

Boost 355

Boost 400



Inline mixed-flow fan







CONTENTS

Safety requirements	3
Purpose	5
Safety requirements Purpose Delivery set Designation key	5
Designation key	5
Technical data	6
Technical data Mounting and set-up	7
Connection to power mains	9
Connection to power mains Technical maintenance	10
Troubleshooting	11
TroubleshootingStorage and transportation regulations	11
Manufacturer's warranty	12
Certificate of acceptance	13
Seller information	13
Manufacturer's warranty	13
Warranty card	13

This user's manual is a main operating document intended for technical, maintenance, and operating staff.

The manual contains information about purpose, technical details, operating principle, design, and installation of the Boost unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country. The information in this user's manual is correct at the time of the document's preparation.

The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.

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SAFETY REQUIREMENTS

- Please read the user's manual carefully prior to installing and operating the unit.
- All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
- The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information.
- Failure to follow the rules and safety precautions noted in this user's manual may result in an injury or unit damage.
- After a careful reading of the manual, keep it for the entire service life of the unit.
- While transferring the unit control, the user's manual must be turned over to the receiving operator.

UNIT INSTALLATION AND OPERATION SAFETY PRECAUTIONS



 Disconnect the unit from power mains prior to any installation operations.



Unpack the unit with care.



The unit must be grounded!

Do not change the power cable length at your own



 While installing the unit, follow the safety regulations specific to the use of electric tools.



- discretion.

 Do not bend the power cable.
- Avoid damaging the power cable.
- Do not put any foreign objects on the power cable.



 Do not lay the power cable of the unit in close proximity to heating equipment.



Do not use damaged equipment or cables when connecting the unit to power mains.



 Do not operate the unit outside the temperature range stated in the user's manual.



Do not touch the unit controls with wet hands.

 Do not carry out the installation and maintenance operations with wet hands.



 Do not wash the unit with water.

environments.

Do not operate the unit in aggressive or explosive

• Protect the electric parts of the unit against ingress of water.





- Do not allow children to operate the unit.
- The unit is allowed to be used by children aged from 8 years oldand above and persons with reduced physical, sensory, or mental capabilities or no experience and knowledge provided that they have been given supervision or instruction regarding safe use of the unit and understand the risks involved



 Disconnect the unit from power mains prior to any technical maintenance.



 Do not store any explosive or highly flammable substances in close proximity to the unit.



 When the unit generates unusual sounds, odour, or emits smoke, disconnect it from power supply and contact the Seller.



Do not open the unit during operation.



 Do not direct the air flow produced by the unit towards open flame or ignition sources.



Do not block the air duct when the unit is switched on.



 In case of continuous operation of the unit, periodically check the security of mounting.



Do not sit on the unit and avoid placing foreign objects on it.



Use the unit only for its intended purpose.



TAKE STEPS TO PREVENT INGRESS OF SMOKE, CARBON MONOXIDE, AND OTHER COMBUSTION PRODUCTS INTO THE ROOM THROUGH OPEN CHIMNEY FLUES OR OTHER FIRE-PROTECTION DEVICES.

SUFFICIENT AIR SUPPLY MUST BE PROVIDED FOR PROPER COMBUSTION AND EXHAUST OF GASES THROUGH THE CHIMNEY OF FUEL BURNING EQUIPMENT TO REVENT BACK DRAFTING.







TO AVOID A RANDOM RESTART OF THE THERMAL SWITCH, THE UNIT MUST NOT BE POWERED THROUGH AN EXTERNAL SWITCHING DEVICE, SUCH AS A TIMER, OR CONNECTED TO POWER MAINS USUALLY TURNED ON/OFF BY PUBLIC SERVICES.



THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.

DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.

PURPOSE

The product described herein is a mixed-flow inline fan for supply or extract ventilation of premises.

The fan is designed for connection to Ø 355 and 400 mm air ducts.

Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).

THE UNIT SHOULD NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL, OR SENSORY CAPACITIES, OR THOSE WITHOUT THE APPROPRIATE TRAINING.



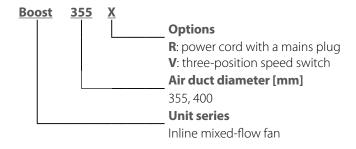
THE UNIT MUST BE INSTALLED AND CONNECTED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE BRIEFING.

THE CHOICE OF UNIT INSTALLATION LOCATION MUST PREVENT UNAUTHORIZED ACCESS BY UNATTENDED CHILDREN.

DELIVERY SET

Name	Number
Fan	1 pc.
User's manual	1 pc.
Packing box	1 pc.

DESIGNATION KEY



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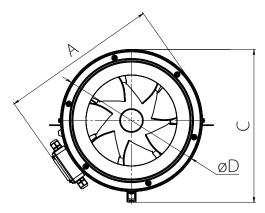
TECHNICAL DATA

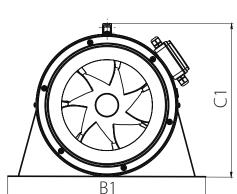
The unit is designed for indoor application with the ambient temperature ranging from +1 °C up to +40 °C and relative humidity up to 80 % at 25 °C. Ingress protection rating against access to hazardous parts and water ingress is IPX4.

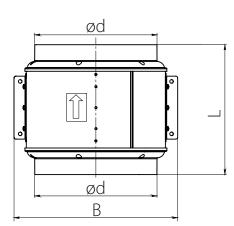
The unit is rated as a class I electric appliance. The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

Parameter	Boost 355			Boost 400		
Speed	High	Medium	Low	High	Medium	Low
Voltage [V] at 50 Hz	1~230					
Power [W]	126	131	150	197	204	224
Current [A]	0.60	0.58	0.66	0.91	0.90	0.98
Maximum air flow [m³/h]	2090	2296	2485	2677	3136	3350
RPM [min ⁻¹]	1350	1400	1470	1446	1390	1320
Maximum transported air temperature [°C]	-25+55					
Ingress protection rating	IPX4					

Overall dimensions of the unit [mm]







	Dimensions [mm]					Weight			
Model	D	d	Α	L	В	B1	C	C 1	[kg]
Boost 355	406	350	451	372	468	566	437	439	15
Boost 400	451	395	496	415	513	623	482	484	18.5





MOUNTING AND SET-UP



READ THE USER'S MANUAL BEFORE INSTALLING THE UNIT.



BEFORE MOUNTING, MAKE SURE THERE ARE NO VISIBLE DEFECTS ON THE UNIT, SUCH AS MECHANICAL DAMAGES, MISSING PARTS, IMPELLER JAMMING ETC.



WHEN MOUNTING THE UNIT, IT IS NECESSARY TO PROVIDE PROTECTION AGAINST CONTACT WITH HAZARDOUS ZONES OF THE FAN BY INSTALLING AIR DUCTS OF THE NECESSARY LENGTHS AND PROTECTIVE GRILLES.



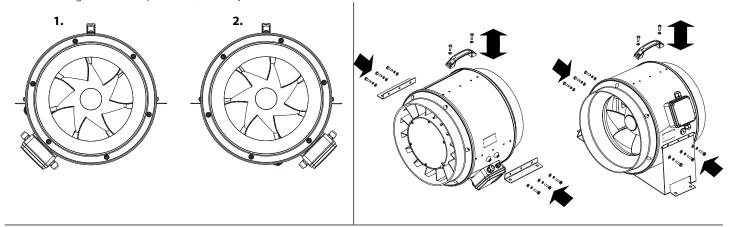
MOUNTING MUST BE PERFORMED BY QUALIFIED SPECIALISTS ONLY, PROPERLY TRAINED AND QUALIFIED TO INSTALL AND MAINTAIN VENTILATION EQUIPMENT.

The unit is intended for mounting with round air ducts. The fan is installed between the air ducts.

The fan casing is equipped with fixing brackets for suspended mounting or for mounting on a horizontal or vertical surface. While installing the unit ensure convenient access for subsequent maintenance and repair. Fasteners for fan mounting are not included in the delivery set and should be ordered separately. While choosing fasteners consider the material of the mounting surface as well as the weigh of the unit, refer to the Technical data section. Fasteners for unit mounting should be selected by a service technician.

The unit can be mounted in two operation positions, which makes mounting easier. For this, dismantle the fan handle first or set it to another position.

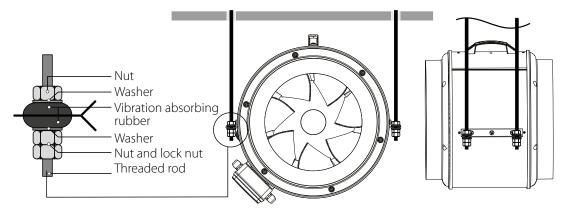
After choosing one of two positions, securely mount the brackets to the fan.



SUSPENDED MOUNTING

Install the fan on the threaded rods (not included in the delivery set).

WARNING! When mounting the fan on threaded rods, it is necessary to provide protection of the nuts against self-loosening.

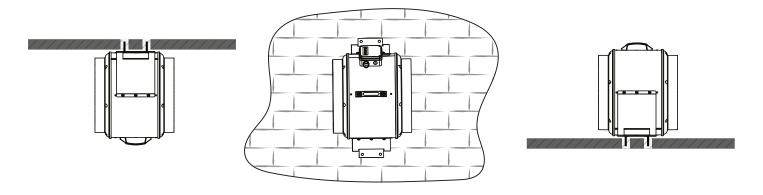






SURFACE MOUNTING

Fasten the fan to the surface using the screws with the dowels of appropriate size (not included in the delivery set). Make sure the fan is fastened securely.



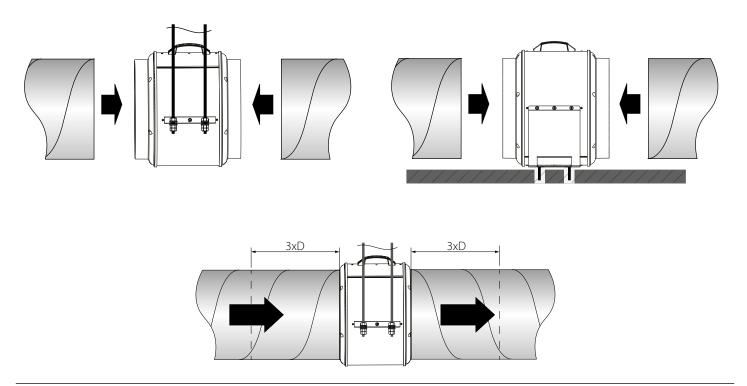
Connect the air ducts of the appropriate diameter to the fan (connections must be airtight).

Air motion in the system must be in compliance with the direction of the arrow on the fan label.

To attain the best performance of the fan and to minimise turbulence-induced air pressure losses, it is recommended to connect the straight air duct section to the spigots on both sides of the unit while mounting.

Minimum recommended straight air duct section length is equal to 3 fan diameters (see the "Technical data" section).

If the air ducts are shorter than 1 m or not connected, the internal parts of the unit must be protected from ingress of foreign objects. To prevent uncontrollable access to the fans, the spigots may be covered with a protecting grille or other protecting device with mesh width not more than 12.5 mm.







CONNECTION TO POWER MAINS



POWER OFF THE POWER SUPPLY PRIOR TO ANY OPERATIONS WITH THE UNIT.

THE UNIT MUST BE CONNECTED TO POWER SUPPLY BY A QUALIFIED ELECTRICIAN.

THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE

MANUFACTURER'S LABEL.



ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.

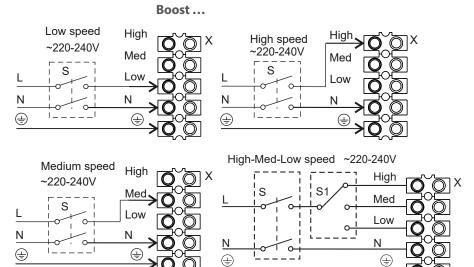
Any tampering with the internal connections is prohibited and will void the warranty.

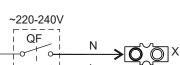
The fan is rated for connection to single-phase AC 220-240 V/50 Hz power mains. The connection must be made using durable, insulated and heat-resistant conductors (cables, wires). The actual wire cross section selection must be based on the maximum load current, maximum conductor temperature depending on the wire type, insulation, length and installation method.

The fan connection shall be made on the terminal block mounted inside the terminal box in strict accordance with the wiring diagram

and terminal designations.

WIRING DIAGRAM





Boost V

(1)

High — high speed

Med — medium speed

Low — low speed

N — neutral

L — line

⊕ — grounding

S — ON\OFF switch

S1 — switch

QF — automatic circuit breaker





TECHNICAL MAINTENANCE



DISCONNECT THE UNIT FROM POWER SUPPLY BEFORE ANY MAINTENANCE OPERATIONS!

Clean the product surfaces regularly (once in 6 months) from dust and dirt.

Disconnect the fan from power mains prior to any maintenance operations.

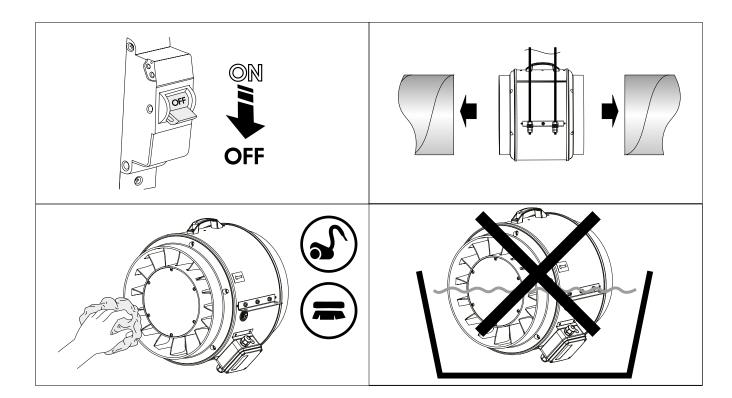
Disconnect the air ducts from the fan.

Clean the fans with a soft brush, cloth, vacuum cleaner or compressed air.

Do not use water, aggressive solvents, or sharp objects as they may damage the impeller.

It is forbidden to remove or change the location of the balancers on the impeller, as this can lead to increased level of vibration, noise and reduce the service life of the unit.

During technical maintenance, make sure that there are no visible defects on the unit, the mounting brackets are securely fastened to the fan casing and the unit is securely mounted.







TROUBLESHOOTING

Problem	Possible reasons	Troubleshooting		
	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot the connection error.		
The fan(s) do(es) not get started.	Jammed motor.	Disconnect the fan from power supply. Troubleshoot the motor jamming. Restart the fan.		
	The fan has overheated.	Disconnect the fan from power supply. Eliminate the cause of overheating. Restart the fan.		
Automatic circuit breaker tripping following the fan turning on.	High current consumption due to short circuit in power line.	Turn the fan off. Contact the Seller.		
	The fan impeller is soiled.	Clean the impellers.		
The fan or casing screw connection is loose.		Tighten the screw connection of the fan or the casing against stop.		
Noise, vibration.	The ventilation system components (air ducts, diffusers, louvre shutters, grilles) are clogged or damaged.	Clean or replace the ventilation system components (air ducts, diffusers, louvre shutters, grilles).		



IF THE POWER CORD IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER, CUSTOMER SERVICE, OR SIMILAR QUALIFIED PERSONNEL IN ORDER TO AVOID DANGER.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

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MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.

The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismounted by the user.
- · Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- · Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.



USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.





CERTIFICATE OF ACCEPTANCE

Unit Type	Inline mixed-flow fan
Model	Boost
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

SELLER INFORMATION

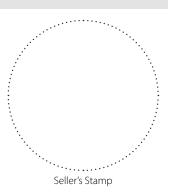
Seller		
Address		
Phone Number		
E-mail		:
Purchase Date		
This is to certify acceptance acknowledged and accepted.	of the complete unit delivery with the user's manual. The warranty terms are	
Customer's Signature		Seller's Stamp

INSTALLATION CERTIFICATE

				1	
The Boost unit is	installed pursuant to th	ne requirements sta	ted in the present user's manual.		
Company name				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	٠.
Address					1
Phone Number				:	:
Installation					;
Technician's Full Name				<u> </u>	
Installation Date:		Signature:			
The unit has been installed in a electrical and technical codes a			able local and national construction, tended by the manufacturer.	Installation Stamp	
Signature:					

WARRANTY CARD

Unit Type	Inline mixed-flow fan
Model	Boost
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	



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