Qty.	Description
1	**NK 100-200/214 AA2F2AESBQQEIW5**

Note! Product picture may differ from actual product

Product No.:   98972412

Non-self-priming, single-stage, centrifugal pump designed according to ISO 5199 with dimensions and rated performance according to EN 733. Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, a radial discharge port and horizontal shaft. It is of the back pull-out design enabling removal of the coupling, bearing bracket and impeller without disturbing the motor, pump housing or pipework.

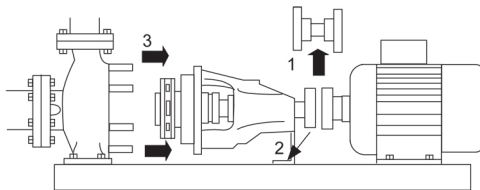The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

Pump and motor are mounted on a common steel base frame in accordance with ISO 3661.

The back pull-out design together with a spacer coupling makes it possible to service the pump without dismantling the pump housing and motor from the base frame.

This saves realignment of pump and motor after service.

   1) Remove coupling.
   2) Remove the bolts in the bearing bracket support foot.
   3) Remove the bearing bracket from the pump housing.

Pump

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.

{IMG Filename: GRALON_NB-NK-G_SHAFTSEAL_Bxxx.gif }
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 32 mm where the coupling is mounted.

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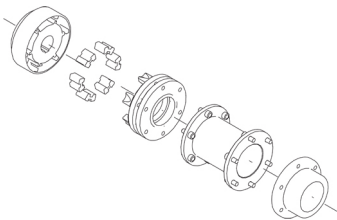
Motor

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 IE3 in accordance with IEC 60034-30-1.

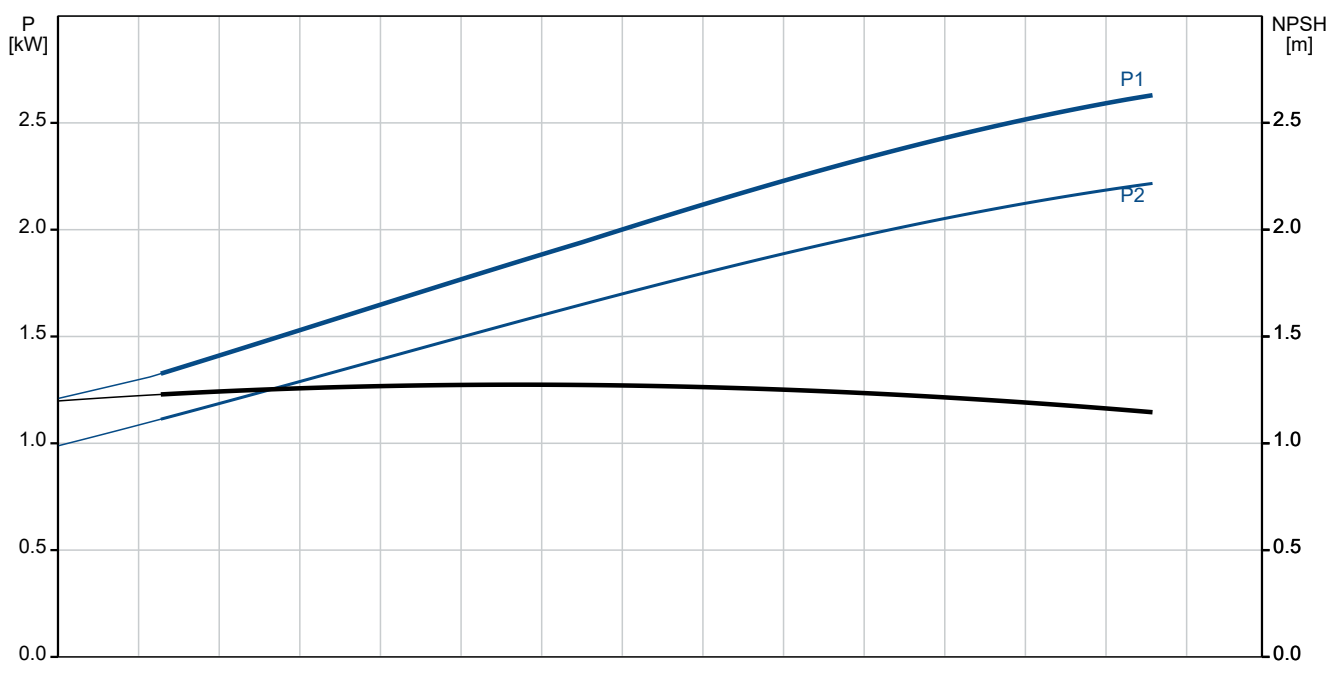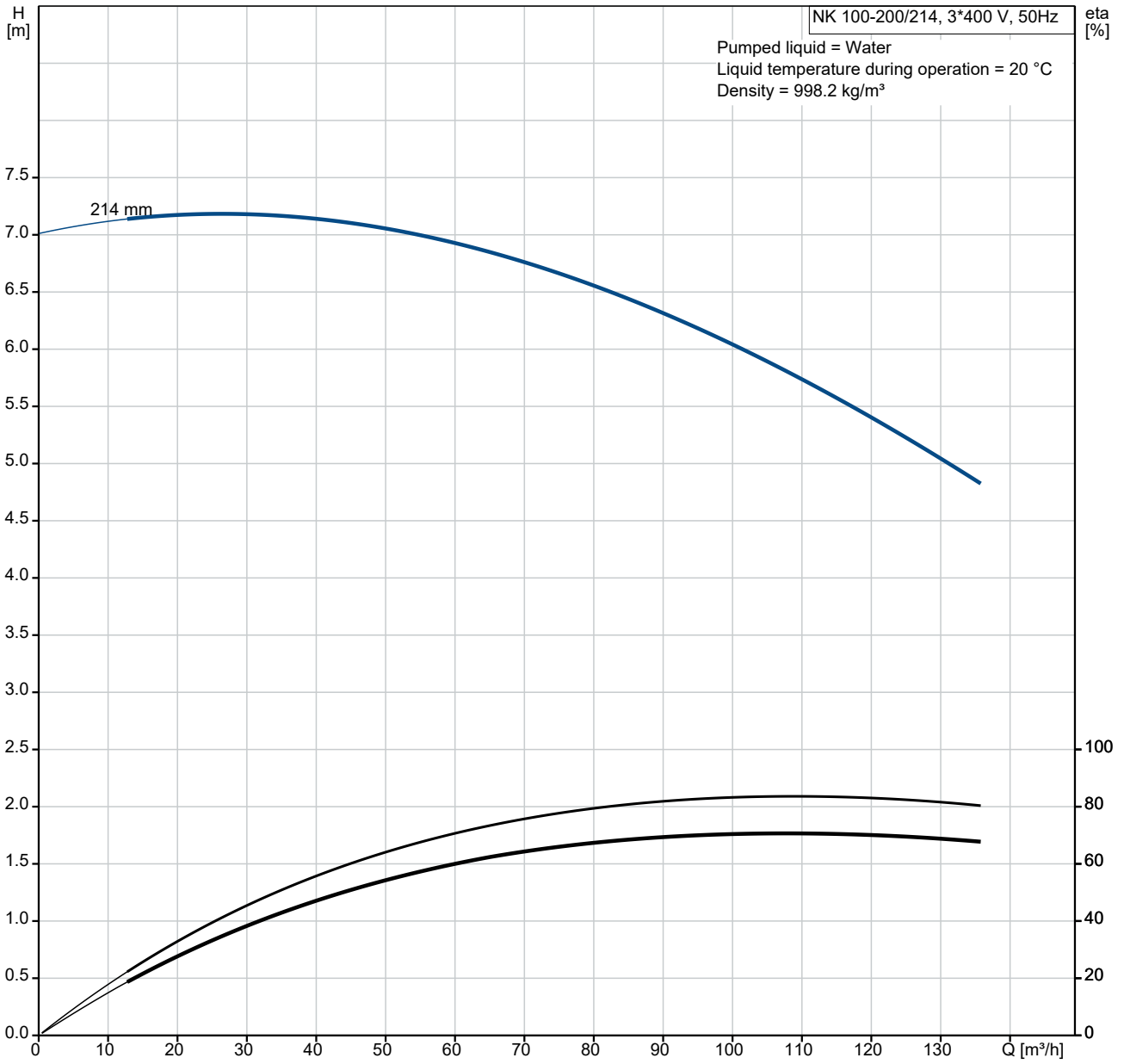| Qty.	Description
1	The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1). The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

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: NONE
Pressure sensor: N

Liquid:
Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:
Pump speed on which pump data are based: 970 rpm
Rated flow: 110 m³/h
Pump with motor (Yes/No):   Y
Rated head: 5.3 m
Actual impeller diameter: 214 mm
Nominal impeller diameter: 200
Code for shaft seal: BQQE
Mechanical seal type: Single
Curve tolerance: ISO9906:2012 3B2
Bearing design: Standard

Materials:
Pump housing: Cast iron
                              EN-GJL-250
                              ASTM class 35
Wear ring: Brass
Impeller: Cast iron
                              EN-GJL-200
                              ASTM class 30
Internal pump house coating: CED
Shaft: Stainless steel
                              EN 1.4301
                              AISI 304

Installation:
t max amb: 55 °C
Maximum operating pressure: 16 bar
Pipe connection standard: EN 1092-2
Type of inlet connection: DIN
Type of outlet connection: DIN
Size of inlet connection: DN 125
Size of outlet connection: DN 100
Pressure rating for connection: PN 16
Coupling type: Flexible w/spacer
Base frame design: EN/ISO
Code for base frame: 6
Grouting (Yes/No):   N

Electrical data:

Qty.	Description	
1	Motor type:	SIEMENS
	IE Efficiency class:	IE3
	Rated power - P2:	2.2 kW
	Mains frequency:	50 Hz
	Rated voltage:	3 x 220-240D/380-420Y V
	Rated current:	8.7/5 A
	Starting current:	560-560 %
	Cos phi - power factor:	0.75
	Rated speed:	970 rpm
	Efficiency:	IE3 84,3%
	Motor efficiency at full load:	84.3-84.3 %
	Motor efficiency at 3/4 load:	85-85 %
	Motor efficiency at 1/2 load:	83.9-83.9 %
	Number of poles:	6
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	98957421
	Bearing insulation type N-end:	STEEL BEARING
	Others:	
	Minimum efficiency index, MEI ≥:	0.65
	Net weight:	214 kg
	Gross weight:	323 kg
	Shipping volume:	1.11 m³
	Country of origin:	HU
	Custom tariff no.:	84137059

98972412 NK 100-200/214 AA2F2AESBQQEIW5 50 Hz

NK 100-200/214, 3*400 V, 50Hz
Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³

Description	Value
General information:	
Product name:	NK 100-200/214 AA2F2AESBQQEIW5
Product No:	98972412
EAN number:	5712604484777
Technical:	
Pump speed on which pump data are based:	970 rpm
Rated flow:	110 m³/h
Pump with motor (Yes/No):	Y
Rated head:	5.3 m
Actual impeller diameter:	214 mm
Nominal impeller diameter:	200
Shaft diameter:	32 mm
Code for shaft seal:	BQQE
Mechanical seal type:	Single
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A2
Bearing design:	Standard
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Wear ring:	Brass
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Internal pump house coating:	CED
Material code:	A
Code for rubber:	E
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
Installation:	
t max amb:	55 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Type of inlet connection:	DIN
Type of outlet connection:	DIN
Size of inlet connection:	DN 125
Size of outlet connection:	DN 100
Pressure rating for connection:	PN 16
Coupling type:	Flexible w/spacer
Base frame design:	EN/ISO
Code for base frame:	6
Grouting (Yes/No):	N
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	2.2 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-420Y V
Rated current:	8.7/5 A
Starting current:	560-560 %
Cos phi - power factor:	0.75
Rated speed:	970 rpm
Efficiency:	IE3 84,3%
Motor efficiency at full load:	84.3-84.3 %

NK 100-200/214, 3*400 V, 50Hz

Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³
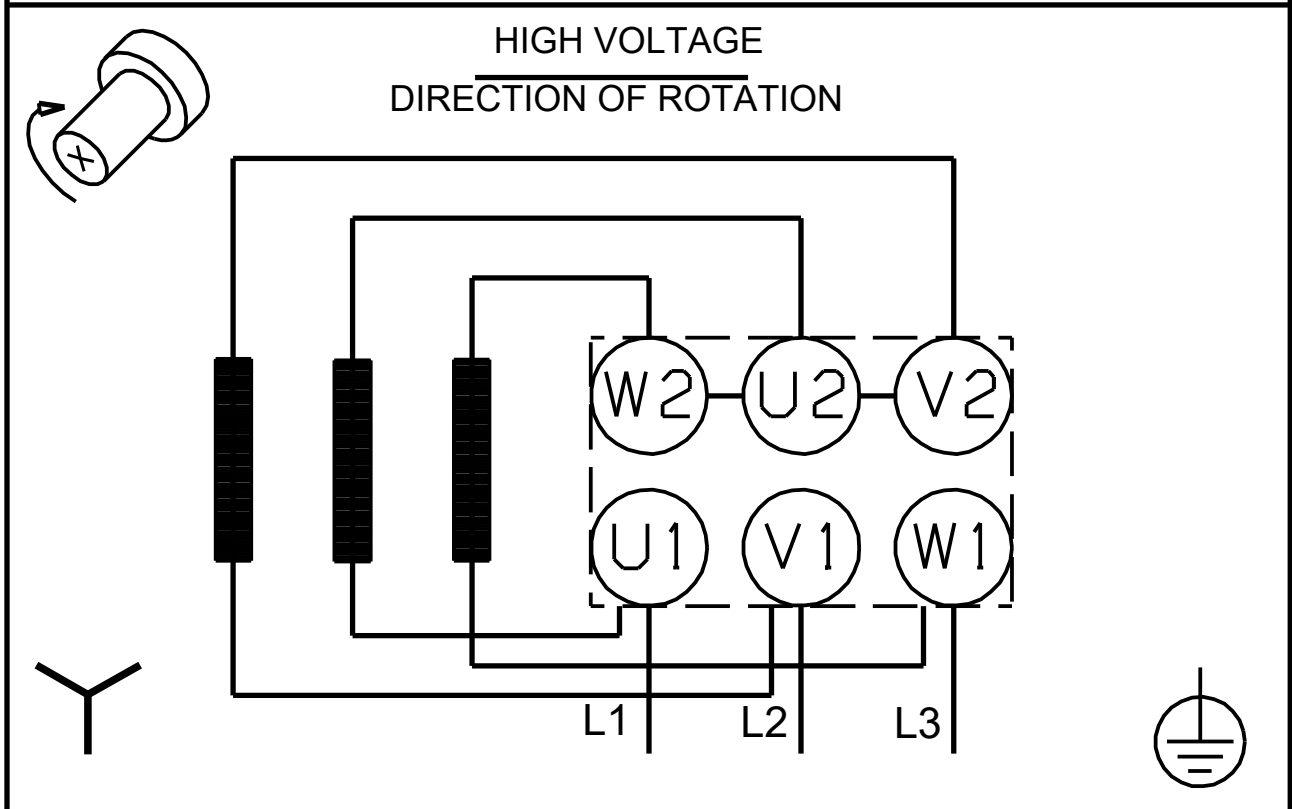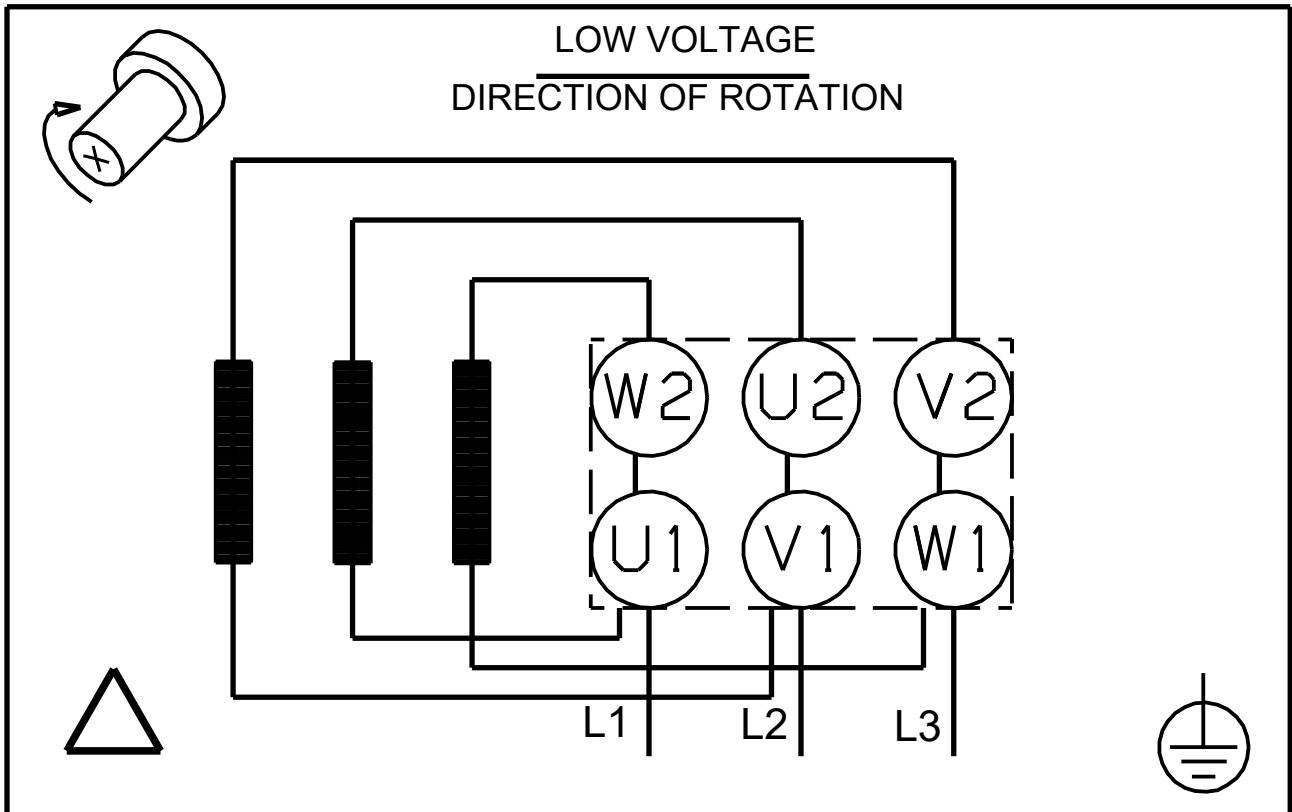
214 mm

Description	Value
Motor efficiency at 3/4 load:	85-85 %
Motor efficiency at 1/2 load:	83.9-83.9 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	98957421
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.65
Net weight:	214 kg
Gross weight:	323 kg
Shipping volume:	1.11 m³
Country of origin:	HU
Custom tariff no.:	84137059

98972412 NK 100-200/214 AA2F2AESBQQEIW5 50 Hz

280

280

80

8 x ⌀ 19

100

8 x ⌀ 19

540

490

205

4 x ⌀ 24

840

1250

205

430

140

457

1140

90

125

125
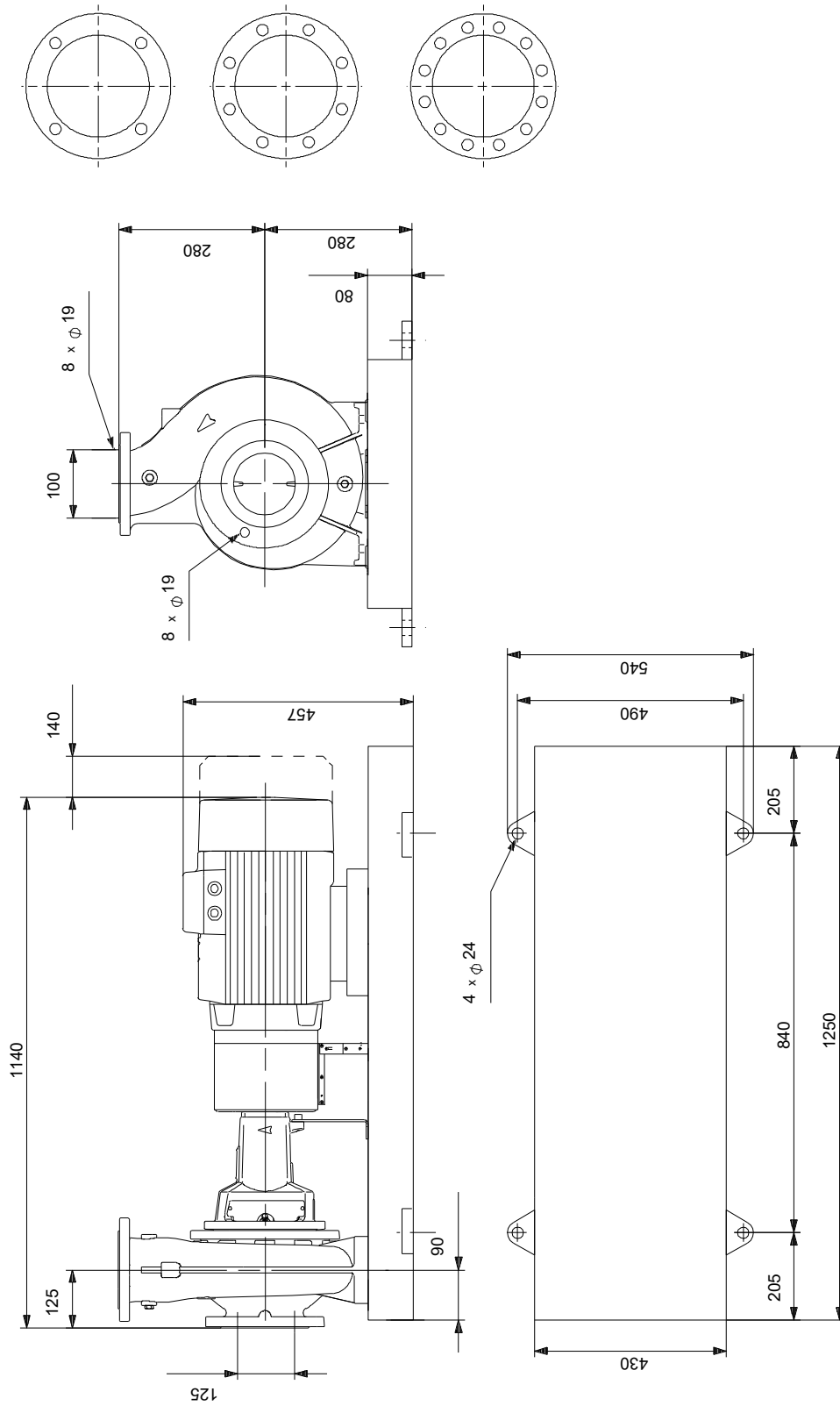
Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

98972412 NK 100-200/214 AA2F2AESBQQEIW5 50 Hz

LOW VOLTAGE
DIRECTION OF ROTATION

W2 U2 V2

U1 V1 W1

L1 L2 L3

HIGH VOLTAGE
DIRECTION OF ROTATION

W2 U2 V2

U1 V1 W1

L1 L2 L3

Note! All units are in [mm] unless others are stated.

Order Data:					
Position	**Your pos.**	**Product name**	**Amount**	**Product No**	**Total**
		NK 100-200/214	1	98972412	Price on request
		NK 100-200/214	1	98972412	Price on request