

UVENTS



Installation, Operation & Maintenance Manual

UVENTS Ventilation Systems

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1. SAFETY INFORMATION

- Read and retain this manual before operating the fan.
- This fan is designed for smoke extraction and ventilation applications.
- Do not modify the motor or fire-rated components.
- All electrical work must be performed by qualified personnel.
- Disconnect power before installation or maintenance.
- Ensure proper grounding and electrical protection according to IP55 standards.
- Fire-rated operation (400°C / 2h) must only be used under emergency conditions as specified.

2. GENERAL DESCRIPTION

UVS-KO-AF4 is an aluminum impeller axial fan equipped with an F400 fire-rated motor certified according to EN 12101-3 (400°C / 2h). The fan is designed for both normal ventilation and emergency smoke extraction applications. The body is manufactured from DKP steel sheet and the impeller consists of airfoil type aluminum blades with adjustable pitch. The unit is suitable for industrial and commercial ventilation systems including smoke control installations.

3. TECHNICAL SPECIFICATIONS

Airflow Range	3,500 to 100,000 m³/h
Static Pressure	250 to 1800 Pa
Impeller	Airfoil type aluminum blades
Drive Options	Direct drive
Body & Impeller Material	DKP Steel Sheet
Motor Efficiency Class	IE2 / IE3
Protection / Insulation	IP55 / F Class
Frequency	50 Hz
Operating Temperature	-20 to +50 °C (continuous operation)
Fire Resistance	400°C / 2h (EN 12101-3 certified)

4. AREAS OF USAGE

- Smoke extraction systems
- Buildings
- Factories
- Hospitals
- Restaurants
- Car parks
- Industrial ventilation systems
- Outdoor applications

5. INSTALLATION

Install the fan according to airflow direction. The unit may be mounted in duct systems or wall openings as part of ventilation or smoke extraction systems. Ensure rigid and secure installation to prevent vibration. Confirm that sufficient clearance is provided around the impeller and motor for proper airflow and cooling. For smoke extraction applications, installation must comply with local fire safety regulations. Electrical connections must be made according to the motor nameplate and wiring diagram. Proper grounding is mandatory.

6. OPERATION

Verify that supply voltage and frequency match the motor nameplate ($\pm 5\%$). Before full operation, check correct rotation direction (for three-phase models). During normal operation, monitor for abnormal vibration, noise, or overheating. Fire-rated operation (400°C / 2h) is intended for emergency smoke extraction conditions only.

7. MAINTENANCE

Disconnect power before any intervention. Periodically inspect and clean the impeller blades and protective grille. Ensure that blade pitch adjustment mechanisms remain secure. Check motor and electrical connections regularly. Fire-rated components must not be altered or modified. Bearings are maintenance-free under normal operating conditions. Avoid high-pressure cleaning and prevent motor contact with water.

8. TROUBLESHOOTING

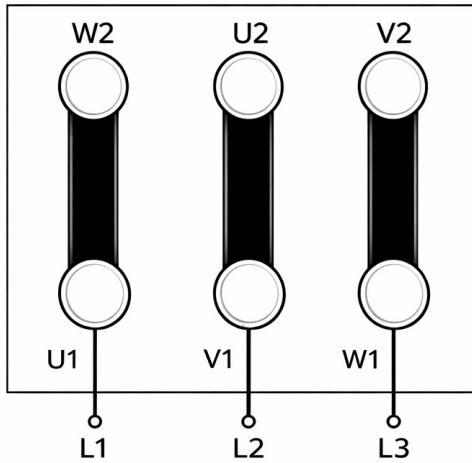
Issue	Possible Cause	Solution
Fan not starting	No power / wrong wiring	Check supply; verify wiring per diagram
Abnormal noise	Foreign object or misalignment	Inspect impeller/duct; tighten mounts
Low airflow	Incorrect rotation, obstruction, incorrect blade pitch	Verify rotation direction; remove obstruction; check blade angle

9. WARRANTY

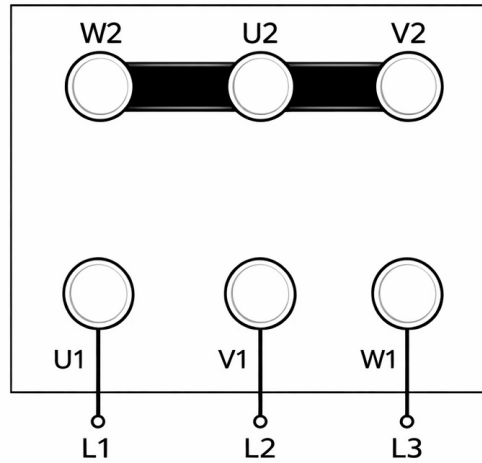
Warranty period is 2 years from delivery against manufacturing defects. Improper installation, user errors, and electrical faults are excluded. Repair time is up to 30 business days after notification.

10. APPENDIX – ELECTRICAL DIAGRAM

*Before making electrical connections, cut off the power and have all electrical work done by authorized personnel.



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