400070	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	1 HP 200-240 V 60 Hz IP55 F ELEC 80A 85.2 %





Submittal Data





Materials:

Impeller:
Impeller:
Impeller:
Material code:

Stainless steel AISI 304 EN 1.4301 A



23/01/2023

Date:

Qty. | Description

1

MTRE 5-3/3 A-WB-A-HUUV



Product No.: 98400070

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 TEST:

- 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 1-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)
 "Alerm": Motor has stopped (fleaking red 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.

Controls: Frequency converter:	Built-in
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water 14 194 °F 68 °F 62.29 lb/ft³
Technical: Pump speed on which pump data Rated flow: Rated head: Chambers:	are based: 3400 rpm 30.4 US GPM 65.29 ft 3



Qty. | Description

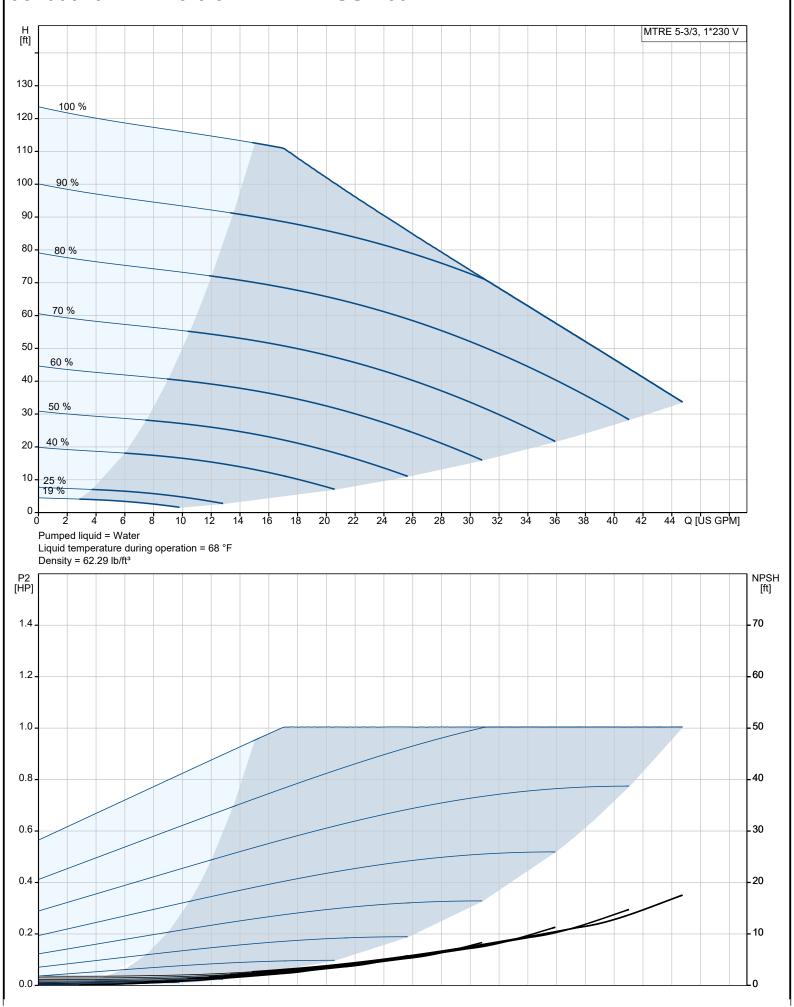
23/01/2023 Date:

Qty.	Description	
1	Drainage back to tank:	Ν
	Pump orientation:	Vertical
	Code for shaft seal:	HUUV
	Approvals:	CE
	Approvals for motor:	CE, RCM, cURus, IE5, IES2,UKCA, SEPRO
	Energy approvals for motor:	CE
	Curve tolerance:	ISO9906:2012 3B
	Cable gland entry:	4xM20 blind plug
	Materials:	
	Pump head:	Cast iron
		EN 1561 EN-GJL-200
		ASTM A48-25B
	Impeller:	Stainless steel
		EN 1.4301
		AISI 304
	Installation:	
	t max amb:	122 °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:	7.72 in
	Flange size for motor:	56C
	Electrical data:	
	Motor standard:	NEMA
	Motor type:	80A
	IE Efficiency class:	IE5
	Rated power - P2:	1 HP
	Mains frequency:	60 Hz
	Suitable for 50/60 Hz:	Y
	Rated voltage:	1 x 200-240 V
	Service factor:	1.0
	Rated current:	4.70-3.90 A
	Cos phi - power factor:	0.99
	Rated speed:	360-4000 rpm
	Efficiency:	85.2%
	Motor efficiency at full load:	85.2 %
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	98362274
	Cable gland entry:	4xM20 blind plug
	Others:	
	Terminal box position:	6
	Minimum efficiency index, MEI ≥:	
	-	38.6 lb
	Net weight:	
	Gross weight:	71.7 lb
	Shipping volume:	4.98 ft ³
	Country of origin:	US 8412 70 2040
	Custom tariff no.:	8413.70.2040



23/01/2023

Date: 08400070 MTRE 5-3/3 A-WB-A-HUUV 60 Hz



Company name: Created by: Phone:

		Date: 23/01/2023
Description	Value	H [ft]
General information:		130
Product name:	MTRE 5-3/3 A-WB-A-HUUV	120
Product No:	98400070	
EAN number:	5711494356133	
Technical:		100 90 %
Pump speed on which pump data are based:	3400 rpm	90 - 80 %
Rated flow:	30.4 US GPM	
		70-
Rated head:	65.29 ft	60 70 %
Chambers:	3	50
Impellers:	3	
Number of reduced-diameter impellers:	0	30 50 %
Drainage back to tank:	Ν	20 40 %
Pump orientation:	Vertical	10 - 25 %
Code for shaft seal:	HUUV	
	CE	0 5 10 15 20 25 30 35 40 Q [US GPM]
Approvals:		Pumped liquid = Water
Approvals for motor:	CE, RCM, cURus, IE5, IES2,UKCA, SEPRO	Liquid temperature during operation = 68 °F Density = 62.29 lb/ft ³
Energy approvals for motor:	CE	P2 NPS
Curve tolerance:	ISO9906:2012 3B	[HP] [ft]
Pump version:	A	
Model:	A	1.260
Cable gland entry:	4xM20 blind plug	
	4XIVIZO bilina piug	1.0 - 50
Materials:		
Pump head:	Cast iron	0.8 40
Pump head:	EN 1561 EN-GJL-200	
Pump head:	ASTM A48-25B	0.6 30
Impeller:	Stainless steel	
Impeller:	EN 1.4301	0.4 20
		0.2 10
Impeller:	AISI 304	
Material code:	A	0.0
Installation:		
t max amb:	122 °F	
Maximum operating pressure:	362.59 psi	4.80
Max pressure at stated temp:	363 psi / 194 °F	
Type of connection:	NPT(F)	
Size of outlet connection:	1 1/4 inch	
Immersion depth:	7.72 in	
Flange size for motor:	56C	4 xe030
Connect code:	WB	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	14 194 °F	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
Selected liquid temperature:	68 °F	* ^{4.17} *** ^{4.17} *
Density:	62.29 lb/ft ³	
Electrical data:		
Motor standard:	NEMA	
	80A	
Motor type:		NPT 1 14
IE Efficiency class:	IE5	
Rated power - P2:	1 HP	
Mains frequency:	60 Hz	
Suitable for 50/60 Hz:	Y	
Rated voltage:	1 x 200-240 V	
-		
Service factor:	1.0	
Rated current:	4.70-3.90 A	
Cos phi - power factor:	0.99	
Rated speed:	360-4000 rpm	
Efficiency:	85.2%	
-		
Motor efficiency at full load:	85.2 %	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	ELEC	
		3 CONtex 1
•	98362274	
Motor No:	98362274 4xM20 blind blug	
•	98362274 4xM20 blind plug	



Date:

23/01/2023

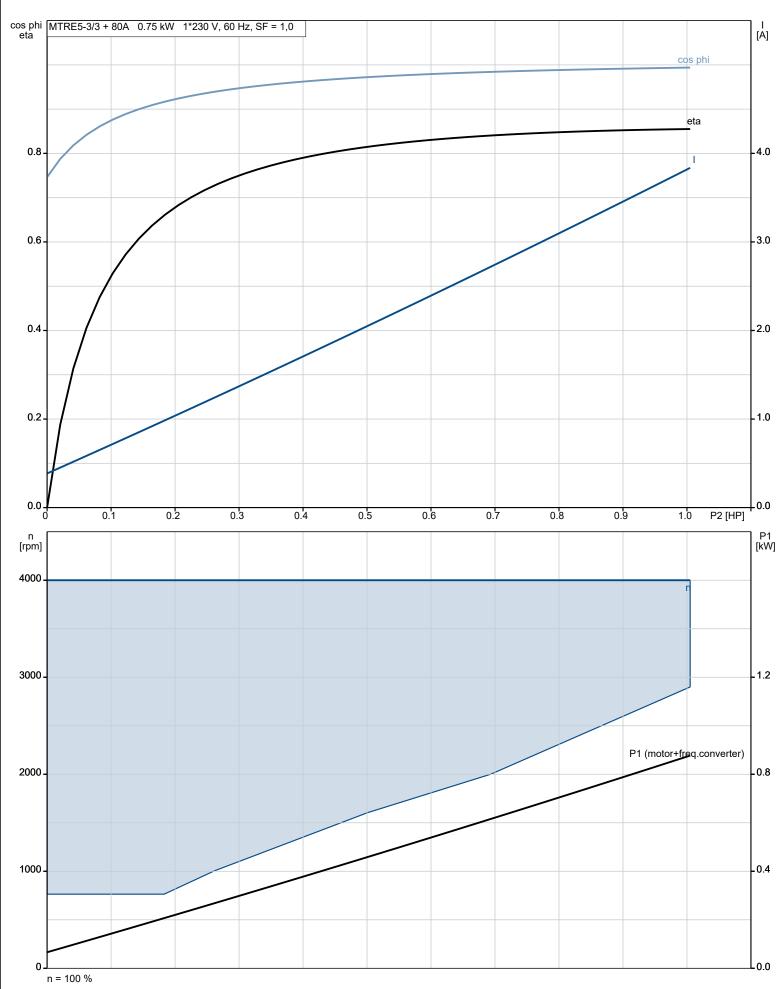
Description	Value
Control panel:	Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.57
Net weight:	38.6 lb
Gross weight:	71.7 lb
Shipping volume:	4.98 ft ³
Country of origin:	US
Custom tariff no.:	8413.70.2040



Date:

23/01/2023

98400070 MTRE 5-3/3 A-WB-A-HUUV 60 Hz

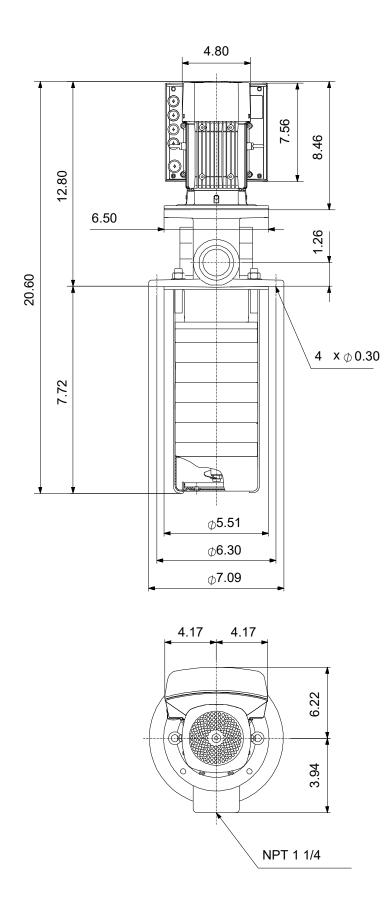


Company name: Created by: Phone:

Date:

23/01/2023

98400070 MTRE 5-3/3 A-WB-A-HUUV 60 Hz



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

Company name: Created by: Phone:

Date:

23/01/2023

98400070 MTRE 5-3/3 A-WB-A-HUUV 60 Hz

