

Submittal Data

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

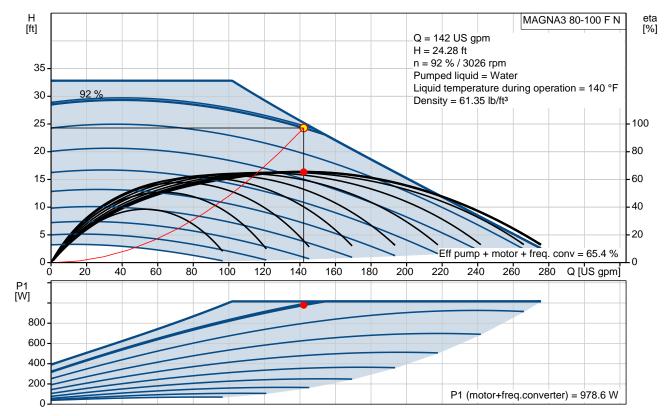
MAGNA3 80-100 F N



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

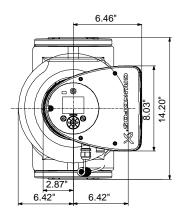
Product photo could vary from the actual product

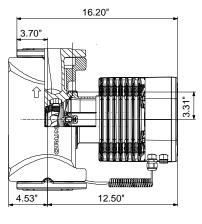
Conditions of Service		Pump Data		Motor Data			
Flow: Head: Efficiency: Liquid: Temperature: NPSH required: Viscosity: Specific Gravity:	142 US gpm 24.28 ft 65.4 % Water 140 °F ft 0.985	Maximum operating pressure: Liquid temperature range: Maximum ambient temperature: Approvals: Flange standard: Pipe connection: Product number:	174.05 psi 14 230 °F 104 °F 98544604 GF GF80 98126858	P1 max: Rated voltage: Main frequency: Enclosure class: Insulation class:	31 1017 W 208-230 V 60 Hz X4D F		

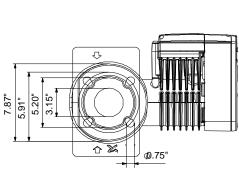




Submittal Data







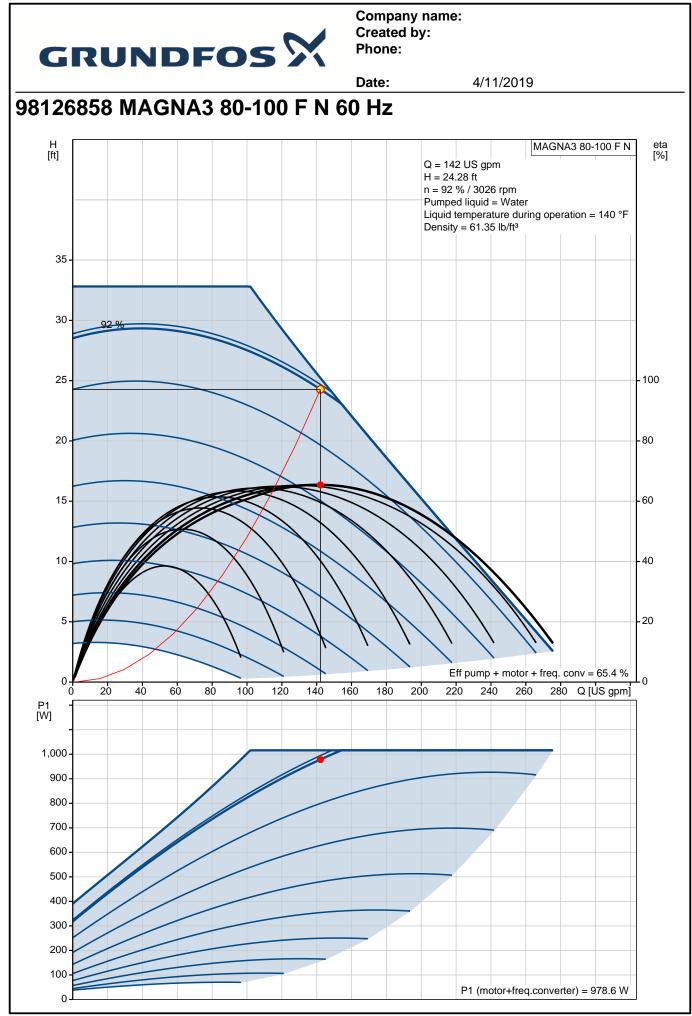
Materials:

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

C	RUNDFOS	Company n Created by: Phone:	
		Date:	4/11/2019
Count	Description		
1	MAGNA3 80-100 F N		
	Product No.: 98126858		
	MAGNA3 – More than a pump With its unrivalled efficiency, all-encompassing rang replacing system components, the MAGNA3 is idea high-performance systems for buildings.	ge and built-in c al for engineers	ommunication capabilities plus functionalities and specifiers looking to create
	This pump in the Grundfos Master Class will fit both obvious choice for almost any building project – old	n heating and co l or new.	ooling applications perfectly, making it the
	The MAGNA3 is of the canned-rotor type, i.e. pump only two gaskets for sealing. The bearings are lubri The innovative clamp with only one screw enables	cated by the pu	mped liquid.
	The MAGNA3 is a pump with no maintenance requ		
	The pump is characterised by the following: • 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 sense • 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 The MAGNA3 is a single-phase pump.	sor	
	Characteristic features • AUTOADAPT. • FLOWADAPT and FLOWLIMIT (more than a purr • Proportional-pressure control. • Constant-pressure control. • Constant-temperature 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 • Large temperature range where the liquid temperators other.	for heating syst	ems.
	Communication The MAGNA3 enables communication via the follow • wireless Grundfos GO Remote • fieldbus communication via CIM modules • digital inputs • relay outputs • analog input (more than a pump function as heat	-	
	Motor and electronic controller		



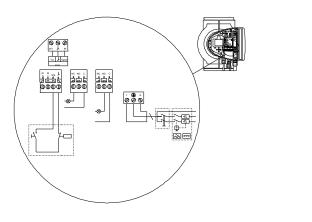
Description The MAGNA3 incorporates a 4-pole synchronous, permanent-magnet motor (PM motor). The characterised by higher efficiency than a conventional asynchronous squirrel-cage motor. The pump speed is controlled by an integrated frequency converter. A differential-pressure and temperature sensor is incorporated in the pump. Liquid: Pumped liquid: Uiquid temperature range: Liquid temperature range: Liquid temperature: A d'. 230 °F Selected liquid temperature: 140 °F Density: Calculated flow: Actual calculated flow: Actual calculated flow: Resulting head of the pump: 24.28 ft TF class: 110 Approvals on nameplate: Pump housing: Stainless steel EN 1.4308 ASTM 351 CF8 Impeller: PES 30%GF Installation: Range of ambient temperature: 32104 °F Maximum operating pressure: Flange standard: GF Pipe connection: GF80 Pressure stage: PN12 Port-to-port length: 4210 °F Density: Port-to-port length: Actual calculated flow: Actual c	This motor type is
characterised by higher efficiency than a conventional asynchronous squirrel-cage motor. The pump speed is controlled by an integrated frequency converter. A differential-pressure and temperature sensor is incorporated in the pump. Liquid: Pumped liquid: Water Liquid temperature range: 14230 °F Selected liquid temperature: 140 °F Density: 61.35 lb/ft ³ Technical: Actual calculated flow: 142 US gpm Rated flow: 142 US gpm Resulting head of the pump: 24.28 ft TF class: 110 Approvals on nameplate: 98544604 Materials: Pump housing: Stainless steel EN 1.4308 ASTM 351 CF8 Impeller: PES 30%GF Installation: Range of ambient temperature: 32104 °F Maximum operating pressure: 174.05 psi Flange standard: GF Pipe connection: GF80 Pressure stage: PN12 Port-to-port length: 14 3/16 in	. This motor type is
The pump speed is controlled by an integrated frequency converter. A differential-pressure and temperature sensor is incorporated in the pump. Liquid: Pumped liquid: Water Liquid temperature range: 14 230 °F Selected liquid temperature: 140 °F Density: 61.35 lb/ft ³ Technical: Actual calculated flow: 142 US gpm Rated flow: 142 US gpm Resulting head of the pump: 24.28 ft TF class: 110 Approvals on nameplate: 98544604 Materials: Pump housing: Stainless steel EN 1.4308 ASTM 351 CF8 Impeller: PES 30%GF Installation: Range of ambient temperature: 32 104 °F Maximum operating pressure: 174.05 psi Flange standard: GF Pipe connection: GF80 Pressure stage: PN12 Port-to-port length: 14 3/16 in	
A differential-pressure and temperature sensor is incorporated in the pump.Liquid:Pumped liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Technical:Actual calculated flow:142 US gpmRated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Liquid:WaterLiquid temperature range:14 230 °FSelected liquid temperature:140 °FDensity:61.35 lb/ft³Technical:Actual calculated flow:142 US gpmRated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Pumped liquid:WaterLiquid temperature range: $14 230 ^{\circ}\text{F}$ Selected liquid temperature: $140 ^{\circ}\text{F}$ Density: $61.35 ^{\circ}\text{Ib}/ft^3$ Technical:Actual calculated flow: $142 ^{\circ}\text{US}$ gpmRated flow: $142 ^{\circ}\text{US}$ gpmResulting head of the pump: $24.28 ^{\circ}\text{ft}$ TF class: 110 Approvals on nameplate: 98544604 Materials:Pump housing:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature: $32 104 ^{\circ}\text{F}$ Maximum operating pressure: $174.05 ^{\circ}\text{psi}$ Flange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length: $14 ^{\circ}16 ^{\circ}$	
Liquid temperature range: $14 \dots 230 ^{\circ}\text{F}$ Selected liquid temperature: $140 ^{\circ}\text{F}$ Density: $61.35 ^{\circ}\text{Ib/ft}^3$ Technical:Actual calculated flow: $142 ^{\circ}\text{US}$ gpmRated flow: $142 ^{\circ}\text{US}$ gpmResulting head of the pump: $24.28 ^{\circ}\text{ft}$ TF class: 110 Approvals on nameplate: 98544604 Materials:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature: $32 \dots 104 ^{\circ}\text{F}$ Maximum operating pressure: $174.05 ^{\circ}\text{psi}$ Flange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length: $14 ^{\circ}16 ^{\circ}$	
Selected liquid temperature: 140 °F Density: 61.35 lb/ft ³ Technical: Actual calculated flow: 142 US gpm Rated flow: 142 US gpm Resulting head of the pump: 24.28 ft TF class: 110 Approvals on nameplate: 98544604 Materials: Pump housing: Pump housing: Stainless steel EN 1.4308 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: GF80 Pressure stage: PN12 Port-to-port length: 14 3/16 in	
Density:61.35 lb/ft³Technical:Actual calculated flow:142 US gpmRated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:Pump housing:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Technical:Actual calculated flow:142 US gpmRated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:98544604Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Actual calculated flow:142 US gpmRated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:Pump housing:Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Rated flow:142 US gpmResulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:Pump housing:Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature: 32 104 °F Maximum operating pressure:Range of ambient temperature: Flange standard:GF GFPipe connection:GF80 Pressure stage: PN12 Port-to-port length:Participation:14 3/16 in	
Resulting head of the pump:24.28 ftTF class:110Approvals on nameplate:98544604Materials:98544604Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation:74.05 psiRange of ambient temperature:32 104 °F Maximum operating pressure:Flange standard:GF Pipe connection:Flange standard:GF PN12Port-to-port length:14 3/16 in	
TF class:110Approvals on nameplate:98544604Materials:98544604Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation:32 104 °FRange of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Approvals on nameplate:98544604Materials:Stainless steelPump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Materials:Pump housing:Stainless steelEN 1.4308ASTM 351 CF8Impeller:PES 30%GFInstallation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation: Range of ambient temperature:32 104 °F 174.05 psiMaximum operating pressure:174.05 psiFlange standard:GF GF80 Pressure stage:Pipe connection:GF80 PN12 Port-to-port length:14 3/16 in	
Pump housing:Stainless steel EN 1.4308 ASTM 351 CF8Impeller:PES 30%GFInstallation: Range of ambient temperature:32 104 °F 174.05 psiMaximum operating pressure:174.05 psiFlange standard:GF GF80 Pressure stage:Pipe connection:GF80 PN12 Port-to-port length:14 3/16 in	
EN 1.4308 ASTM 351 CF8 Impeller: PES 30%GF Installation: Range of ambient temperature: 32 104 °F Maximum operating pressure: 174.05 psi Flange standard: GF Pipe connection: GF80 Pressure stage: PN12 Port-to-port length: 14 3/16 in	
ASTM 351 CF8 PES 30%GF Installation: Range of ambient temperature: 32 104 °F Maximum operating pressure: 174.05 psi Flange standard: GF Pipe connection: GF80 Pressure stage: PN12 Port-to-port length: 14 3/16 in	
Installation:Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Range of ambient temperature:32 104 °FMaximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Maximum operating pressure:174.05 psiFlange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Flange standard:GFPipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Pipe connection:GF80Pressure stage:PN12Port-to-port length:14 3/16 in	
Pressure stage:PN12Port-to-port length:14 3/16 in	
Port-to-port length: 14 3/16 in	
Electrical data:	
Power input - P1: 31 1017 W	
Main frequency: 60 Hz	
Rated voltage:1 x 208-230 VMaximum current consumption:0.32 4.71 A	
Enclosure class (IEC 34-5): X4D	
Insulation class (IEC 85): F	
Others:	
Energy (EEI): 0.17	
Net weight: 66 lb	
Gross weight: 71.8 lb	
0070 H^3	
Shipping volume:2370 ft3Custom tariff no.:8413.70.2015	

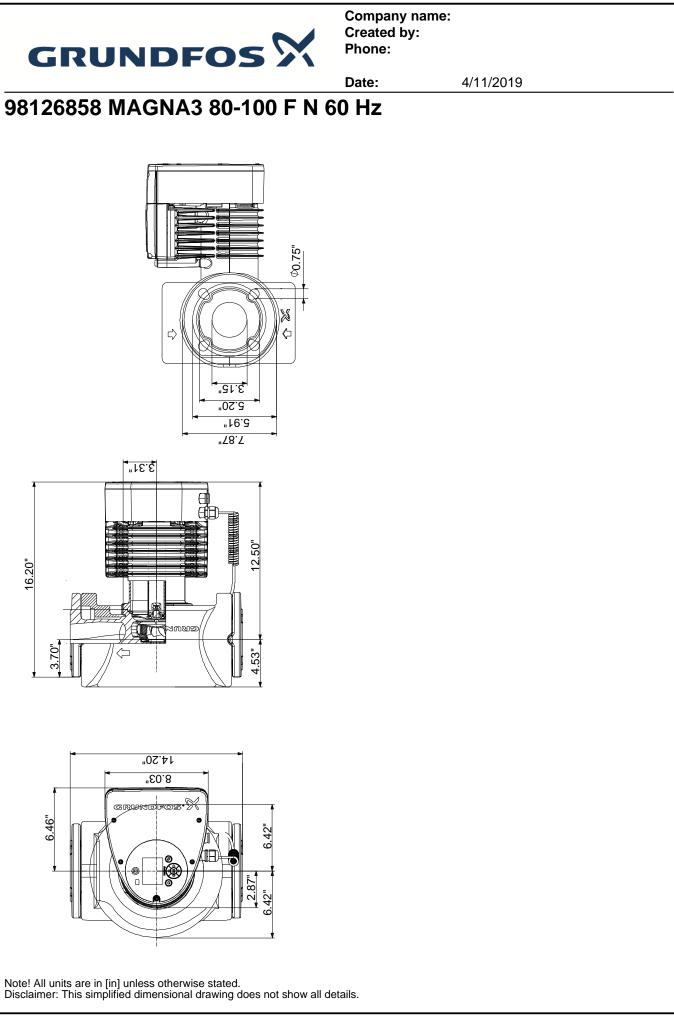


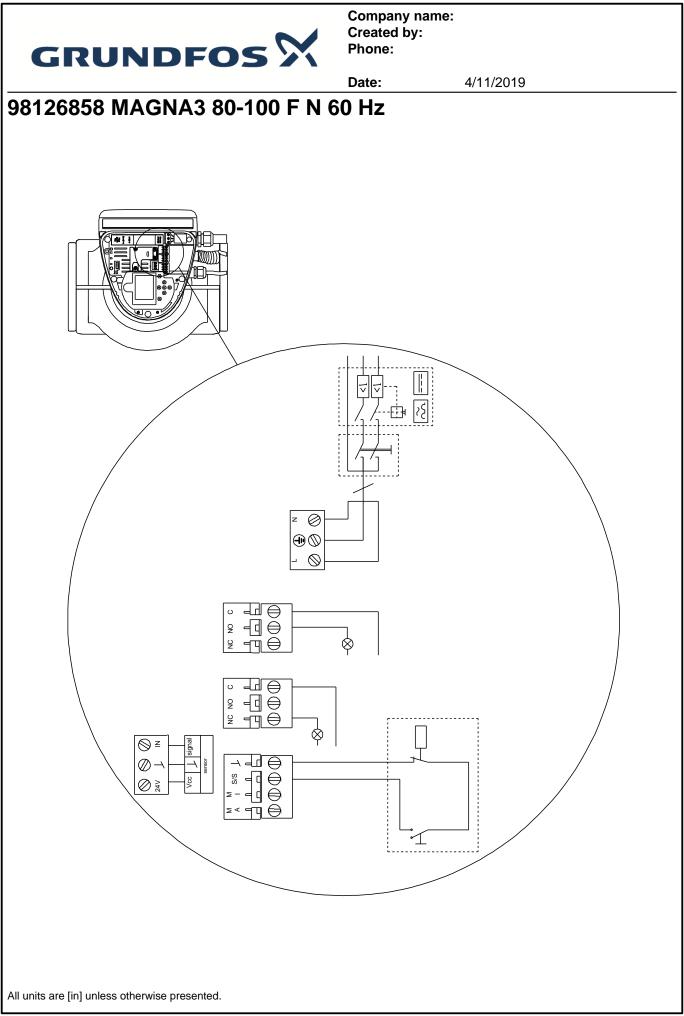
Printed from Grundfos Product Center [2019.02.002]



		Date:	4/11/2019
Description	Value	H [ft]	MAGNA3 80-100 F N
General information:		- ``	Q = 142 US gpm
Product name:	MAGNA3 80-100 F N		H = 24.28 ft n = 92 % / 3026 rpm
Product No.:	98126858	25	Pumped liquid = Water
EAN:	5710629500205	35 -	Liquid temperature during operation = 140 °F Density = 61.35 lb/ft ³
Technical:			
Actual calculated flow:	142 US gpm	30 - 92 %	
Rated flow:	142 US gpm		
Resulting head of the pump:	24.28 ft	25 -	100
Head max:	32.81 ft		
TF class:	110	20	
Approvals on nameplate:	98544604		
Model:	D	15 -	60
Materials:	_		
Pump housing:	Stainless steel	10-	40
,	EN 1.4308		X N N N N N N N N N N N N
	ASTM 351 CF8	5-	
Impeller:	PES 30%GF		
Installation:	0 00,00.		Eff pump + motor + freq. conv = 65.4% 0
Range of ambient temperature:	32 104 °F	0	50 100 150 200 Q [US gpm]
Maximum operating pressure:	174.05 psi	P1 [W]	
Flange standard:	GF	1,000 -	
Pipe connection:	GF80	-*	
Pressure stage:	PN12	800 -	
Port-to-port length:	14 3/16 in	600 -	
Liquid:		_ //	
Pumped liquid:	Water	400 -	
Liquid temperature range:	14 230 °F	200	
Selected liquid temperature:	140 °F	200	
Density:	61.35 lb/ft ³	0	P1 (motor+freq.converter) = 978.6 W
Electrical data:	01.0010/10		16.20*
Power input - P1:	31 1017 W	6.46"	3.70*
Main frequency:	60 Hz		
Rated voltage:	1 x 208-230 V		
Maximum current consumption:	0.32 4.71 A		
Enclosure class (IEC 34-5):	X4D		
Insulation class (IEC 85):	F	2.87	
Others:	1	6.42" 6.42"	
Energy (EEI):	0.17		-+
Net weight:	66 lb		
Gross weight:	71.8 lb		
Shipping volume:	2370 ft ³		
Custom tariff no.:	8413.70.2015		









4/11/2019

Order Data:

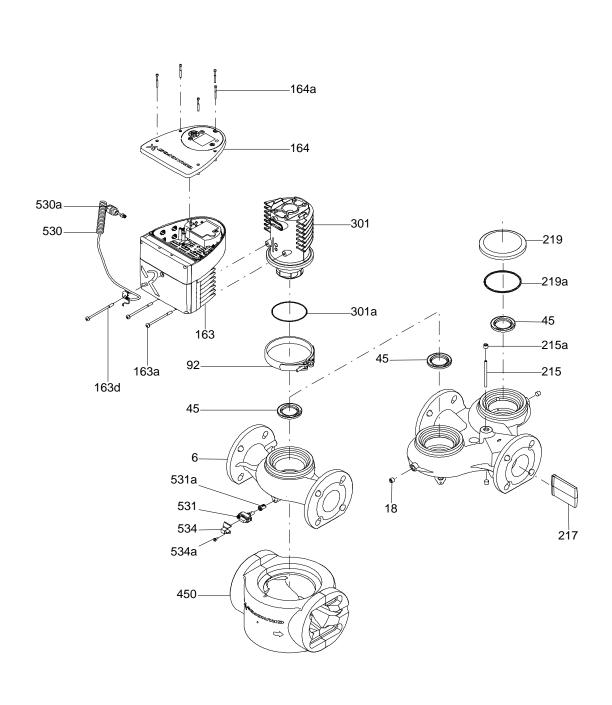
Product name:MAGNA3 80-100 F NAmount:1Product No.:98126858

Total: Price on request



4/11/2019

(TM057299 MAGNA3 750-1600W)





4/11/2019

Parts list MAGNA3 80-100 F N, Prod number 98126858 Produced After 1732 (production year and week number)

Position		Annotation	Classification data	Part No.	Co	unt	Unit
-	Control box				1		pcs
- 162	Control box cpl.					1	
	Spacer						
	Controlboard Leaded						
7a	Combi Slot Torx screw						
159a	Cable w/plug						
159b	Connector plug 3-pole						
159b	Connector plug 3-pole						
159b	Connector plug 4-pole						
159c	Pan washer head screw						
159d	Board						
160	Spacer						
163b	Compression spring						
164	Cover						
164a	Screw DELTA PT						
273b	Battery						
501	Displayboard cpl.						
163	Control box					1	
- 6	Pump housing cpl.				1		pcs
6	Pump housing cpl.					1	
45	Neck ring cpl.					1	
92	Clamp cpl.				1		pcs
163a	Pan head screw				2		pcs
163d	Pan head screw				1		pcs
301	Pump head				1		pcs
301b	Protector				1		pcs
450	Insulation				1		pcs
531	Sensor				1		pcs
534	Bracket				1		pcs
534a	Pan head thread forming screw				1		pcs