

Submittal Data

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

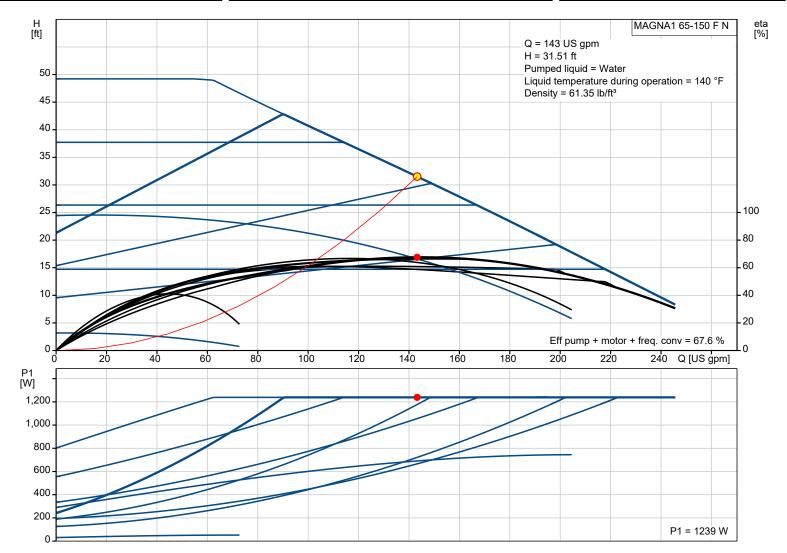


MAGNA1 65-150 F N

MAGNA1 N is the stainless steel variant for applications where the media requires this (e.g. domestic hot water). With MAGNA1, the job is done in an intuitive and efficient way.

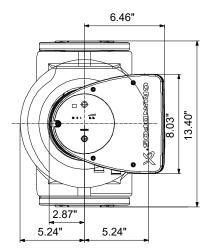
Product photo could vary from the actual product

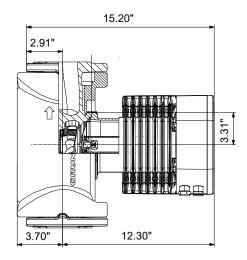
Conditions of Service		Pump Data		Motor Data	
Flow: Head:	143 US gpm 31.51 ft	Maximum operating pressure: Liquid temperature range:	174.05 psi 14 230 °F	P1 max: Rated voltage:	31 1263 W 208-230 V
Efficiency: Liquid:	67.6 % Water	Maximum ambient temperature: Approvals:	104 °F 98544606	Main frequency: Enclosure class:	60 Hz X4D
Temperature:	140 °F	Flange standard:	GF	Insulation class:	F
NPSH required: Specific Gravity:	ft 0.985	Pipe connection: Product number:	GF65 On request		

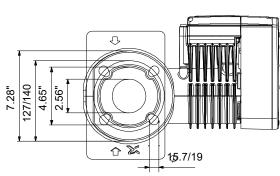


GRUNDFOS

Submittal Data







Materials:

Pump housing:	Stainless steel
Pump housing:	EN 1.4308
Pump housing:	ASTM 351 CF8
Impeller:	PES 30%GF



4/22/2021

Count | Description

1

MAGNA1 65-150 F N



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.

Date:

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.

Pressure stage:

• No maintenance and long life.

Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water 14 230 °F 140 °F 61.35 lb/ft³
Technical: Actual calculated flow: Resulting head of the pump: TF class: Approvals on nameplate:	143 US gpm 31.51 ft 110 98544606
Materials: Pump housing: Impeller:	Stainless steel EN 1.4308 ASTM 351 CF8 PES 30%GF
Installation: Range of ambient temperature: Maximum operating pressure: Flange standard: Pipe connection:	32 104 °F 174.05 psi GF GF65

PN12



Company name: Hurley Engineering Created by: Phone:

4/22/2021

Count | Description

Port-to-port length: 13 7/16 in Electrical data: Power input - P1: 31 .. 1263 W Main frequency: 60 Hz Rated voltage: 1 x 208-230 V Maximum current consumption: 0.31 .. 5.53 A Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): F Others: Energy (EEI): 0.18 Net weight: 53.6 lb Gross weight: 58.6 lb Shipping volume: 1.94 ft³ Country of origin: US Custom tariff no.: 8413.70.2015

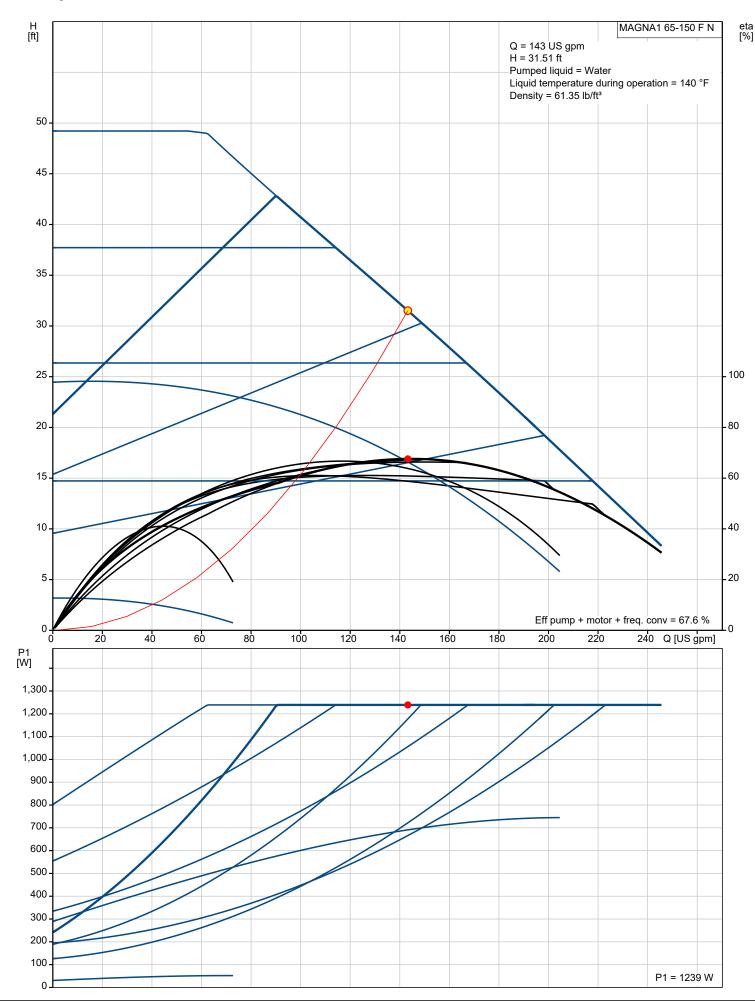
Date:



4/22/2021

Date:

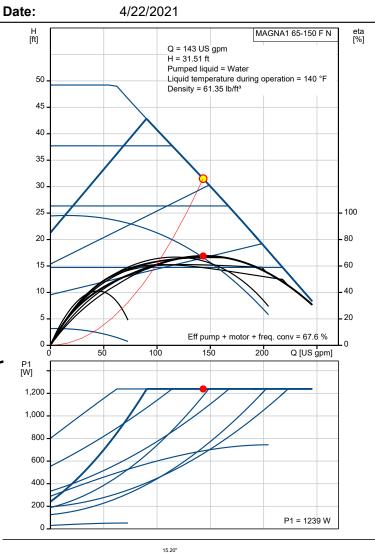
On request MAGNA1 65-150 F N 60 Hz

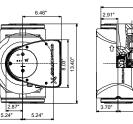


GRUNDFOS

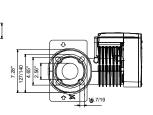
Company name: Hurley Engineering Created by: Phone:

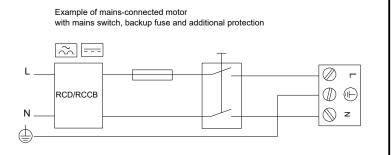
DescriptionValueGeneral information:Product name:MAGNA1 65-150 F NProduct No.:On requestEAN:On requestEAN:On requestTechnical:Actual calculated flow:143 US gpmResulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Stainless steelPump housing:Stainless steelPump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:S2 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid temperature:14 230 °FSelected liquid temperature:14 230 °FSelected liquid temperature:140 °FMange14 230 °FSelected liquid temperature:14 230 °FSelected liquid temperature:14 230 °FSelected liquid temperature:14 0 °FDensity:61.35 lb/ft³Electrical data:PPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:T		
Product name:MAGNA1 65-150 F NProduct No.:On requestEAN:On requestTechnical:	Description	Value
Product No.:On requestEAN:On requestTechnical:143 US gpmActual calculated flow:143 US gpmResulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:PK 30%GFInstallation:Range of ambient temperature:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Porto-port length:13 7/16 inLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 85):FOthers:V	General information:	
EAN:On requestTechnical:Actual calculated flow:143 US gpmResulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:T4.05 psiFlange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:TPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 85):FOthers:Cthers:	Product name:	MAGNA1 65-150 F N
Technical:Actual calculated flow:143 US gpmResulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature:14230 °FSelected liquid temperature:14230 °FSelected liquid temperature:111263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.315.53 AEnclosure class (IEC 85):FOthers:Chers:	Product No.:	On request
Actual calculated flow:143 US gpmResulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:Stainless steelPump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature:140 °FSelected liquid temperature:140 °FDensity:60 HzRated voltage:1 x 208-230 VMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 85):FOthers:V	EAN:	On request
Resulting head of the pump:31.51 ftHead max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquidUagePumped liquid:WaterLiquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:PPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Technical:	
Head max:49.22 ftTF class:110Approvals on nameplate:98544606Model:BMaterials:Pump housing:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:TRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquidtwaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:TPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 35):FOthers:C	Actual calculated flow:	143 US gpm
TF class: 110 Approvals on nameplate: 98544606 Model: B Materials: Pump housing: Pump housing: Stainless steel Pump housing: EN 1.4308 Pump housing: ASTM 351 CF8 Impeller: PES 30%GF Installation: Range of ambient temperature: Range of ambient temperature: 32 104 °F Maximum operating pressure: 174.05 psi Flange standard: GF Pipe connection: GF65 Pressure stage: PN12 Port-to-port length: 13 7/16 in Liquid Enertical data: Pumped liquid: Water Liquid temperature range: 14 230 °F Selected liquid temperature: 140 °F Density: 61.35 lb/ft³ Electrical data: Puwer input - P1: Power input - P1: 31 1263 W Main frequency: 60 Hz Rated voltage: 1 x 208-230 V Maximum current consumption: 0.31 5.53 A Enclosure class (IEC 34-5): X4D Ins	Resulting head of the pump:	31.51 ft
Approvals on nameplate:98544606Model:BMaterials:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:TRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:EPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Head max:	49.22 ft
Model:BMaterials:Stainless steelPump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Electrical data:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	TF class:	110
Materials:Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:40 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	Approvals on nameplate:	98544606
Pump housing:Stainless steelPump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:C	Model:	В
Pump housing:EN 1.4308Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:TPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:V	Materials:	
Pump housing:ASTM 351 CF8Impeller:PES 30%GFInstallation:FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:FPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Pump housing:	Stainless steel
Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:VaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	Pump housing:	EN 1.4308
Installation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:VaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	Pump housing:	ASTM 351 CF8
Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	Impeller:	PES 30%GF
Maximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterPumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):F	Installation:	
Flange standard:GFPipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterPumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Range of ambient temperature:	32 104 °F
Pipe connection:GF65Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:WaterPumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Maximum operating pressure:	174.05 psi
Pressure stage:PN12Port-to-port length:13 7/16 inLiquid:VaterPumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:Insulation class (IEC 85):	Flange standard:	GF
Port-to-port length:13 7/16 inLiquid:WaterPumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:140 °FPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:1	Pipe connection:	GF65
Liquid:Pumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:140°FPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:Insulation class (IEC 85):	Pressure stage:	PN12
Liquid:Pumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:140°FPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:Insulation class (IEC 85):	Port-to-port length:	13 7/16 in
Liquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:140°FPower input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:		
Selected liquid temperature:140 °FDensity:61.35 lb/ft³Electrical data:1Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Pumped liquid:	Water
Density: 61.35 lb/ft³ Electrical data:	Liquid temperature range:	14 230 °F
Electrical data:Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:V	Selected liquid temperature:	140 °F
Power input - P1:31 1263 WMain frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Density:	61.35 lb/ft ³
Main frequency:60 HzRated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Electrical data:	
Rated voltage:1 x 208-230 VMaximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:	Power input - P1:	31 1263 W
Maximum current consumption:0.31 5.53 AEnclosure class (IEC 34-5):X4DInsulation class (IEC 85):FOthers:Content of the second	Main frequency:	60 Hz
Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): F Others: F	Rated voltage:	1 x 208-230 V
Insulation class (IEC 85): F Others:	Maximum current consumption:	0.31 5.53 A
Others:	Enclosure class (IEC 34-5):	X4D
	Insulation class (IEC 85):	F
	. ,	
Energy (EEI): 0.18	Energy (EEI):	0.18
Net weight: 53.6 lb		53.6 lb
Gross weight: 58.6 lb	5	58.6 lb
Shipping volume: 1.94 ft ³	3	1.94 ft³
Country of origin: US		US
Custom tariff no.: 8413.70.2015	Custom tariff no.:	8413.70.2015





-





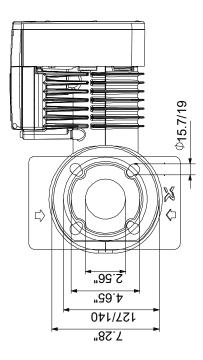


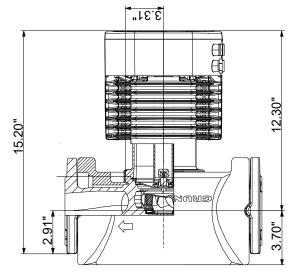
Company name: Hurley Engineering Created by: Phone:

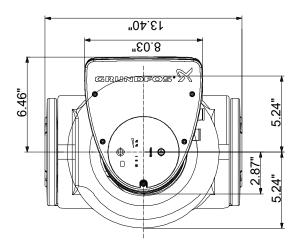
Date:

4/22/2021

On request MAGNA1 65-150 F N 60 Hz







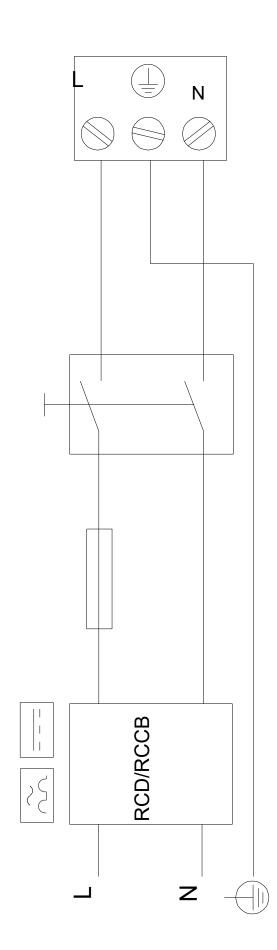


Company name: Hurley Engineering Created by: Phone:

Date:

4/22/2021

On request MAGNA1 65-150 F N 60 Hz



with mains switch, backup fuse and additional protection

Example of mains-connected motor



Total: Price on request