WIPCOOL®
TWÓJ KLUCZ DO KOMFORTU

OPERATING MANUAL · ENGLISH

2F1BRK

Kit: Two-Stage Vacuum Pump with Tool Case, Converter and Makita and Bosch Adapters

Read this manual before use. Keep it with the unit for its entire service life.



Read the manual
Safety and connection rules before the first start-up.

Service and warranty
Service requests and warranty terms at wipcool.eu.

Documents online
Manual, data sheet and declaration of conformity at wipcool.eu.

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How to use this manual

Find the chapter you need. The numbers on the right are the pages of this booklet.

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MEANING OF SYMBOLS



Separate collection of WEEE

Do not dispose of used equipment with household waste.



CE marking

Manufacturer's declaration of conformity with EU requirements.



Read the manual

Safety and operating rules before starting work.

Wipcool 2F1BRK / 2F2BRK user manual

The Wipcool 2F1BRK and 2F2BRK kits contain a two-stage rotary vane vacuum pump for creating a vacuum in closed systems. The pump can be powered by an 18 V battery or from the mains using the supplied mains power adapter (converter).

The user manual is an integral part of the product. Please read this manual carefully and follow all instructions precisely.

General information

Wipcool products are designed for professional use by qualified air conditioning and refrigeration engineers. As the manufacturer, Wipcool stipulates that our equipment should only be operated by suitably qualified and trained personnel.

- Observe all local safety regulations and general safety standards when using the Wipcool 2F1BRK / 2F2BRK vacuum pump.
- The user manual should be kept near the device so that personnel can access it easily at all times.
- Before use, qualified personnel should read the user manual carefully and understand all the instructions it contains.
- The manufacturer accepts no liability for any damage resulting from improper use, failure to follow the user manual, insufficiently qualified personnel or any unauthorised modifications to the device.
- The general terms of sale contained in the sales documents apply.

Symbols and conventions

Symbols and markings used on the device and in the manual:

01



Warning - read the text in the box next to the symbol.

02



Dangerous voltage - risk of electric shock.

03



Warning of a fire or explosion hazard.

04



Notice - risk of damage to the device or an incorrect operating result.

05



Do not dispose of the pump with household waste.

Safety information

WARNING
Do not use the pump in the rain. Water in the device can cause electric shock.

WARNING
Do not use the pump with R290 or R600a refrigerants.

- Use the manufacturer's original accessories.

WARNING
Do not draw in corrosive gases or gases that react chemically with oil.

- The temperature of the gas drawn in must not exceed 80 °C. Operate at an ambient temperature of 0 °C to 50 °C.

- Protect the battery socket from impacts and mechanical loads. Do not use the pump if the socket is damaged.

WARNING
Do not run the pump without oil or when the oil level is too low.

WARNING
If the pump stops because the battery is discharged and the protection has activated, switch it off immediately using the power switch. Repeated attempts to restart it can damage the battery.

Technical specifications

Parameter	2F1BRK	2F2BRK
Pump included	2F1BR	2F2BR
Battery power supply	18 V DC	18 V DC
Battery socket	AEG/RIDGID	AEG/RIDGID
Mains power supply via power adapter	230 V~ / 50–60 Hz	230 V~ / 50–60 Hz
Maximum flow rate	71 l/min	142 l/min
Ultimate vacuum	15 microns (0.02 mbar)	15 microns (0.02 mbar)
Power	approx. 190 W	approx. 370 W
Oil volume	280 ml	450 ml
Device weight	4.5 kg	7.5 kg
Pump dimensions only (L × W × H)	309 × 113 × 198 mm	339 × 130 × 225 mm
Reference operating time with a 4.0 Ah battery	45 min	40 min
Operating ambient temperature	0 °C to 50 °C	0 °C to 50 °C
Maximum temperature of gas drawn in	80 °C	80 °C

Device diagram

The pump has a spark-free design. The oil sight glass is used to check the oil level and condition.

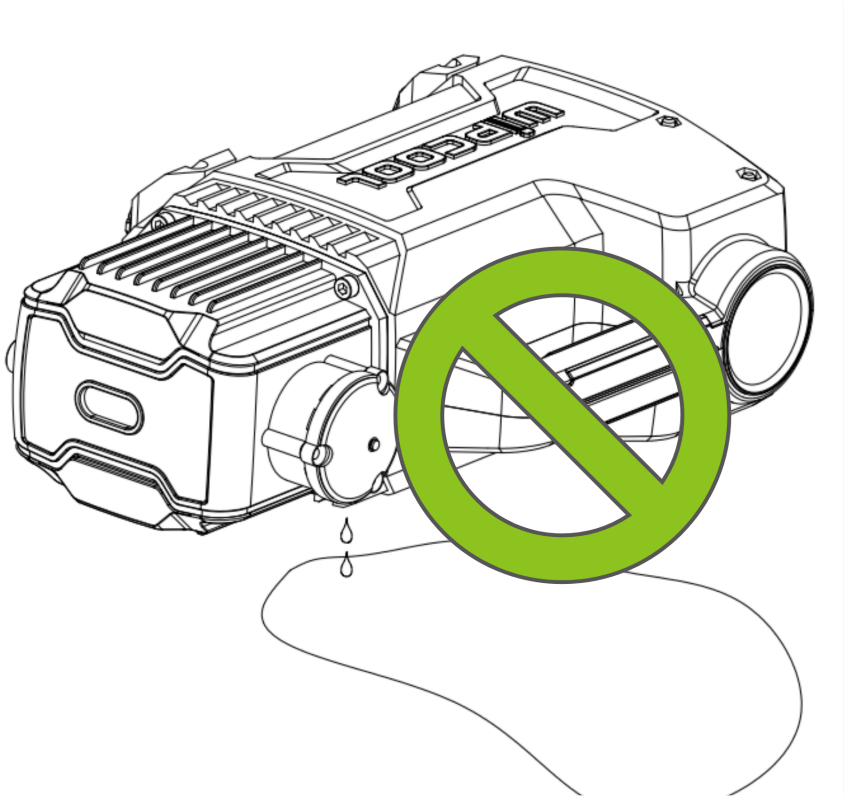


Figure 1. Protection against oil leakage when tilted.

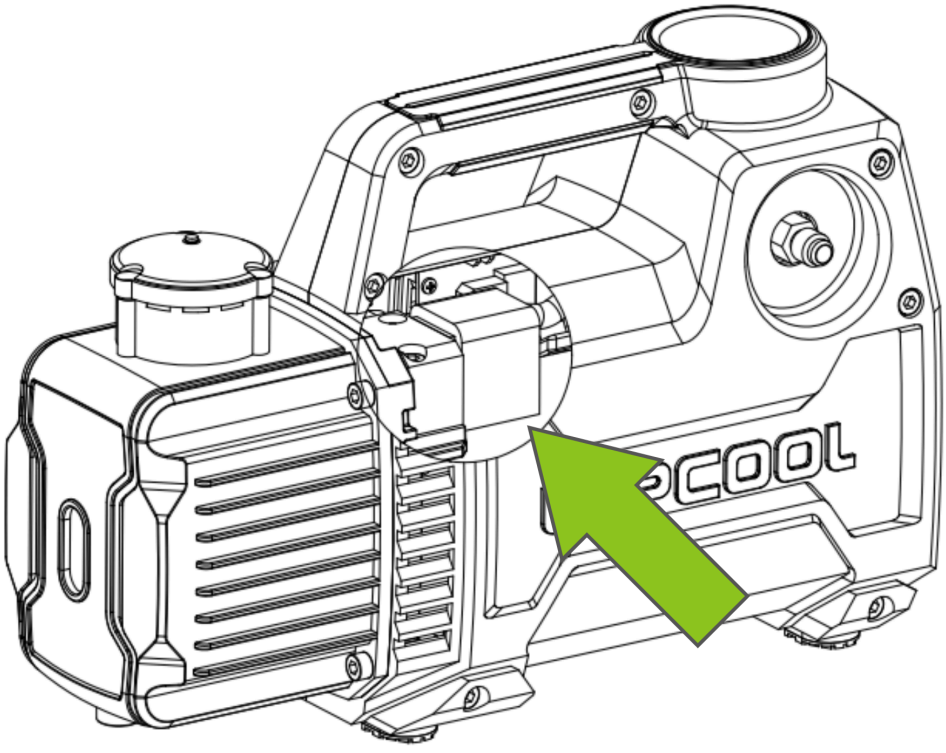


Figure 2. Built-in solenoid valve.

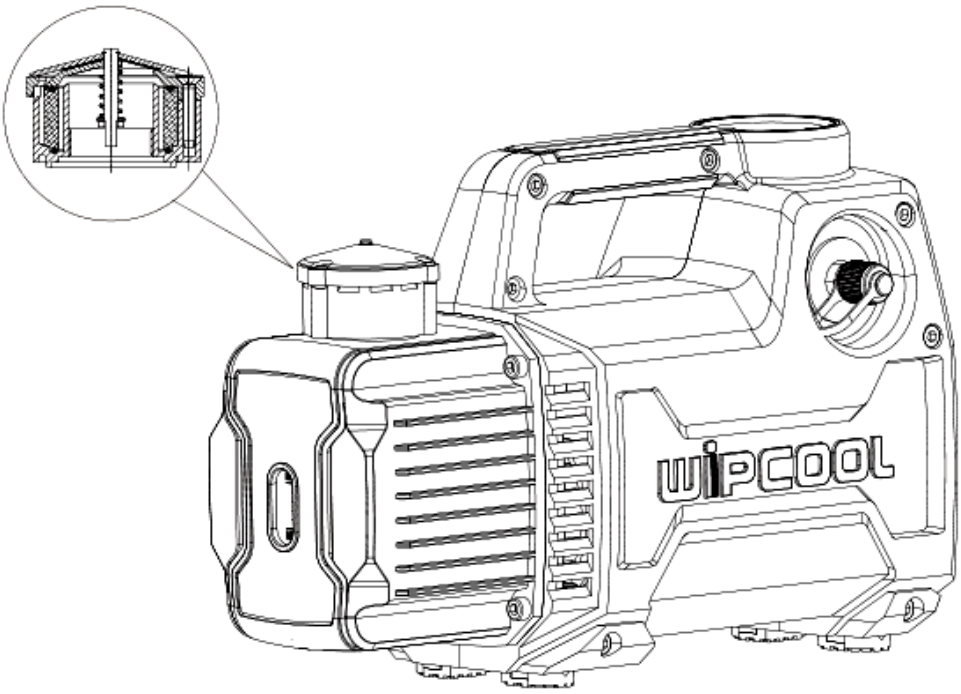


Figure 3. Protection against oil ejection.

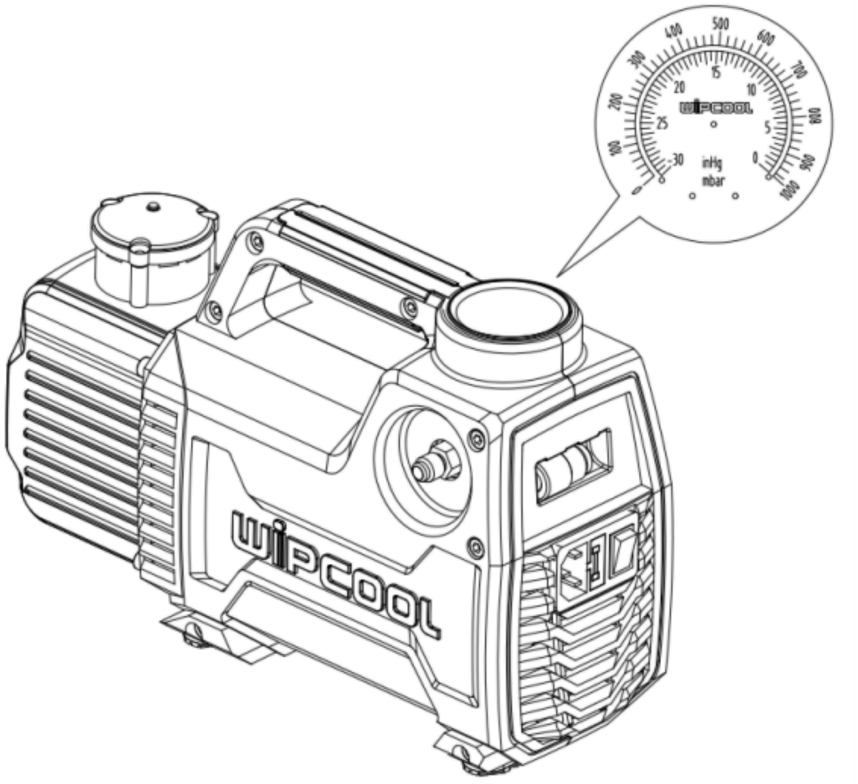


Figure 4. Vacuum gauge on top of the pump.

Kit contents

- Two-stage vacuum pump: 2F1BR in the 2F1BRK kit or 2F2BR in the 2F2BRK kit.
- Tool case.
- Two battery adapters: Makita and Bosch.
- Mains power adapter.
- Oil filler cap.

The kits are sold without a battery. A vacuum hose is required for operation.

Application

The pumps are used to create a vacuum in refrigeration systems, including those using R12, R22, R134a, R410A and mildly flammable A2L refrigerants such as R32 and R1234yf.

The pumps can also be used in other high-vacuum systems, for example in vacuum packaging, gas analysis and thermoforming.

Connection

The pump socket fits 18 V AEG/RIDGID batteries. For Makita and Bosch batteries, use the appropriate adapter supplied with the kit.

Before connecting the power adapter, check that the mains voltage and frequency match those on its rating plate.



Figure 5. Pump configured with a battery.



Figure 6. Pump configured with a mains power adapter.

Operating instructions

Preparation and start-up

On receipt of the kit, check that the delivery is complete; report any transport damage or missing items to the seller. Before each use, check the condition of the pump and accessories and check for oil leaks, including in the packaging.

01 Before first use, unscrew and remove the transport plug from the oil filler opening. When topping up the oil subsequently, unscrew the oil filler cap.

02 Check the oil level in the oil sight glass. If it is too low, slowly add vacuum pump oil until the level reaches halfway up the sight glass. The protection against oil leakage when tilted may slow down filling.

03 Screw in the supplied oil filler cap.

04 Connect the vacuum hose to the pump and the system.

05 Slide an 18 V AEG/RIDGID battery into the socket at the back of the pump (connect a Makita or Bosch battery using the appropriate adapter supplied with the kit) or connect the mains power adapter. Then start the pump using the power switch.

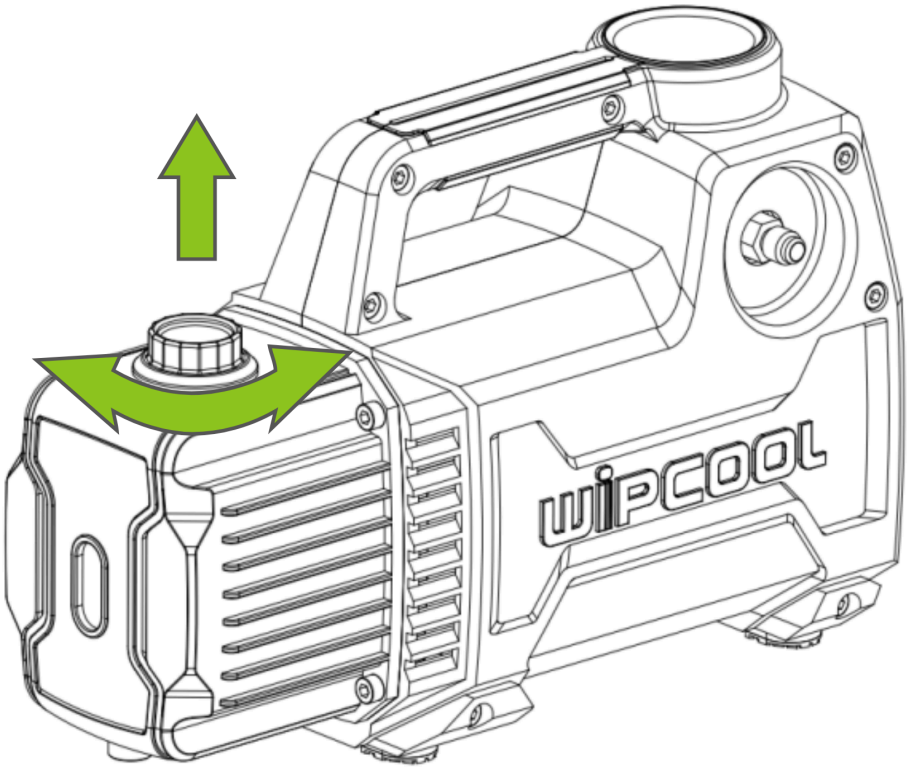


Figure 7. Removing the transport plug.

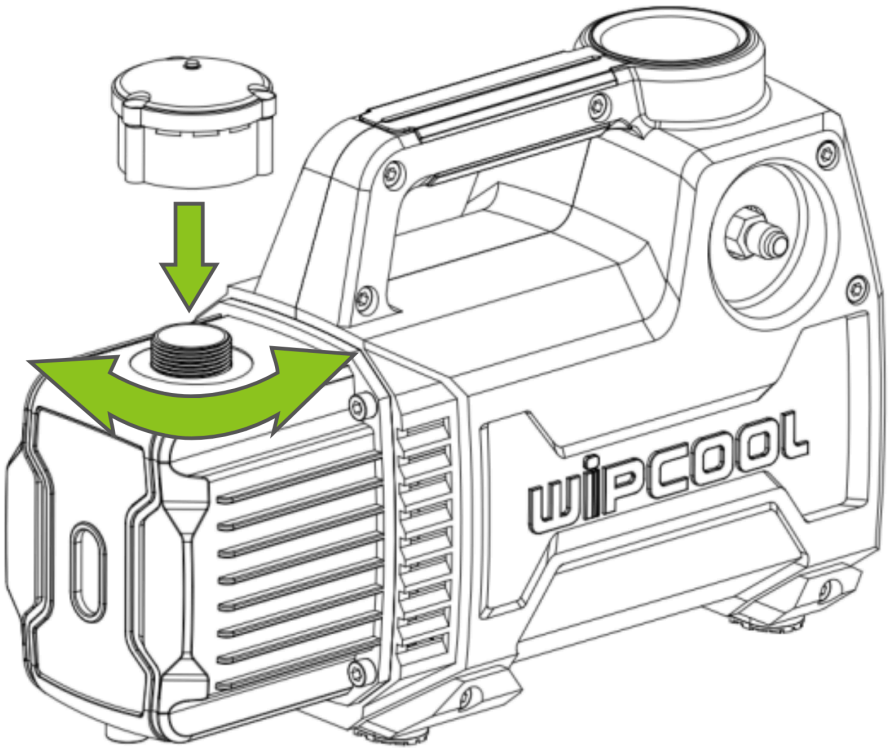


Figure 8. Fitting the oil filler cap.

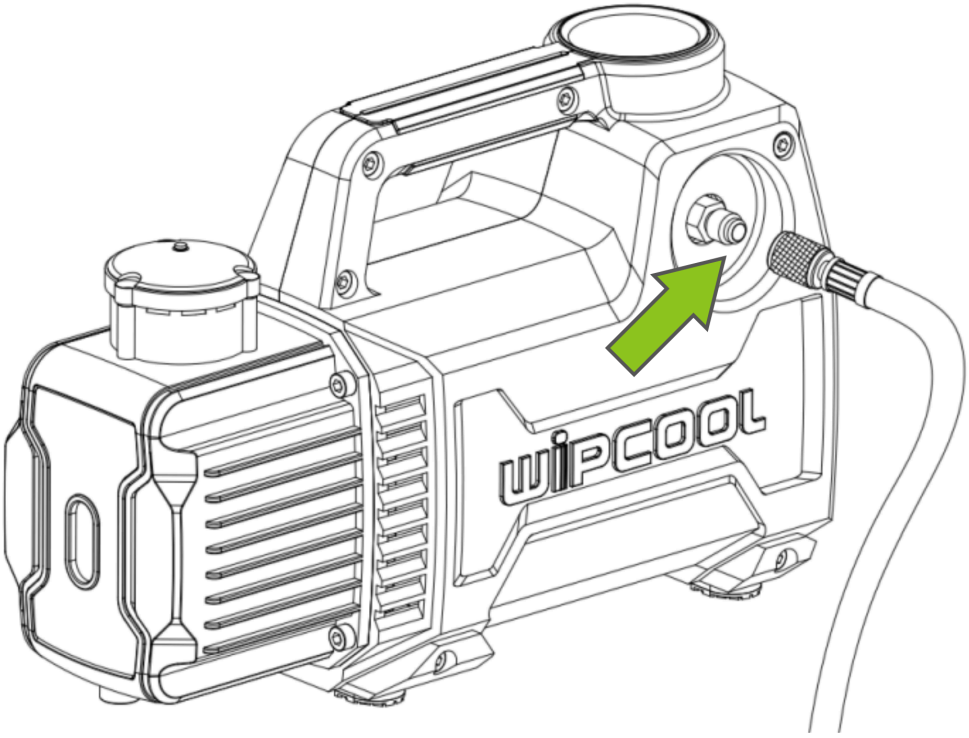


Figure 9. Connecting the pump to the system.

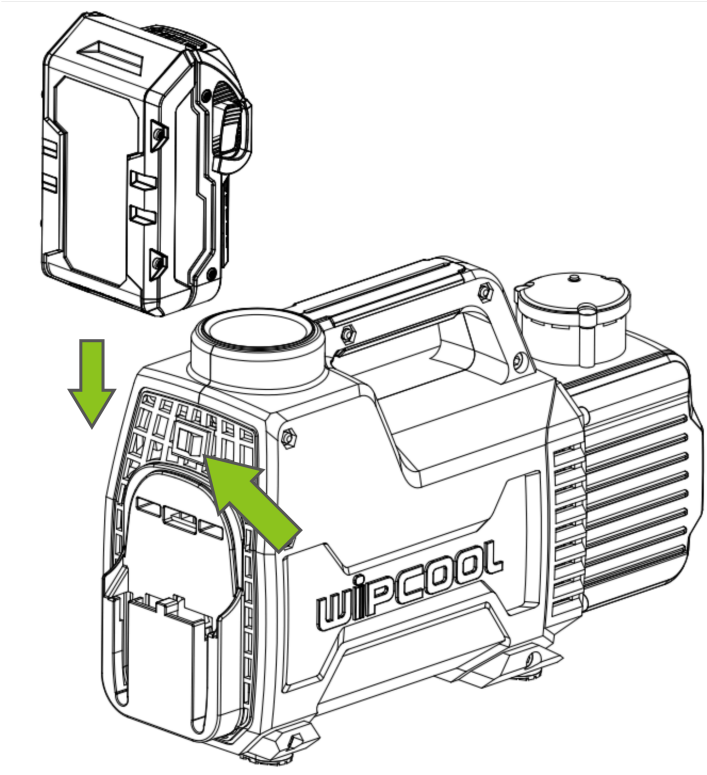


Figure 10. Battery socket at the back of the pump.

Maintenance

Checking the oil

Change the oil when it is contaminated, brown, black or starts to foam.

Changing the oil

WARNING
Remove the battery (or disconnect the power adapter) before draining the oil.

CAUTION
The built-in protection against oil leakage when tilted may slow down filling.

01 Unscrew the drain screw beneath the oil reservoir, drain the oil and tighten the screw.

02 Unscrew the oil filler cap and slowly pour in the oil.

03 Start the pump and watch the oil level. When it stabilises halfway up the sight glass, tighten the oil filler cap.

04 Turn off the pump using the power switch.

Troubleshooting

Problem	Possible cause	Solution
The pump does not reach the required vacuum	Insufficient oil	Top up the oil to halfway up the sight glass.
The pump does not reach the required vacuum	Emulsified or contaminated oil	Change the oil.
The pump does not reach the required vacuum	Blocked oil inlet or insufficient oil flow	Clean the oil inlet and filter screen.
The pump does not reach the required vacuum	Leak in the vacuum hose or reservoir	Check the vacuum hose and reservoir for leaks; repair the leak.
The pump does not reach the required vacuum	Pump not matched to the system	Check the size of the system and select a pump with a suitable flow rate.
The pump does not reach the required vacuum	Parts worn after prolonged operation, increased clearance or an internal leak	You can replace the pump with a new one or have it repaired. Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.

Problem	Possible cause	Solution
The pump does not reach the required vacuum	Contaminated sealing surface on the oil filler cap	Check and clean the sealing surface on the oil filler cap.
Oil leak	Worn shaft seal	Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.
Oil leak	Loose or damaged oil reservoir connection	Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.
Difficult starting	Oil temperature too low	Before connecting the pump to the system, switch it on with the inlet open and let it run until the oil warms up.
Difficult starting	Motor or power supply problem	Check the power supply. Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.
Difficult starting	Contamination inside the pump	Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.
The pump does not start or stops suddenly	Blown fuse	Check the fuse and replace it.
The pump does not start or stops suddenly	Motor or power supply problem	Check the power supply. Arrange a repair with the service centre - submit a request at wipcool.pl/serwis.

Waste electrical and electronic equipment

01



The crossed-out bin symbol means that the device must not be disposed of with other waste at the end of its life.

Under the applicable regulations on waste electrical and electronic equipment, products marked with the separate collection symbol must not be disposed of with other municipal waste. Because they contain harmful substances, electronic products that are not sorted separately can be dangerous to the environment and human health. Proper separate collection of waste electrical and electronic equipment prevents adverse effects on the environment.

By taking waste equipment to a collection point, the user contributes to its reuse, recycling and recovery.

Recycling - one method of protecting the environment. The process of recovering substances from waste that can be reused as raw materials.

Recovery - the use of waste that has lost its utility value, such as plastics, paper and cardboard, as secondary raw materials (the term is also commonly used to mean destruction).

Information about the collection system for waste electrical and electronic equipment

- Waste electrical and electronic equipment must not be disposed of with other waste.
- The collection of incomplete electrical and electronic equipment and parts from waste equipment is prohibited.
- A distributor delivering equipment intended for households to a purchaser must collect waste household equipment free of charge at the place of delivery, provided that the waste equipment is of the same type and performs the same function as the equipment delivered.
- The user can hand over waste equipment to a waste equipment collector, a treatment facility or a municipal waste collector in the municipality.
- Information about collection points is available on the BIP websites of regional marshal's offices and city and municipal offices.

Service and documents

Before submitting a request, prepare:

- Model - it is on the device rating plate and on the invoice.
- Serial number - if there is none, provide the production number (e.g. 11/2025), usually found on the underside of the device.
- Proof of purchase - an invoice or receipt from an authorised distributor.
- Description of the fault - what is happening, when it started and under what conditions.

You can submit a service request at wipcool.pl/serwis. You will also find the warranty terms there.

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SERVICE AND DOCUMENTS

2F1BRK · Operating manual

EDITION DETAILS

Model	**2F1BRK**
Edition	**04.11.2026 · EN**
Manufacturer	**Zhejiang Wipcool Refrigeration Equipment Co., Ltd.**
Authorised representative	**4REF sp. z o.o., ul. gen. Władysława Andersa 38, 15-113 Białystok**

wipcool.eu

- online manual and other languages
- data sheet and declaration of conformity
- service and requests

The CE marking confirms the declared conformity with EU requirements.
Crossed-out bin: do not dispose of used equipment with household waste.