**Company name:** Pump Sales Direct
**Created by:**
**Phone:**

**Date:** 15/08/2022

| Qty. | Description |
|---|---|
| 1 | **NB 50-200/219 AAF2AESBQQEQW1** |

Product No.: 98062906

Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

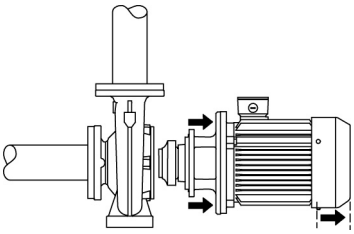
Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

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

The pump is close-coupled to a fan-cooled asynchronous motor.

The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

The back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipes.



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.

## Pump

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.

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

Motor stool and pump cover are made of cast iron (EN-GJL-250). Coupling guards are fitted to the motor stool. The pump cover is provided with a manual air vent screw for venting of the pump housing and the shaft seal chamber.

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.

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 pump housing has no feet.

## Motor

| Qty. | Description |
|---|---|
| 1 | The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.<br>The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.<br>The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.<br>Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.<br>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: | 2950 rpm |
| Rated flow: | 93.59 m³/h |
| Rated head: | 58.26 m |
| Actual impeller diameter: | 219 mm |
| Nominal impeller diameter: | 200 |
| Shaft seal arrangement: | Single |
| Code for shaft seal: | BQQE |
| Curve tolerance: | ISO9906:2012 3B |
| Bearing design: | Standard |
| Materials: | |
| Pump housing: | Cast iron<br>EN-GJL-250<br>ASTM class 35 |
| Wear ring: | Brass |
| Impeller: | Cast iron<br>EN-GJL-200<br>ASTM class 30 |
| Internal pump house coating: | CED |
| Shaft: | Stainless steel<br>EN 1.4301<br>AISI 304 |
| Installation: | |
| t max amb: | 60 °C |
| Maximum operating pressure: | 16 bar |
| Pipe connection standard: | EN 1092-2 |
| Size of inlet connection: | DN 65 |

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**Company name:** Pump Sales Direct
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**Date:** 15/08/2022

| Qty. | Description | |
|---|---|---|
| 1 | Size of outlet connection: | DN 50 |
| | Pressure rating for connection: | PN 16 |
| | Bearing lubrication: | Grease |
| | Pump housing with feet: | No |
| | Support block (Yes/No): | N |
| | | |
| | Electrical data: | |
| | Motor type: | 180MB |
| | IE Efficiency class: | IE3 |
| | Rated power - P2: | 22 kW |
| | Mains frequency: | 50 Hz |
| | Rated voltage: | 3 x 380-415D/660-690Y V |
| | Rated current: | 39.5/22.8 A |
| | Starting current: | 830 % |
| | Cos phi - power factor: | 0.90-0.90 |
| | Rated speed: | 2950 rpm |
| | Efficiency: | IE3 92,7% |
| | Motor efficiency at full load: | 92.7 % |
| | Motor efficiency at 3/4 load: | 93.7 % |
| | Motor efficiency at 1/2 load: | 94.4 % |
| | Number of poles: | 2 |
| | Enclosure class (IEC 34-5): | 55 Dust/Jetting |
| | Insulation class (IEC 85): | F |
| | Motor No: | 87470023 |
| | Bearing insulation type N-end: | STEEL BEARING |
| | | |
| | Others: | |
| | Minimum efficiency index, MEI ≥: | 0.70 |
| | Net weight: | 180 kg |
| | Gross weight: | 205 kg |
| | Shipping volume: | 0.707 m³ |
| | Danish VVS No.: | 386062208 |
| | Country of origin: | HU |
| | Custom tariff no.: | 84137051 |

**Company name:** Pump Sales Direct
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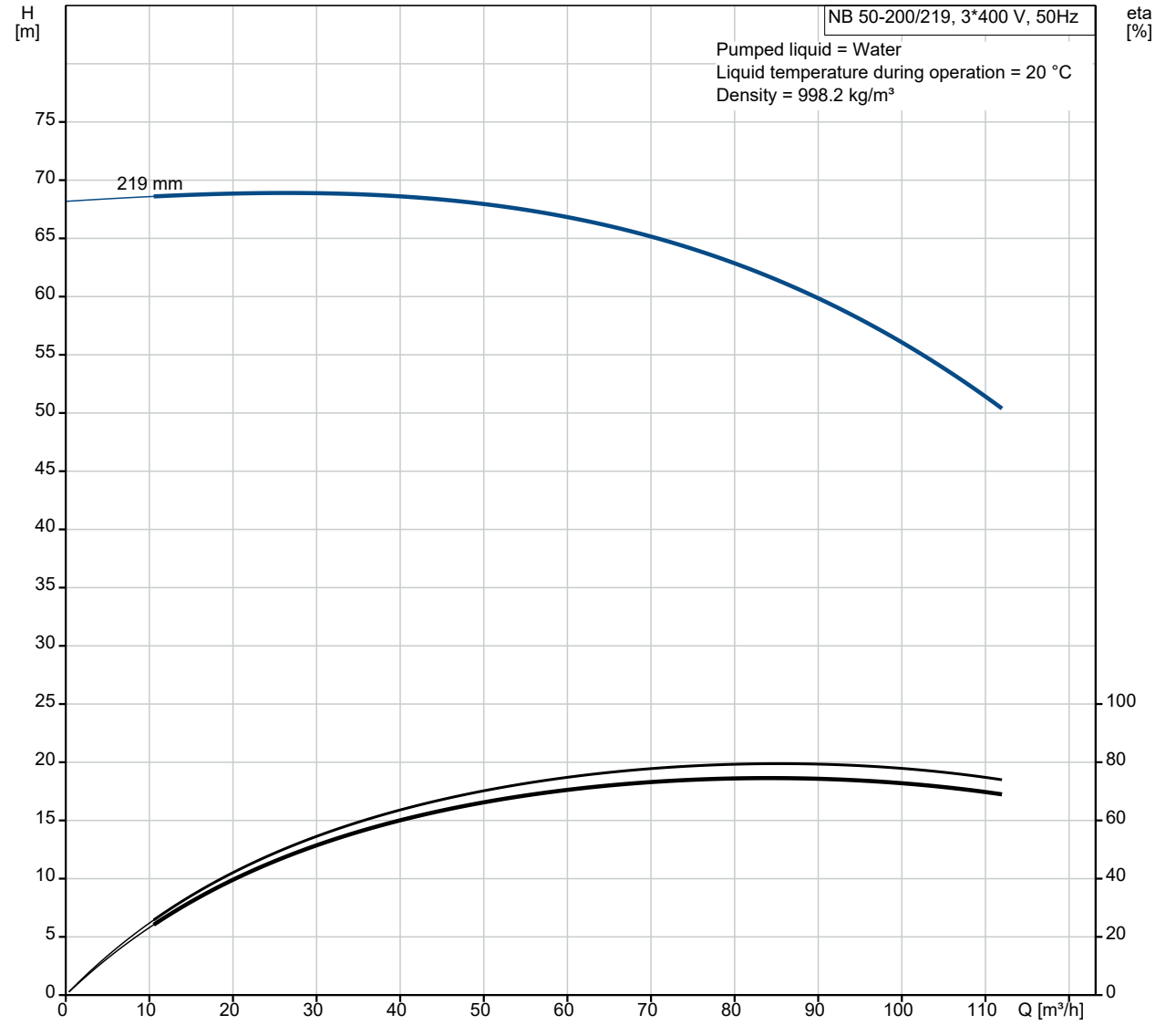
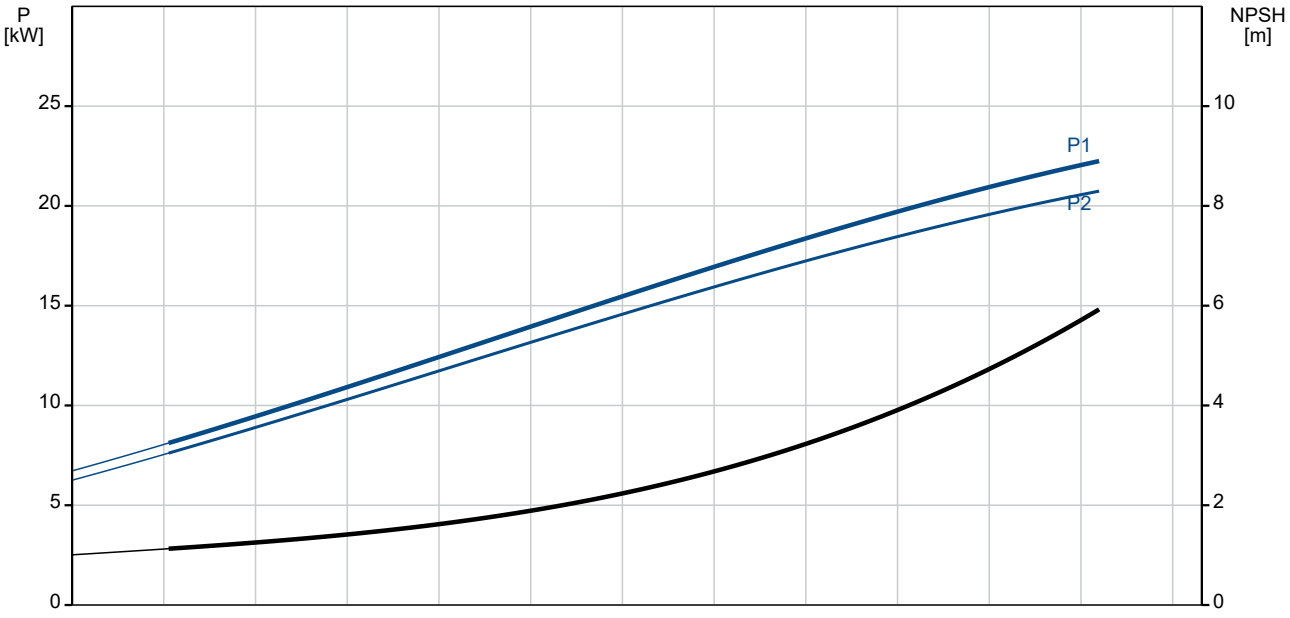
**Date:** 15/08/2022

# 98062906 NB 50-200/219 AAF2AESBQQEQW1 50 Hz

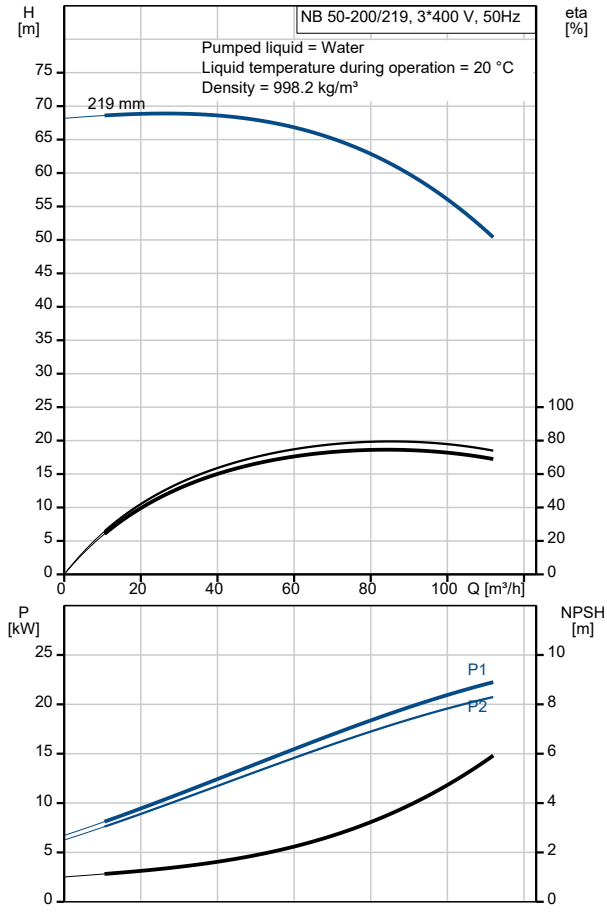


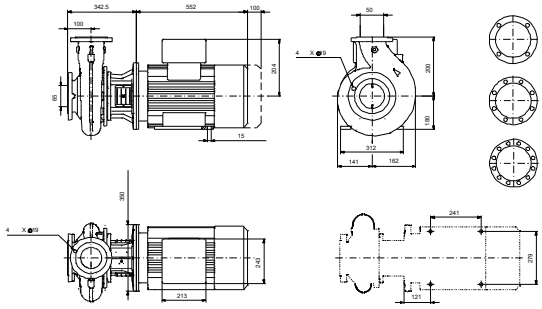



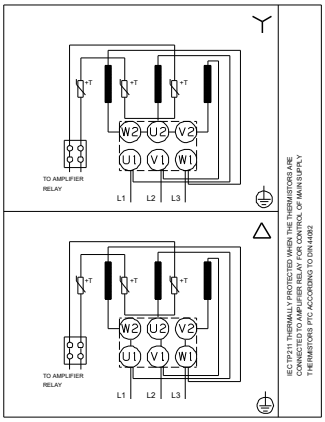
**Company name:** Pump Sales Direct
**Created by:**
**Phone:**

**Date:** 15/08/2022

| Description | Value |
|---|---|
| **General information:** | |
| Product name: | NB 50-200/219 AAF2AESBQQEQW1 |
| Product No: | 98062906 |
| EAN number: | 5710628342097 |
| **Technical:** | |
| Pump speed on which pump data are based: | 2950 rpm |
| Rated flow: | 93.59 m³/h |
| Rated head: | 58.26 m |
| Actual impeller diameter: | 219 mm |
| Nominal impeller diameter: | 200 |
| Shaft seal arrangement: | Single |
| Shaft diameter: | 24 mm |
| Code for shaft seal: | BQQE |
| Curve tolerance: | ISO9906:2012 3B |
| Pump version: | A |
| 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: | 60 °C |
| Maximum operating pressure: | 16 bar |
| Pipe connection standard: | EN 1092-2 |
| Size of inlet connection: | DN 65 |
| Size of outlet connection: | DN 50 |
| Pressure rating for connection: | PN 16 |
| Bearing lubrication: | Grease |
| Pump housing with feet: | No |
| Support block (Yes/No): | N |
| Connect code: | F2 |
| **Liquid:** | |
| Pumped liquid: | Water |
| Liquid temperature range: | -25 .. 120 °C |
| Selected liquid temperature: | 20 °C |
| Density: | 998.2 kg/m³ |
| **Electrical data:** | |
| Motor type: | 180MB |
| IE Efficiency class: | IE3 |
| Rated power - P2: | 22 kW |
| Mains frequency: | 50 Hz |
| Rated voltage: | 3 x 380-415D/660-690Y V |
| Rated current: | 39.5/22.8 A |
| Starting current: | 830 % |
| Cos phi - power factor: | 0.90-0.90 |
| Rated speed: | 2950 rpm |
| Efficiency: | IE3 92,7% |





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**Company name:** Pump Sales Direct
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**Date:** 15/08/2022

| Description | Value |
|---|---|
| Motor efficiency at full load: | 92.7 % |
| Motor efficiency at 3/4 load: | 93.7 % |
| Motor efficiency at 1/2 load: | 94.4 % |
| Number of poles: | 2 |
| Enclosure class (IEC 34-5): | 55 Dust/Jetting |
| Insulation class (IEC 85): | F |
| Built-in motor protection: | PTC |
| Motor No: | 87470023 |
| Mount. design. acc. IEC 34-7: | IM B35 |
| Bearing insulation type N-end: | STEEL BEARING |
| **Controls:** | |
| Frequency converter: | NONE |
| Pressure sensor: | N |
| **Others:** | |
| Minimum efficiency index, MEI ≥: | 0.70 |
| Net weight: | 180 kg |
| Gross weight: | 205 kg |
| Shipping volume: | 0.707 m³ |
| Danish VVS No.: | 386062208 |
| Country of origin: | HU |
| Custom tariff no.: | 84137051 |

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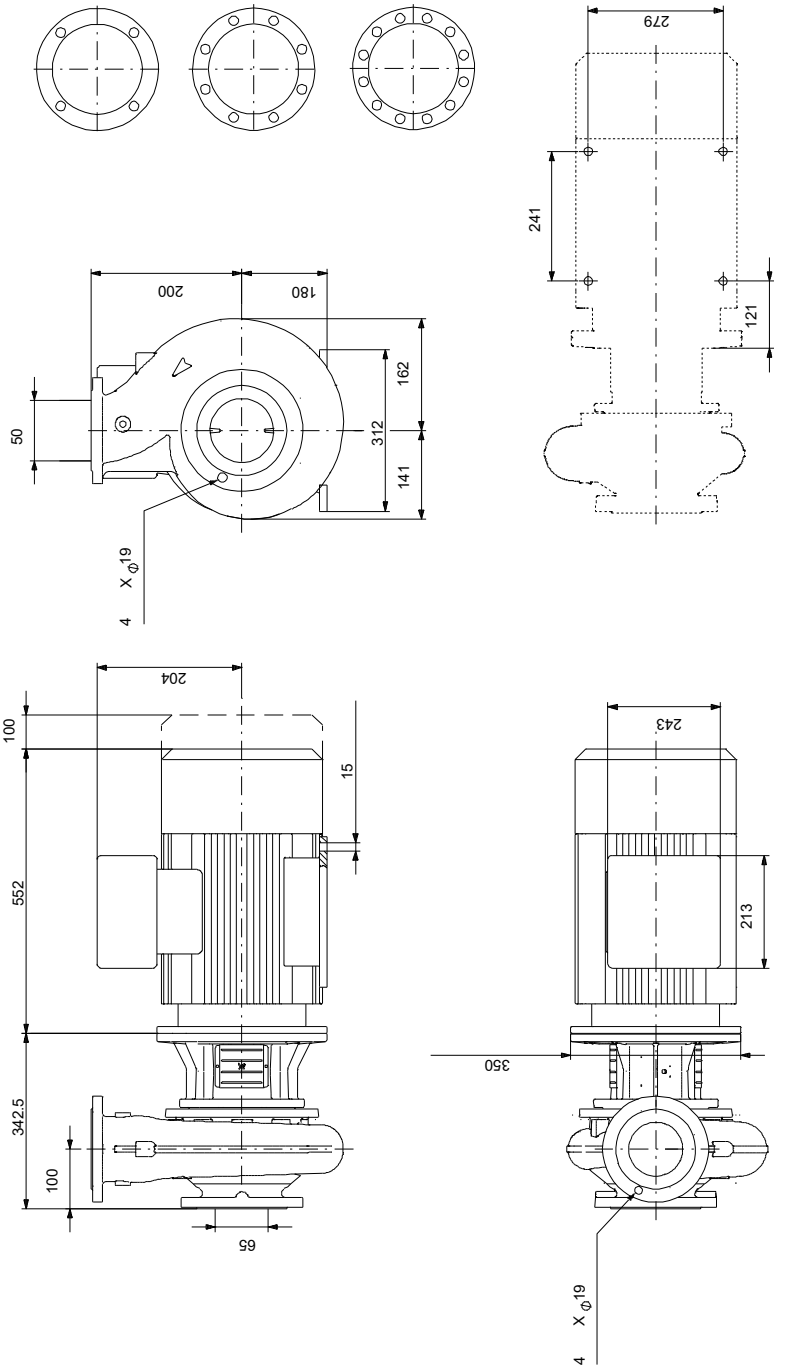
# 98062906 NB 50-200/219 AAF2AESBQQEQW1 50 Hz




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

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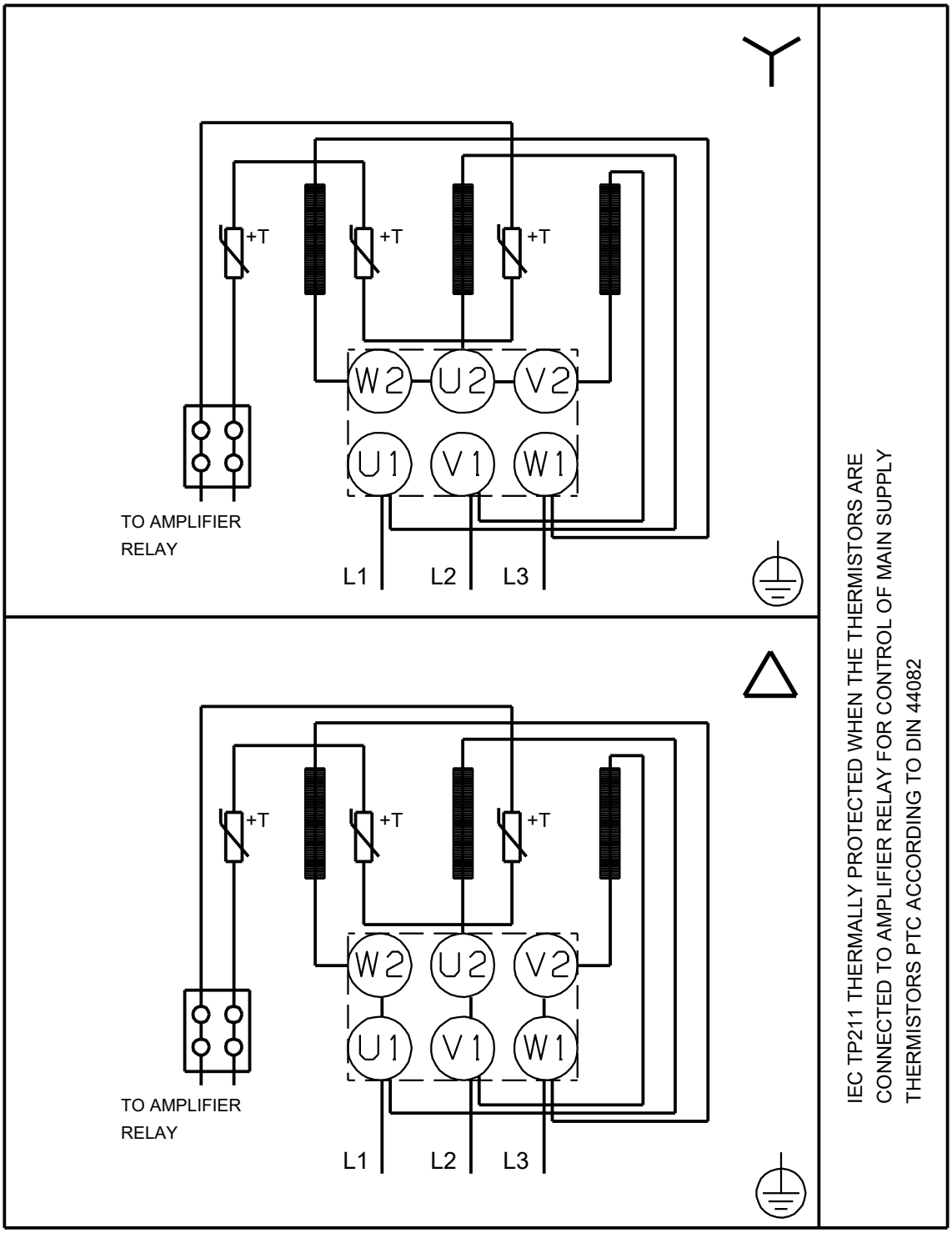
# 98062906 NB 50-200/219 AAF2AESBQQEQW1 50 Hz




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

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**Company name:** Pump Sales Direct
**Created by:**
**Phone:**

**Date:** 15/08/2022

## Order Data:

| Position | Your pos. | Product name | Amount | Product No | Total |
|---|---|---|---|---|---|
| | | NB 50-200/219 | 1 | 98062906 | Price on request |