

SUPPLEMENTARY INFORMATION

EN

Translation of the Original



Rotary vane vacuum pump with IE2 motor



Dear Customer,

Thank you for choosing a Pfeiffer Vacuum product. Your new rotary vane pump is designed to support you by its performance, its perfect operation and without interfering your individual application. The name Pfeiffer Vacuum stands for high-quality vacuum technology, a comprehensive and complete range of top-quality products and first-class service. With this expertise, we have acquired a multitude of skills contributing to an efficient and secure implementation of our product.

Knowing that our product must not interfere with your actual work, we are convinced that our product offers you the solution that supports you in the effective and trouble-free execution of your individual application.

Please read these operating instructions before putting your product into operation for the first time. If you have any questions or suggestions, please feel free to contact <u>info@pfeiffer-vacuum.de</u>.

Further operating instructions from Pfeiffer Vacuum can be found in the <u>Download Center</u> on our website.

Disclaimer of liability

These operating instructions describe all models and variants of your product. Note that your product may not be equipped with all features described in this document. Pfeiffer Vacuum constantly adapts its products to the latest state of the art without prior notice. Please take into account that online operating instructions can deviate from the printed operating instructions supplied with your product.

Furthermore, Pfeiffer Vacuum assumes no responsibility or liability for damage resulting from the use of the product that contradicts its proper use or is explicitly defined as foreseeable misuse.

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We reserve the right to make changes to the technical data and information in this document.

1 About this manual



IMPORTANT

Read carefully before use. Keep the manual for future consultation.

1.1 Validity

This document applies to the following devices:

• Uno 30 M with IE2 motor

This supplementary information describes important deviations from the standard product and is valid only in conjunction with the valid operating instructions.

1.2 Applicable documents

Document	Number
Operating instructions for "Standard rotary vane pump" UNO 30 M	PD 0006 BN
Declaration of conformity	Part of this document

You can find this document in the Pfeiffer Vacuum Download Center.

2 Installation

2.1 Connecting single-phase motors

NOTICE

Property damage from the voltage range being set incorrectly

Recommissioning after longer downtimes of the vacuum pump or after changing the oil requires the current settings to be checked.

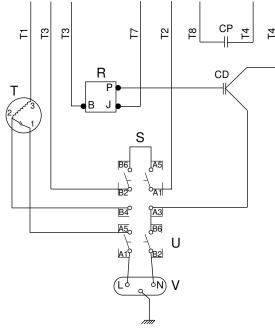
- ▶ Before switching the vacuum pump on each time, check the currently set voltage range.
- Make changes to the voltage range only after the vacuum pump has been disconnected from the mains.



The magnetic coupling does not offer an overload protection.

The magnetic coupling's torque is so strong that it does not provide any overload protection for the motor.

Vacuum pumps with single-phase motors are equipped with an installed thermal protection switch. In event of excess temperature, the protection switch interrupts the motor current, but does not offer a permanent shut-down of the motor.





- R Capacitor relay
- U Mains switch
- S Voltage selector switch T Thermic protection switch
- V Rubber connector

Motor voltage [V], ± 5%	Frequency [Hz]	Motor rating [kW]	Rated (nominal) cur- rent [A]	I _{max} [A]
100 – 110	50	0.75	12.0	87
200 – 230	50	0.75	6.5	49
100 – 120	60	0.90	13.0	89
200 – 240	60	0.90	6.5	47

Tbl. 1: Recommended fuse ratings for on-site fuse protection

On-site fuse protection

For the protection of the motor in case of malfunction, always provide fuse protection according to the regulations applicable for the region.

Switch position:	"1"	"2"
Rocker switch "S"	□□□□ 200-240 V □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	200-240 V 100-120 V
Voltage ranges	100 – 110 V / 50 Hz 100 – 120 V / 60 Hz	200 – 230 V / 50 Hz 200 – 240 V / 60 Hz

Tbl. 2: Permissible voltage ranges for reversible single phase motor

Changing the voltage range (for vacuum pumps with reversible motor)

- 1. Determine the mains voltage on-site each time before you install the vacuum pump or move the vacuum pump to a different location.
- 2. Disconnect vacuum pump from mains.
- 3. Set the required voltage range at rocker switch "S" in motor terminal box.

3 Technical data and dimensions

3.1 Technical data

Type designation	Uno 30 M
Connection flange (in)	DN 25 ISO-KF
Gas ballast	Yes
Motor type	1-phase motor
Motor protection	Bimetal
Switch	Yes
Mains cable included	Yes
Magnetic coupling	Yes
Cooling method	Air (Forced convection)
Protection degree	IP54
Ambient temperature	15 – 40 °C
Temperature: Shipping	-25 – 55 °C
Input voltage(s)	200 – 230 V AC, 50 Hz 200 – 240 V AC (±5 %), 60 Hz
Rated power 50 Hz	0.75 kW
Rated power 60 Hz	0.9 kW
Rotation speed at 50 Hz	1500 rpm
Rotation speed at 60 Hz	1800 rpm
Continuous gas input temperature, max.	40 °C
Final pressure with gas ballast	1 hPa
Final pressure	2 · 10 ⁻¹ hPa
Pumping speed at 50 Hz	30 m³/h
Pumping speed at 60 Hz	35 m³/h
Exhaust pressure, max.	1500 hPa
Exhaust pressure, min.	250 hPa
Emission sound pressure level without gas ballast at 50 Hz	62 dB(A)
Operating fluid	F4
Operating fluid amount	11
Leakage rate safety valve	1 · 10⁻⁵ Pa m³/s
Weight	44 kg

Tbl. 3: Technical data UNO 30 M | PK D54 262 B

3.2 Dimensions

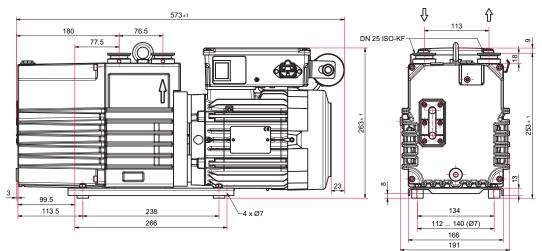


Fig. 2: Dimensions Duo 30 M | PK D54 262 B Dimensions in mm

EC Declaration of Conformity

Declaration for product(s) of the type:

Rotary vane pump

Uno 30 M

We hereby declare that the listed product satisfies all relevant provisions of the following **European Directives**.

Machinery 2006/42/EC (Annex II, no. 1 A)

Electromagnetic compatibility 2014/30/EU

Restriction of the use of certain hazardous substances 2011/65/EU Restriction of the use of certain hazardous substances, delegated directive 2015/863/EU

Harmonized standards and applied national standards and specifications:

DIN EN ISO 12100:2011 DIN EN 1012-2: 2011 DIN EN ISO 13857:2020 DIN ISO 21360-1:2016 ISO 21360-2:2020 DIN EN 61010-1:2020 DIN EN IEC 61000-6-2:2019 DIN EN IEC 61000-6-4:2020 DIN EN ISO 2151:2009 DIN EN IEC 63000:2019

The authorized representative for the compilation of technical documents is Dr. Adrian Wirth, Pfeiffer Vacuum GmbH, Berliner Straße 43, 35614 Asslar, Germany.

Signature:

- Chen

Pfeiffer Vacuum GmbH Berliner Straße 43 35614 Asslar Germany

(Daniel Sälzer) Managing Director Asslar, 2024-08-01





UK Declaration of Conformity

This declaration of conformity has been issued under the sole responsibility of the manufacturer.

Declaration for product(s) of the type:

Rotary vane pump

Uno 30 M

We hereby declare that the listed product satisfies all relevant provisions of the following **British Directives.**

Supply of Machinery (Safety) Regulations 2008 **Electromagnetic Compatibility Regulations 2016** The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Applied standards and specifications:

EN ISO 12100:2010	EN 61010-1:2010 + A1:2019 + A1:2019/AC:2019
EN 1012-2:1996+A1:2009	EN IEC 61000-6-2:2019
EN ISO 13857:2019	EN IEC 61000-6-4:2019
ISO 21360-1:2020	EN ISO 2151:2:2008
ISO 21360-2:2020	EN IEC 63000:2018

The manufacturer's authorized representative in the United Kingdom and the authorized agent for compiling the technical documentation is Pfeiffer Vacuum Ltd, 16 Plover Close, Interchange Park, MK169PS Newport Pagnell.

Signature:

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(Daniel Sälzer) Managing Director Asslar, 2024-08-01



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