

## 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

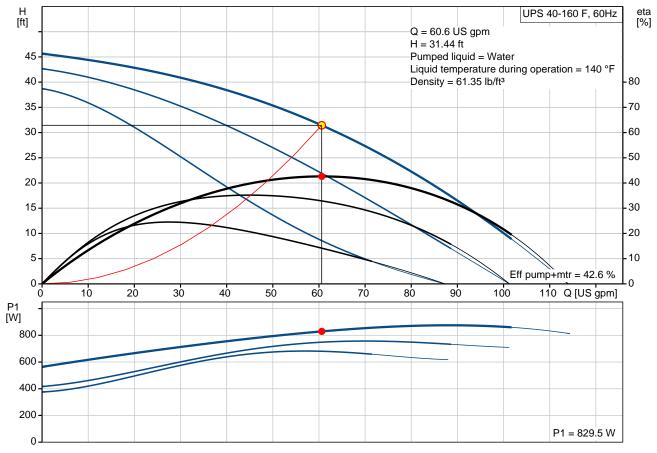
Circulator pumps

Product photo could vary from the actual product

of Service
60.6 US gpm
31.44 ft
42.6 %
Water
140 °F
ft
0.985

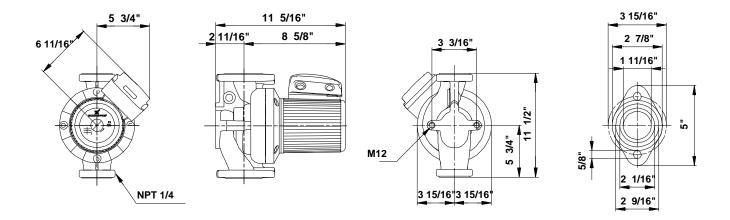
Pump Data	
Maximum operating pressure:	145 psi
Liquid temperature range:	14 248 °F
Maximum ambient temperature:	104 °F
Approvals:	CUL
Type of connection:	F
Flange standard:	USA Oval
Pipe connection:	GF 40/43
Product number:	96402783

Motor Da	ta
Max. power input:	890 W
Rated voltage:	230 V
Main frequency:	60 Hz
Enclosure class:	X4D
Insulation class:	Н
Motor protection:	CONTACT
Thermal protection:	internal



## **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.: 96402783

**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 1-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:

Actual calculated flow: 60.6 US gpm
Resulting head of the pump: 31.44 ft
Approvals on nameplate: CUL

Materials:

Pump housing: Cast iron

EN-JL1040

ASTM 35 B - 40 B



Date: 2/21/2018

Impeller: Stainless steel

DIN W.-Nr. 1.4301

**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: 690 W 760 W Power input in speed 2: 890 W Max. power input: Main frequency: 60 Hz Rated voltage: 1 x 230 V Current in speed 1: 3.45 A Current in speed 2: 3.75 A Current in speed 3: 4.2 A Cos phi in speed 1: 0,86 Cos phi in speed 2: 0,89 Cos phi: 0,92 Capacitor size - run:  $20 \mu F/400 V$ 

Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): Η

Others:

Net weight: 45.4 lb Gross weight: 55.3 lb Shipping volume: 3.46 ft<sup>3</sup>



**Date:** 2/21/2018

Position | Count | Description

1 |

**UPS 40-160 F** 



Product photo could vary from the actual product

Product No.: 96402783

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 1-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:

Actual calculated flow: 60.6 US gpm
Resulting head of the pump: 31.44 ft
Approvals on nameplate: CUL

Materials:

Impeller:

Pump housing: Cast iron

EN-JL1040

ASTM 35 B - 40 B Stainless steel

DIN W.-Nr. 1.4301



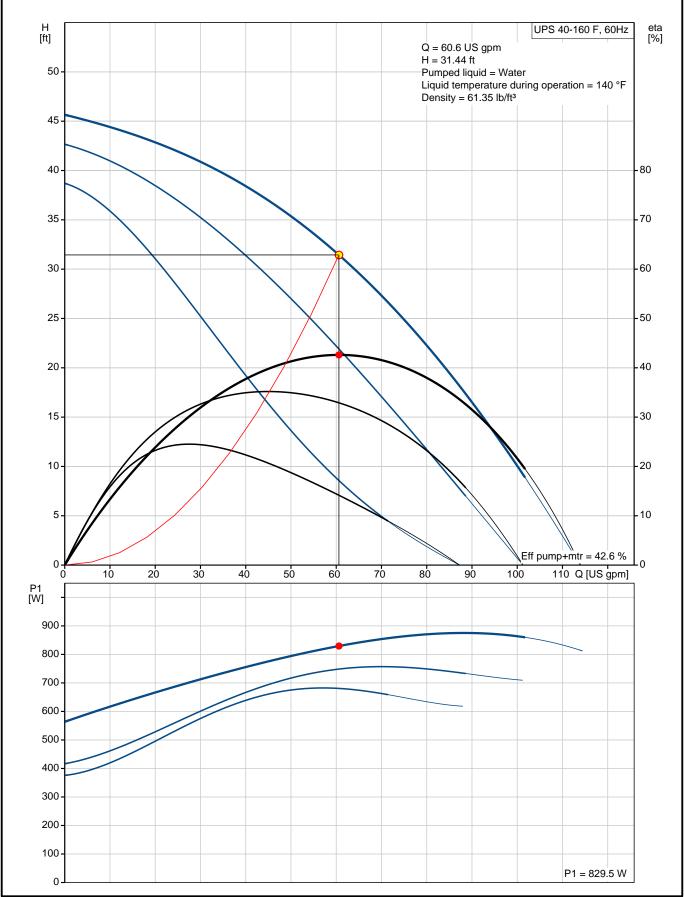
**Date:** 2/21/2018

				2/21/2010
Position	Count	Description		
			AISI 304	
		Installation:		
		Range of ambient temperature:		
		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	
		Electrical data:		
		Power input in speed 1:	690 W	
		Power input in speed 2:	760 W	
		Max. power input:	890 W	
		Main frequency:	60 Hz	
		Rated voltage:	1 x 230 V	
		Current in speed 1:	3.45 A	
		Current in speed 2:	3.75 A	
		Current in speed 3:	4.2 A	
		Cos phi in speed 1:	0,86	
		Cos phi in speed 2:	0,89	
		Cos phi:	0,92	
		Capacitor size - run: Enclosure class (IEC 34-5):	20 μF/400 V X4D	
		Insulation class (IEC 85):	H	
		insulation class (IEO 05).		
		Others:		
		Net weight:	45.4 lb	
		Gross weight:	55.3 lb	
		Shipping volume:	3.46 ft <sup>3</sup>	



**Date:** 2/21/2018

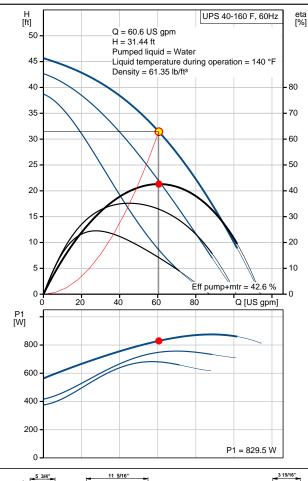
## 96402783 UPS 40-160 F 60 Hz

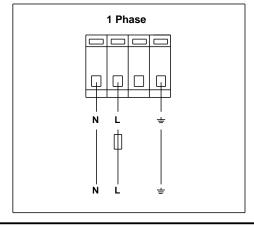




**Date:** 2/21/2018

Description	Value
General information:	
Product name:	UPS 40-160 F
Product No.:	96402783
EAN:	5700390681258
Technical:	
Speed Number:	3
Actual calculated flow:	60.6 US gpm
Resulting head of the pump:	31.44 ft
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
Tore to port longar.	11 1/2 111
Liquid:	4
Pumped liquid:	Water
Liquid temperature range:	14 248 °F
Liquid temperature during operation:	140 °F
Density:	61.35 lb/ft <sup>3</sup>
Electrical data:	
Power input in speed 1:	690 W
Power input in speed 2:	760 W
Max. power input:	890 W
Main frequency:	60 Hz
Rated voltage:	1 x 230 V
Current in speed 1:	3.45 A
Current in speed 2:	3.75 A
Current in speed 3:	4.2 A
Cos phi in speed 1:	0,86
Cos phi in speed 2:	0,89
Cos phi:	0,92
Capacitor size - run:	20 μF/400 V
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	H
Motor protection:	CONTACT
Thermal protec:	internal
R a:	5.6 - 7.35 ohm
R s1:	2.02 - 2.66 ohm
R s2:	3.75 - 4.95 ohm
Controls:	
Relay:	without relay
	·







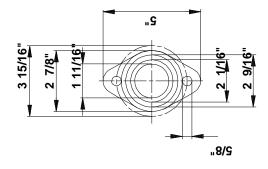
**Date:** 2/21/2018

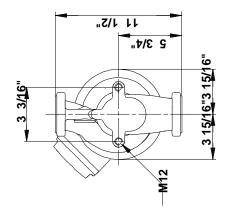
Description	Value
Pos term box:	1.30H
Others:	
Net weight:	45.4 lb
Gross weight:	55.3 lb
Shipping volume:	3.46 ft <sup>3</sup>
Sales region:	Namreg

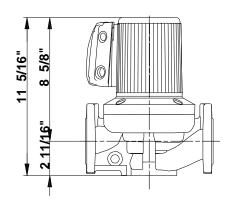


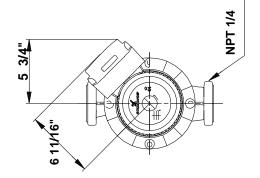
**Date:** 2/21/2018

## 96402783 UPS 40-160 F 60 Hz







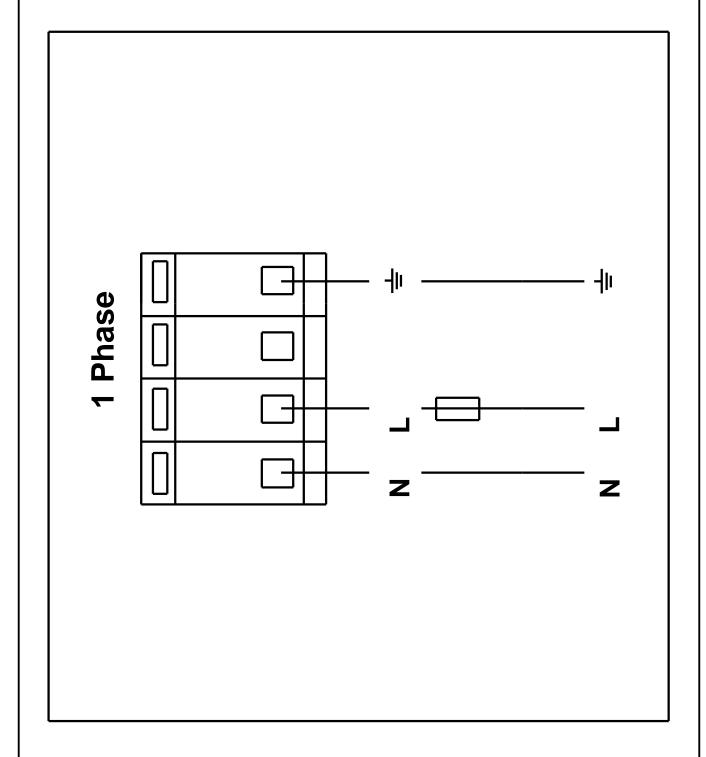


Note! All units are in [mm] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



**Date:** 2/21/2018

96402783 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

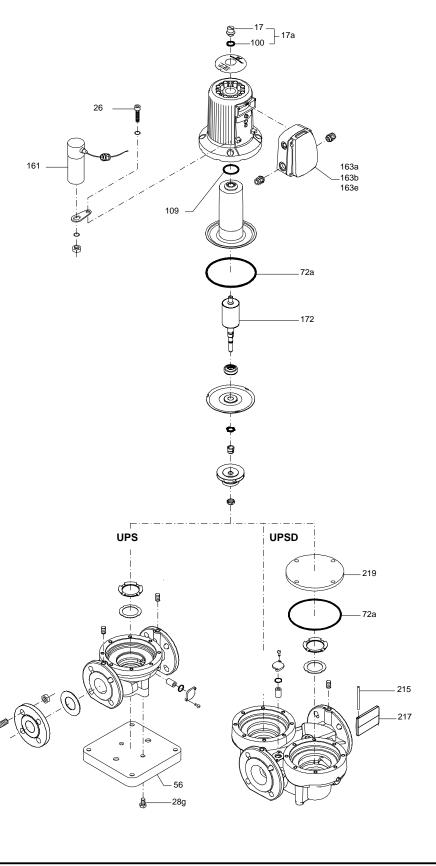
Product No.: 96402783

Total: Price on request



**Date:** 2/21/2018

**Exploded view (TM010410 3905)** 

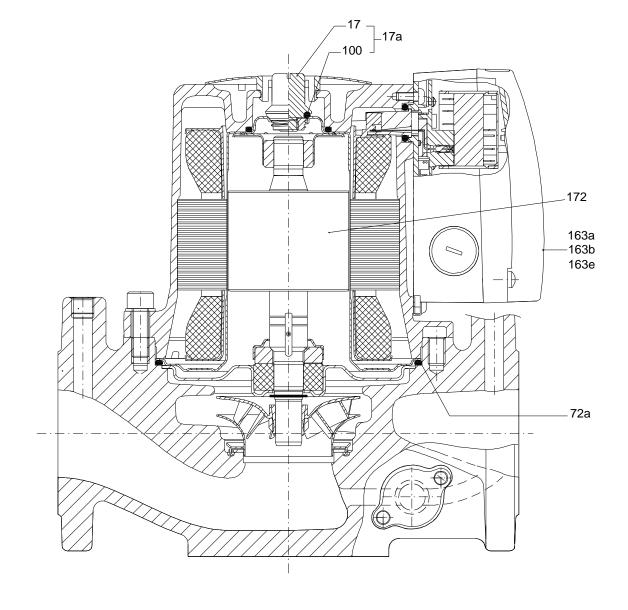


TM010410



**Date:** 2/21/2018

Sectional drawing (TM010371 3905)



TM010371



**Date:** 2/21/2018

# Parts list UPS 40-160 F, Prod number 96402783 Valid from 1.4.1995 (9513)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Capacitor				1	pcs
163a	Terminal box cpl.		Designation: WITH RELAY MODULE		1	pcs
163b	Terminal box cpl.		Designation: WITH STANDARD MODULE		1	pcs
163e	Terminal box cpl.		Designation: W. PROTECTION MODULE		1	pcs