

	Dat	e:	16/06/2022
	Description		
	NKE 40-250/242 AA2F2AESBQQEIWA		
	Note! Product picture may d Product No.: On request	ffer from	actual product
	Non-self-priming, single-stage, centrifugal pump designed ac performance according to EN 733. Flanges are PN 16 with d axial suction port, a radial discharge port and horizontal shaf coupling, bearing bracket and impeller without disturbing the	mension . It is of	ns according to EN 1092-2. The pump has ar the back pull-out design enabling removal of
	The unbalanced rubber bellows seal is according to DIN EN		
	The pump is fitted with a foot-mounted, fan-cooled, permane mounted on a common base frame.	nt-magn	et synchronous motor. Pump and motor are
	The motor includes a frequency converter and PI controller in variable control of the motor speed, which again enables ada	the mo	tor terminal box. This enables continuously
	The product's minimum efficiency index (MEI) is greater or e considered as an indicative benchmark for best-performing v 2013.	, qual to C	.70. This is by the Commission Regulation (E
	An external sensor can be connected if controlled pump ope temperature control.	ation is	required for flow, differential pressure or
	The operating panel on the motor terminal box features a four indicator.	r-inch T	FT display, push-buttons and the Grundfos E
	The display gives an intuitive and user-friendly interface to a The push-buttons are used to navigate through the menu str enable setting of required setpoint as well as setting of pump	to "Min	access pump and performance data on site " or "Max." operation or to "Stop".
	The Grundfos Eye indicator on the operating panel provides     "Power on": Motor is running (rotating green indicator		
	<ul> <li>"Warning": Motor is still running (rotating yellow indica lights)</li> </ul>	tor light	s) or has stopped (permanently yellow indicat
	<ul> <li>"Alarm": Motor has stopped (flashing red indicator ligh Communication with the pump is also possible by means of enables further settings as well as reading out of a number of input" and total "Power consumption".</li> </ul>	Grundfos	s GO Remote (accessory). The remote contro eters such as "Actual value", "Speed", "Powe
	Pump and motor are mounted on a common steel base fram The back pull-out design together with a spacer coupling ma the pump housing and motor from the base frame.		
	This saves realignment of pump and motor after service. 1) Remove coupling.		
	<ul><li>2) Remove the bolts in the bearing bracket support foot.</li><li>3) Remove the bearing bracket from the pump housing.</li></ul>		
	P		
1	Pump		



16/06/2022

Qty. | Description

The pump housing has both a priming and a drain hole closed by plugs. The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust.

Date:

Wear rings used in pump housing and for impeller are made of bronze/brass.

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

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Seal faces:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

The shaft is made of stainless steel and has a diameter of 24 mm where the coupling is mounted.

The pump uses a spacer coupling between the pump and motor shaft.

### Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

The terminal box holds terminals for these connections:

- one dedicated digital input

- two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 3.5 V
- 5 V voltage supply to potentiometer and sensor
- one configurable digital input or open-collector output
- Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- two signal-relay outputs (potential-free contacts)
- GENIbus connection
- interface for Grundfos CIM fieldbus module.

### Further product details

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

## **Technical data**

Controls: Frequency converter: Pressure sensor:	Built-in N
Liquid: Pumped liquid: Liquid temperature range:	Water -25 120 °C



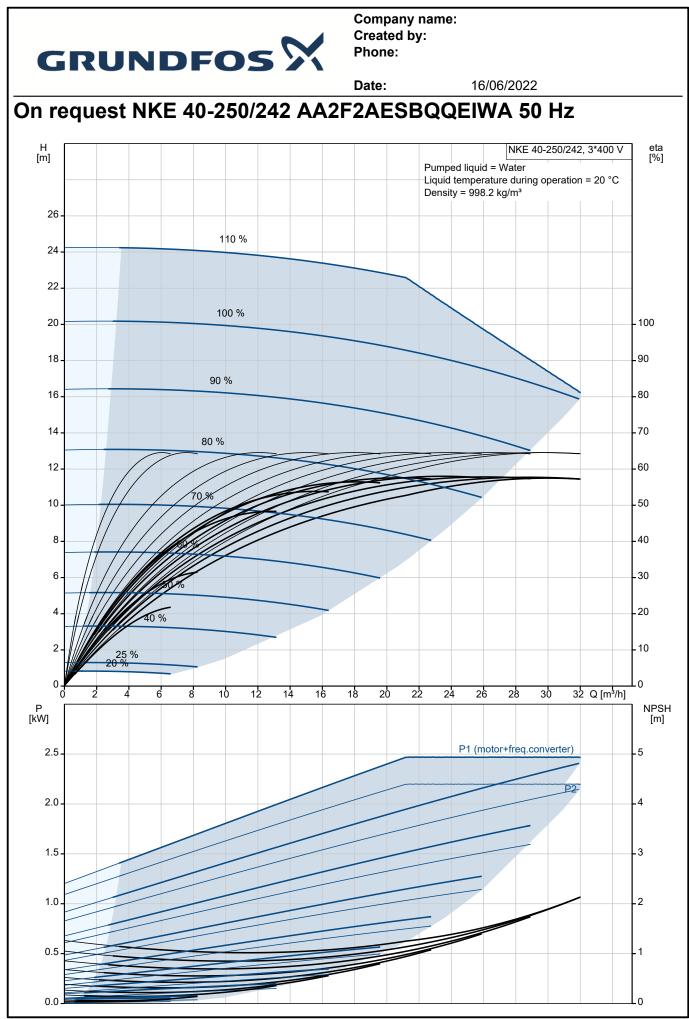
Qty.

Company name: Created by: Phone:

GRUNDFO	os X	Phone:		
		Date:	16/06/2022	
Description				
Selected liquid temperature: Density:	20 °C 998.2 kg/m³			
Technical: Pump speed on which pump dat Rated flow: Pump with motor (Yes/No): Rated head: Actual impeller diameter: Nominal impeller diameter: Code for shaft seal: Mechanical seal type: Curve tolerance: Bearing design:	a are based: 1450 r 28.7 m³/h Y 16.9 m 242 mm 250 BQQE Single ISO9906:2012 3B2 Standard	pm		
Materials: Pump housing:	Cast iron EN-GJL-250 ASTM class 35			
Wear ring: Impeller:	Brass Cast iron EN-GJL-200 ASTM class 30			
Internal pump house coating: Shaft:	CED Stainless steel EN 1.4301 AISI 304			
Installation: Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Size of outlet connection: Size of outlet connection: Pressure rating for connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No):	-20 50 °C 16 bar EN 1092-2 DIN DIN DN 65 DN 40 PN 16 Flexible w/spacer EN/ISO 5 N			
Electrical data: Motor type: IE Efficiency class: Rated power - P2: Mains frequency: Rated voltage: Rated current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor No: Bearing insulation type N-end:	100LB IE5 2.2 kW 50 Hz 3 x 380-500 V 4.30-3.60 A 0.90-0.82 180-2200 rpm 89.1% 89.1 % 4 IP55 F 99305880 STEEL BEARING			



G	RUNDF	US X	Filone.		
			Date:	16/06/2022	
.   D	escription				
0	thers:				
	linimum efficiency index, ME	El≥: 0.70			
	et weight: ross weight:	150 kg 171 kg			
	hipping volume:	0.44 m <sup>3</sup>			
	ountry of origin:	HU			
c	ustom tariff no.:	84137059			



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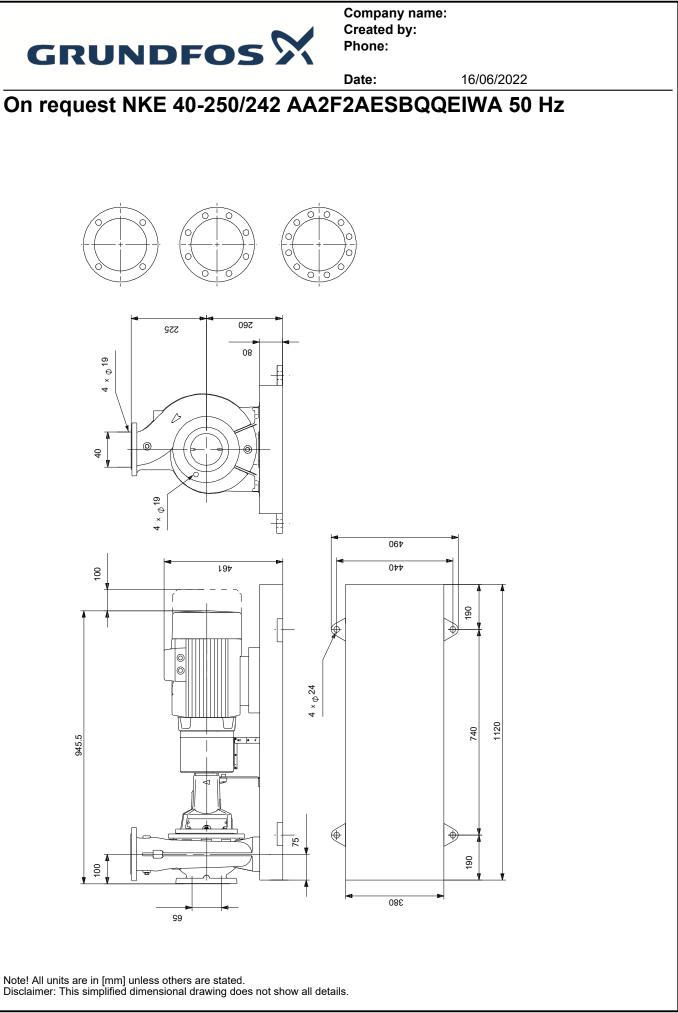
		Date:	16/06/2	022	
Description	Value	H [m]		NKE 40-250/242, 3*400	∨ eta [%]
General information:	T GINO		Pumped liquid		
Product name:	NKE 40-250/242 AA2F2AESBQQEIWA	26 <b>-</b> 24 <b>-</b>	Liquid temper Density = 998 1 ניט און	ature during operation = 20 °C 3.2 kg/m³	,
Product No:	On request	22 -			
EAN number:	On request		100 %		
Technical:		20 -			100
Pump speed on which pump data are based:	1450 rpm	18 -	90 %		- 90 - 80
Rated flow:	28.7 m³/h				
Pump with motor (Yes/No):	Y	14	80 %		- 70
Rated head:	16.9 m	12 /			- 60
Actual impeller diameter:	242 mm	10/	10%		_ 50
Nominal impeller diameter:	250	8- //			40
Shaft diameter:	24 mm				
Code for shaft seal:	BQQE	6-	11197%		- 30
Mechanical seal type:	Single	4 -	40 %		- 20
Curve tolerance:	ISO9906:2012 3B2	2 - 23	5,%		10
Pump version:	A2	0			
Bearing design:	Standard	0	5 10 15	20 25 Q [m <sup>3</sup>	/h]
Materials:		P [kW]			NPSH [m]
Pump housing:	Cast iron	2.5		P1 (motor+freq.converter)	5
Pump housing:	EN-GJL-250			P2	
Pump housing:	ASTM class 35	2.0 -			4
Wear ring:	Brass	1.5 -			3
Impeller:	Cast iron				
Impeller:	EN-GJL-200	1.0			2
Impeller:	ASTM class 30				
Internal pump house coating:	CED	0.5			
Material code:	A	0.0			0
Code for rubber:	E				
Shaft:	Stainless steel				
Shaft:	EN 1.4301	<del>r</del>	945.5		
Shaft:	AISI 304			40 4 × •19	(- )
Installation:				4 x <b>0</b> <sup>19</sup>	
Range of ambient temperature:	-20 50 °C	┈╶┊┼╣╽╠┲╾			6200
Maximum operating pressure:	16 bar	── +₩∭₽			5.0
Pipe connection standard:	EN 1092-2		÷		
Type of inlet connection:	DIN	75	4 x • 24	. т	
Type of outlet connection:	DIN	<b>/</b>		Ţ	000
Size of inlet connection:	DN 65		40	Q8	
Size of outlet connection:	DN 40				
Pressure rating for connection:	PN 16	190	740	<u>_</u>	
Coupling type:	Flexible w/spacer		1120		
Base frame design:	EN/ISO				
Code for base frame:	5				
Grouting (Yes/No):	N				
Connect code:	F				
Liquid:			<u>i l'i l'i l'i l'i l'i l'i l'i l'i l'i l'</u>		
Pumped liquid:	Water				
Liquid temperature range:	-25 120 °C				
Selected liquid temperature:	20 °C				
Density:	998.2 kg/m <sup>3</sup>		17 Productions 17 Productions 17 Productions 17 AD		
Electrical data:					
Motor type:	100LB	00			
IE Efficiency class:	IE5				
Rated power - P2:	2.2 kW				
Mains frequency:	50 Hz		8 65Hbas 8 3 640 33 -54 V		
Rated voltage:	3 x 380-500 V				
Rated current:	4.30-3.60 A		11 - 23 - 20 - 23 - 20 - 24 - 24 - 24 - 24 - 24 - 24 - 24		
	4.00-0.00 A				

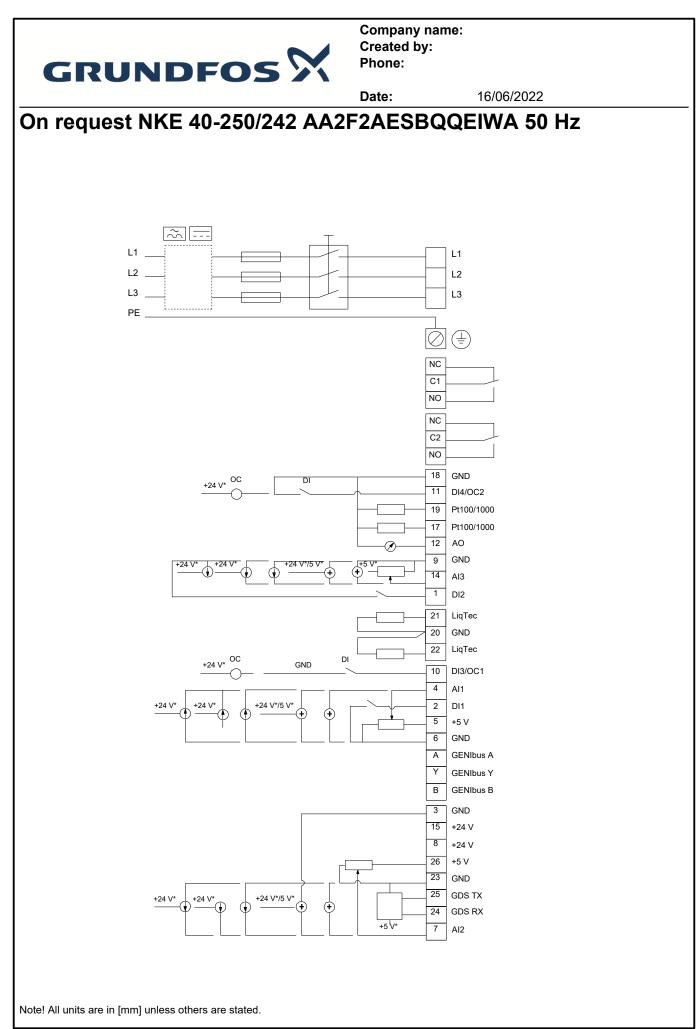
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		Date:
Description	Value	
Cos phi - power factor:	0.90-0.82	
Rated speed:	180-2200 rpm	
Efficiency:	89.1%	
Motor efficiency at full load:	89.1 %	
Number of poles:	4	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	ELEC	
Motor No:	99305880	
Bearing insulation type N-end:	STEEL BEARING	
Controls:		
Control panel:	HMI300 - Advanced	
Function Module:	FM300 - Advanced	
Frequency converter:	Built-in	
Pressure sensor:	Ν	
Others:		
Minimum efficiency index, MEI ≥:	0.70	
Net weight:	150 kg	
Gross weight:	171 kg	
Shipping volume:	0.44 m³	
Country of origin:	HU	
Custom tariff no.:	84137059	







16/06/2022

# Order Data:

Product name:NKE 40-250/242Amount:1Product No:On request

Total: Price on request