

PROJECT: Magna-3	UNIT TAG: _____	QUANTITY: 1
REPRESENTATIVE: _____	TYPE OF SERVICE: Cast Iron Pump Configuration	DATE: _____
ENGINEER: Hurley Engineering	SUBMITTED BY: Devin Carle	DATE: _____
CONTRACTOR: TBD	APPROVED BY: _____	DATE: _____
	ORDER NO.: _____	DATE: _____

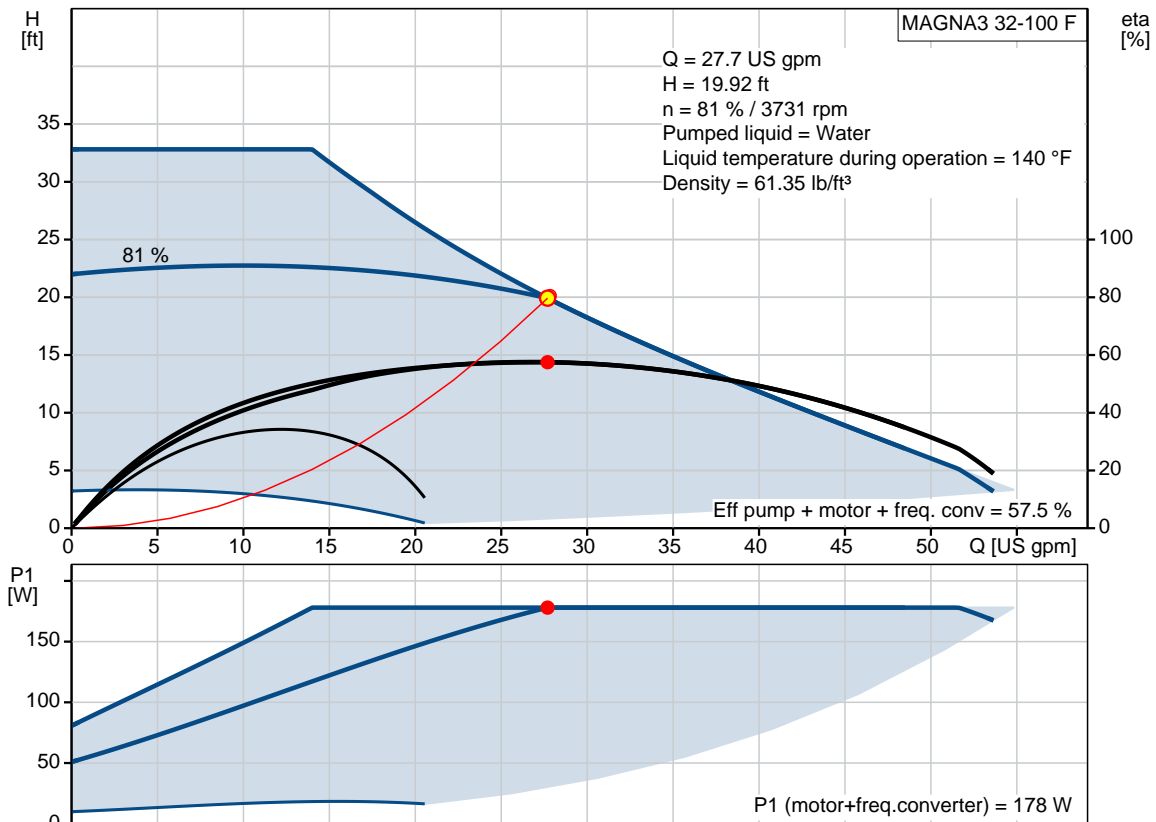


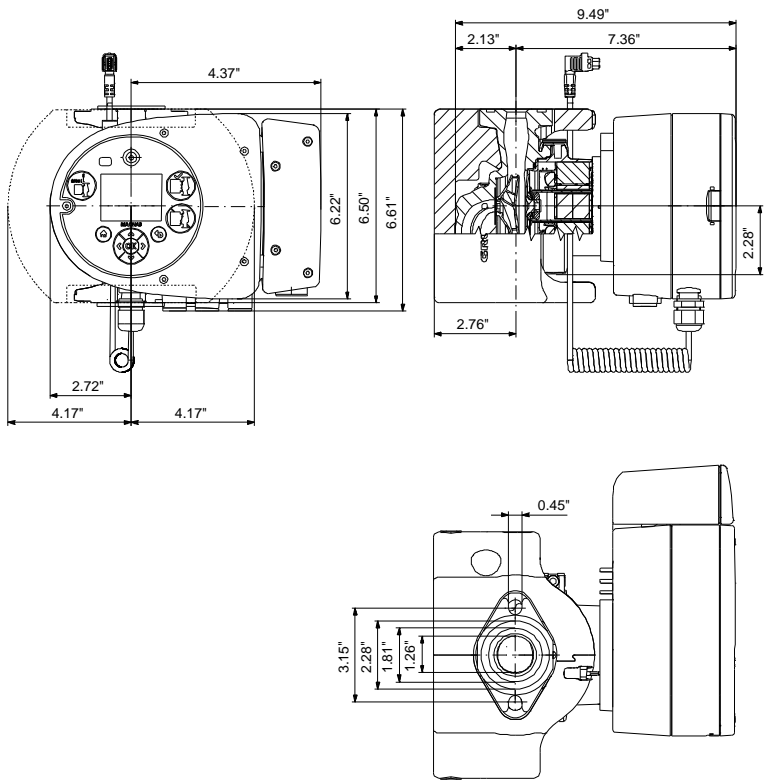
MAGNA3 32-100 F

Full range of intelligent, high-efficiency circulators for heating, cooling, ground source heat pump systems and domestic hot water applications

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data	
Flow:	27.7 US gpm	Maximum operating pressure:	174.05 psi	P1 max:	9.7 .. 178 W
Head:	19.92 ft	Liquid temperature range:	14 .. 230 °F	Rated voltage:	115-230 V
Efficiency:	57.5 %	Maximum ambient temperature:	104 °F	Main frequency:	60 Hz
Liquid:	Water	Approvals:	98544605	Enclosure class:	X4D
Temperature:	140 °F	Flange standard:	GF	Insulation class:	F
NPSH required:	ft	Pipe connection:	GF15/26/40/43		
Viscosity:	_____	Product number:	98126824		
Specific Gravity:	0.985				






Materials:

Pump housing: Cast iron
 EN-GJL-250
 ASTM A48-250B

Impeller: PES 30%GF

Count	Description
1	<p data-bbox="288 405 518 441">MAGNA3 32-100 F</p> <div data-bbox="352 465 639 725">  </div> <p data-bbox="694 712 1150 734">Product photo could vary from the actual product</p> <p data-bbox="288 743 568 766">Product No.: 98126824</p> <p data-bbox="288 801 1372 909">MAGNA3 – More than a pump With its unrivalled efficiency, all-encompassing range and built-in communication capabilities plus functionalities replacing system components, the MAGNA3 is ideal for engineers and specifiers looking to create high-performance systems for buildings.</p> <p data-bbox="288 918 1337 969">This pump in the Grundfos Master Class will fit both heating and cooling applications perfectly, making it the obvious choice for almost any building project – old or new.</p> <p data-bbox="288 1005 1361 1144">The MAGNA3 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. The innovative clamp with only one screw enables easy repositioning of the pump head. The MAGNA3 is a pump with no maintenance requirements and with extremely low Life Cycle Cost.</p> <p data-bbox="288 1180 890 1507">The pump is characterised by the following:</p> <ul data-bbox="288 1211 890 1473" style="list-style-type: none"> • controller integrated in the control box • control panel with TFT display on the control box • control box prepared for optional CIM modules • built-in differential-pressure and temperature sensor • cast-iron pump housing (depending on model) • carbon-fiber-reinforced composite rotor can • stainless-steel bearing plate and rotor cladding • aluminium alloy stator housing • air-cooled power electronics <p data-bbox="288 1480 727 1507">The MAGNA3 is a single-phase pump.</p> <p data-bbox="288 1543 1329 1944">Characteristic features</p> <ul data-bbox="288 1574 1329 1944" style="list-style-type: none"> • AUTOADAPT. • FLOWADAPT and FLOWLIMIT (more than a pump function as it reduces the need for pump throttling valves). • Proportional-pressure control. • Constant-pressure control. • Constant-temperature control. • Constant-curve duty. • Max. or min. curve duty. • Automatic Night Setback. • No external motor protection required. • Insulating shells supplied with single-head pumps for heating systems. • Large temperature range where the liquid temperature and the ambient temperature are independent of each other. <p data-bbox="288 1980 475 2007">Communication</p>



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Phone:

Date: 3/19/2020

Count	Description																																																										
	<p>The MAGNA3 enables communication via the following:</p> <ul style="list-style-type: none">• wireless Grundfos GO Remote• fieldbus communication via CIM modules• digital inputs• relay outputs• analog input (more than a pump function as heat energy meter) <p>Motor and electronic controller</p> <p>The MAGNA3 incorporates a 4-pole synchronous, permanent-magnet motor (PM motor). This motor type is characterised by higher efficiency than a conventional asynchronous squirrel-cage motor.</p> <p>The pump speed is controlled by an integrated frequency converter.</p> <p>A differential-pressure and temperature sensor is incorporated in the pump.</p> <p>Liquid:</p> <table><tr><td>Pumped liquid:</td><td>Water</td></tr><tr><td>Liquid temperature range:</td><td>14 .. 230 °F</td></tr><tr><td>Selected liquid temperature:</td><td>140 °F</td></tr><tr><td>Density:</td><td>61.35 lb/ft³</td></tr></table> <p>Technical:</p> <table><tr><td>Actual calculated flow:</td><td>27.7 US gpm</td></tr><tr><td>Resulting head of the pump:</td><td>19.92 ft</td></tr><tr><td>TF class:</td><td>110</td></tr><tr><td>Approvals on nameplate:</td><td>98544605</td></tr></table> <p>Materials:</p> <table><tr><td>Pump housing:</td><td>Cast iron</td></tr><tr><td></td><td>EN-GJL-250</td></tr><tr><td></td><td>ASTM A48-250B</td></tr><tr><td>Impeller:</td><td>PES 30%GF</td></tr></table> <p>Installation:</p> <table><tr><td>Range of ambient temperature:</td><td>32 .. 104 °F</td></tr><tr><td>Maximum operating pressure:</td><td>174.05 psi</td></tr><tr><td>Flange standard:</td><td>GF</td></tr><tr><td>Pipe connection:</td><td>GF15/26/40/43</td></tr><tr><td>Pressure stage:</td><td>PN12</td></tr><tr><td>Port-to-port length:</td><td>6 1/2 in</td></tr></table> <p>Electrical data:</p> <table><tr><td>Power input - P1:</td><td>9.7 .. 178 W</td></tr><tr><td>Main frequency:</td><td>60 Hz</td></tr><tr><td>Rated voltage:</td><td>1 x 115-230 V</td></tr><tr><td>Maximum current consumption:</td><td>0.29 .. 1.61 A</td></tr><tr><td>Enclosure class (IEC 34-5):</td><td>X4D</td></tr><tr><td>Insulation class (IEC 85):</td><td>F</td></tr></table> <p>Others:</p> <table><tr><td>Energy (EEI):</td><td>0.18</td></tr><tr><td>Net weight:</td><td>13.9 lb</td></tr><tr><td>Gross weight:</td><td>17.3 lb</td></tr><tr><td>Shipping volume:</td><td>748 ft³</td></tr><tr><td>Country of origin:</td><td>US</td></tr></table>	Pumped liquid:	Water	Liquid temperature range:	14 .. 230 °F	Selected liquid temperature:	140 °F	Density:	61.35 lb/ft ³	Actual calculated flow:	27.7 US gpm	Resulting head of the pump:	19.92 ft	TF class:	110	Approvals on nameplate:	98544605	Pump housing:	Cast iron		EN-GJL-250		ASTM A48-250B	Impeller:	PES 30%GF	Range of ambient temperature:	32 .. 104 °F	Maximum operating pressure:	174.05 psi	Flange standard:	GF	Pipe connection:	GF15/26/40/43	Pressure stage:	PN12	Port-to-port length:	6 1/2 in	Power input - P1:	9.7 .. 178 W	Main frequency:	60 Hz	Rated voltage:	1 x 115-230 V	Maximum current consumption:	0.29 .. 1.61 A	Enclosure class (IEC 34-5):	X4D	Insulation class (IEC 85):	F	Energy (EEI):	0.18	Net weight:	13.9 lb	Gross weight:	17.3 lb	Shipping volume:	748 ft ³	Country of origin:	US
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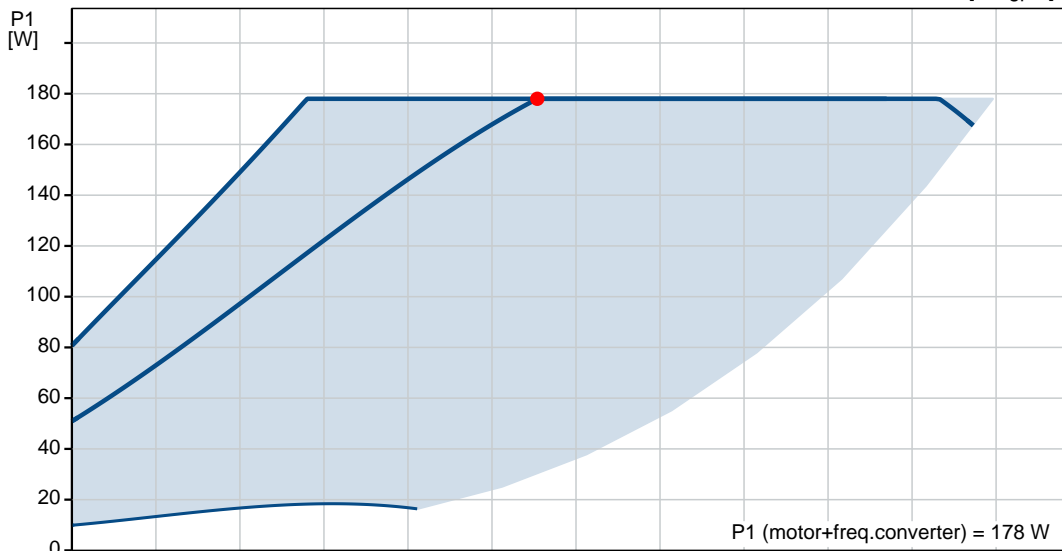
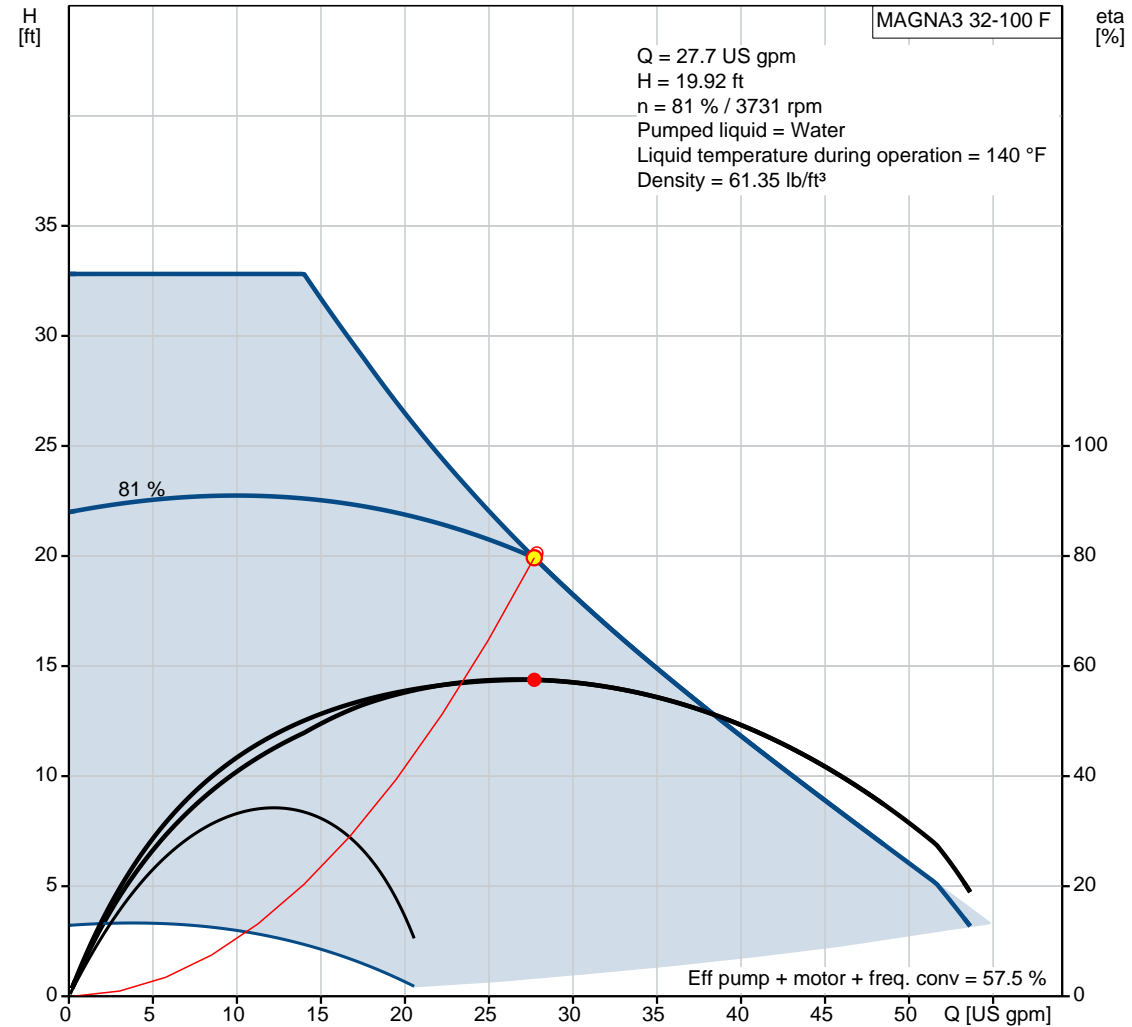
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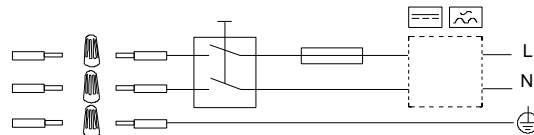
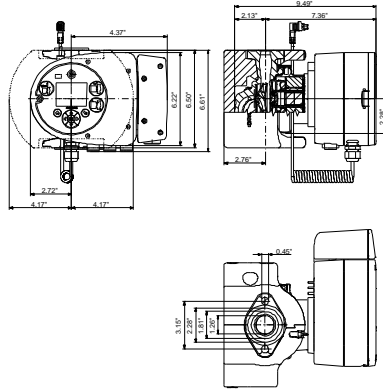
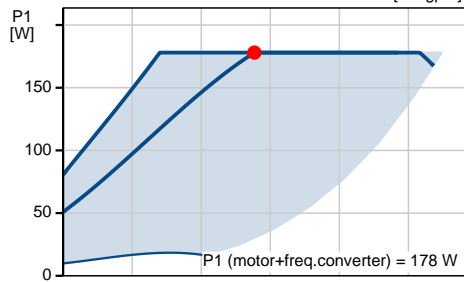
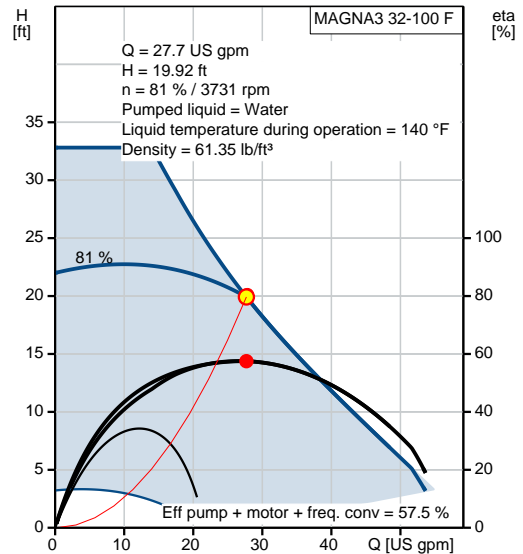
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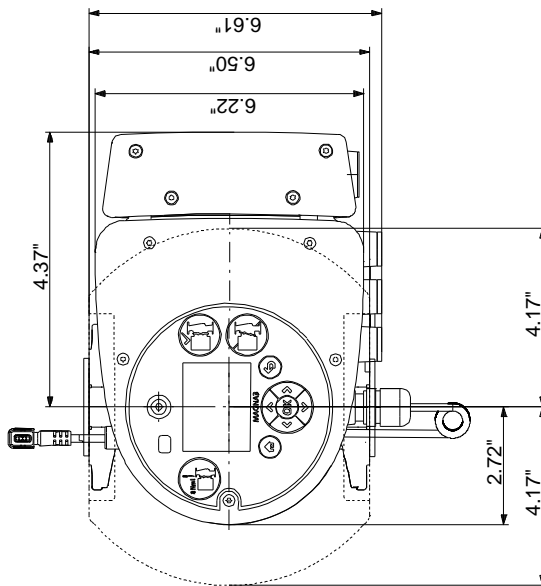
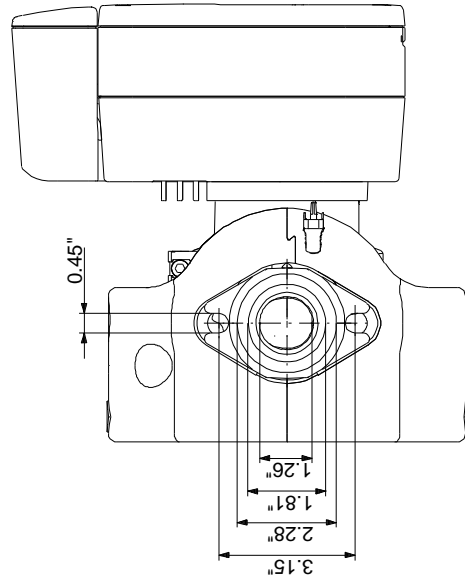
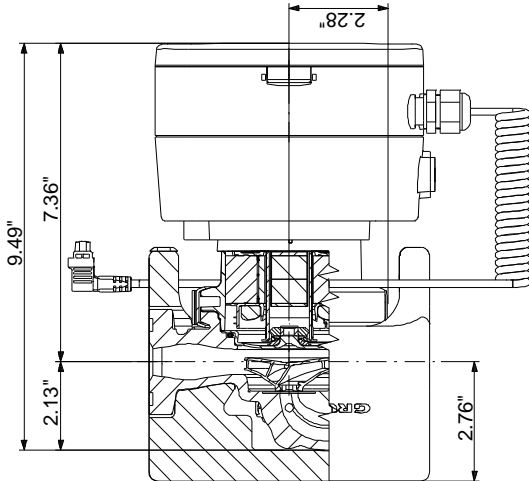
98126824 MAGNA3 32-100 F 60 Hz



Description	Value
General information:	
Product name:	MAGNA3 32-100 F
Product No.:	98126824
EAN:	5710629499868
	5710629499868
Technical:	
Actual calculated flow:	27.7 US gpm
Resulting head of the pump:	19.92 ft
Head max:	32.81 ft
TF class:	110
Approvals on nameplate:	98544605
Model:	D
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:	GF15/26/40/43
Pressure stage:	PN12
Port-to-port length:	6 1/2 in
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	14 .. 230 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft ³
Electrical data:	
Power input - P1:	9.7 .. 178 W
Main frequency:	60 Hz
Rated voltage:	1 x 115-230 V
Maximum current consumption:	0.29 .. 1.61 A
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	F
Others:	
Energy (EEI):	0.18
Net weight:	13.9 lb
Gross weight:	17.3 lb
Shipping volume:	748 ft ³
Country of origin:	US
Custom tariff no.:	8413.70.2005

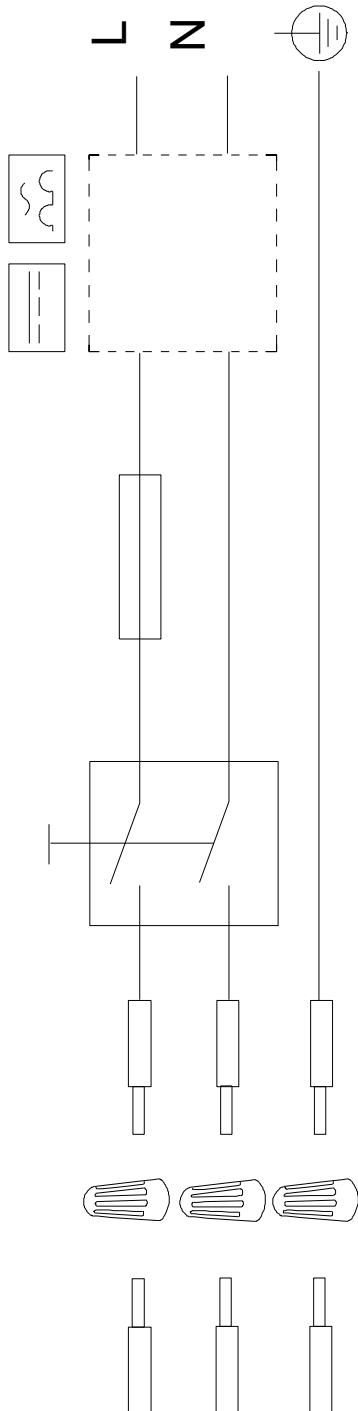


98126824 MAGNA3 32-100 F 60 Hz



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

98126824 MAGNA3 32-100 F 60 Hz



All units are [in] unless otherwise presented.