

WALPOL

Assembly and operating instructions

Compact fans and centrifugal fans



Version 7.0
B12

1. General information

1.1. Note symbols



Danger

Immediate hazard

Failure to observe the warning will result in immediate death or serious injury.



Caution

Low-risk hazard

Failure to observe the warning may result in moderate injury.



Warning

Potential hazard

Failure to observe the warning may result in death or serious injury.

Important

Danger with risk of property damage

Failure to observe the warning may result in property damage.



Note

Useful information and instructions

2. Important safety instructions

Planners, system builders and operators are responsible for proper installation and operation in accordance with the intended use.

- Read the operating instructions completely and carefully.
- Operating instructions and applicable documents, such as electrical connection diagrams or operating instructions of the motor, must be kept with the fan/compact fan. They must always be available at the place of use.
- Local and national laws and regulations must be observed and complied with.
- Take into account the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- The fan/compact fan may only be used when in perfect condition.
- The generally prescribed electrical and mechanical protective devices must be provided.
- Secure the installation site and the premises against access by unauthorised persons during installation, electrical connection, commissioning, troubleshooting and maintenance.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- Ensure that all warning labels on the fan/compact fan are complete and legible.
- This appliance is not intended for use by persons (including children) with reduced physical or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

2.1. Personnel

The fan/compact fan may only be operated by qualified, instructed and trained personnel. These persons must know the relevant safety regulations in order to recognise and avoid possible dangers. The individual actions and qualifications can be found in Table 1 Qualification.

Table 1 Qualification

Actions	Qualification	
Storage, operation, transport, cleaning, disposal	Trained personnel (see following instructions)	
Electrical connection, commissioning, electrical disconnection	Qualified electrician or persons with appropriate qualifications	
Installation, Dismantling	Assembly specialist or persons with appropriate qualifications	
Maintenance	Electrical specialist or persons with appropriate qualifications	Assembly specialist or persons with appropriate qualifications
Repair	Electrical specialist or persons with appropriate qualifications Assembly specialist or persons with appropriate qualifications	Assembly specialist or persons with appropriate qualifications



Note

The operator must ensure that the personnel have been instructed in the operation and have understood the operating instructions. If anything is unclear, please contact Walpol or our representatives.

2.2. Personal protective equipment

Protective equipment must be worn when carrying out any work in the vicinity of the fan/compact fan.

- Protective clothing
- Protective gloves
- Safety goggles
- Safety shoes
- Hard hat
- Hearing protection

2.3. The 5 safety rules for working in and on electrical systems

- | | | |
|--|---|---|
| 1. Disconnect (disconnect all poles of an electrical system from live parts) | 2. Secure against being switched on again | 4. Earth and short-circuit |
| | 3. Check that no voltage is present | 5. Cover or isolate adjacent live parts |

3. Warranty

In order for warranty claims to be asserted, the products must be properly connected and operated and used in accordance with the data sheets. Further prerequisites are a fully completed maintenance plan and commissioning report, which will be requested from Walpol in the event of a warranty claim. The commissioning report is part of this document, the maintenance plan must be prepared by the operator, see chapter Maintenance 12.3 Maintenance

4. Delivery, transport, storage

Safety instructions

Warning: Danger due to rotating fan blades

- Prevent unauthorised persons from accessing the unit by security personnel or an access guard.

Warning: Suspended loads

- When carrying out any work in the vicinity of the fan/compact fan, wear protective equipment, see 2.2 Personal protective equipment,
- Never step under a suspended load.
- Ensure that no one is under a suspended load.

Delivery

Each fan/compact fan leaves our factory in perfect electrical and mechanical condition. It is recommended that the fan/compact fan be transported to the installation site in its original packaging.

Check delivery

- Check the packaging for transport damage. Any damage must be noted in the cargo manifest.
- Check that the delivery is complete.

Unpacking



Warning

When removing the transport packaging, there is a risk of damage from sharp edges, nails, staples, splinters, etc.

- Unpack the fan/compact fan carefully.
- Check the fan/compact fan for obvious transport damage.
- Do not remove the packaging until shortly before installation.
- Wear protective equipment for any work in the vicinity of the fan/compact fan, see 2.2 Personal protective equipment

Transport

Safety instructions

Warning: Electrical or mechanical hazard due to fire, moisture, short circuit or malfunction.

- The fan/compact fan must never be carried by the connection cable, terminal box, impeller, guard grille, inlet connection or silencer.
- In the case of open transport, ensure that no water can penetrate the motor or other sensitive components.
- It is recommended that the fan/compact fan be transported in its original packaging up to the installation site.

Caution: Careless loading or unloading may cause damage to the fan/compact fan.

- Carry out loading or unloading carefully.
- Use lifting equipment designed for the load.
- Observe the transport arrows on the packaging.
- The packaging is only used as transport protection and must not be used for lifting.

Storage

- Store the fan/compact fan in the original packaging in a dry, dust-free place protected from the weather.
- Avoid exposure to extreme heat or cold.

Important

Danger due to loss of function of motor bearing

- Avoid excessively long storage periods (recommendation: max. 1 year).
- Check that the motor bearing functions correctly before installation.

5. Description

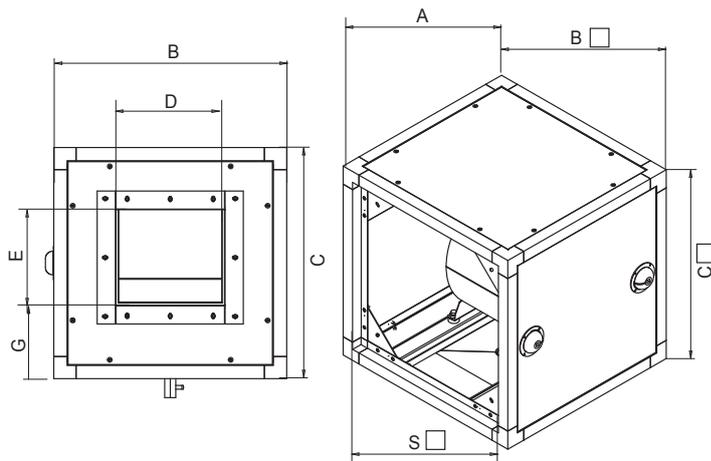
5.1. Compact fans and centrifugal fans with AC motor

Speed control options:

- 400V IE2/3 motors with transformer speed control
- 230V motors with transformer speed control

5.2. Description Compact fans

- The compact fans are double-walled with 20mm panels for sound insulation. The galvanised housing is equipped with a floor pan with a 1/2" condensate drain. One side wall is provided as a maintenance opening.
- All compact fans have a built-in centrifugal fan, see 5.3



standard open side

(various panels, see accessories). panels, are accessories, see catalogue)

Dimensions (in mm)	CLC 7/7	CLC 9/9	CLC 10/10	CLC 12/9	CLC 10/10 D	CLC 12/9 D	CLC 15/15 D
A	520	690	690	690	690	690	820
B	520	690	690	690	690	690	820
C	520	690	690	690	690	690	820
S	460	630	630	630	630	630	760
D	242	310	342	321	342	321	482
E	215	265	293	347	293	347	407
G	165	193	209	239	209	239	275
W-Connect Typ	S-520	M-690	M-690	M-690	M-690	M-690	L-820

5.3. Description Centrifugal fan

The centrifugal fans, double inlet with direct drive by built-in motors in the delivery flow, are suitable for conveying dust-free air and other non-aggressive gases or vapours. The non-gas-tight scroll housing is prepared for the connection of flanges. The drum impeller with forward curved circular blades is directly mounted on the rotor of the built-in motor or directly mounted on the shaft of the internal rotor motor. The built-in motors are designed in protection class IP /20/44/54 and thermal class F or B depending on the fan (see technical type plate or catalogue). The motors are partly equipped with thermal contacts against thermal overload (see circuit diagram or technical catalogue). The connection is made at the terminal box or via a loose cable. If the unit is to be installed outdoors or if very humid air is to be conveyed, a condensation drain - at the lowest point of the housing - must be provided.



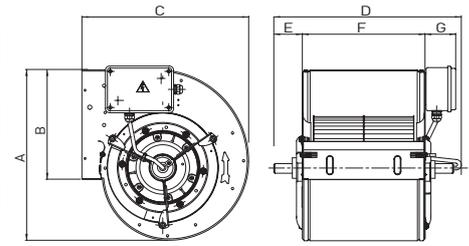
12/12

The fans are intended for installation in equipment or systems

They do not have their own contact hazard protection as standard. Appropriate protective measures must be taken in accordance with DIN EN ISO 13857!

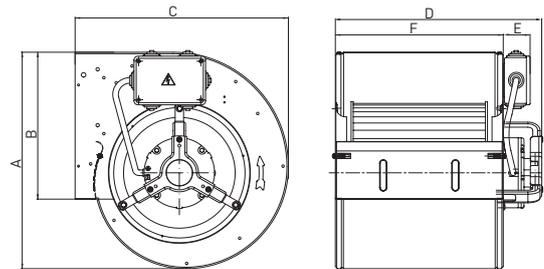
Dimensions
(in mm)

	DM-A 133/190	DM-A 146/180	DM-A 7/7	DM-A 9/9 ED	DM-A 9/9	DM-A 10/10	DM-A 12/12
A	183	217	322	326	387	443	521
B	70	102	208	260	263	290	342
C	178	203	316	318	379	425	491
D	215	224	355	377	377	399	453
E	0	0	54	21	21	10	0
F	215	224	232	298	298	331	395
G	0	0	58	58	58	58	58



Dimensions
(in mm)

	DM 12/9	DM 10/10 D	DM 15/15 D
A	521	446	625
B	341	290	403
C	490	425	579
D	383	387	533
E	40	44	25
F	311	333	473



5.4. Fan and motor data

- Max. Temperature of the transported air, Max. Ambient temperature, sound pressure level -> See data sheet, available in our online catalogue.
- Voltage, amperage, protection class, weight -> See type plate
- The motor data can be found on the type plate of the motor or in the technical documentation of the motor manufacturer.
- The data on the type plate of the fan/compact fan apply to "normal air" according to ISO 5801.

5.5. Intended use

- The fans/compact fans are intended for installation in ventilation systems.
- The fan/compact fan is suitable for conveying **clean air**.
- The maximum permissible operating data on the type plate apply to an air density of 1.2 kg/m³ (NN) and a maximum humidity of 80%.



Note

Any use deviating from this is considered improper. Walpol accepts no liability for any resulting personal injury and/or damage to property!

Improper use is mainly when the fan/compact fan is used in a way other than described. The following examples are contrary to the intended use and dangerous:

- | | | |
|--|--|---|
| • Conveying explosive and flammable media | • Operation in potentially explosive atmospheres | • Operation with closed air connections |
| • Conveying aggressive media | • Operation without a duct system or protective grille | • Outdoor installation without weather protection |
| • Conveying extremely polluted air without pre-filtering | | |



Note

We generally recommend pre-filtering the extract or supply air before the fan/compact fan
For example, with a filter box or an activated carbon module, see WALPOL product range

6. Type plate and type code

Each fan/compact fan has a type plate.

Please compare the fan/compact fan type/data with the version you ordered to avoid misunderstandings or incorrect deliveries.

7. Accessories

We recommend original accessories from Walpol. For information, please contact Walpol.

8. Installation

Warning: Risk of impact from falling fan/compact fan or fan parts.

- Check the surface for load-bearing capacity before installation.
- Take all static and dynamic loads into account when selecting lifting equipment and mounting parts.

General safety instructions

- The installation darf only be carried out by appropriately qualified persons, for details, see Table 1 Qualification.
- Take into account the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices must not be dismantled, bypassed or put out of function.
- Move the impeller of the fan/compact fan by hand before installation to check its free running.
- Provide contact protection, suction protection and safety distances according to DIN EN ISO13857 and DIN 24167-1.
- Use vibration dampers to prevent vibration transmission.
- Prevent foreign particles from being sucked in.
- To prevent vibration transmission to the duct system, we recommend using the flexible connectors.

Prerequisites

- Make sure that the fan/compact fan and all its components are undamaged.
- Make sure that the specifications on the type plate (fan and motor) correspond to the operating conditions.
- Make sure that there is sufficient space for mounting the fan/compact fan.
- Mount the fans so that there is sufficient access for troubleshooting, maintenance and repair work.
- When mounting, protect the unit from dust and moisture.

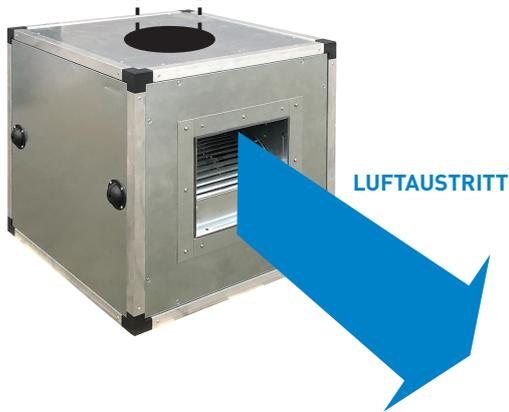
8.1. Assembly/installation

Safety note:

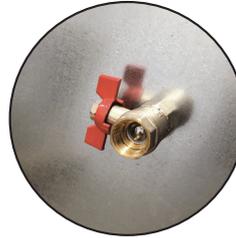
- Protective devices that have been dismantled for assembly work must be refitted immediately after assembly (and before electrical connection).
- Mount fans in such a way that stability or installation safety is ensured at all times during operation.
- Fasten fans to foot construction / base frame or flange. CAUTION Catching the masses at other points will damage the fan and endanger safety. 5.2 Installation site
- The type, condition, ambient temperature and ambient medium of the installation site must be suitable for the respective fan.
- The substructure must be level and have sufficient load-bearing capacity.
- If the fan is installed outdoors or if very humid air is conveyed, rainwater or condensation can collect in the housing. Provide a condensation drain socket - available as an accessory - at the lowest point of the enclosure. 5.3 Installation / fastening
- Fasten the fan or base frame to the substructure without tension.
- If fan feet are included in the scope of delivery (mounted or unmounted), they must be mounted in the desired position before installation, if necessary! CAUTION Tension causes fatigue fractures! They impair the function of the fan.
- No forces must be transmitted to the fan from system parts.
- Use flexible connection pieces for duct connection.
- Ensure uniform deflection of the vibration dampers.

8.1.1. Compact fans in individual operation

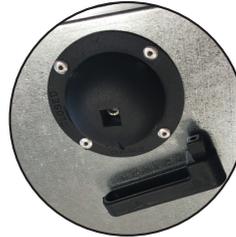
**LUFTEINTRITT
(Zuschnitt bauseits)**
 Paneel mit Zuschnitt kann auch an andere
 Position des Gehäuses montiert werden



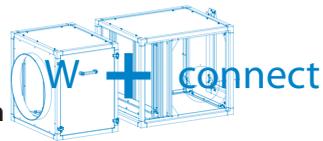
Built-in fan



Condensate drain
 on the underside



Closure



8.1.2. Compact fans in the W-Connect system

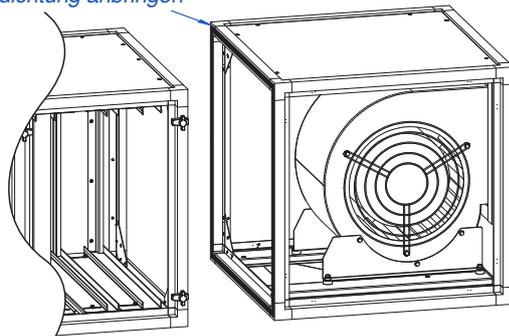


Note

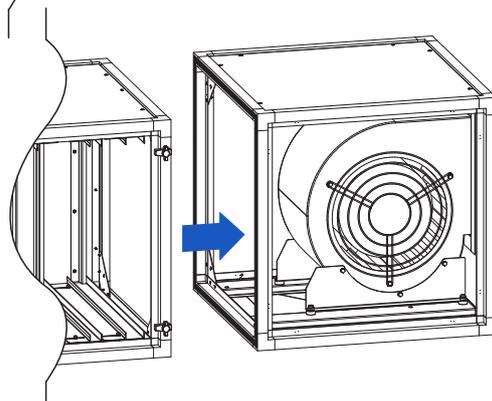
Only modules of the same size can be connected to each other.

1.

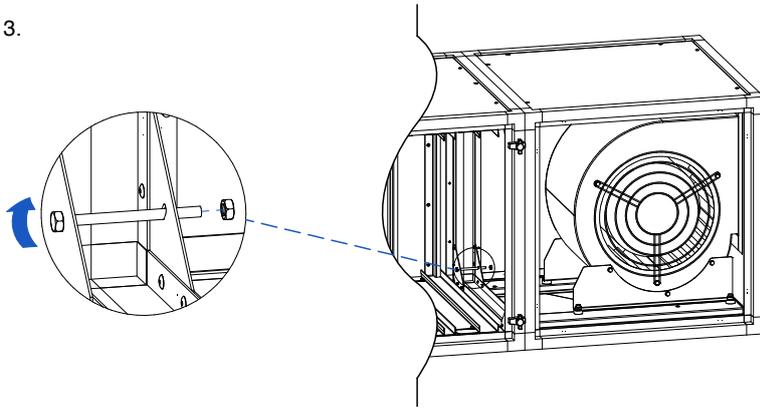
Klebedichtung anbringen



2.



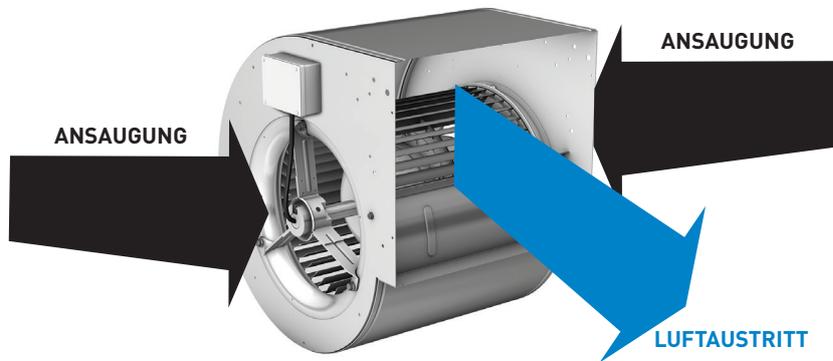
3.



The screw connection system is already integrated in the series Kompakt fan type CLC, filter box type FB, activated charcoal module type WAM. **For the GBV and GBG airboxes, the W-Connect Kit must be used.**

8.1.3. Centrifugal fan

Centrifugal fans are intended for installation in " housings " (e.g. ventilation construction, kitchen bonnets, etc.).



Note

Centrifugal fans must have sufficient free intake area (at least half the diameter of the impeller) on both sides of the housing!

9. Electrical connection

Safety instructions

Warning: Danger due to electrical voltage!

- The 5 safety rules must be observed, see The 5 safety rules for working in and on electrical installations
- Prevent water from entering the terminal box.
- The electrical connection may only be carried out by suitably qualified persons, for details see. Table Qualification
- The electrical installation of the fan and the components may only be carried out by specially trained personnel in compliance with these operating instructions and the applicable regulations.

The following standards and guidelines must be observed:

- EN 60204-1, IEC 60364-1 / DIN VDE 0100
- Local regulations of the power supply companies
- To protect against unexpected start-up, install devices in accordance with DIN EN 60204 (e.g. lockable isolation switch).

Warning: Danger due to electrostatic influence of medical implants!

- Persons with medical implants should keep a sufficient distance from the corresponding devices.

Connection

- Motor / Motor connection Connect the motor according to the connection diagram enclosed in the terminal box.
- The cross-section of the protective earth conductor must be equal to or greater than the phase cross-section.

- Check whether the data on the type plate match the connection data.
- Carry out the electrical connection according to the wiring diagram.
- Install a disconnecting device permanently in the electrical installation (all-pole contact opening min. 3 mm).
- Use all locking screws.
- Insert the screws by hand so that the thread is not damaged.
- Tighten all screws firmly to ensure IP protection.
- Screw the cover of the terminal box/revision switch evenly.
- Connect the cable end in a dry environment.

9.1. Motor protection

- The motors are equipped with internal or upward-guided thermal contacts.
- The thermal contacts switch off the motor either directly (in series with the motor winding) or in conjunction with our full motor protection switching device if the permissible winding temperature is exceeded, thus guaranteeing optimum motor protection (observe the wiring diagrams!).
- Motors with a rated power up to 4kW can generally be switched on directly.
- For motors with a rated power >4kW, star-delta starting or soft starting must usually be provided.
- In all cases, observe the specified power limitations from the responsible power supply company. The motors are designed for continuous operation S1.
- For more than three starts per hour, the suitability of the motor must be confirmed by Walpol.

Important

Fuses or circuit breakers are not sufficient motor protection.

Damage caused by insufficient motor protection voids the manufacturer's warranty

Important

Motor damage due to overvoltage, overload or short circuit.

- Temperature monitors that are led out must be integrated into the control circuit in such a way that in the event of a fault they do not switch on again automatically after cooling down.
- Motor cables and temperature monitoring cables must always be laid separately.
- Without thermal protection: Use motor protection switches!

9.2. Fans with variable speed



Warning

Resonance frequencies can result in increased vibrations in certain speed ranges. These vibrations can destroy components.

- Operate the fan/compact fan only outside these speed ranges.
- Run through these speed ranges so quickly that no vibration can exceed the values for the resonance frequency.
- The operating instructions for the speed controller must be observed.

10. Commissioning

The warranty is only valid if commissioning has been carried out correctly and written proof of this has been provided.

Safety instructions

Commissioning may only be carried out by appropriately qualified persons, for details, see. Table Qualification

Prerequisites

- Assembly and electrical connection have been completed properly.
- Inlet and outlet are clear.
- Residual material from the installation and foreign bodies have been removed from the fan/compact fan and ducts.
- The cable glands have been tightened.
- Check the fan/compact fan for visible damage before switching it on and ensure that the protective devices are functioning properly.
- The data on the type plate correspond to the connection data.
- Use all locking screws.
- The safety devices have been fitted.
- Install a disconnecting device permanently in the electrical installation (all-pole contact opening min. 3 mm). Check whether all mechanical and electrical safety devices have been fitted and connected.
- If, due to the type of use of the fan, inlet and outlet openings, as well as drive shaft or other rotating parts are freely accessible, safety guards must be fitted in accordance with DIN EN ISO 13857! Appropriate guards are available as accessories and must be expressly ordered.
- If the surface temperature of accessible fan parts exceeds +70°C (DIN EN ISO 13732-1), separating guards must be fitted. Before commissioning, carry out the following checks:
- Check that the impeller runs freely by turning it by hand.
- Check that the type of current, voltage and frequency of the mains connection correspond to the fan or motor rating plate.

Check that the connected control devices function properly:

- Close the inspection openings (if any).
- The fan may only be put into operation if all protective devices are fitted and it is ensured that the impeller is protected in accordance with DIN EN ISO 13857!
- The suitability of the protective devices and their attachments to the fan must be evaluated in connection with the overall safety concept of the system.
- Test run Switch on the fan briefly and check the direction of rotation of the impeller by comparing it with the direction of rotation arrow on the fan. If the direction of rotation is incorrect, reverse the polarity of the motor electrically, observing the safety instructions.
- Check current consumption **CAUTION** After reaching the fan's operating speed, immediately measure the current consumption and compare it with the rated motor current on the motor or fan type plate.
- Switch off immediately if overcurrent persists.
- Check smooth running **CAUTION** Check fan for smooth running. There must be no unusual oscillations or vibrations.

Tests

The following sequence must be observed during commissioning:

1. Switch on the fan/compact fan.
2. Carry out the tests required in the commissioning protocol (19 Commissioning protocol, speed-controllable fans: "Measurement data during commissioning" at maximum speed.
3. Switch off the fan/compact fan. With the mains voltage switched on, the motor starts an initialisation (a few seconds). After initialisation, the control input is active.

11. Operation

Safety instructions

Warning: Danger from electrical voltage or moving parts.

- The unit may only be operated by suitably qualified persons, for details see. Table 1 Qualification,
- Operate the fan/compact fan only in accordance with its operating instructions and the operating instructions for the motor.



Note

To maintain operation and safety

We recommend having the function and condition of fans and compact fans checked and documented at regular intervals by professionally qualified personnel or a specialist company. The type, scope and maintenance intervals, as well as any additional activities required, must be determined depending on the use of the fans and the prevailing conditions on site. The maintenance and inspection recommendation based on VDMA 24186-1

12. Troubleshooting/maintenance/repair

12.1. Safety instructions

- Troubleshooting/maintenance/repair may only be carried out by appropriately qualified persons, for details see. Table 1 Qualification.
- The 5 safety rules must be observed, see 2.3 The 5 safety rules for working in and on electrical installations.
- The impeller must be at a standstill.

12.2. Troubleshooting

Table 13 Troubleshooting

Malfunction	Remedy	Possible causes	Remedy
Fan runs unsteadily		Impeller is out of balance	If possible, have it rebalanced by a specialist company. Otherwise, please contact Walpol.
		Dirt on impeller	Clean carefully, rebalance
		Material degradation on impeller due to aggressive pumped media.	Contact Walpol
		Direction of rotation of impeller incorrect	Change direction of rotation if possible. Otherwise, please contact Walpol.
		Deformation of the impeller due to excessive temperature.	Make sure that the temperature does not exceed the certified value/mount a new impeller.
		Vibrations/vibration	Check the installation of the fan/compact fan/check the duct system, see .
		Fan operation in resonance frequency range	Consider chapter 9.2 Fans with variable speed
Air performance of the fan/compact fan too low		Direction of rotation Impeller incorrect	Change direction of rotation if possible. Otherwise, please contact Walpol.
		Incorrect connection wiring (e.g. star instead of delta).	Check connection wiring and correct if necessary.
		Pressure losses too high.	Optimise duct routing.
		Volume flow controllers are not or only partially open.	Check opening position on site.
		Inlet or pressure paths blocked.	Remove blockage.
Grinding noises when starting or operating the fan/compact fan		Check whether the duct connections on the fan/compact fan are tightened.	Loosen duct connections and realign.
Thermal contact/ PTC thermistor tripped		Direction of rotation of impeller incorrect	Change direction of rotation if possible. Otherwise contact Walpol.
		Missing phase	If using a 3-phase motor (no EC), check that all 3 phases are present.
		Motor overheating	Check impeller cooling (if present), check resistance of motor windings (if possible) / contact Walpol.
		Capacitor (if used) not or not correctly connected	Connect capacitor correctly.
		Motor blocked	Contact Walpol

Fault Remedy	Possible causes	Remedy
Fan does not reach nominal speed	Defective motor winding	Contact Walpol
	Drive motor incorrectly aligned	Contact Walpol
	Control devices (if used), such as frequency converter or transformer are incorrectly set.	Set control devices correctly.
	Mechanical blockage	Remove blockage.
Motor does not rotate	Incorrect supply voltage	Check supply voltage, restore power supply.
	Connection defective	Disconnect from power supply, correct connection according to wiring diagram
	Temperature monitor has reacted.	Let motor cool down. Determine cause of error and correct.
Electronics/motor overheated	Cooling insufficient	Improve cooling.
	Motor overload	Check whether the correct fan/compact fan is used for the application.
	Ambient temperature too high	Check whether the correct fan/compact fan is used for the application.

12.3. Maintenance

The warranty is only valid if maintenance has been carried out correctly and written proof of this has been provided.

To ensure continuous fan operation, we recommend regular maintenance intervals. These maintenance intervals are specified in the "Activities" table below. In addition, follow-up activities such as cleaning, replacement of defective components or other corrective measures must be carried out by the operator. For traceability, it is necessary to create a maintenance plan in which the work carried out is documented. This must be drawn up by the operator. If "extreme operating conditions" prevail, the maintenance intervals must be shorter. Examples of extreme operating conditions:

- Fans for kitchen exhaust air
- Permanent ambient temperature > 30 °C or < -10 °C, or temperature fluctuations > 20 K

Table 14 Activities

Actions	Normal Operating conditions		Extreme Operating conditions	
	Semi-annually	Annually	Quarterly	Semi-annually
Check the fan/compact ventilator and its components for visible damage, corrosion and dirt.		X		X
Check the impeller for damage and imbalance.		X		X
Check the correct function of the condensate drain.		X	X	X
Clean the fan/compact fan/ventilation system (see 13 Cleaning).	X		X	
Check the screw connections for tightness and damage/defects.		X	see normal operating conditions	
Make sure that the inlet of the fan/compact fan is free of dirt.		X		X
Check that the fan/compact fan and its components are used as intended.	X		see normal operating conditions	
Check the current consumption and compare this with the nominal data.		X		X
Check the vibration dampers (if used) for correct function, visible damage and corrosion.		X	see normal operating conditions	
Check the electrical and mechanical protective devices for correct function.		X	see normal operating conditions	
Check that the type plate of the fan/compact fan is legible.		X		X
Check the connection terminals and cable glands for tight fit and visible damage/defects.		X	see normal operating conditions	
Check the flexible connectors for damage.	X		see normal operating conditions	

12.4. Spare parts

- Only use original spare parts from Walpol!
- When ordering spare parts, state the serial number of the fan/compact fan. This is indicated on the type plate.

13. Cleaning

Safety instructions

- Cleaning may only be carried out by suitably qualified persons, for details see Table 1 Qualification. The 5 safety rules must be observed, see 2.3 The 5 safety rules for working in and on electrical installations.
- The impeller must be at a standstill.
- The rules of VDI 2052 apply.

Procedure

Important

For a long period of use, keep the fan/compact fan clean.

- Install a pre-filter (e.g. filter box from Walpol).
- Do not use hard brushes, steel brushes or sharp-edged objects.
- Never use a high-pressure cleaner ("steam jet").
- Do not bend or scratch the fan blades when cleaning.
- When cleaning the impeller, make sure that the balance weights are attached.
- Keep the airways of the fan clean and clean them carefully with a cleaning cloth or a "soft" brush if necessary.



Note

Proper operation is only possible with regular "gentle" cleaning.

14. Disassembly/removal

Disassembly and removal of the motor must be carried out in the reverse order of assembly and electrical connection.

15. Disposal

- Ensure that the material is recycled. Observe the national regulations.
- The unit and the transport packaging consist mainly of recyclable raw materials.

16. Commissioning report

The warranty is only valid if commissioning has been carried out correctly and written proof of this is provided.

Fan

Description:

Item no.:

Production order no.:

Installer

Company:

Contact person:

Company address:

Tel.No.:

E-mail:

Operator (installation site)

Company:

Contact person:

Company address:

Tel.No.:

E-mail:

Type of connection

Yes

No

Directly connected to the mains

Via contactor control

Transformer

Frequency converter

Sinus-Filter

Shielded cables

Motor protection

Yes

No

Motor protection switch or motor protection relay

PTC thermistor

Resistance value [Ω]:

Thermal contact

Electrical motor protection

Other

Functional test	Yes	No
Impeller easily rotatable (by hand)	<input type="checkbox"/>	<input type="checkbox"/>
Direction of rotation corresponds to direction of rotation arrow	<input type="checkbox"/>	<input type="checkbox"/>
Smooth running without unusual noises / vibrations	<input type="checkbox"/>	<input type="checkbox"/>
Rated data - Fan (nameplate on fan/compact fan housing)		
Voltage [V]:	Current [A]:	
Frequency [Hz]	Power [kW]:	
Impeller speed [rpm].		

Measurement data at commissioning		
Voltage [V]:	Temp. of the conveyed air [°C]:	
Current L1 [A]*	Impeller speed [rpm]	
Current L2 [A]:	Volume flow [m³/h]:	
Current L3 [A]:	Differential pressure [Pa]*:	

*For single-phase fans, enter in line "Current L1 [A]"

*Δ-pressure between suction and discharge side of the fan

If a volume flow measurement is not possible, the value can be calculated using the following formula:

	X	=
Duct cross-section [m²]	Flow velocity [m/s]	Volume flow [m³/h]:
<small>Grid measurement according to VDI 2044</small>		

	Yes	No
Commissioning of the fan/compact fan successful?	<input type="checkbox"/>	<input type="checkbox"/>

Date, signature installer

Date, Signature Operator

17. EU declaration of conformity

The manufacturer: Walpol GmbH
Benzstr. 13
45891 Gelsenkirchen

Product designation: LOW PRESSURE
CENTRIFUGAL FANS

Type designation: DM, DM-A, CBM

Serial number All Manufactured

From year of manufacture: 2005

The object of the declaration defined above complies with the requirements set out in the following articles of Appendix I of the Machinery Directive 2006/42/EC: Articles 1.1.2, 1.1.5, Article 1.5.1 (by fulfilling the requirements of the Low Voltage Directive 2014/35/EU), and Article 1.5.11 (by fulfilling, due to its inherently benign design, the requirements of EMC Directive 2014/30/EU with regard to emission and immunity to electromagnetic levels). Additional safety measures are still necessary to protect against risks arising from moving parts as per Article 1.3.8. Therefore the manufacturer of machinery or equipment where the fan is incorporated into or assembled is responsible for compliance with Article 1.3.8 and 1.4.1. Compliance with EN ISO 13857 refers to guards and protective devices when supplied, and installed, with the product.

It must not be put into service until the machine in which it is incorporated has been declared in conformity with the all requirements of the Machinery Directive 2006/42/EC according to Annex II-1 part B.

It is also in conformity with the relevant Union harmonization legislation: Commission Regulation (EU) No 327/2011 implementing Directive 2009/125/EC with regard to eco-design requirements for fans driven by motors with an electric input power between 125 W and 500 kW and RoHS Directive 2011/65/EU.

The following harmonized standards and technical specifications have been applied:

EN 60204-1:2006 + AC:2010	EN ISO 12499:2008
EN 62311:2008	EN ISO 13857:2008
EN ISO 12100:2010	

We are committed to provide relevant information on this product in response to a reasonable request by national authorities.

The Technical Director is the person authorised to compile the technical file in accordance with Annex VII part B.

Location: Gelsenkirchen
Date: 01.012.2021



Maximilian Girnus
Managing Director WALPOL GmbH

www.WALPOL.eu