Submittal Data

PROJECT:	Magna-1	UNIT TAG:		QUANTITY:	1
		TYPE OF SERVICE:	Cast Iron Pump Configuration		
REPRESENTATIVE:	Hurley Engineering	SUBMITTED BY:	Devin Carle	DATE:	
ENGINEER:	TBD	APPROVED BY:		DATE:	
CONTRACTOR:	TBD	ORDER NO.:		DATE:	

Product photo could vary from the actual product

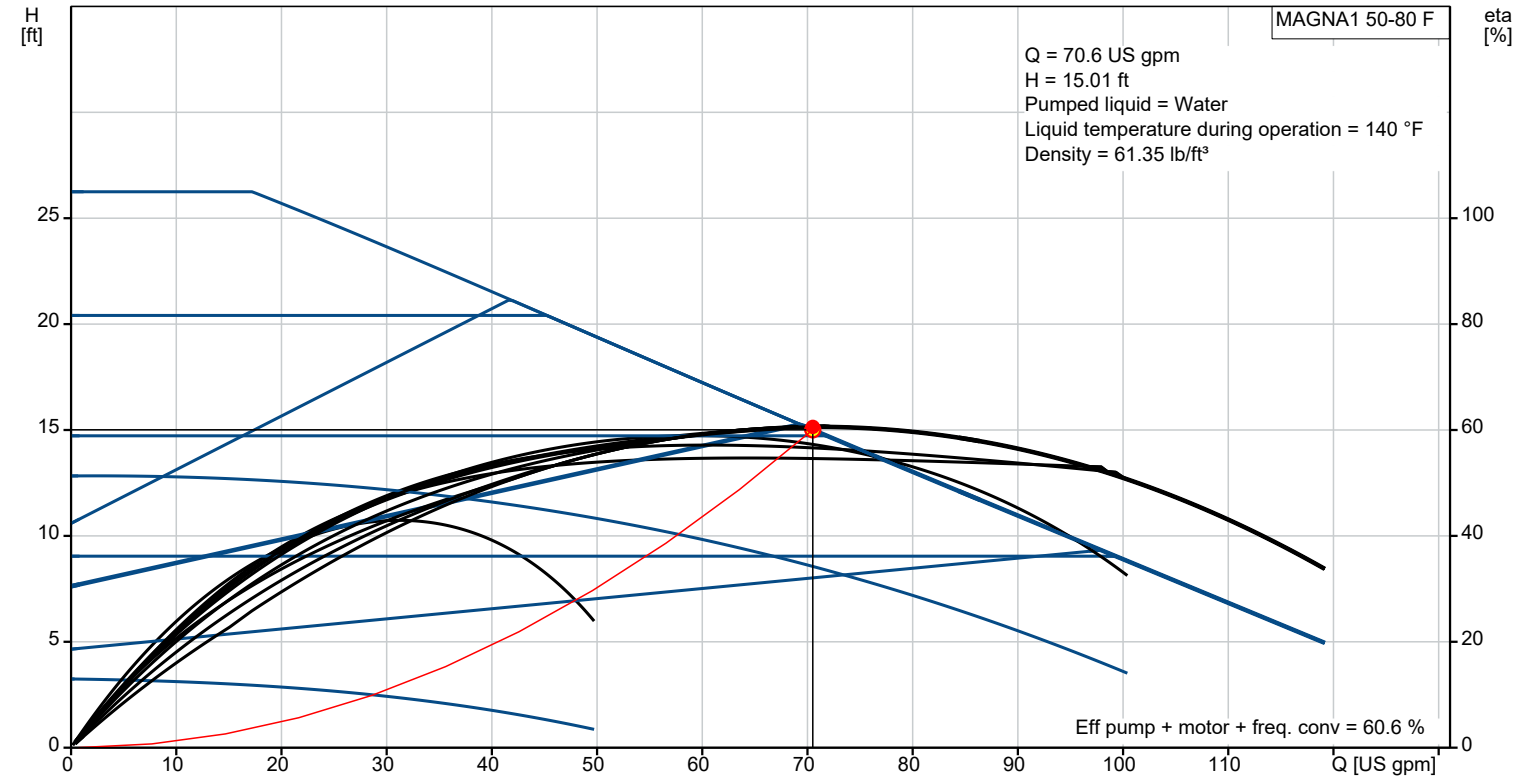
MAGNA1 50-80 F

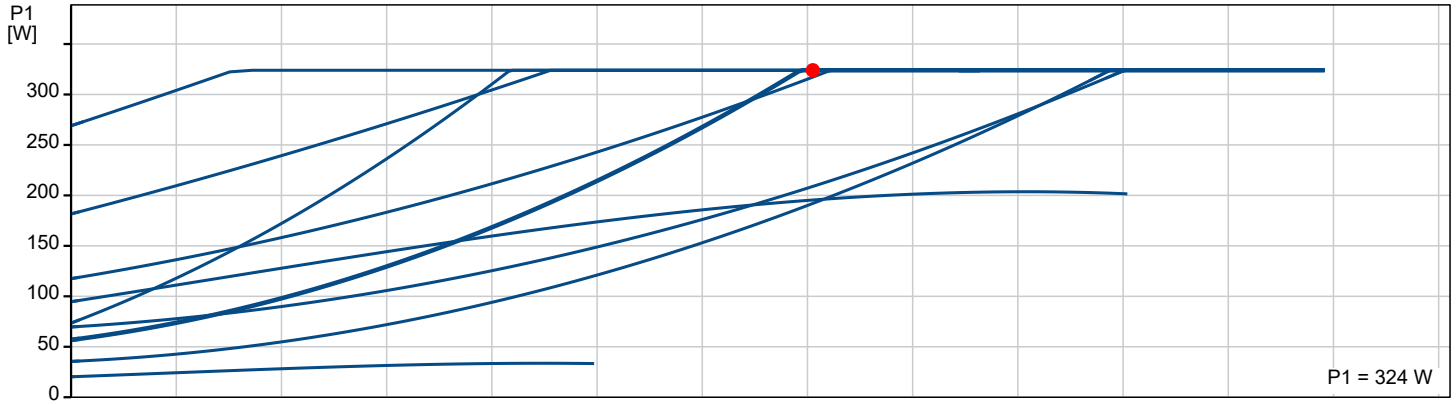
The simple option for a job well done. The product has an intuitive user interface, which is especially fit for replacement of older circulators. The ideal choice for basic functionality needs.

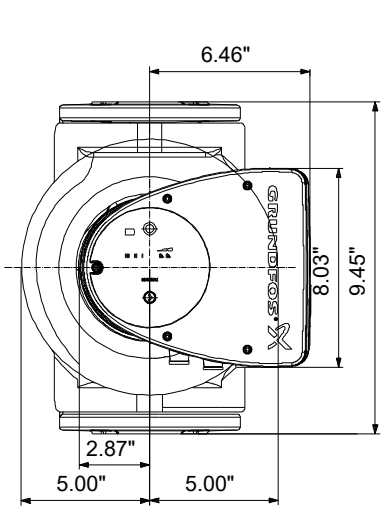
Conditions of Service	
Flow:	70.6 US gpm
Head:	15.01 ft
Efficiency:	60.6 %
Liquid:	Water
Temperature:	140 °F
NPSH required:	ft
Specific Gravity:	0.985

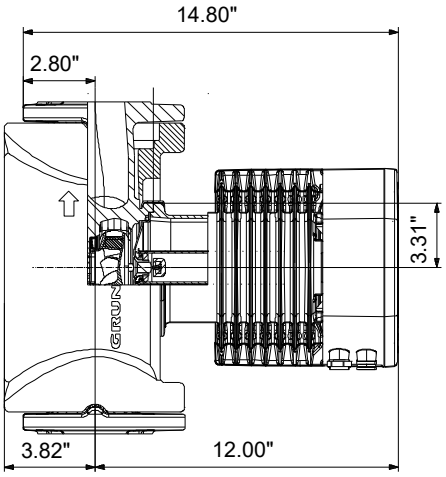
Pump Data	
Maximum operating pressure:	174.05 psi
Liquid temperature range:	14 .. 230 °F
Maximum ambient temperature:	104 °F
Approvals:	98544607
Flange standard:	GF
Pipe connection:	GF53
Product number:	On request

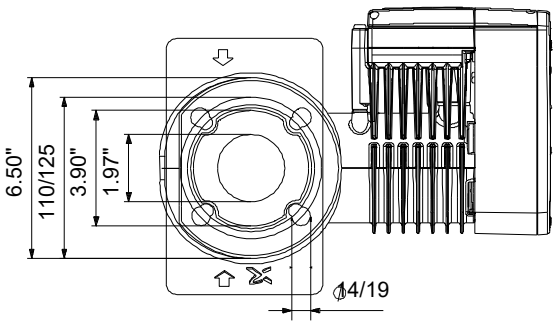
Motor Data	
P1 max:	21 .. 331 W
Rated voltage:	208-230 V
Main frequency:	60 Hz
Enclosure class:	X4D
Insulation class:	F











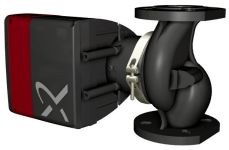
Materials:

Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM A48-250B
Impeller:	PES 30%GF

Company name: Hurley Engineering
Created by:
Phone:

Date: 4/22/2021

Count	Description
1	**MAGNA1 50-80 F**



Product No.: On request

MAGNA1 circulator pump with easy selection of pump setting
The pump is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing.

The bearings are lubricated by the pumped liquid.
In order to avoid problems in connection with disposal, great importance has been attached to using as few different materials as possible.
A pump with no maintenance requirements and extremely low life cycle cost.

Heating systems
• Main pump
• mixing loops
• heating surfaces
• air-conditioning surfaces.
The MAGNA1 circulator pumps are designed for
circulating liquids in heating systems with variable flows where it is desirable to optimize the setting of the pump duty point, thus reducing energy costs. The pumps are also suitable for domestic hot-water systems.
To ensure correct operation, it is important that the sizing range of the system falls within the duty range of the pump.
The pump is also suitable for systems with
hot-water priority as an external signal can
immediately force the pump to operate according to the max. curve, for example in solar-heating systems.

Benefits
• Safe selection.
• Simple installation.
• Low energy consumption. All MAGNA1 pumps comply with the EuP requirements.
• Nine light fields for indication of pump setting. Three proportional-pressure curves, three constant-pressure curves and three fixed-speed curves are available.
• Low noise level.
• No maintenance and long life.

Liquid:

Pumped liquid:	Water
Liquid temperature range:	14 .. 230 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft³

Technical:

Actual calculated flow:	70.6 US gpm
Resulting head of the pump:	15.01 ft
TF class:	110
Approvals on nameplate:	98544607

Materials:

Pump housing:	Cast iron EN-GJL-250 ASTM A48-250B
Impeller:	PES 30%GF

Installation:

Range of ambient temperature:	32 .. 104 °F
Maximum operating pressure:	174.05 psi
Flange standard:	GF
Pipe connection:	GF53
Pressure stage:	PN12

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Company name: Hurley Engineering
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Count	Description	
	Port-to-port length:	9 1/2 in
	Electrical data:	
	Power input - P1:	21 .. 331 W
	Main frequency:	60 Hz
	Rated voltage:	1 x 208-230 V
	Maximum current consumption:	0.22 .. 1.48 A
	Enclosure class (IEC 34-5):	X4D
	Insulation class (IEC 85):	F
	Others:	
	Energy (EEI):	0.21
	Net weight:	39 lb
	Gross weight:	43.6 lb
	Shipping volume:	1.62 ft^3
	Country of origin:	US
	Custom tariff no.:	8413.70.2005

GRUNDFOS

Company name: Hurley Engineering
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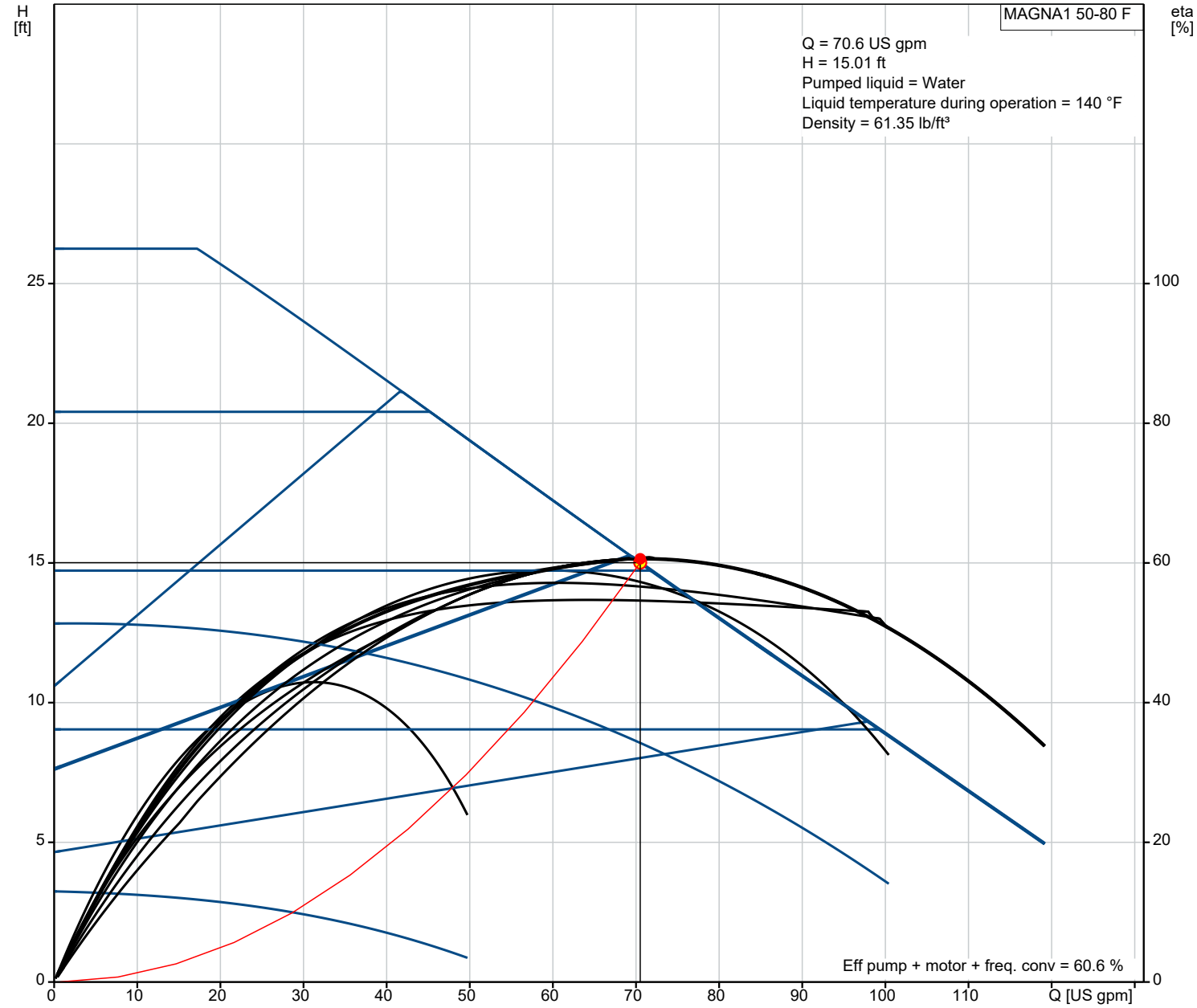
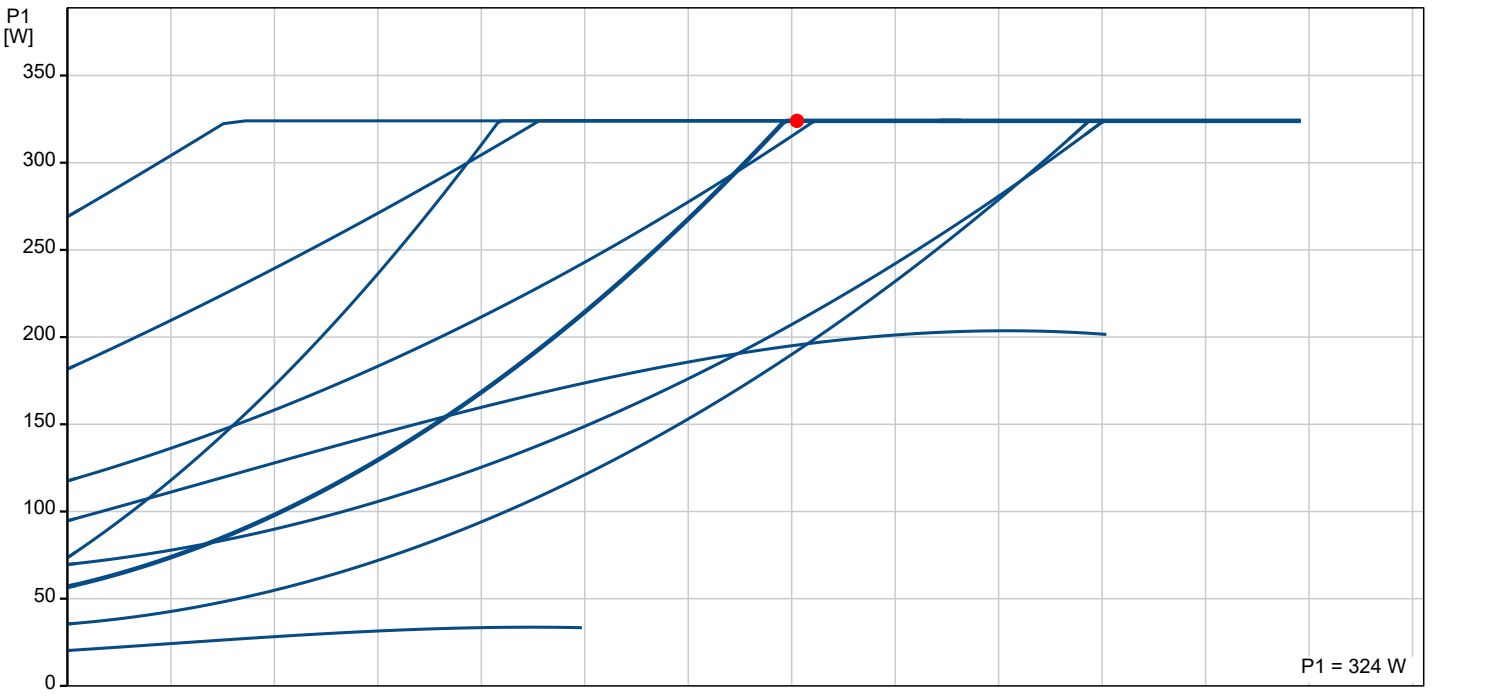
On request MAGNA1 50-80 F 60 Hz





Company name: Hurley Engineering
Created by:
Phone:

Date: 4/22/2021

Description	Value
General information:	
Product name:	MAGNA1 50-80 F
Product No.:	On request
EAN:	On request
Technical:	
Actual calculated flow:	70.6 US gpm
Resulting head of the pump:	15.01 ft
Head max:	26.25 ft
TF class:	110
Approvals on nameplate:	98544607
Model:	B
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM A48-250B
Impeller:	PES 30%GF
Installation:	
Range of ambient temperature:	32 .. 104 °F
Maximum operating pressure:	174.05 psi
Flange standard:	GF
Pipe connection:	GF53
Pressure stage:	PN12
Port-to-port length:	9 1/2 in
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	14 .. 230 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft³
Electrical data:	
Power input - P1:	21 .. 331 W
Main frequency:	60 Hz
Rated voltage:	1 x 208-230 V
Maximum current consumption:	0.22 .. 1.48 A
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	F
Others:	
Energy (EEI):	0.21
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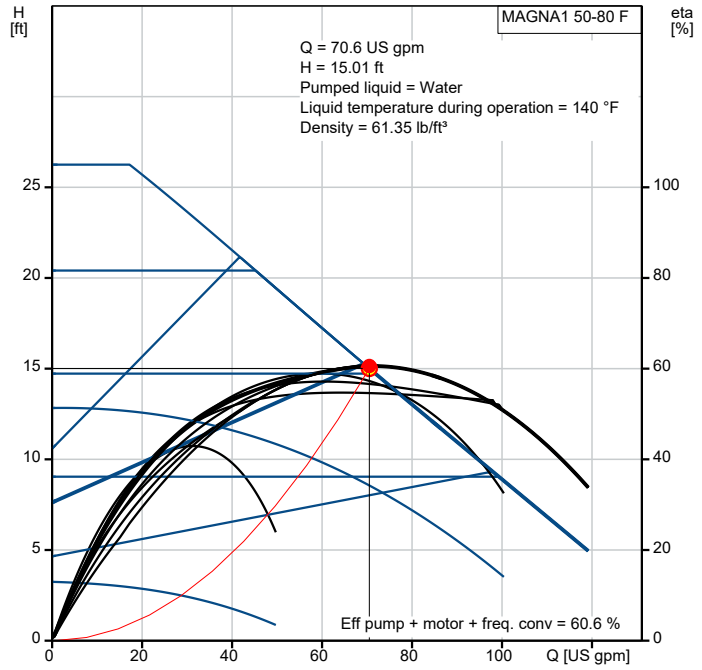
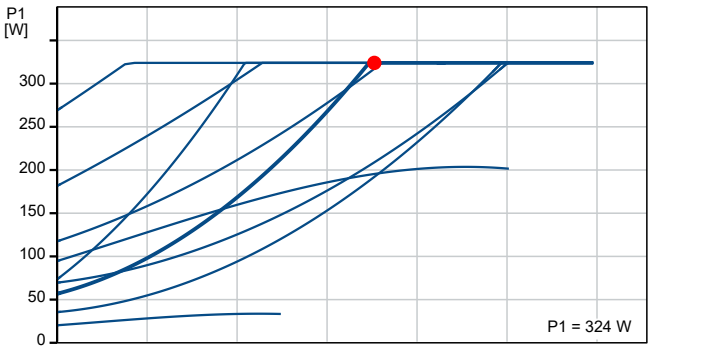
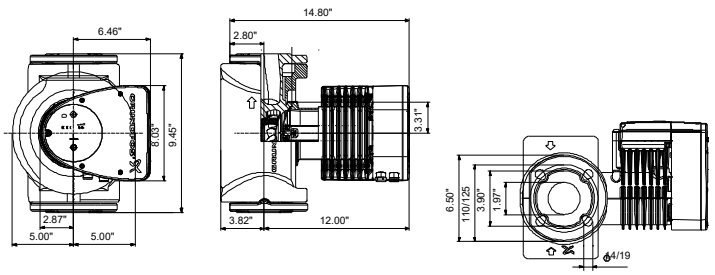
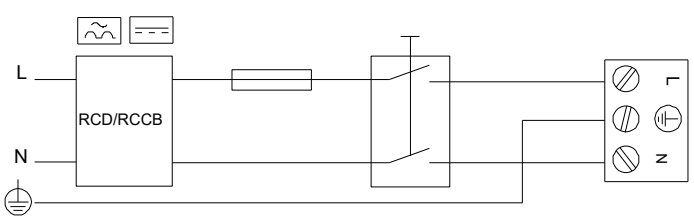






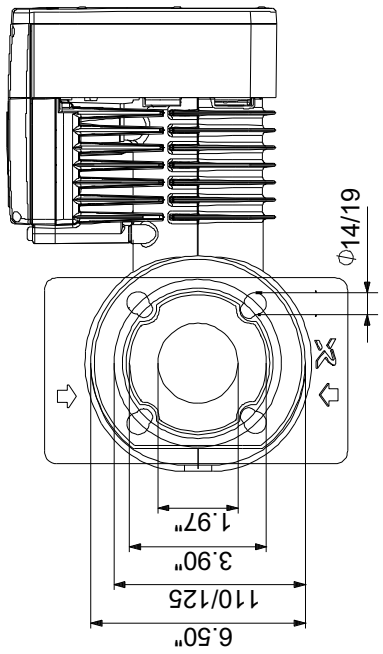
Example of mains-connected motor
with mains switch, backup fuse and additional protection

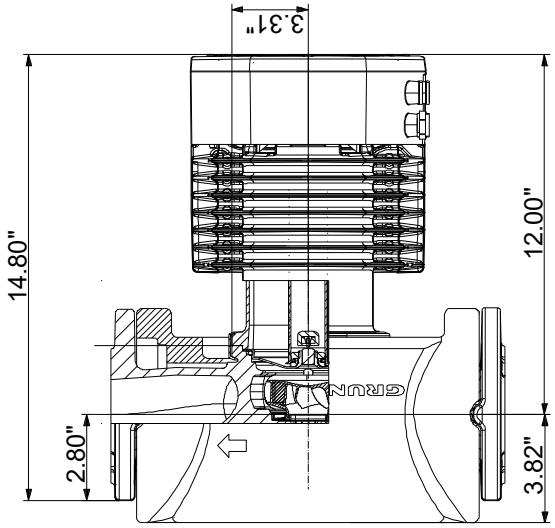


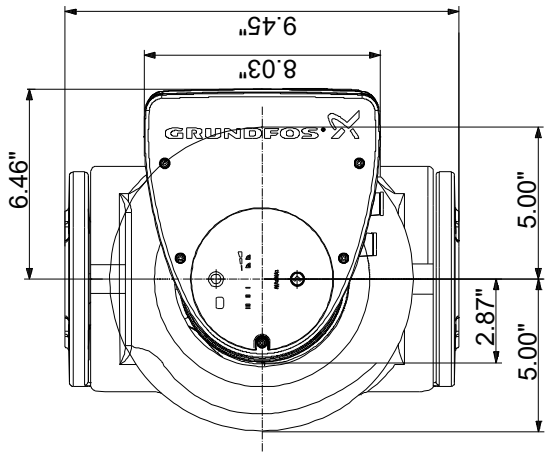
Company name: Hurley Engineering
Created by:
Phone:

Date: 4/22/2021

On request MAGNA1 50-80 F 60 Hz







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

Company name: Hurley Engineering
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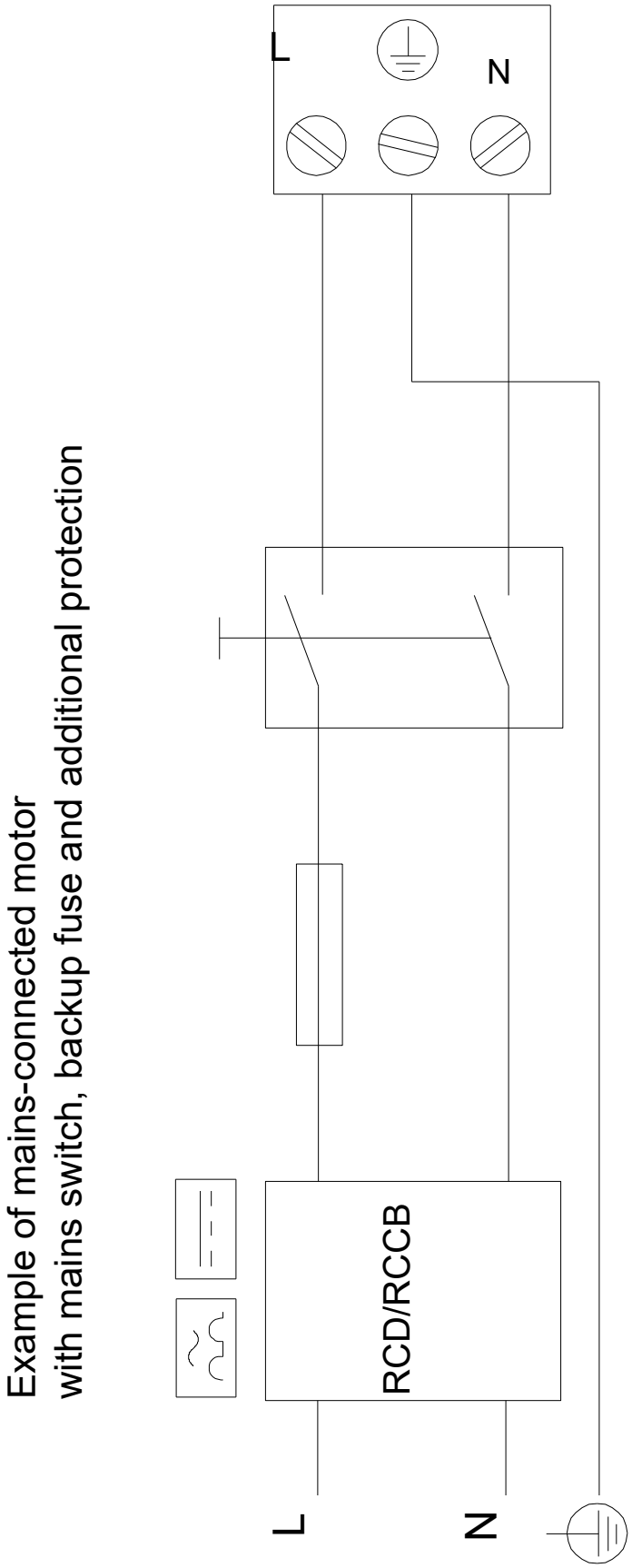
Date: 4/22/2021

On request MAGNA1 50-80 F 60 Hz



Example of mains-connected motor
with mains switch, backup fuse and additional protection

All units are [in] unless otherwise presented.

GRUNDFOS

Company name: Hurley Engineering
Created by:
Phone:

Date: 4/22/2021

Order Data:

Product name: MAGNA1 50-80 F
Amount: 1
Product No.: On request

Total: Price on request