

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

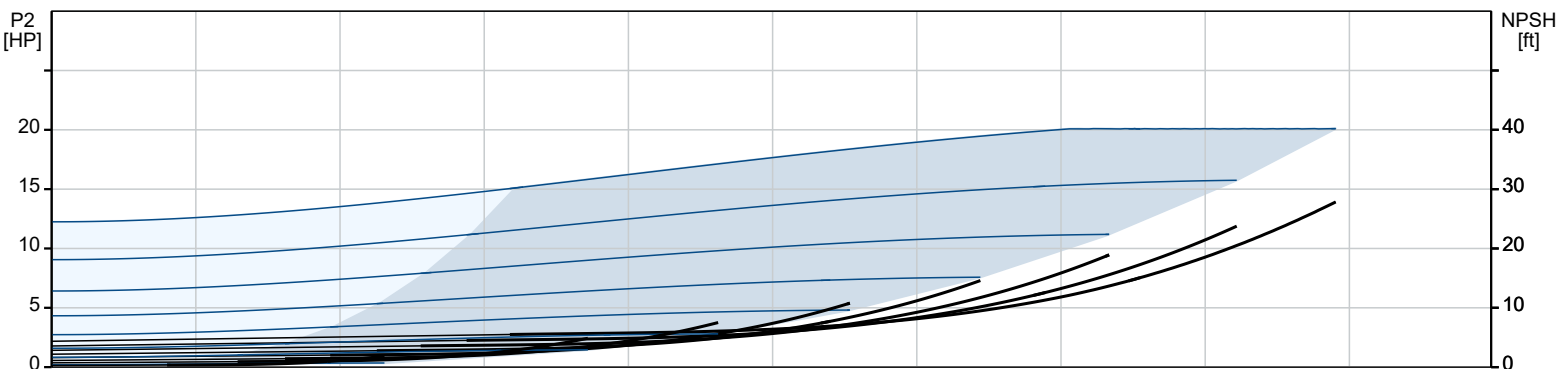
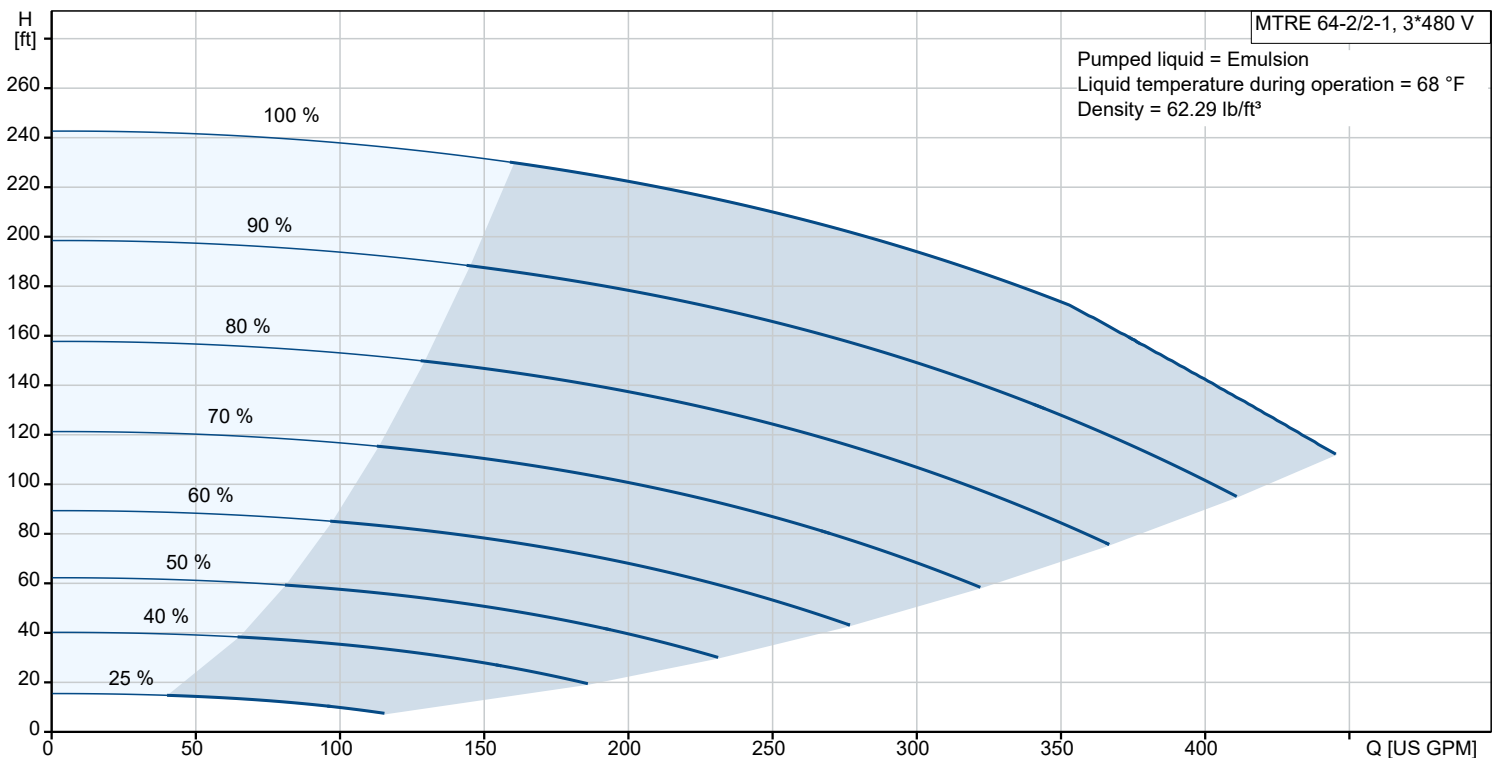


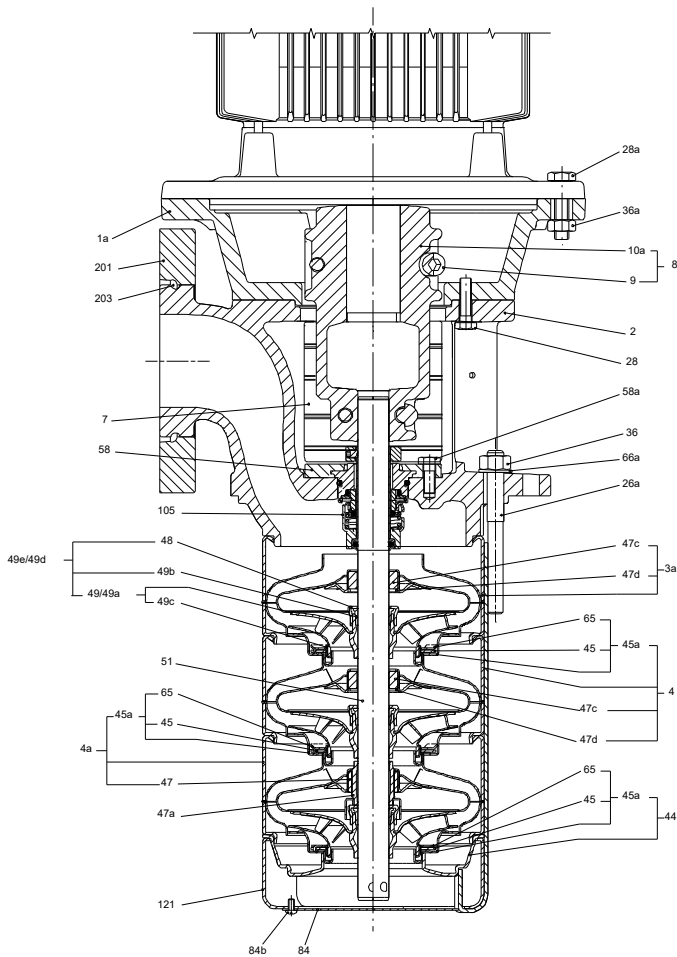
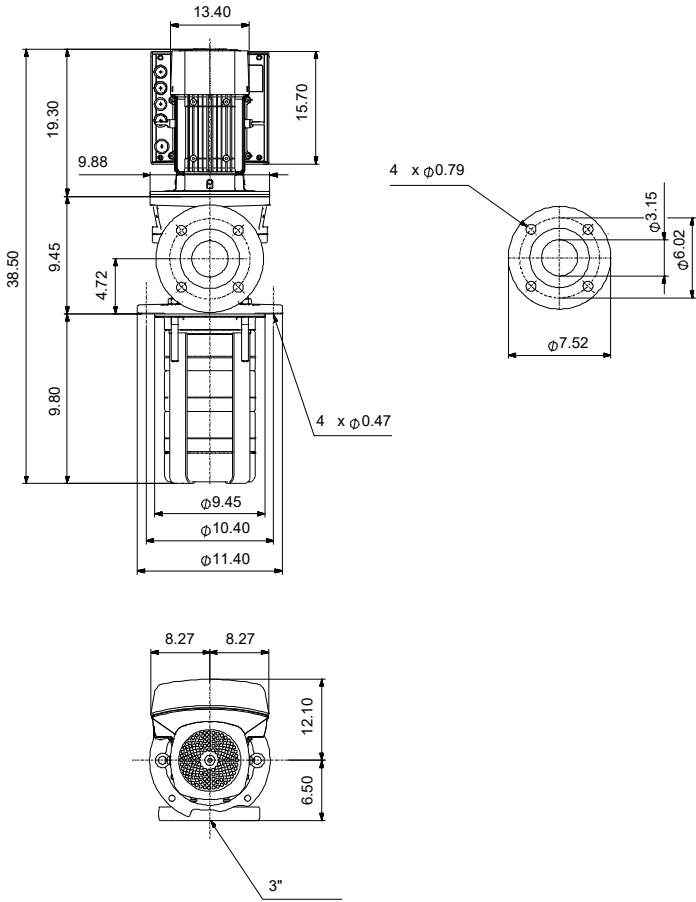
## MTRE 64-2/2-1 A-G-A-HUUV

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:	%	Max pressure at stated temp:	363 psi / 194 °F	Rated power - P2:	20 HP
Liquid:	Emulsion	Liquid temperature range:	14 .. 194 °F	Rated voltage:	460 V
Temperature:	68 °F	Maximum ambient temperature:	104 °F	Mains frequency:	60 Hz
NPSH required:	ft	Shaft seal:	HUUV	Enclosure class:	IP55
Specific Gravity:	1.000	Product number:	98472483	Insulation class:	F
				Motor protection:	YES
				Motor type:	160AB
				Eta 1/1:	91.0 %





**Materials:**

- Impeller: Stainless steel
- Impeller: AISI 304
- Impeller: EN 1.4301
- Material code: A

Qty.	Description
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1 MTRE 64-2/2-1 A-G-A-HUUV



Product No.: [98472483](#)

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 asynchronous 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. An operating panel on the motor terminal box enables 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 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 holds terminals for these connections:

- pump start/stop input (potential-free contact)
- remote setpoint setting via analog signal, 0-10 V, 0(4)-20 mA
- 10 V voltage supply for setpoint potentiometer, I<sub>max</sub> = 5 mA
- three analog sensor inputs, 0-10 V, 0(4)-20 mA
- 24 V voltage supply for sensor, I<sub>max</sub> = 40 mA
- one analog output
- three digital inputs
- two Pt100 inputs
- two potential-free fault signal relays with changeover contact, reporting "Fault", "Operation" or "Ready"
- RS-485 GENIbus connection
- interface for Grundfos CIM fieldbus module.

Immersion depth: 9.8 in

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Emulsion

Liquid temperature range: 14 .. 194 °F

Selected liquid temperature: 68 °F

Density: 62.29 lb/ft<sup>3</sup>

Technical:

Pump speed on which pump data are based: 3497 rpm

Rated flow: 339 US GPM

Rated head: 176.5 ft

Chambers: 2

Drainage back to tank: N

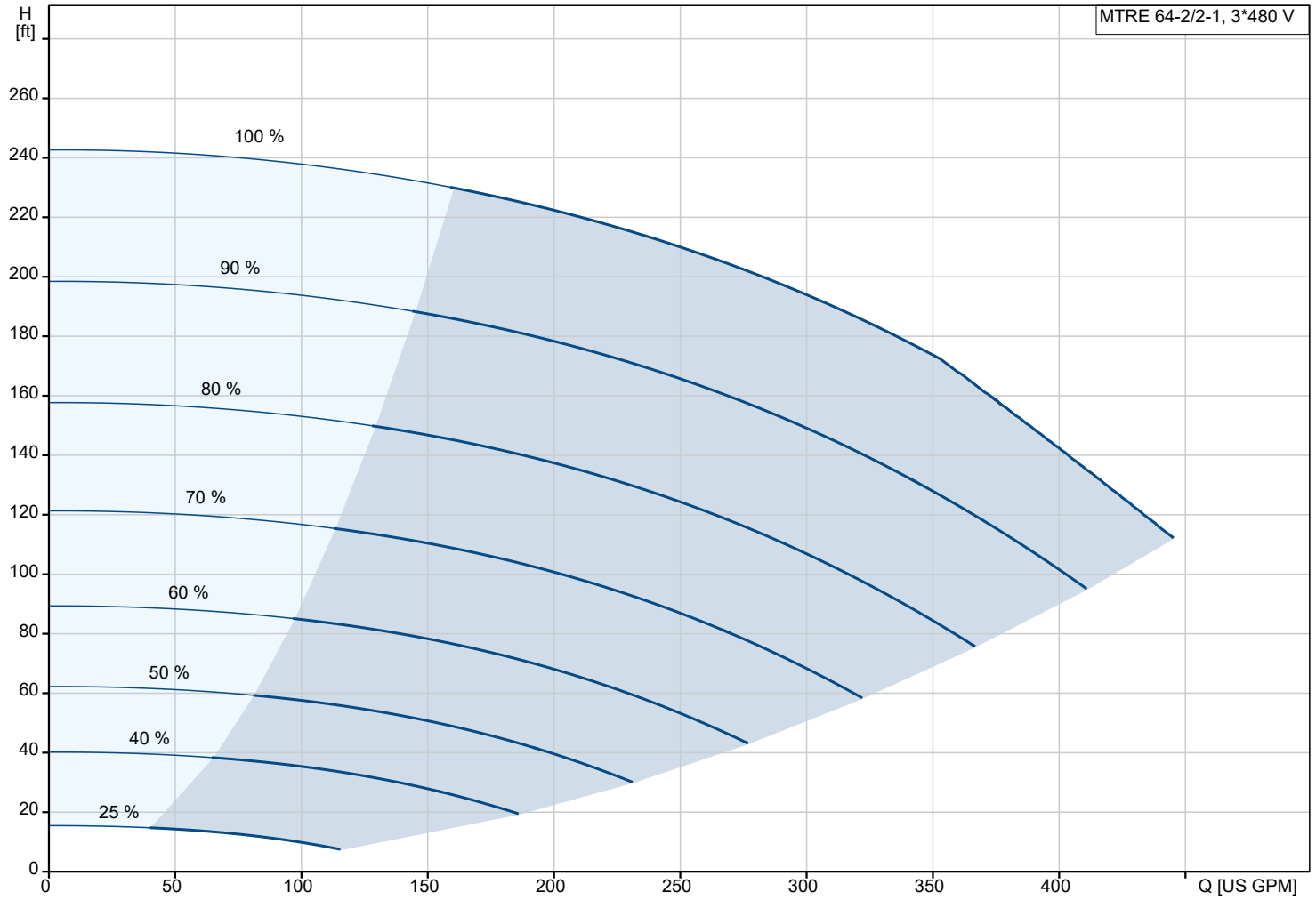
Pump orientation: Vertical

Code for shaft seal: HUUV

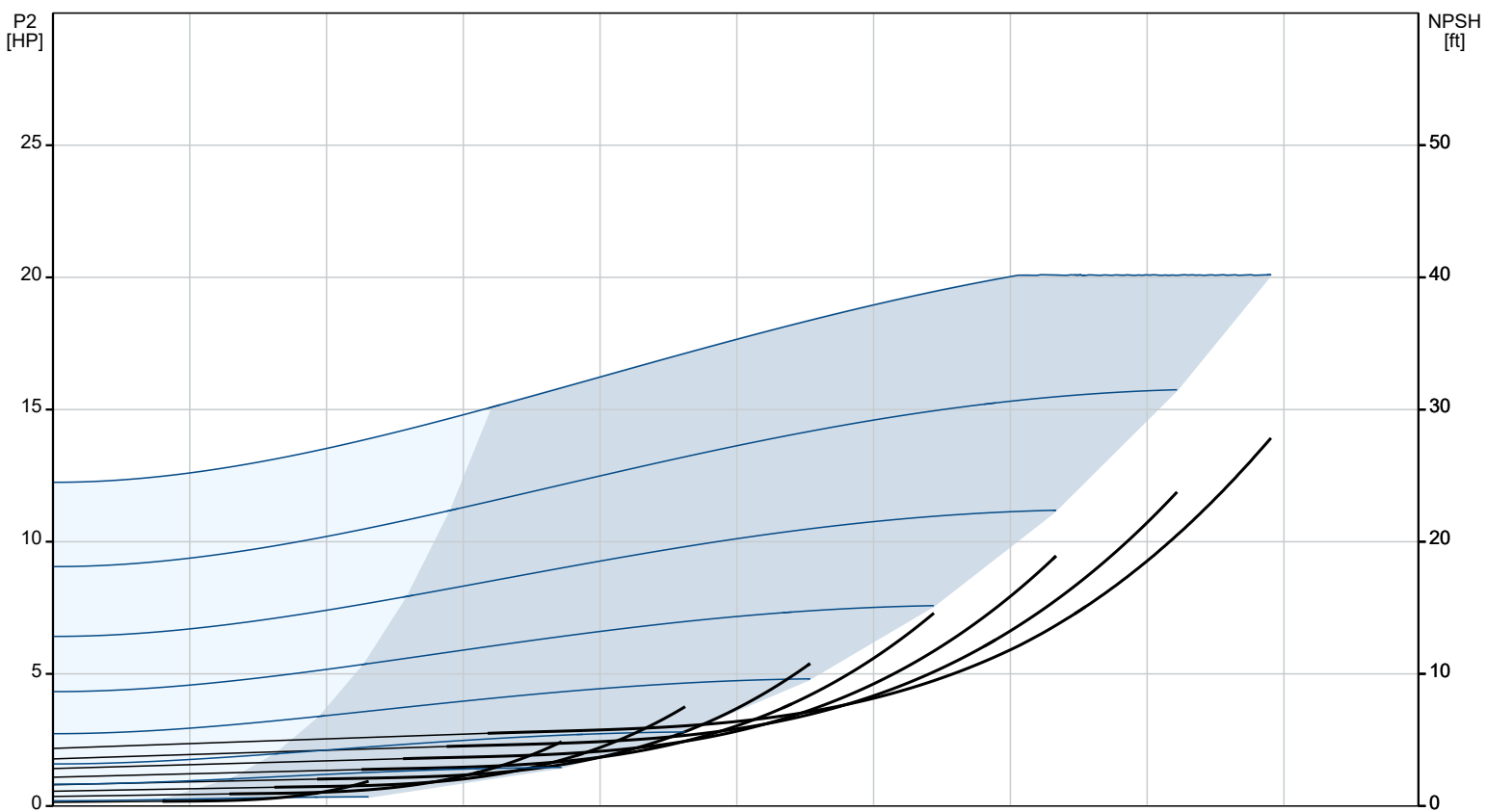
Approvals: CE

Qty.	Description
1	<p>Approvals for motor: CE, cURus, RCM, UKCA, SEPRO            Energy approvals for motor: CE            Curve tolerance: ISO9906:2012 3B            Cable gland entry: 1xM40+1xM20+4xM16 knock out</p> <p>Materials:            Pump head: Cast iron            EN 1561 EN-GJL-200            ASTM A48-25B</p> <p>Impeller: Stainless steel            EN 1.4301            AISI 304</p> <p>Installation:            t max amb: 104 °F            Maximum operating pressure: 362.59 psi            Max pressure at stated temp: 363 psi / 194 °F            Type of connection: ANSI            Size of outlet connection: 3 inch            Immersion depth: 9.8 in            Flange size for motor: 256TC</p> <p>Electrical data:            Motor standard: NEMA            Motor type: 160AB            IE Efficiency class: NEMA Premium / IE3 60Hz            Rated power - P2: 20 HP            Mains frequency: 60 Hz            Suitable for 50/60 Hz: Y            Rated voltage: 3 x 460 V            Service factor: 1.15            Rated current: 26 A            Cos phi - power factor: 0.89            Rated speed: 480-3540 rpm            Motor efficiency at full load: 91.0 %            Number of poles: 2            Enclosure class (IEC 34-5): IP55            Insulation class (IEC 85): F            Motor No: 85901137            Cable gland entry: 1xM40+1xM20+4xM16 knock out</p> <p>Others:            Terminal box position: 6            Minimum efficiency index, MEI ≥: 0.70            Net weight: 403 lb            Gross weight: 628 lb            Shipping volume: 43 ft³            Country of origin: US            Custom tariff no.: 8413.70.2040</p>

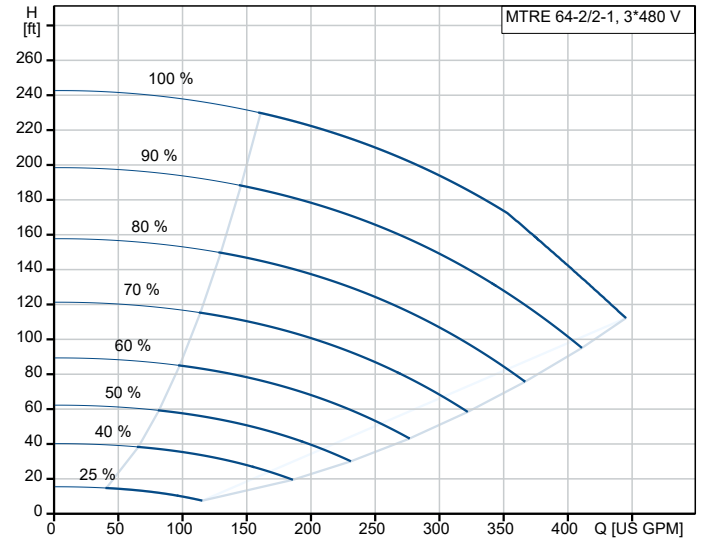
## 98472483 MTRE 64-2/2-1 A-G-A-HUUV 60 Hz



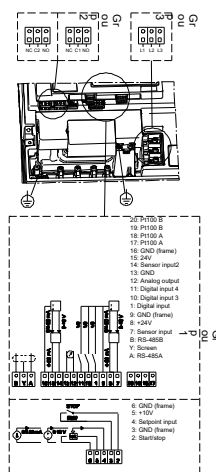
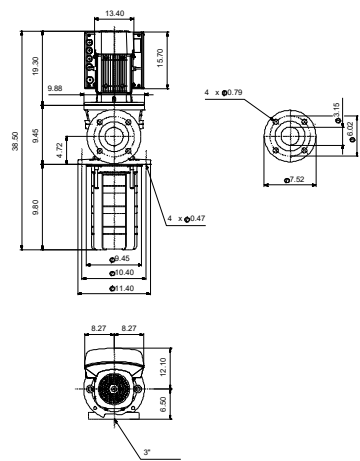
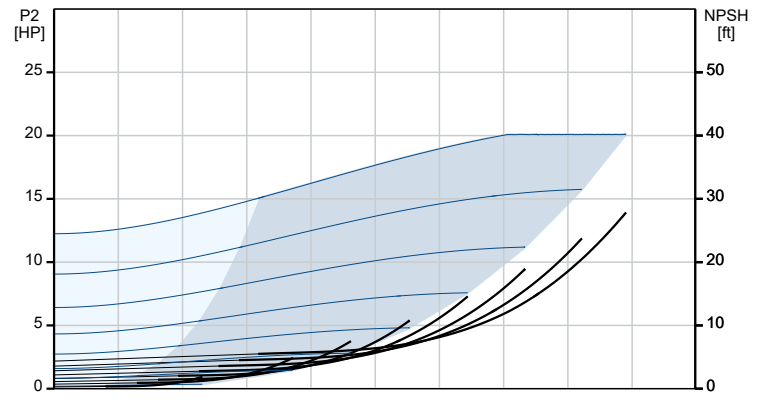
Pumped liquid = Emulsion  
Liquid temperature during operation = 68 °F  
Density = 62.29 lb/ft<sup>3</sup>



Description	Value
<b>General information:</b>	
Product name:	MTRE 64-2/2-1 A-G-A-HUUV
Product No:	98472483
EAN number:	571149566255
<b>Technical:</b>	
Pump speed on which pump data are based:	3497 rpm
Rated flow:	339 US GPM
Rated head:	176.5 ft
Chambers:	2
Impellers:	2
Number of reduced-diameter impellers:	1
Drainage back to tank:	N
Pump orientation:	Vertical
Code for shaft seal:	HUUV
Approvals:	CE
Approvals for motor:	CE, cURus, RCM, UKCA,SEPRO
Energy approvals for motor:	CE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
Cable gland entry:	1xM40+1xM20+4xM16 knock out
<b>Materials:</b>	
Pump head:	Cast iron
Pump head:	EN 1561 EN-GJL-200
Pump head:	ASTM A48-25B
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
<b>Installation:</b>	
t max amb:	104 °F
Maximum operating pressure:	362.59 psi
Max pressure at stated temp:	363 psi / 194 °F
Type of connection:	ANSI
Size of outlet connection:	3 inch
Immersion depth:	9.8 in
Flange size for motor:	256TC
Connect code:	G
<b>Liquid:</b>	
Pumped liquid:	Emulsion
Liquid temperature range:	14 .. 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	NEMA
Motor type:	160AB
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	20 HP
Mains frequency:	60 Hz
Suitable for 50/60 Hz:	Y
Rated voltage:	3 x 460 V
Service factor:	1.15
Rated current:	26 A
Cos phi - power factor:	0.89
Rated speed:	480-3540 rpm
Motor efficiency at full load:	91.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	YES
Motor No:	85901137
Cable gland entry:	1xM40+1xM20+4xM16 knock out



Pumped liquid = Emulsion  
 Liquid temperature during operation = 68 °F  
 Density = 62.29 lb/ft<sup>3</sup>





Company name:

Created by:

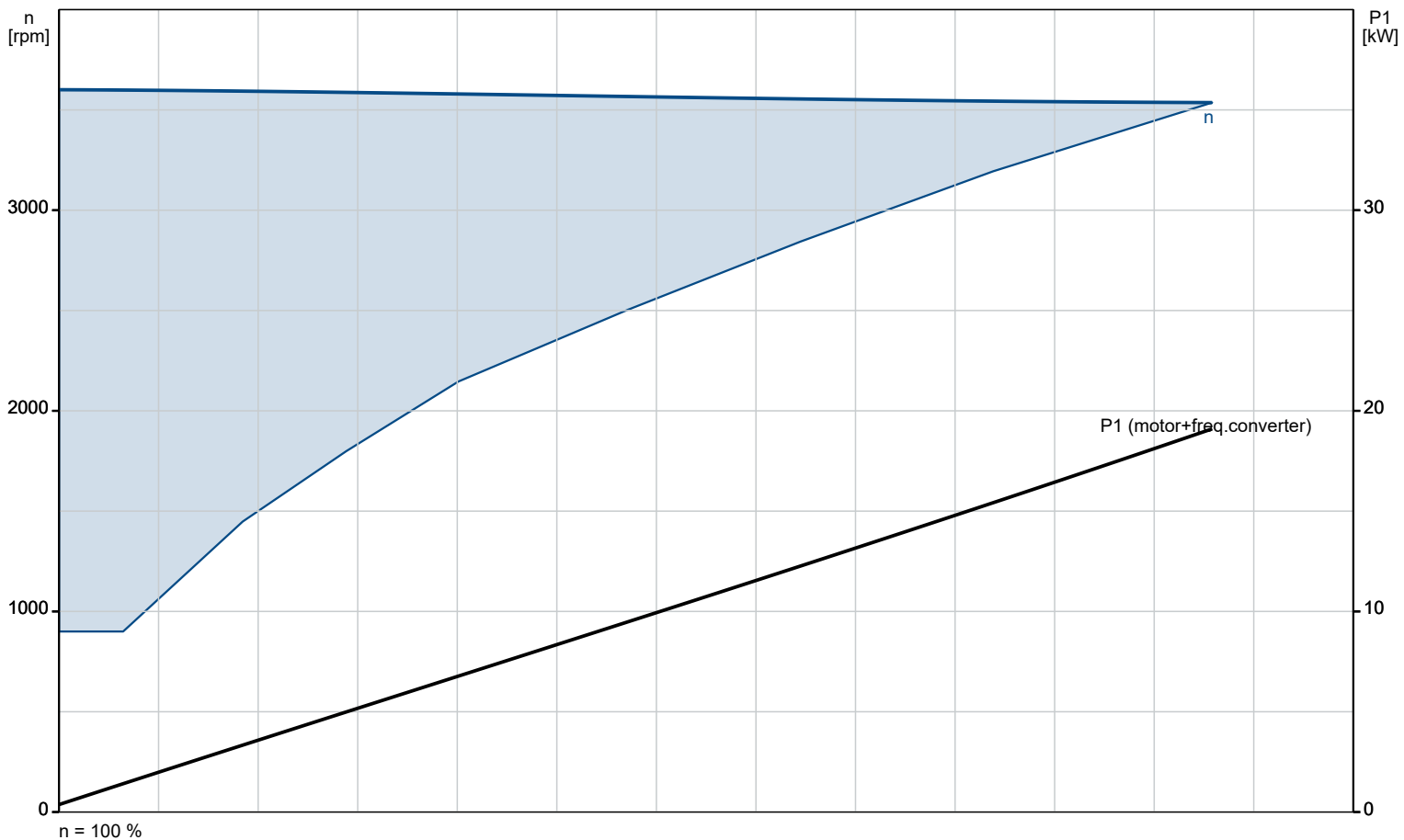
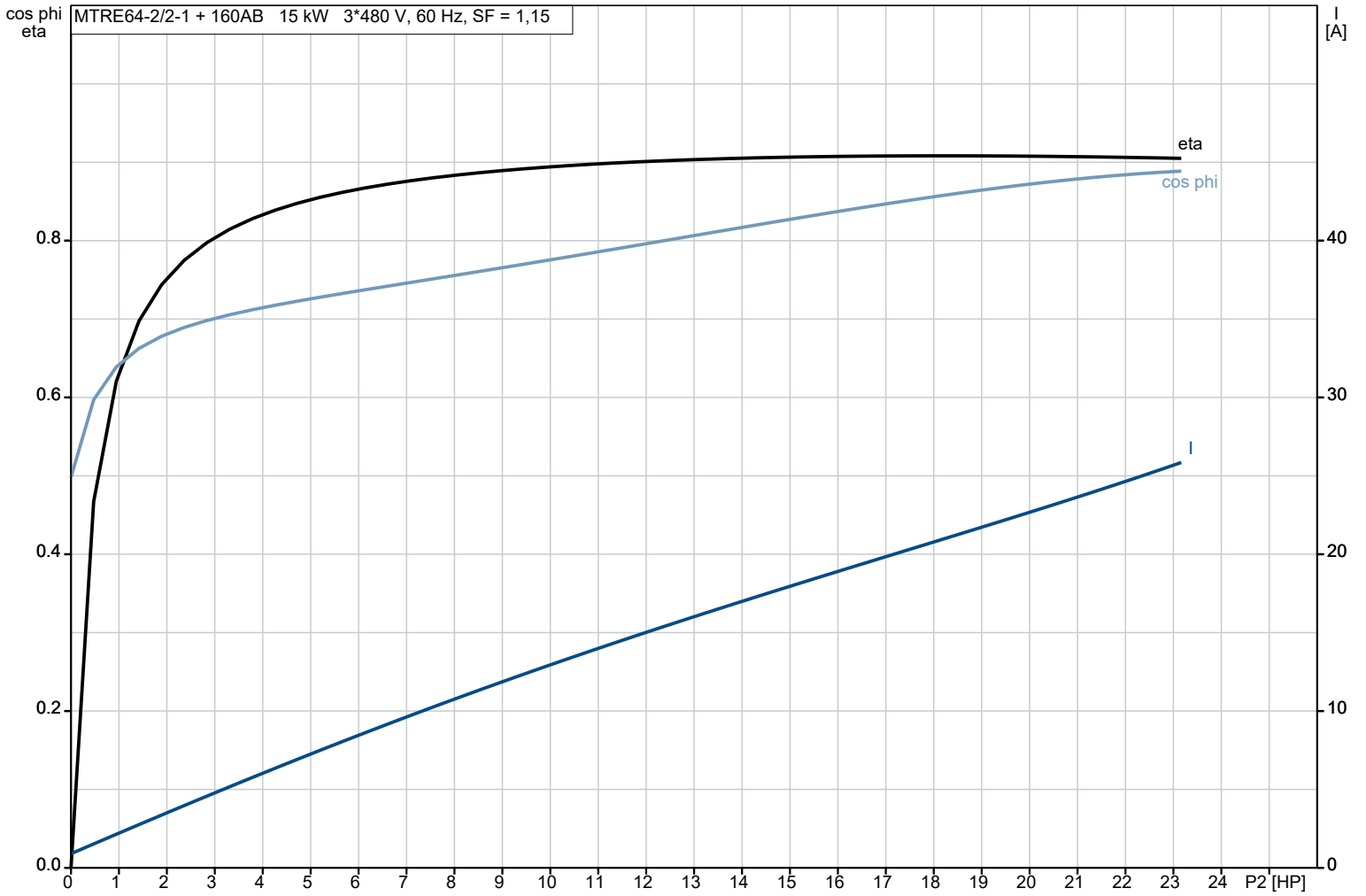
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Date:

03/03/2023

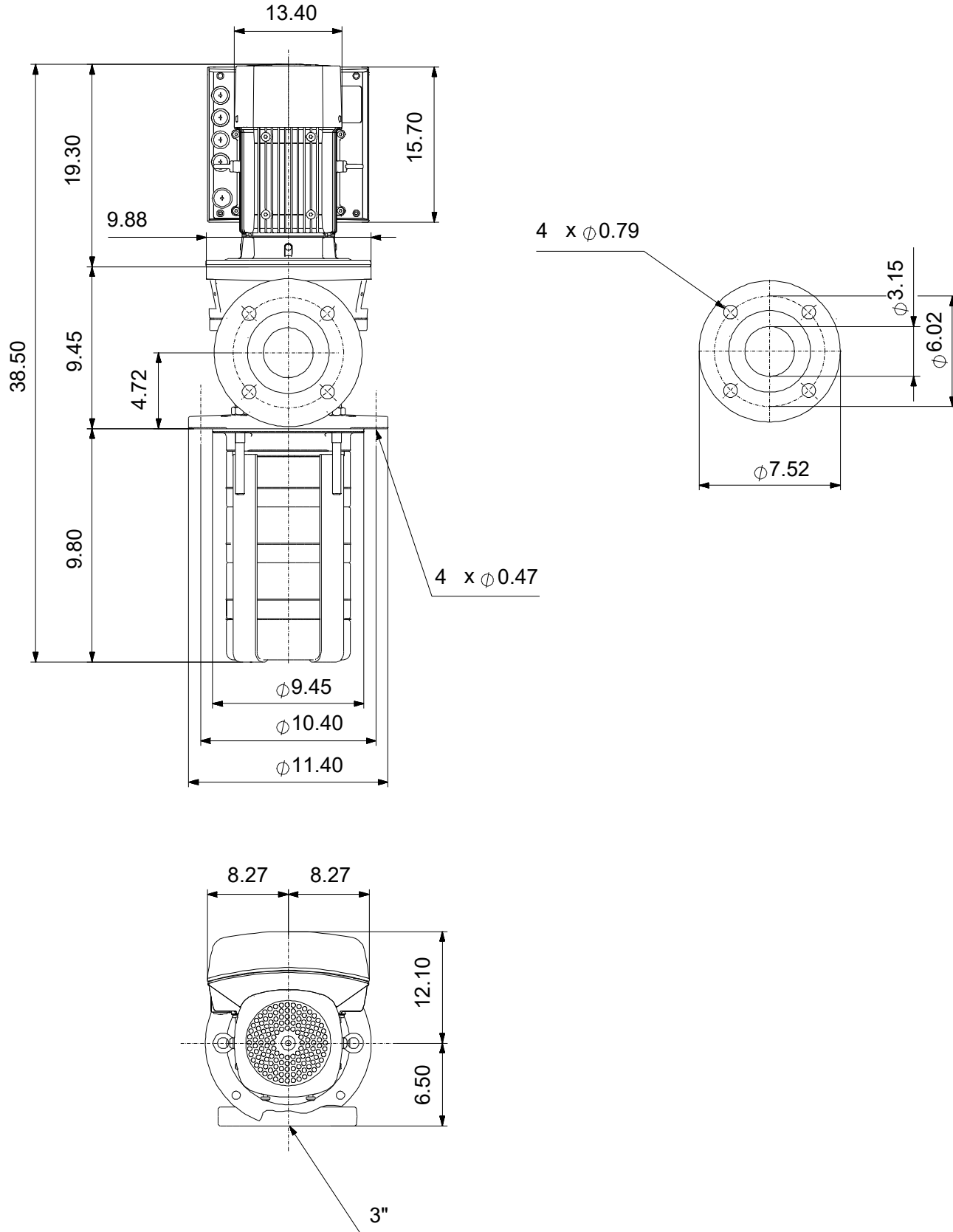
Description	Value
<b>Controls:</b>	
Control panel:	Standard
Function Module:	ADVANCED I/O
Frequency converter:	Built-in
<b>Others:</b>	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.70
Net weight:	403 lb
Gross weight:	628 lb
Shipping volume:	43 ft <sup>3</sup>
Country of origin:	US
Custom tariff no.:	8413.70.2040

## 98472483 MTRE 64-2/2-1 A-G-A-HUUV 60 Hz

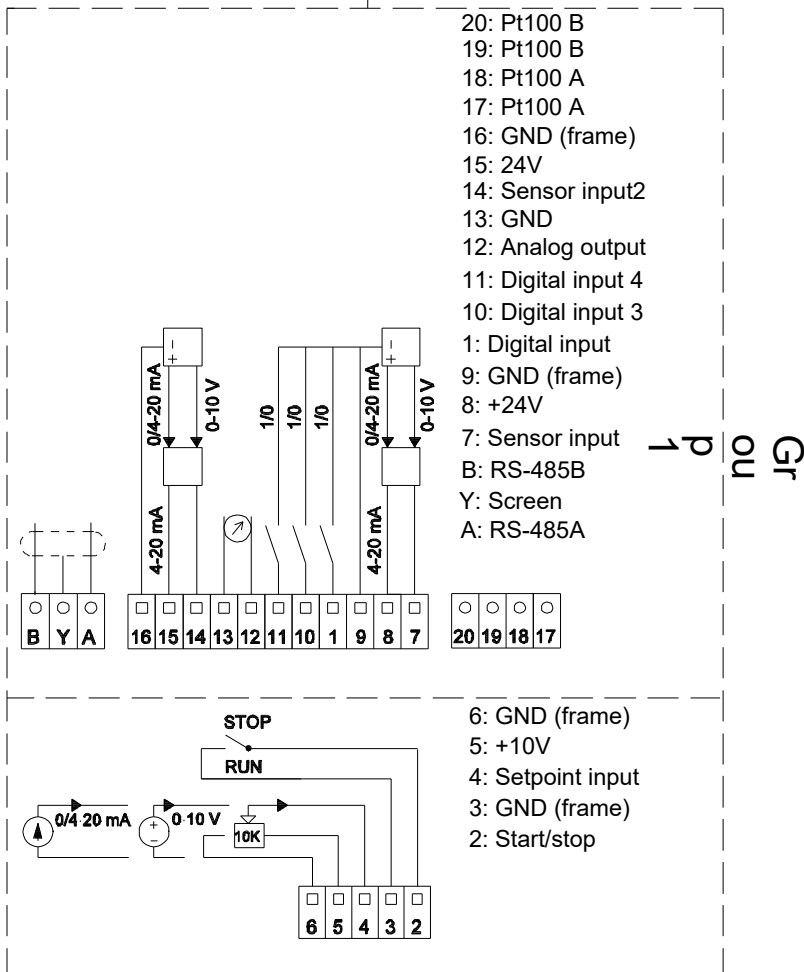
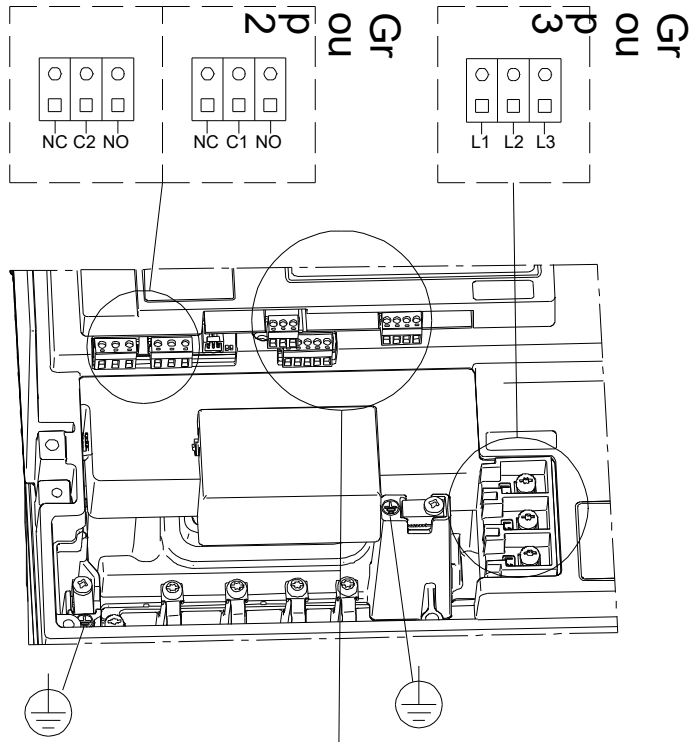




## 98472483 MTRE 64-2/2-1 A-G-A-HUUV 60 Hz



## 98472483 MTRE 64-2/2-1 A-G-A-HUUV 60 Hz



Note! All units are in [in] unless others are stated.