

Submittal Data

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



UPS 40-160 F

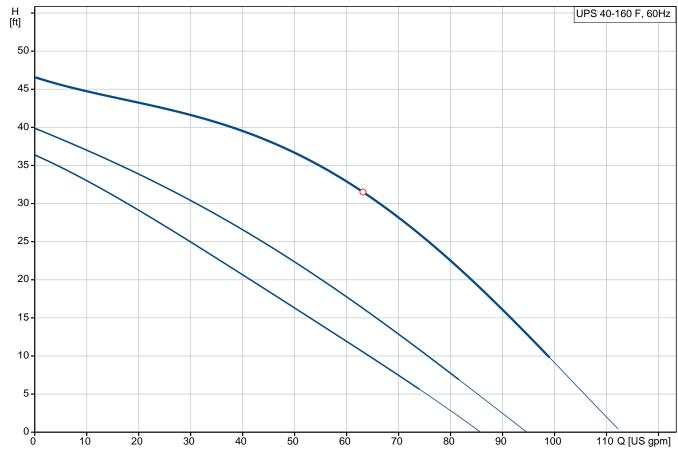
Circulator pumps

Product photo could vary from the actual product

Conditions of Service					
Flow:					
Head:					
Efficiency:					
Liquid:	Water				
Temperature:	140 °F				
NPSH required:	ft				
Viscosity:					
Specific Gravity:	0.985				

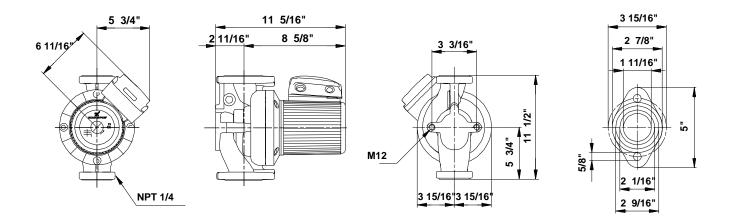
Pump Data	
Maximum operating pressure:	145 psi
Liquid temperature range:	14 248 °F
Maximum ambient temperature:	104 °F
Approvals:	CUL
Type of connection:	F
Flange standard:	USA Oval
Pipe connection:	GF 40/43
Product number:	96402784

Motor Data				
Max. power input:	800 W			
Rated voltage:	208-230 V			
Main frequency:	60 Hz			
Enclosure class:	X4D			
Insulation class:	Н			
Motor protection:	CONTACT			
Thermal protection:	external			



GRUNDFOS

Submittal Data



Materials:

Pump housing: Cast iron

EN-JL1040

ASTM 35 B - 40 B

Impeller: Stainless steel

DIN W.-Nr. 1.4301

AISI 304



Date: 2/21/2018

Tender Text



Product photo could vary from the actual product

Product No.: 96402784

UPS 40-160 F

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.

The pump is characterized by:

- * 3 speed motor.
- * Ceramic radial bearings.
- * Carbon axial bearing.
- Stainless steel rotor can, bearing plate

and rotor cladding.

- * Aluminium alloy stator housing.
- Cast iron pump housing.
- * Stator with built-in thermal switch.

The motor is a 3-phase motor.

The pump is supplied with a standard module in the terminal box.

The standard module is to be connected to the mains supply via external contactor.

Controls:

Relay: without relay

Liquid:

Pumped liquid: Water
Liquid temperature range: 14 .. 248 °F
Liquid temperature during operation: 140 °F
Density: 61.35 lb/ft³

Technical:

Approvals on nameplate: CUL

Materials:

Impeller:

Pump housing: Cast iron

EN-JL1040

ASTM 35 B - 40 B

Stainless steel

DIN W.-Nr. 1.4301



Date: 2/21/2018

AISI 304

Installation:

Range of ambient temperature: 32 .. 104 °F Maximum operating pressure: 145 psi Flange standard: **USA** Oval

Type of connection:

Pipe connection: GF 40/43 Pressure stage: 145 psi Port-to-port length: 11 1/2 in

Electrical data:

Power input in speed 1: 500 W 570 W Power input in speed 2: 800 W Max. power input: Main frequency: 60 Hz Rated voltage: 3 x 208-230 V

Current in speed 1: 1.55 A Current in speed 2: 1.75 A Current in speed 3: 2.5 A Cos phi in speed 1: 0,81 Cos phi in speed 2: 0,82

Cos phi: 0,8 Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): Η

Winding resistance: 22.8 - 30.0 ohm

Others:

Net weight: 45.4 lb Gross weight: 55.3 lb Shipping volume: 3.46 ft³



Date: 2/21/2018

Position | Count | Description

1 UPS 40-160 F



Product photo could vary from the actual product

Product No.: 96402784

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.

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The standard module is to be connected to the mains supply via external contactor.

Controls:

Relay: without relay

Liquid:

Pumped liquid: Water
Liquid temperature range: 14 .. 248 °F
Liquid temperature during operation: 140 °F
Density: 61.35 lb/ft³

Technical:

Approvals on nameplate: CUL

Materials:

Impeller:

Pump housing: Cast iron

EN-JL1040

ASTM 35 B - 40 B

Stainless steel DIN W.-Nr. 1.4301

AISI 304

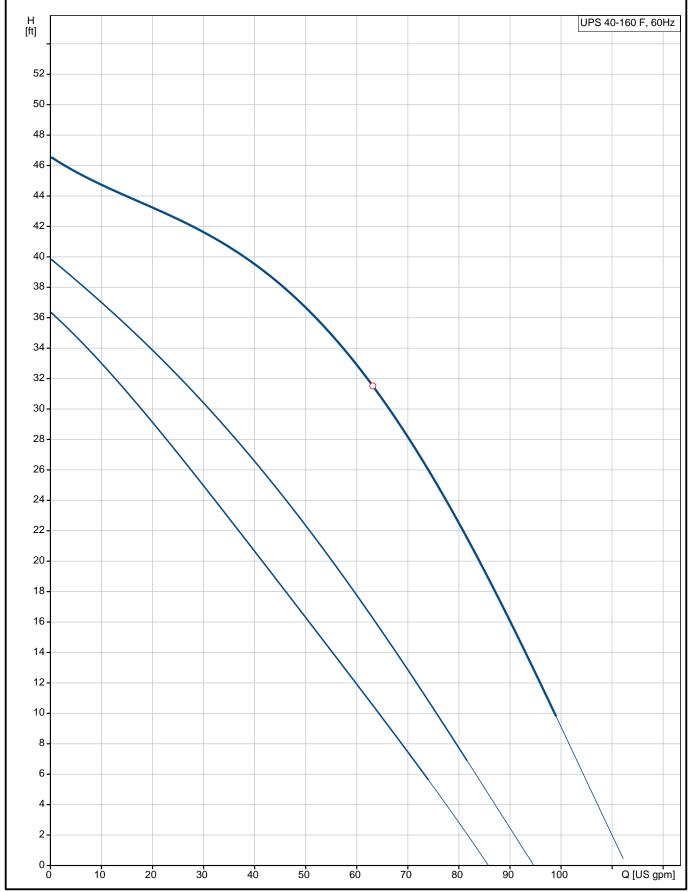


			<u> </u>	2/21/2010
Position	Count	Description		
		Installation:		
		Range of ambient temperature:	32 104 °F	
		Maximum operating pressure:	145 psi	
		Flange standard:	USA Oval	
		Type of connection:	F	
		Pipe connection:	GF 40/43	
		Pressure stage:	145 psi	
		Port-to-port length:	11 1/2 in	
			11 1/2 111	
		Electrical data:		
		Power input in speed 1:	500 W	
		Power input in speed 2:	570 W	
		Max. power input:	800 W	
		Main frequency:	60 Hz	
		Rated voltage:	3 x 208-230 V	
		Current in speed 1:	1.55 A	
		Current in speed 2:	1.75 A	
		Current in speed 3:	2.5 A	
		Cos phi in speed 1:	0,81	
		Cos phi in speed 2:	0,82	
		Cos phi:	0,8	
		Enclosure class (IEC 34-5):	X4D	
		Insulation class (IEC 85):	Н	
		Winding resistance:	22.8 - 30.0 ohm	
		Others:		
		Net weight:	45.4 lb	
		Gross weight:	55.3 lb	
		Shipping volume:	3.46 ft ³	
	I	I		



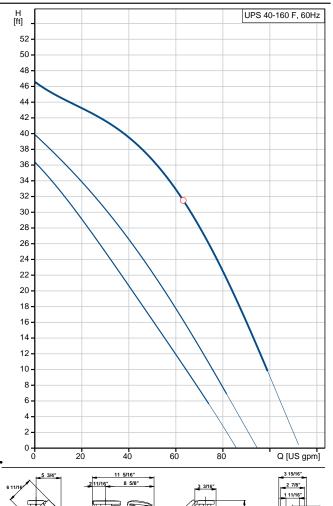
Date: 2/21/2018

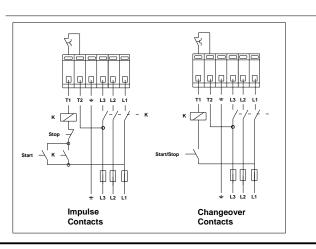
96402784 UPS 40-160 F 60 Hz





Description	Value
General information:	
Product name:	UPS 40-160 F
Product No.:	96402784
EAN:	5700390681289
EAN.	3700390081289
Technical:	
	2
Speed Number:	3
Head max:	52.5 ft
Approvals on nameplate:	CUL
Model:	С
Materials:	
Pump housing:	Cast iron
	EN-JL1040
	ASTM 35 B - 40 B
Impeller:	Stainless steel
	DIN WNr. 1.4301
	AISI 304
Installation:	
Range of ambient temperature:	32 104 °F
Maximum operating pressure:	145 psi
Flange standard:	USA Oval
Type of connection:	F
Pipe connection:	GF 40/43
Pressure stage:	145 psi
Port-to-port length:	11 1/2 in
i ort-to-port lerigin.	11 1/2 111
Liquid:	
Pumped liquid:	Water
	4
Liquid temperature during operation:	14 248 °F
Liquid temperature during operation:	140 °F
Liquid temperature during operation: Density:	140 °F
Liquid temperature during operation: Density: Electrical data:	140 °F 61.35 lb/ft³
Liquid temperature during operation: Density: Electrical data: Power input in speed 1:	140 °F 61.35 lb/ft³ 500 W
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2:	140 °F 61.35 lb/ft³ 500 W 570 W
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85):	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec: Winding resistance:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external 22.8 - 30.0 ohm
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec: Winding resistance: Controls: Relay:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external 22.8 - 30.0 ohm
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec: Winding resistance:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external 22.8 - 30.0 ohm
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Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec: Winding resistance: Controls: Relay: Pos term box:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external 22.8 - 30.0 ohm without relay 1.30H
Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage: Current in speed 1: Current in speed 2: Current in speed 3: Cos phi in speed 1: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection: Thermal protec: Winding resistance: Controls: Relay: Pos term box:	140 °F 61.35 lb/ft³ 500 W 570 W 800 W 60 Hz 3 x 208-230 V 1.55 A 1.75 A 2.5 A 0,81 0,82 0,8 X4D H CONTACT external 22.8 - 30.0 ohm





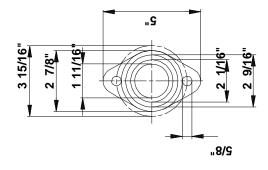


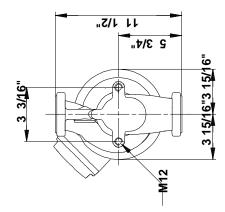
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Shipping volume:	3.46 ft ³
Sales region:	Namreg

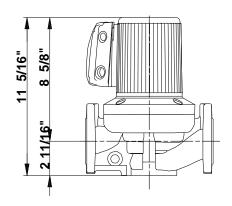


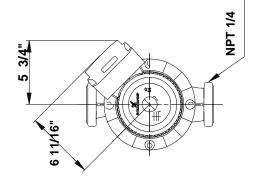
Date: 2/21/2018

96402784 UPS 40-160 F 60 Hz







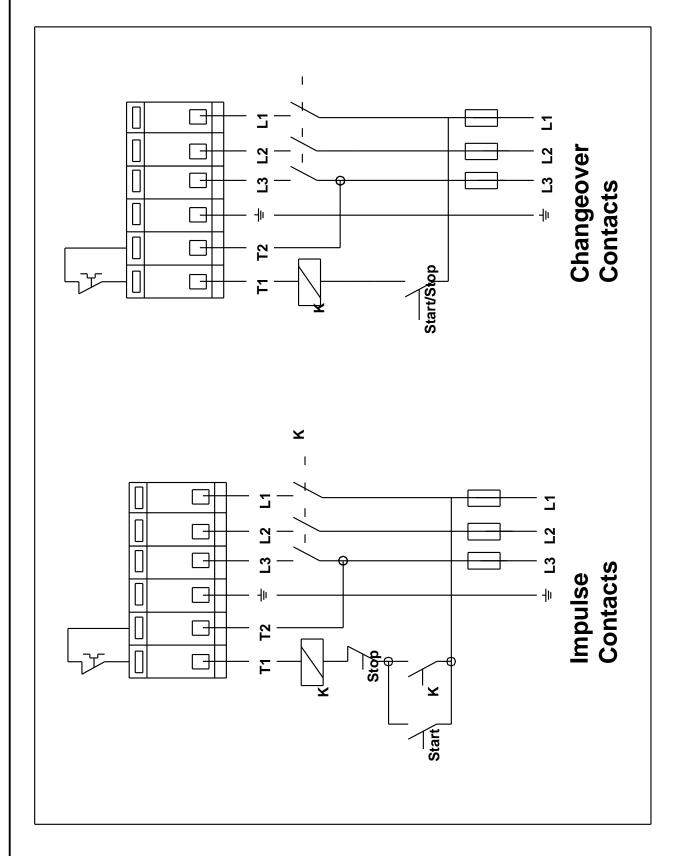


Note! All units are in [mm] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date: 2/21/2018

96402784 UPS 40-160 F 60 Hz



All units are [mm] unless otherwise presented.



Date: 2/21/2018

Order Data:

Product name: UPS 40-160 F

Amount: 1

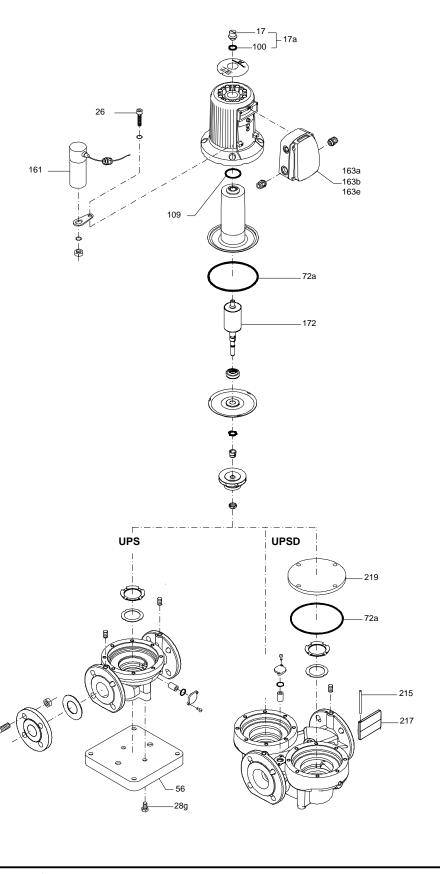
Product No.: 96402784

Total: Price on request



Date: 2/21/2018

Exploded view (TM010410 3905)

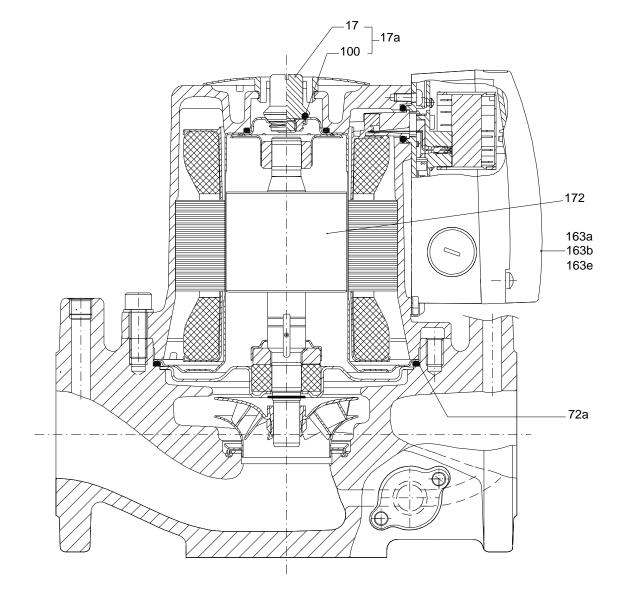


TM010410



Date: 2/21/2018

Sectional drawing (TM010371 3905)



TM010371



Date: 2/21/2018

Parts list UPS 40-160 F, Prod number 96402784 Valid from 1.9.1998 (9836)

1 OSILIOII	Description	Aimotation	Classification data	Part No.		_
	Pump				1	
	Pump w/o motor				1	
221	Flange cpl.		5' ' 511400			
201	Flange		Diameter: DN 100			
			Pressure (bar): PN 16			
203	Lock ring					
	Motor stool cpl.					
1a	Motor stool					
7	Coupling guard					
7a	Socket button head screw					
8	Coupling cpl.		Dimension: 22/42			
9	Hex socket head cap		Designation: DIN 912			
	screw		Length: 25			
			Thread: M10			
10a	Coupling half					
28	Hex socket head cap		Designation: DIN 912			
	screw		Length: 50			
			Thread: M10			
28a	Hex head screw					
32a	Washer		Designation: DIN 125 A			
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
36	Hex nut		Thread: M16			
1	Basic unit					
2a	Pump head cpl.					
2a	Pump head					
9	Hex socket head cap		Designation: DIN 912			
	screw		Length: 25			
			Thread: M10			
18	Air vent screw		modd. Wro			
10	Plug					
	Spindle					
23	Plug					
37	O-ring		Diameter: 216			
31	O-IIIIg		Material type: FKM			
			Thickness: 4			
58	Cover		THICKHESS. 4			
60	Spring		Diometer 40.0			
100	O-ring		Diameter: 16,3			
			Material type: FKM			
			Thickness: 2,4			
6b	Base cpl.		Rubber type: FKM			
	Bearing ring, stationary	/				
6	Base					
25	Plug					
31	Hex socket head cap					
32	₩er		Designation: DIN 125A			
			Inner diameter: 6,4			
			Outer diameter: 12,0			
			Thickness: 1,6			
37	O-ring		Diameter: 216			
			Material type: FKM			



Position	Description	Annotation	Classification data	Part No.	Count	Unit
			Thickness: 4			
38	O-ring		Diameter: 16,3			
			Material type: FKM			
			Thickness: 2,4			
26	Staybolt		Length: 415			
			Thread: M16			
36	Hex nut		Thread: M16			
55	Outer sleeve		Outer diameter: 216			
			Length: 271			
66a	Washer		Designation: DIN 125 A			
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
- 76	Nameplate set					
76	Plate					
76a	Rivet					
+ 105	Shaft seal		Material type: EUBV			
-	Motor				1	
151	Fan cover					
153	Angular-contact bearing					
155d	Bearing cover					
156a	End shield					
164	Terminal box cover					
163b	Terminal box cpl.		Designation: WITH STANDARD MODULE		1	pcs
163e	Terminal box cpl.		Designation: W. PROTECTION MODULE		1	pcs