

Connection side channel blower 400 V

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The **connection** of the **side channel blower** may only be realized by **electrotechnical qualified personnel!**

A **wrong connection** will **damage** the **side channel blower** and the **warranty claim expires**. Improper installation or operation of the device may damage the electronics or the machine and may **endanger** the **health** of the operating personnel. Please consult our technical department if there are any obscurities.

Procedure:

- The connection of the side channel blower to the 3-phase 400 V mains must be done in a star
- Open the wiring board. The star bridge should already be clamped by default, otherwise insert the bridges as shown in Fig. 2 and screw them together.

Star bridge for 400 V operation



Fig. 1

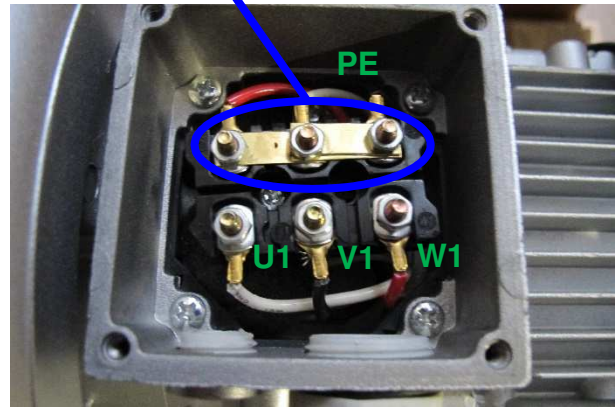


Fig. 2

- Insert the 400 V connecting cable (see Fig. 3)
- The protective conductor (green / yellow) is connected to the screw provided for this purpose (see Fig. 4)
- The phase connection wires L1 / L2 / L3 (depending on the cable black and labeled with numbers or brown / black / gray) must be connected to the terminals U1, V1 and W1 depending on the rotating field (see Fig. 4)



Fig. 3



Fig. 4

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- If a 5-core connection cable is used, no neutral conductor may be connected. This must be disconnected on both sides of the cable
- After correct connection, the direction of rotation must be checked. Briefly start the side channel blower and compare the direction of rotation of the fan wheel with the attached arrow. If the direction of rotation is reversed, the connection of U1 and W1 must be changed. (see Fig. 5 and Fig. 6)

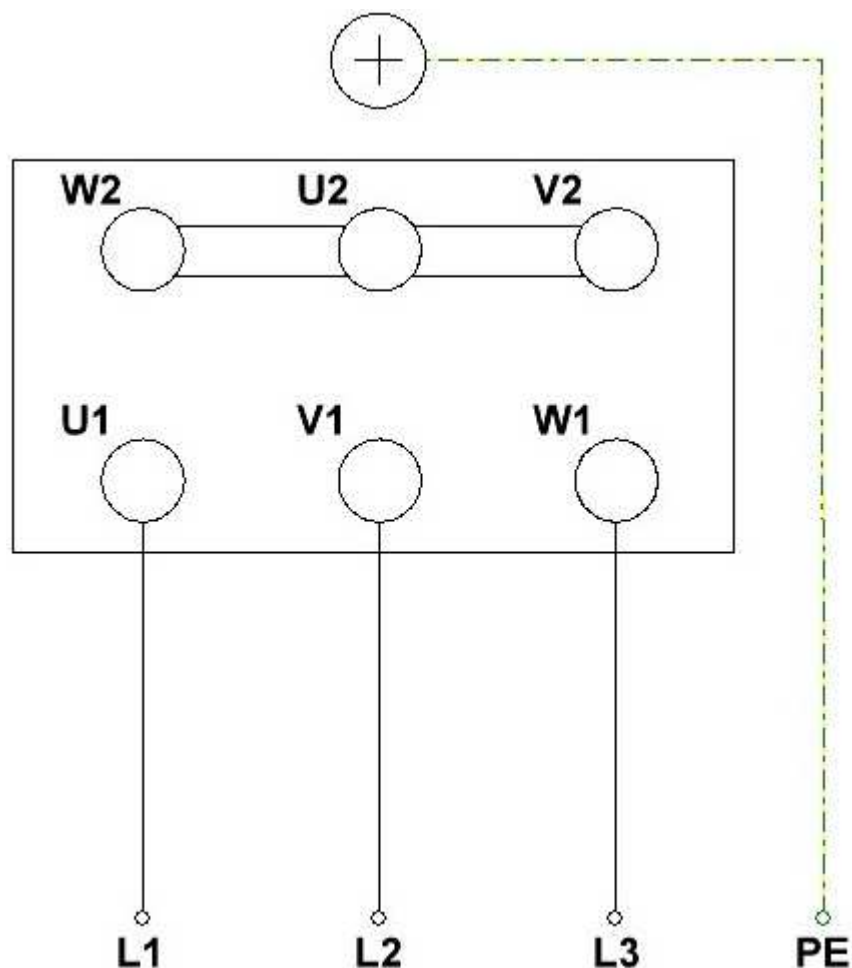


Fig. 5



Fig. 6

Connection diagram:





Safety measures:

A suitable circuit breaker must be fitted to the connecting cable of the motor to ensure protection of the cable and to be able to disconnect the machine from the mains.

To ensure proper operation, the machine must be installed indoors, in a clean, dry, well-ventilated and non-corrosive environment. Make sure there is always good ventilation in the room. Even in summer, the room temperature in the entire environment of the machine must be kept below 40°C.

Always attach the machine with the feet on a solid surface.

Make sure the machine is properly grounded.



ATTENTION:

Do not carry wide clothes or hanging objects in the danger area of the machine.

Make sure that no unauthorized persons, children or animals are in the vicinity of the running machine. Never allow objects to get into the slots of the motor fan protective housing.

The machine surface can reach temperatures over 70°C. After switching off the machine and before carrying out any work, wait until the surface has cooled down.

The machine must under no circumstances be operated in explosive or dangerous environments.

Always protect the electric motor with a thermal circuit breaker or with a circuit breaker corresponding to the rating on the rating plate.



Recommendation for the vacuum operation:

It is recommended to install a suction-side safety valve to prevent the negative pressure from being higher than allowed for the engine.