

Submittal Data

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



UPS 32-160 F

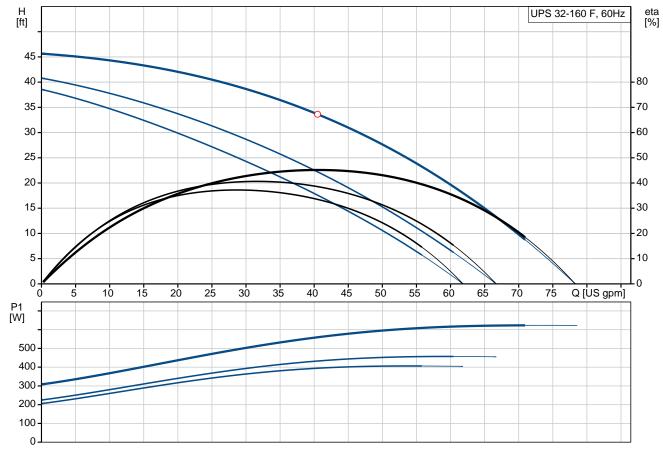
Circulator pumps

Product photo could vary from the actual product

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

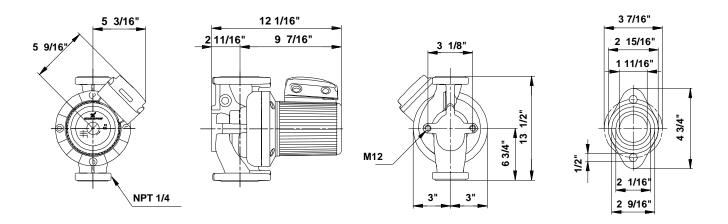
Pump Data	
Maximum operating pressure: 14	l5 psi
Liquid temperature range: 14	l 248 °F
Maximum ambient temperature: 10)4 °F
Approvals: Cl	JL
Type of connection:	
1	SA Oval
	F 40/43
Product number: 96	402736

Motor Data			
Max. power input:	600 W		
Rated voltage:	208-230 V		
Main frequency:	60 Hz		
Enclosure class:	X4D		
Insulation class:	F		
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.: 96402736

UPS 32-160 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 USA Oval

Type of connection: F

Pipe connection: GF 40/43
Pressure stage: 145 psi
Port-to-port length: 13 1/2 in

Electrical data:

Power input in speed 1: 380 W
Power input in speed 2: 430 W
Max. power input: 600 W
Main frequency: 60 Hz

Rated voltage: 3 x 208-230 V Current in speed 1: 1.12 A

Current in speed 2: 1.25 A
Current in speed 3: 1.96 A
Cos phi in speed 1: 0,85
Cos phi in speed 2: 0,86
Cos phi: 0,77
Enclosure class (IEC 34-5): X4D
Insulation class (IEC 85): F

Winding resistance: 26.0 - 34.0 ohm

Others:

Net weight: 37.7 lb Gross weight: 44.3 lb Shipping volume: 2.08 ft³



Date: 2/21/2018

Position | Count | Description

1 UPS 32-160 F



Product photo could vary from the actual product

Product No.: 96402736

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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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

AISI 304



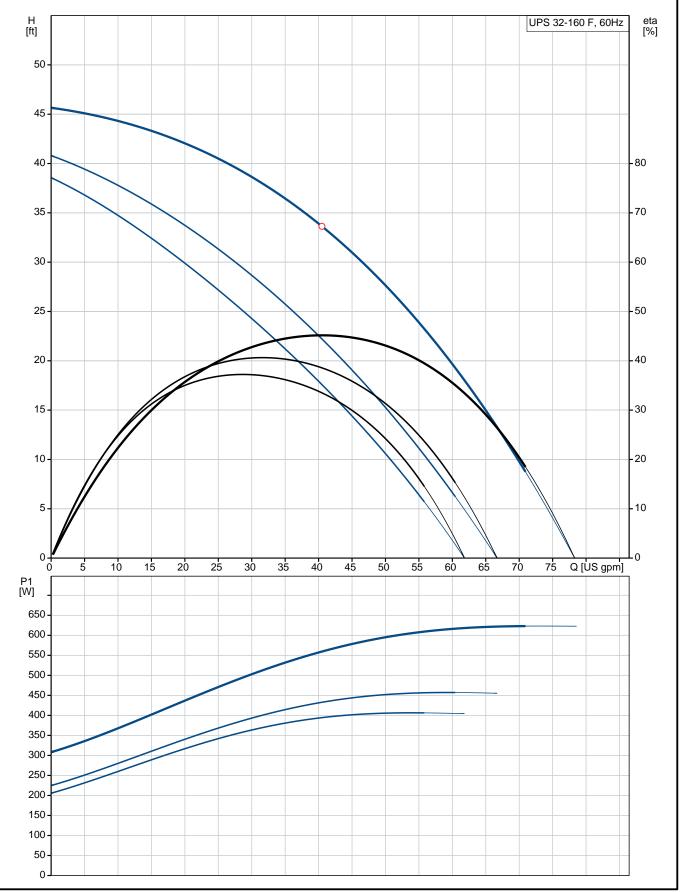
Date: 2/21/2018

			Date:	2/21/2018
Position	Count	Description		
		Installation:		
		Range of ambient temperature:	32 104 °E	
		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:	13 1/2 in	
		Electrical data:		
		Power input in speed 1:	380 W	
		Power input in speed 2:	430 W	
		Max. power input:	600 W	
		Main frequency:	60 Hz	
		Rated voltage:	3 x 208-230 V	
		Current in speed 1:	1.12 A	
		Current in speed 2:	1.25 A	
		Current in speed 3:	1.96 A	
		Cos phi in speed 1:	0,85	
		Cos phi in speed 2:	0,86	
		Cos phi:	0,77	
		Enclosure class (IEC 34-5):	X4D	
		Insulation class (IEC 85):	F	
		Winding resistance:	26.0 - 34.0 ohm	
		Willumg resistance.	20.0 - 34.0 01111	
		Others:		
		Net weight:	37.7 lb	
		Gross weight:	44.3 lb	
		Shipping volume:	2.08 ft ³	



Date: 2/21/2018

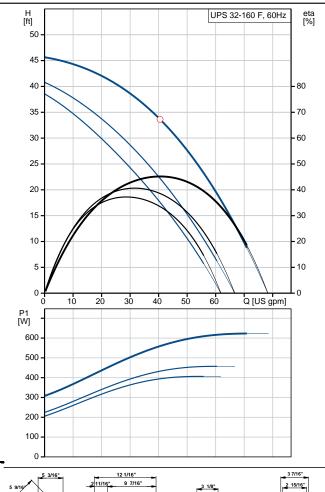
96402736 UPS 32-160 F 60 Hz

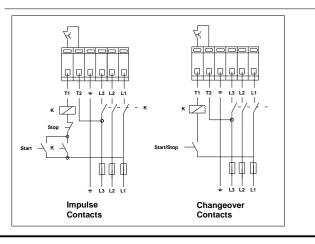




Date: 2/21/2018

-	
Description	Value
General information:	
Product name:	UPS 32-160 F
Product No.:	96402736
EAN:	5700390679507
	0.00000.000.
Technical:	
Speed Number:	3
Head max:	52.5 ft
Approvals on nameplate:	CUL
Model:	C
Model.	6
Materials:	
Pump housing:	Cast iron
Tump housing.	EN-JL1040
	ASTM 35 B - 40 B
Impollor	Stainless steel
Impeller:	DIN WNr. 1.4301
	AISI 304
Installation:	
	22 404.95
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:	13 1/2 in
Liquid:	
Pumped liquid:	Water
Pumped liquid: Liquid temperature range:	Water 14 248 °F
	4
Liquid temperature range:	14 248 °F
Liquid temperature range: Liquid temperature during operation: Density:	14 248 °F 140 °F
Liquid temperature range: Liquid temperature during operation: Density: Electrical data:	14 248 °F 140 °F
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1:	14 248 °F 140 °F
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2:	14 248 °F 140 °F 61.35 lb/ft³
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz
Liquid temperature range: Liquid temperature during operation: Density: Electrical data: Power input in speed 1: Power input in speed 2: Max. power input: Main frequency: Rated voltage:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86
Liquid temperature range: 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 3: Current in speed 3: Cos phi in speed 2: Cos phi:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85
Liquid temperature range: 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 2: Cos phi: Enclosure class (IEC 34-5):	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77
Liquid temperature range: 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 3: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85):	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F
Liquid temperature range: 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 3: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external
Liquid temperature range: 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 3: Cos phi in speed 2: Cos phi: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor protection:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm
Liquid temperature range: 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 3: Cos phi 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm
Liquid temperature range: 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 3: Cos phi in speed 3: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm
Liquid temperature range: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm without relay 1.30H
Liquid temperature range: 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 3: Cos phi in speed 3: 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:	14 248 °F 140 °F 61.35 lb/ft³ 380 W 430 W 600 W 60 Hz 3 x 208-230 V 1.12 A 1.25 A 1.96 A 0,85 0,86 0,77 X4D F CONTACT external 26.0 - 34.0 ohm







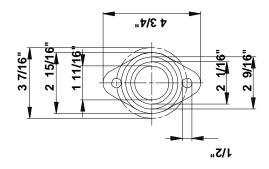
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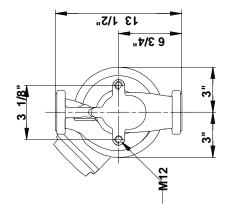
Description	Value
Shipping volume:	2.08 ft ³
Sales region:	Namreg

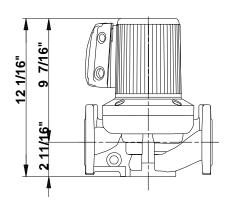


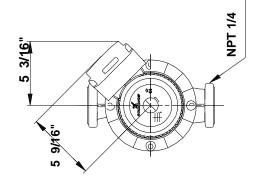
Date: 2/21/2018

96402736 UPS 32-160 F 60 Hz







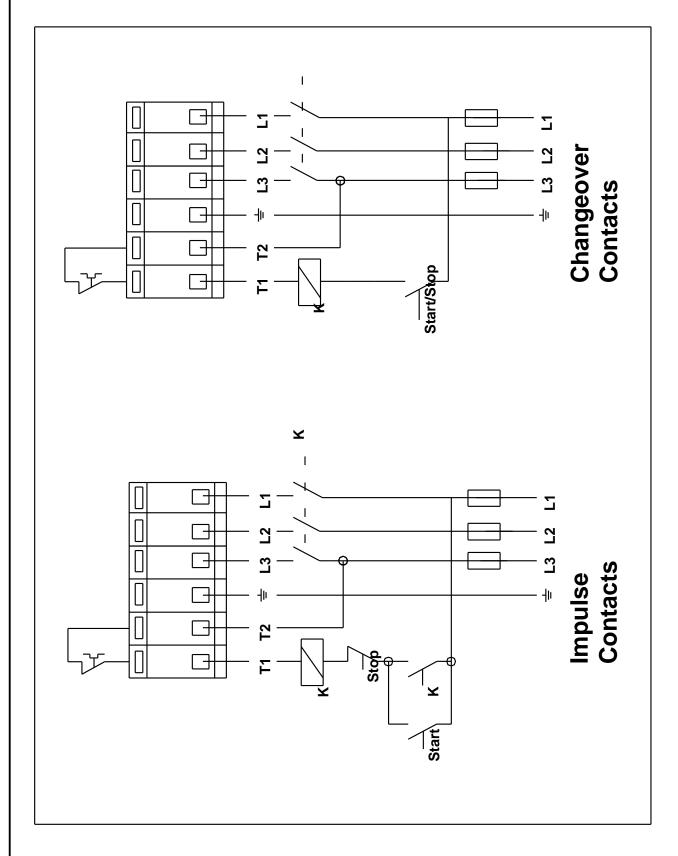


Note! All units are in [mm] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date: 2/21/2018

96402736 UPS 32-160 F 60 Hz



All units are [mm] unless otherwise presented.



Date: 2/21/2018

Order Data:

Product name: UPS 32-160 F

Amount: 1

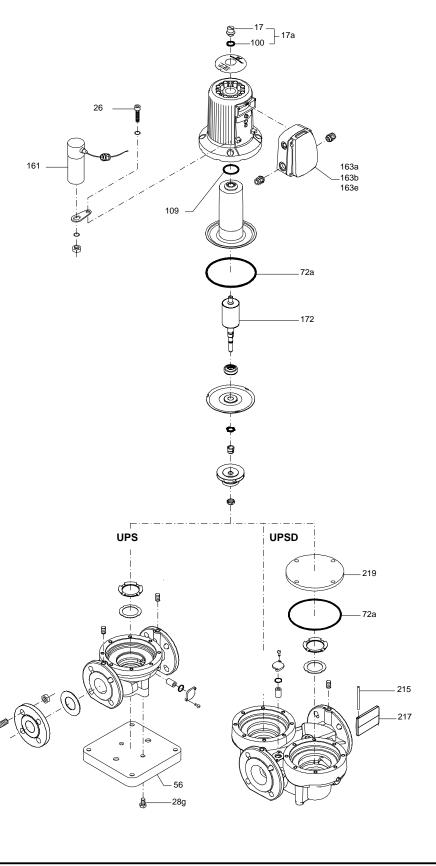
Product No.: 96402736

Total: Price on request



Date: 2/21/2018

Exploded view (TM010410 3905)

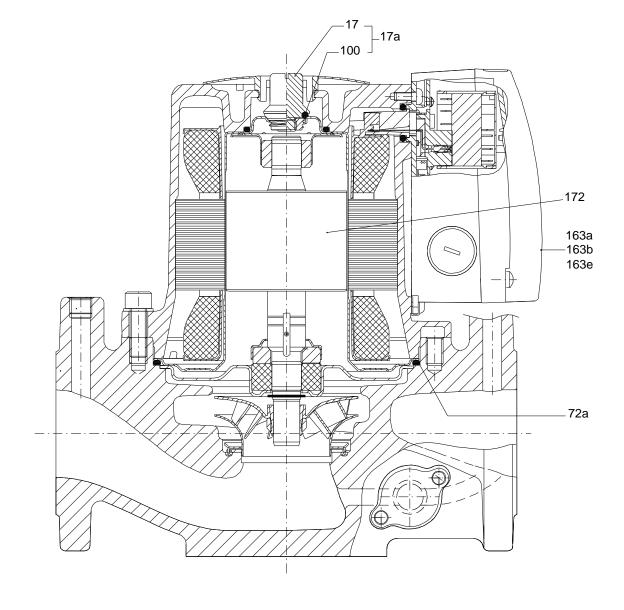


TM010410



Date: 2/21/2018

Sectional drawing (TM010371 3905)



TM010371



Date: 2/21/2018

Parts list UPS 32-160 F, Prod number 96402736 Valid from 1.4.1995 (9513)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
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