



FANS FOR HEATING SYSTEMS

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## OPERATION AND MAINTENANCE MANUAL

Exhaust fan **R2E 180-CG82-05 (KOND)**

Exhaust fan **R2E 180-CG82-12 (KOND)**

### 1. Technical specification

Motor manufacturer:	<b>ebmpapst</b>
Motor type:	M2E 068-CF
Max Air Pressure:	320 Pa
Max Air Volume:	450 m <sup>3</sup> /h
Speed:	2530 rpm
Input Power:	68 W
Input Voltage:	230 V~ 50 Hz
Capacitor:	2 µF
Max. temp. of transp. air:	up to +250°C
Weight:	2.30 kg

### 2. Technical description

This fan consists of galvanized steel mounting plate to which the external rotor motor.

In the -05 version, the outer rotating part of the engine is protected by a steel cover with ventilation holes.

In the -12 version, the outer rotating part of the engine is not protected by a cover. The motor is equipped with corrosion resistant, backward curved impeller.

### 3. Applications

The fan is designed for extracting (removing) flue gas from central heating boilers or fireplaces. It can also be used for exhaust or blowing hot air up to +250°C.

Permissible ambient temperature is -25°C do +85°C.

It is not designed to work as a standalone device.

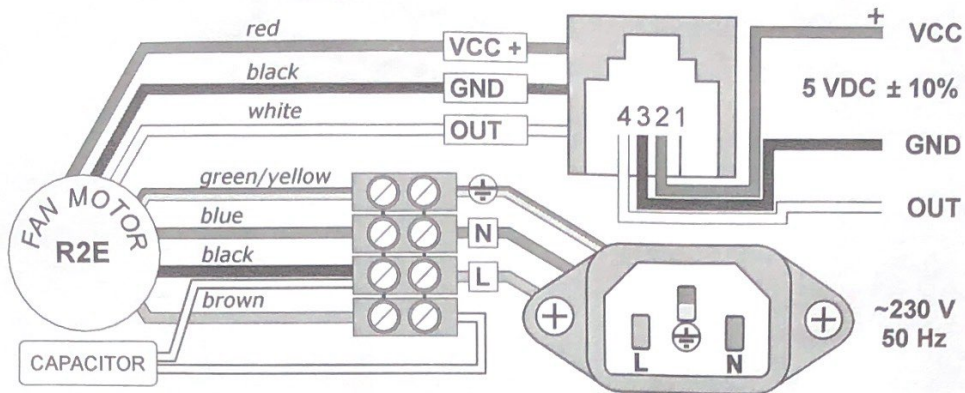
### 4. Installation of the fan.

The fan can be mounted directly on the flue (smoke conduit) of a boiler or a fireplace. The assembly method should take into account the possibility of cleaning the fan.

**WARNING!** After mounting, there must be no access to the rotating part of the fan.

## 5. Connecting diagram

The fan has single-phase induction motor with a capacitor.  
It's also equipped with Hall Sensor IC.



Mains connecting cable should be 3 x 0.75 mm<sup>2</sup> in cross-section area (3x20 AWG).  
Qualified personnel only should connect the fan.

## 6. Exploitation and maintenance

**To ensure fail-free operation, the following has to be done at least once a year (depending on dust levels):  
check electrical installations,  
carefully clean the fan blades and the protecting grill.**

**The fan should be disassembled before cleaning the dirty fan blades. This should be done by qualified personnel only.**

## 7. Safety instructions

- 7.1. Electrical installation has to be made according to the applicable rules.
- 7.2. The fan is not designed to circulate high-dust air, steam, corrosive or explosive gases.
- 7.3. Execution of any work can be carried out at the fan only when the power supply is disconnected and by qualified personnel.
- 7.4. Assembly of the fan to other device has to protect and prevent access to the rotor.



**The Manufacturer of the Products covered by this Declaration is:**

M PLUS M Frąszczak M. Kruk E. Sp.J.  
Address: Obłaczkowo 148; 62-300 Września, Poland  
Tel.: +48 61 4374920 Fax: +48 61 4374922

**Fan series:** WPA..., WPB..., WW..., WCP..., CMB..., G2E..., R2E..., R2D..., RF2C..., RR...,

equipped with asynchronous (or electronically commutated), commutated DC,  
internal or external rotor motor,

**are developed, designed and manufactured in accordance with the EC Directives:**

**2014/35/EC** Low Voltage Directive (LVD)

**2014/30/EC** Electromagnetic Compatibility Directive (EMC)

**2009/125/EC** Directive establishing the requirements for energy-related products (ErP).

Conformity is declared to following standards (applicable to built-in components):

**EN 60034-1:2010 + Corr:2010**

**Rotating electrical machines  
Part 1: Rating and performance**

**EN 60204-1:2007 + A1:2009  
+ Corr:2010**

**Safety of machinery - Electrical equipment of machines -  
Part 1: General requirements**

In case the fan or rotor is installed as part of a larger system, it is the responsibility  
of the assembler of said system to ensure the compatibility with the directives.

Signed:

Marzenna Frąszczak  
(owner)

Edward Kruk  
(owner)

Date: 2018-02-04

**The Waste Electrical and Electronic Equipment Directive**

(WEEE Directive) is the European Community directive 2002/96/EC on waste electrical and electronic equipment (WEEE) Waste equipment. This symbol indicates that when the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling. By separating this product from other household-type waste, the volume of waste sent to incinerators or land-fills will be reduced and natural resources will thus be conserved.

## WARRANTY

ebm  
papst



Fan type:

**R2E 180-CG82-05**  
**R2E 180-CG82-12**

Motor type:

**M2E 068-CF**

**Producer / Manufacturer stamp:**

**M PLUS M** SPÓŁKA JAWNA  
M PLUS M Frąszczak M. Kruk E. sp.j.  
OBŁACZKOWO 148, 62-300 Września  
tel. (061) 437-49-20, fax 437-49-22  
NIP 780-00-07-027, REGON 630151518

Date of manufacture:

**July 2025**

Date of sale:

**Distributor / Seller stamp:**

Notes:

### Warranty terms:

- 1. Producer** M PLUS M company ensures good quality and proper operation of the fan when used according to the rules given in that manual.
- Warranty period is 2 years from purchase date, not longer however than 3 years from manufacturing date.
- The **Distributor (Seller)** is obliged to free warranty repair within 14 days from date of delivery of the fan to **Distributors (Seller) site**.
- The **Distributor (Seller)** returns cost of shipping of the fan with economy parcel within warranty period.
- Jurisdiction for all disputes is the local (Polish) court competent for the company M PLUS M, after exhausting amicable ways of resolving the case.
- Loss of warranty rights in case of:
  - installation and application not according to this manual
  - mechanical damage
  - delivering for repair incomplete or being improperly repaired or machined fan
- This warranty is void without date and stamp of sale, or changed by unauthorised personnel.