Submittal Data

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

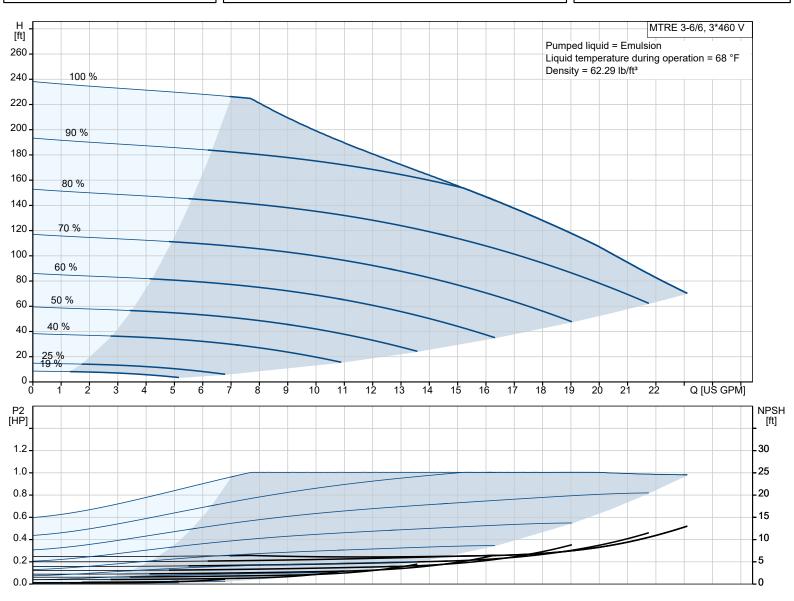


MTRE 3-6/6 A-WB-A-HUUV

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.

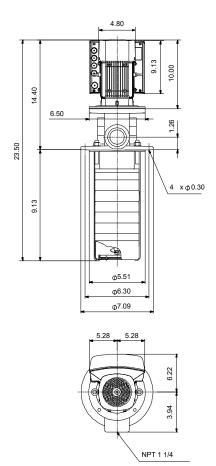
Note! Product picture may differ from actual product

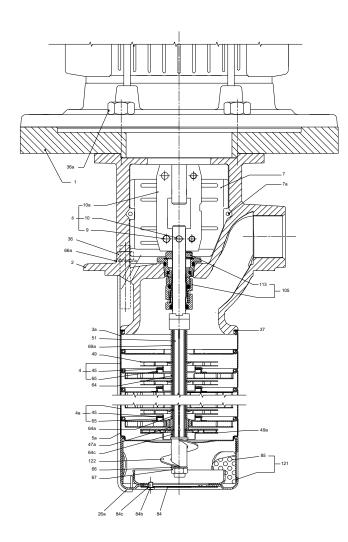
Conditions of Service Pump Data			Motor Data		
Efficiency: Liquid: Temperature: NPSH required: Specific Gravity:	% Emulsion 68 °F ft 1.000	Max pressure at stated temp: Liquid temperature range: Maximum ambient temperature: Shaft seal: Product number:	363 psi / 194 °F 14 194 °F 122 °F HUUV 98400066	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	1 HP 440-480 V 60 Hz IP55 F ELEC 80A 86.4 %





Submittal Data





Materials:

Impeller:
Impeller:
Impeller:
Material code:

Stainless steel AISI 304 EN 1.4301 A



12/05/2023

Date:

Qty. | Description

1

MTRE 3-6/6 A-WB-A-HUUV



Product No.: 98400066

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)

rpm

- "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:	9.13 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 ³
Technical: Pump speed on which pump data Rated flow: Rated head: Chambers:	are based: 3484 15.4 US GPM 137.5 ft 6



Qty. | Description

12/05/2023 Date:

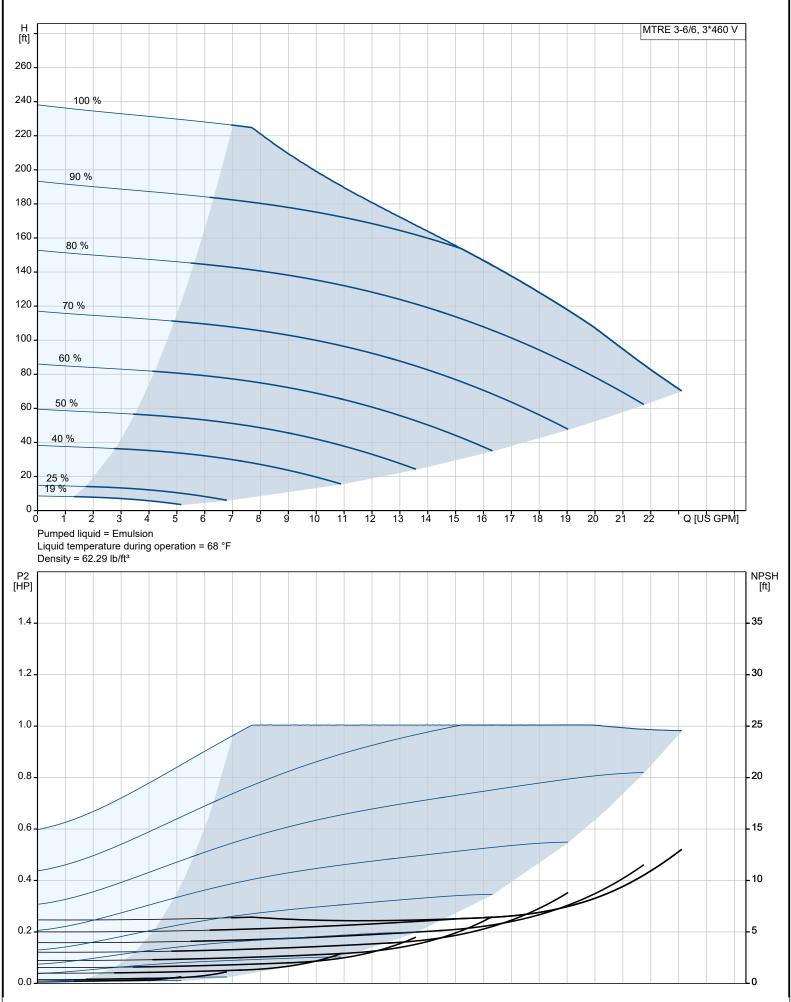
Qty.	Description	
1	Drainage back to tank:	Ν
	Pump orientation:	Vertical
	Code for shaft seal:	HUUV
	Approvals:	CE
	Approvals for motor:	CE, RCM, cURus, IE5, IES2,UKCA, SEPRO
	Energy approvals for motor:	CE
	Curve tolerance:	ISO9906:2012 3B
	Cable gland entry:	4xM20 blind plug
	Cable gland entry.	
	Materials:	
	Pump head:	Cast iron
	•	EN 1561 EN-GJL-200
		ASTM A48-25B
	Impeller:	Stainless steel
	•	EN 1.4301
		AISI 304
	Installation:	
	Maximum ambient temperature:	
	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:	9.13 in
	Flange size for motor:	56C
	Electrical data:	
	Motor standard:	NEMA
	Motor type:	80A
	Rated power - P2:	1 HP
	Mains frequency:	60 Hz
	Suitable for 50/60 Hz:	Υ
	Rated voltage:	3 x 440-480 V
	Service factor:	1.25
	Rated current:	1.65 A
	Cos phi - power factor:	0.73
	Rated speed:	360-4000 rpm
	IE Efficiency class:	IE5
	Motor efficiency at full load:	86.4 %
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	99256782
	Cable gland entry:	4xM20 blind plug
	Others:	
	Terminal box position:	6
	Minimum efficiency index, MEI ≥:	
	Net weight:	41.9 lb
	Gross weight:	74.9 lb
	Shipping volume:	4.98 ft ³
	Country of origin:	US 8442 70 2040
	Custom tariff no.:	8413.70.2040



12/05/2023

Date:

98400066 MTRE 3-6/6 A-WB-A-HUUV 60 Hz



Company name: Created by: Phone:

		Date:	12/05/2023			
Description	Value	H -		MTR	E 3-6/6, 3*46	0 V
General information:		-				
Product name:	MTRE 3-6/6 A-WB-A-HUUV	240 100 %				
Product No:	98400066	220 -				
EAN number:	5711494355952					
Fechnical:	37 11434333332	200 - 90 %				
		180 -				
Pump speed on which pump data are based:	3484 rpm	160 - 80 %				
Rated flow:	15.4 US GPM	140 -		\searrow		
Rated head:	137.5 ft	120 - 70 %				
Chambers:	6			\prec \land		
mpellers:	6	100 - 60 %				
		80 -			$ \rightarrow $	
lumber of reduced-diameter impellers:	0	60 - 50 %			>	
Drainage back to tank:	Ν	40 - 40 %				
Pump orientation:	Vertical	20 - 25 %				
Code for shaft seal:	HUUV					
Approvals:	CE	0 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +	6 8 10 12 14	16 18 20	Q [US G	РМІ
••		Pumped liquid = E			- [
Approvals for motor:	CE, RCM, cURus, IE5, IES2,UKCA, SEPRO		e during operation = 68 °F			
Energy approvals for motor:	CE	P2				NF
Curve tolerance:	ISO9906:2012 3B	[HP]				ſ
Pump version:	A	- 1				
Model:	A	1.2				_ 30
Cable gland entry:	A 4xM20 blind plug					Γ ³
	4xivizo bilina piug	1.0				- 25
Materials:						
Pump head:	Cast iron	0.8 -				- 20
Pump head:	EN 1561 EN-GJL-200					
Pump head:	ASTM A48-25B	0.6				- 15
mpeller:	Stainless steel	0.4			//	10
mpeller:	EN 1.4301	0.4				- "
mpeller:	AISI 304	0.2				- 5
Material code:	A	0.0				Lo
Installation:		à				
Maximum ambient temperature:	122 °F					
Maximum operating pressure:	362.59 psi	4.80	-			
Max pressure at stated temp:	363 psi / 194 °F					
Type of connection:	NPT(F)		9 9			
Size of outlet connection:	1 1/4 inch	6.50				
			12			
Immersion depth:	9.13 in		4			
Flange size for motor:	56C		4 x 0 .30			
Connect code:	WB	9.3				
Liquid:						
Pumped liquid:	Emulsion					
_iquid temperature range:	14 194 °F	6 .30				
Selected liquid temperature:	68 °F	6 7.09				
Density:	62.29 lb/ft ³		7			
-	02.23 ID/IL		77			
Electrical data:						
Motor standard:	NEMA		°			
Motor type:	80A	NPT 11	4			
Rated power - P2:	1 HP					
Mains frequency:	60 Hz					
Suitable for 50/60 Hz:	Y	रू)ाः	т			
Rated voltage:	3 x 440-480 V					
-						
Service factor:	1.25		Ø.			
Rated current:	1.65 A					
Cos phi - power factor:	0.73					
Rated speed:	360-4000 rpm		11 GND 11 DH0C2			
E Efficiency class:	IE5		10 P10011000 17 P10011000 12 A0			
Motor efficiency at full load:	86.4 %					
Enclosure class (IEC 34-5):	IP55		27 LiqTec 20 GND			
		-24 V ² OC (80)				
Insulation class (IEC 85):	F	-21.5 to 41.6				
Built-in motor protection:	ELEC		GND GND A GENbus A			
Motor No:	99256782		GENIDAR Y GENIDAR B GENIDAR B GND			
Cable gland entry:	4xM20 blind plug	[3 www 12 424 V 8 424 V			
		—				
Cable gland entry: Controls: Control panel:	Graphical	*#** \$ -#*** \$				



Date:

12/05/2023

Description	Value
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.70
Net weight:	41.9 lb
Gross weight:	74.9 lb
Shipping volume:	4.98 ft ³
Country of origin:	US
Custom tariff no.:	8413.70.2040



Date: 12/05/2023 98400066 MTRE 3-6/6 A-WB-A-HUUV 60 Hz cos phi eta MTRE3-6/6 + 80A 0.75 kW 3*460 V, 60 Hz, SF = 1,25 ۱ [A] eta I 0.8 -1.6 cos phi 0.6 1.2 0.4 0.8 0.2 0.4 0.0 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 P2 [HP] o P1 [kW] n [rpm] 4000 3000 -1.2 P1 (motor+freq.converter) 2000 .0.8 1000 0.4

0. n = 100 %

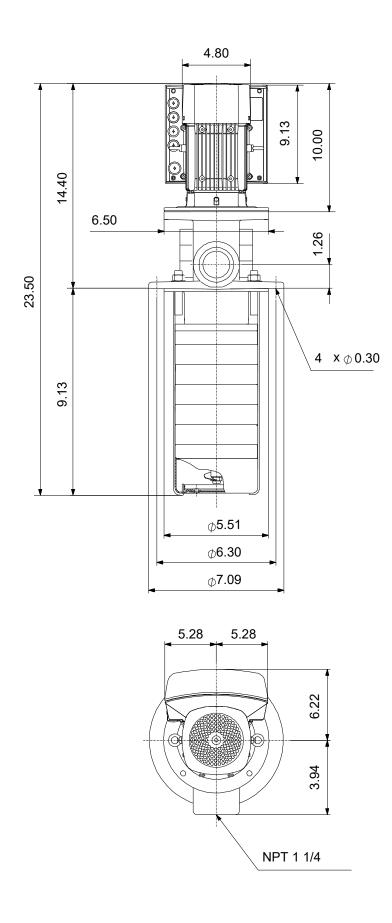


Company name: Created by: Phone:

Date:

12/05/2023

98400066 MTRE 3-6/6 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:

12/05/2023

98400066 MTRE 3-6/6 A-WB-A-HUUV 60 Hz

