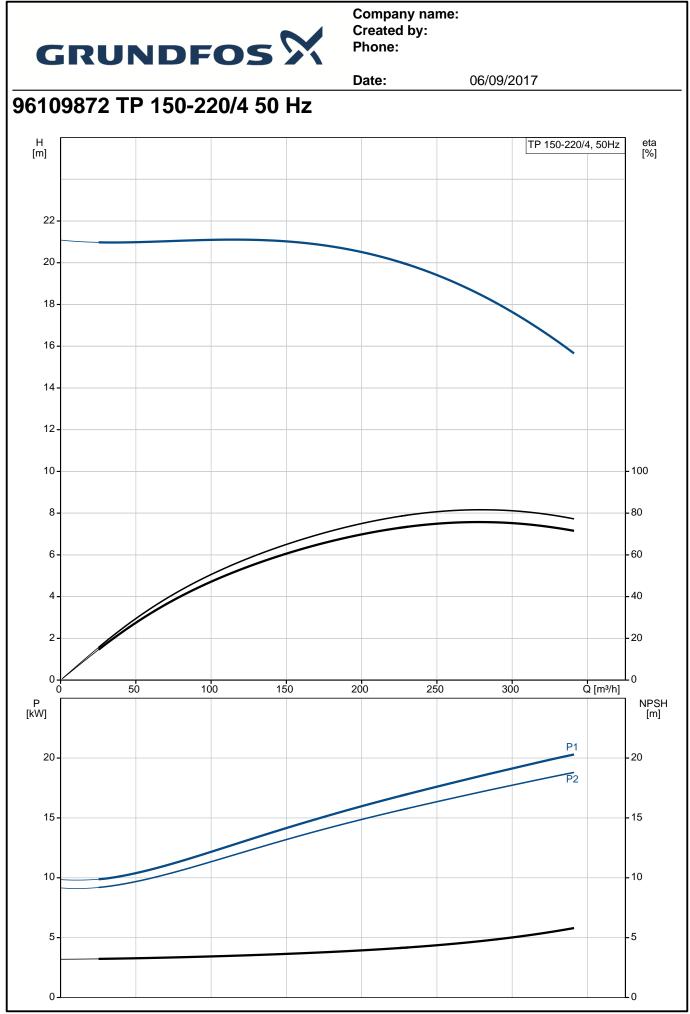
G	R	UNDFOS	Company na Created by: Phone:	ime:			
			Date:	06/09/2017			
Position	Qty.	Description					
	1	TP 150-220/4 A-F-A-BQQE					
		Product No.: 96109872					
		Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diamet The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.					
		The pump is fitted with an unbalanced rubber bellows seal. The shaft seal is according to EN 12756 Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2). The pump is fitted with a fan-cooled asynchronous motor.					
		Liquid: Pumped liquid: Liquid temperature range: Liquid temperature during opera Density:	Water -25 120 °C tion: 20 °C 998.2 kg/m³				
		Technical: Speed for pump data: Rated flow: Rated head: Actual impeller diameter: Primary shaft seal: Curve tolerance:	1460 rpm 278 m³/h 18.2 m 256 mm BQQE ISO9906:2012 3B				
		Materials: Pump housing: Impeller:	Cast iron EN-JL1040 ASTM A48-40 B Cast iron EN-JL1030 ASTM A48-30 B				
		Installation:					
		Range of ambient temperature: Maximum operating pressure: Flange standard: Pipe connection: Pump inlet: Pump outlet: Pressure stage: Port-to-port length: Flange size for motor:	-20 55 °C 16 bar DIN DN 150 DN 150 DN 150 PN 16 800 mm FF300				
		Electrical data: Motor type: IE Efficiency class: Rated power - P2: Power (P2) required by pump: Mains frequency:	SIEMENS IE3 18.5 kW 18.5 kW 50 Hz				



Company name: Created by: Phone:

		Date:	06/09/2017
Qty.	Description		
	Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load:	3 x 380-420D/660-725Y V 37,0-33,5/21,6-19,6 A 690-690 % 0,82 1470 rpm IE3 92,6% 92.6-92.6 % 93.2-93.2 %	
	Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	4 55 Dust/Jetting F	
	Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume:	EuP Standalone/Prod. 378 kg 426 kg 1.12 m ³	
	Danish:	VVS NU 38 1718.220	
	Qty.	Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85): Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight:	Qty.DescriptionRated voltage:3 x 380-420D/660-725Y VRated current:37,0-33,5/21,6-19,6 AStarting current:690-690 %Cos phi - power factor:0,82Rated speed:1470 rpmEfficiency:IE3 92,6%Motor efficiency at full load:92.6-92.6 %Motor efficiency at 3/4 load:93.2-93.2 %Motor efficiency at 1/2 load:93.2-93.2 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FOthers:Startus:Minimum efficiency index, MEI0.65ErP status:EuP Standalone/Prod.Net weight:378 kgGross weight:426 kgShipping volume:1.12 m³



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Company name: Created by: Phone:

		Date:	06/09/201	17	
Description	Value	H [m]		TP 150-220/4, 50Hz	e [%
General information:					
Product name:	TP 150-220/4 A-F-A-BQQE	22 -			
Product No:	96109872	22			
EAN number:	5700396988566	20 -			
	3700390900000	-			
Technical:		18 -			
Speed for pump data:	1460 rpm	16 -			_
Rated flow:	278 m³/h	-			
Rated head:	18.2 m	14 -			
Head max:	220 dm	10			
		12 -			
Actual impeller diameter:	256 mm	10 -			100
Primary shaft seal:	BQQE	-			
Curve tolerance:	ISO9906:2012 3B	8 -			- 80
Pump version:	A	6			60
Model:	A	6 -			60
		4 -			- 40
Materials:					
Pump housing:	Cast iron	2-			- 20
·	EN-JL1040	0			
	ASTM A48-40 B) 100 150 200	250 300 Q [m³/h]	- 0
Impeller:	Cast iron	P] NF
	EN-JL1030	[kW]		P1	[
	ASTM A48-30 B	20 -			- 20
Material code:	A 31M A40-30 B	-		P2	
	A	15 -			15
Installation:		-			
	20 55 %	10			10
Range of ambient temperature:	-20 55 °C				10
Maximum operating pressure:	16 bar	_			
Flange standard:	DIN	5 -		-	-5
Connect code:	F				
Pipe connection:	DN 150	0			Lo
Pump inlet:	DN 150				
Pump outlet:	DN 150				
Pressure stage:	PN 16				
Port-to-port length:	800 mm				
Flange size for motor:	FF300				
Liquid:					
Pumped liquid:	Water				
Liquid temperature range:	-25 120 °C				
Liquid temperature during operation:	20 °C				
Density:	998.2 kg/m ³				
Density.	330.∠ kg/III-				
Electrical data:					
	SIEMENS				
Motor type:	SIEMENS				
IE Efficiency class:	IE3				
Rated power - P2:	18.5 kW				
Power (P2) required by pump:	18.5 kW				
Mains frequency:	50 Hz				
Rated voltage:	3 x 380-420D/660-725Y V				
Rated current:	37,0-33,5/21,6-19,6 A				
Starting current:	690-690 %				
Cos phi - power factor:	0,82				
Rated speed:	1470 rpm				
Efficiency:					
	IE3 92,6%				
Motor efficiency at full load:	92.6-92.6 %				
Motor efficiency at 3/4 load:	93.2-93.2 %				
Motor efficiency at 1/2 load:	93.2-93.2 %				
Number of poles:	4				

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Company name: Created by: Phone:

		Date:	06/09/2017
Description	Value		
Enclosure class (IEC 34-5):	55 Dust/Jetting		
Insulation class (IEC 85):	F		
Motor protec:	PTC		
Motor No:	99032117		
Otherse			
Others:			
Minimum efficiency index, MEI :	0.65		
ErP status:	EuP Standalone/Prod.		
Net weight:	378 kg		
Gross weight:	426 kg		
Shipping volume:	1.12 m ³		
Danish:	VVS NO 38 1718.220		

