

TECHNICAL DOCUMENTATION
AXIAL FANS FR SERIES



1. General information

Thank you for purchasing our product. It is required to read the following instructions for proper use of the device, all information must be followed carefully.

All users of the fan should have free access to manual, in case of its resale manual must be attached to the device.

2. Use

Axial fans are used for ventilation, cooling and heating. They can be used in commercial and industrial places, they are also suitable for home usage e.g. shops, catering services, warehouses, workshops ect.

3. Transport and storage

Fans should be transported and kept in the original package. Store the fans in the original packing in a dry area, protected from the weather, and dirt until final installation.

4. Installation

It is essential to read the following instructions and proceed to the content recommendations. The installation should be carried out by the professional installers, who possess the qualifications to install, assemble and run these types of device.

Before any work, it is obligatory to cut off the current supply. Please check: insulation and winding resistance, ground resistance, bearing condition.

Please check, if the fan should not have been damaged during transport or storage (dent or casing distortions, interruption in junction box, the turbine should not touch the casing, the propeller should not touch the tunnel).

It is essential to check, if the technical data on the data plate comply with the requirements on the electrical system.

If the irregularities have not been identified, you can proceed with the installation:

- prepare the proper electrical connections
- place the fan in the ventilation duct / dedicated hole
- squeeze flexible ducts using duct clip and screw them (optional)
- tighten the screws
- connect the fan to the electrical system

The connection must comply with the connection scheme.

5. Maintenance

Maintenance should be done once a year or more often, depending on the working conditions. Before any work, it is obligatory to cut off the current supply and secure against switching on.

In order to clean the fan please:

- disassemble the fan
- clean all components with the damp cloth, with the greatest care not to wet the engine
- dry all components
- assemble the fan
- connect the fan to the power supply

6. Safety information

- Fans are intended for transfer the air.
- Do not use the fan in hazardous environment, close to flammable materials or polluted environment.
- The temperature working range -30 to 60 degrees.
- After the turn off, the elements of fan may be warm.
- Unusual sounds during fan operation may indicate a malfunction.
- Non proceeding to the included information may lead to health impairment or threat to life.

Terms of warranty

I. Supplier Reventon Group Sp. z o.o. [Ltd.] grants the buyer a 24-month warranty period for the following devices:

- axial fan FR-200-BS/BC
- axial fan FR-250-BG/SG/BS/BC
- axial fan FR-300-BG/SG/BS/BC
- axial fan FR-350-BG/SG/BS/BC
- axial fan FR-400-BG/SG/BS/BC
- axial fan FR-450-BG/SG/BS/BC
- axial fan FR-500-BG/SG/BS/BC
- axial fan FR-550-BG/SG/BS/BC
- axial fan FR-630-BG/SG/BS/BC
- axial fan FR-710-BG/SG/BS
- axial fan FR-800-BG/SG/BS

II. The terms of warranty are valid from purchasing the device (i.e. invoice / another confirming document issue date) but not longer than 30 months from leaving the supplier's warehouse.

III. To obtain the service it is needed to provide or send to the supplier scans of the warranty card with stamp of installation company, document confirming the purchase (eg. like copy of the invoice) and correctly filled the warranty form.

IV. The supplier is committed to consider the claim within 14 working days since the date of reporting (i. e. day when documents given in point III are provided).

V. In the exceptional cases, the supplier reserves the right to extend the time limit for examination of warranty, especially if the defect is not permanent and its determination requires a longer period of time. The extension must be notified by the supplier before the end of the 14th working day.

VI. Under the guarantee the supplier provides a repairment, replacement or refund for the defective device within a specified time limit.

VII. Warranty does not cover the parts of the device subject to normal maintenance and the following cases:

- a) mechanical damage of the product
- b) defects and damages through:
 - improper storage or transport
 - improper or non-compliant use and maintenance (i.e. inconsistent with the manual)
 - using the device in the improper conditions (too high humidity, too high or too low temperature, impact of the surrounding, sun etc.)
 - unauthorized (by the user or other unauthorized persons) repairs, modifications or construction changes
 - connecting equipment inconsistent with the technical documentation
 - connecting additional equipment, which is not recommended by the supplier
 - improper power supply

c) elements which wear and tear such as discolor of the housing

If there is any of the above, claimant will be charged for transport and/or repairs.

VIII. Any changes in the Warranty Terms, improper use of the product (careless handling, exposure to liquids, moisture, corrosion), as well as traces of selfrepairing (non by the Reventon Group) or alterations cause, the warranty is not valid.

IX. Not following to any of warranty regulations makes the warranty not valid.

X. All correspondence, returns, complains should be send to the following address: Reventon Group Sp. z o.o. [Ltd.], 556 Wyzwolenia Street, 43-340 Kozy, Poland or email address: serwis@reventongroup.eu.

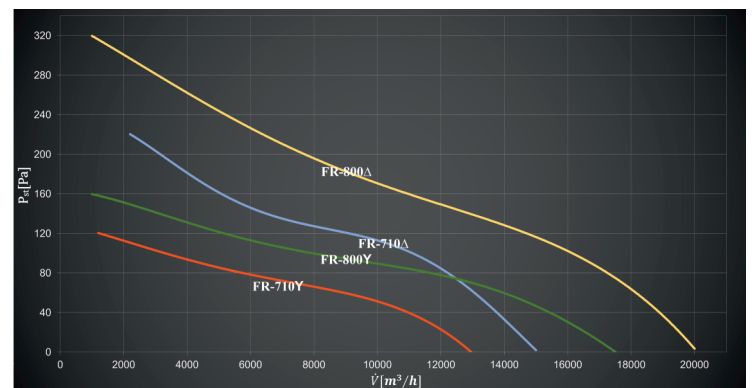
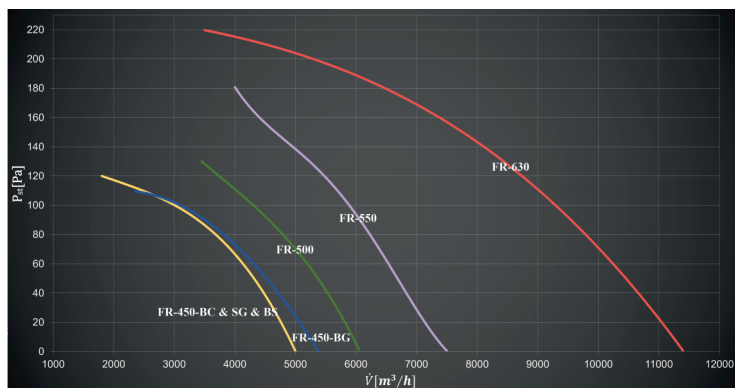
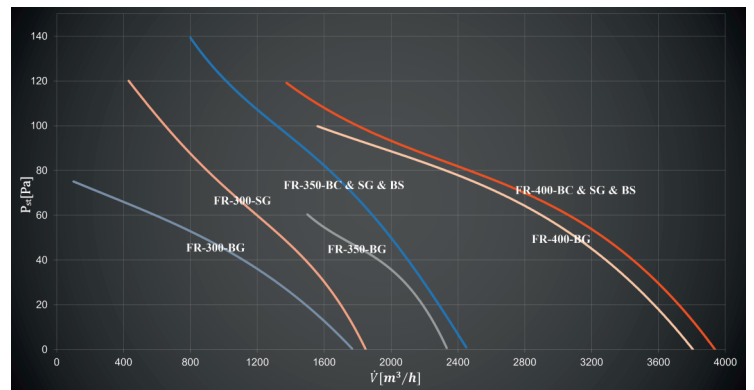
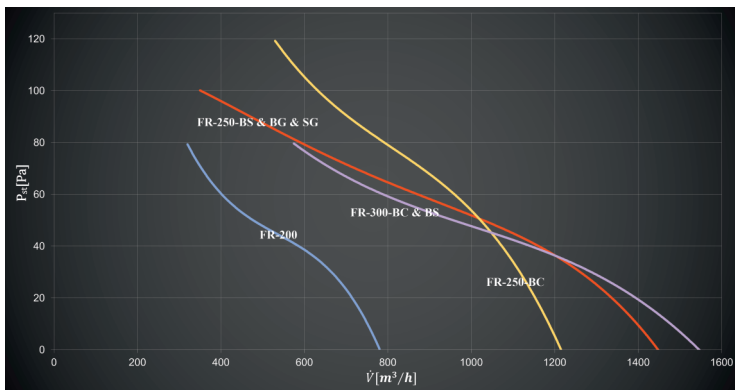
The supplier reserves the rights to make changes to the technical documentation without previous notice.

Technical data

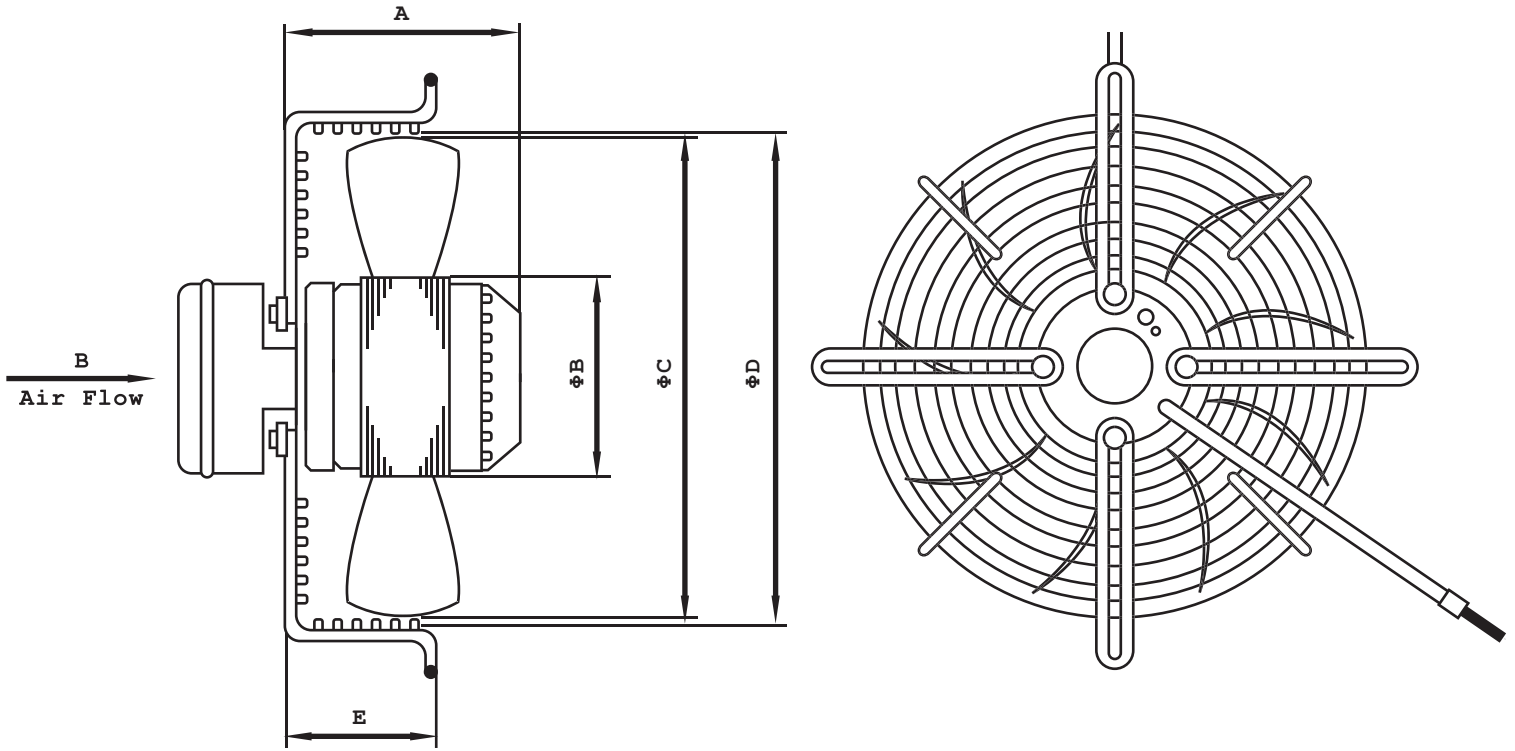
TECHNICAL DATA	FR-200	FR-250	FR-300	FR-350	FR-400	FR-450	FR-500	FR-550	FR-630	FR-710	FR-800
Maximum airflow [m³/h]	780	1450 1220*	1850 1550*** 1750***	2450 2350***	3950 3800***	5000 5400***	6050	7500	11400	Δ 15000 Υ 13000	Δ 20000 Υ 17500
Supply voltage [V] / Supply frequency [Hz]	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	400/50	400/50
Rated motor current [A]	0,25	0,42 0,35*	0,42 0,40*** 0,38***	0,65 0,58***	0,82 0,84***	1,15 1,08***	1,35	1,75	2,9	Δ 1,9 Υ 1,15	Δ 2,85 Υ 1,65
Motor speed [rpm]	2500	2400 2650*	1380 1400** 1350***	1420 1400***	1380 1400***	1350 1360***	1380	1380	1300	Δ 900 Υ 730	Δ 920 Υ 770
Motor power [W]	55	90 80*	85 75*** 75***	126 124***	180 190***	250 240***	295	385	660	Δ 900 Υ 650	Δ 1200 Υ 930
Protection degree IP [-]	44	44	44	44	44	44	44	44	44	44	44
Bearing type	Ball bearing										
Working temperature [°C]	-30 - 60										
Insulation class [-]	F	F	F	F	F	F	F	F	F	F	F
Net weight [kg]	2	2,5 3,5***	3 4** 5*	5 6***	6 7***	8 9***	9 10** 11*	11 12* 13**	15 17* 24**	30 40**	35 40**
Noise [dB]	52	60	60 62***	64	67	69	70	71	74	Δ 73 Υ 72	Δ 75 Υ 74
Capacitor [μF/VDB]	2/450	3/450	3/450	4/450	6/450	8/450	10/450	12/450	16/450	-	-

* applies to BC model
 ** applies to BS model
 *** applies to BG model

Fan performance curves

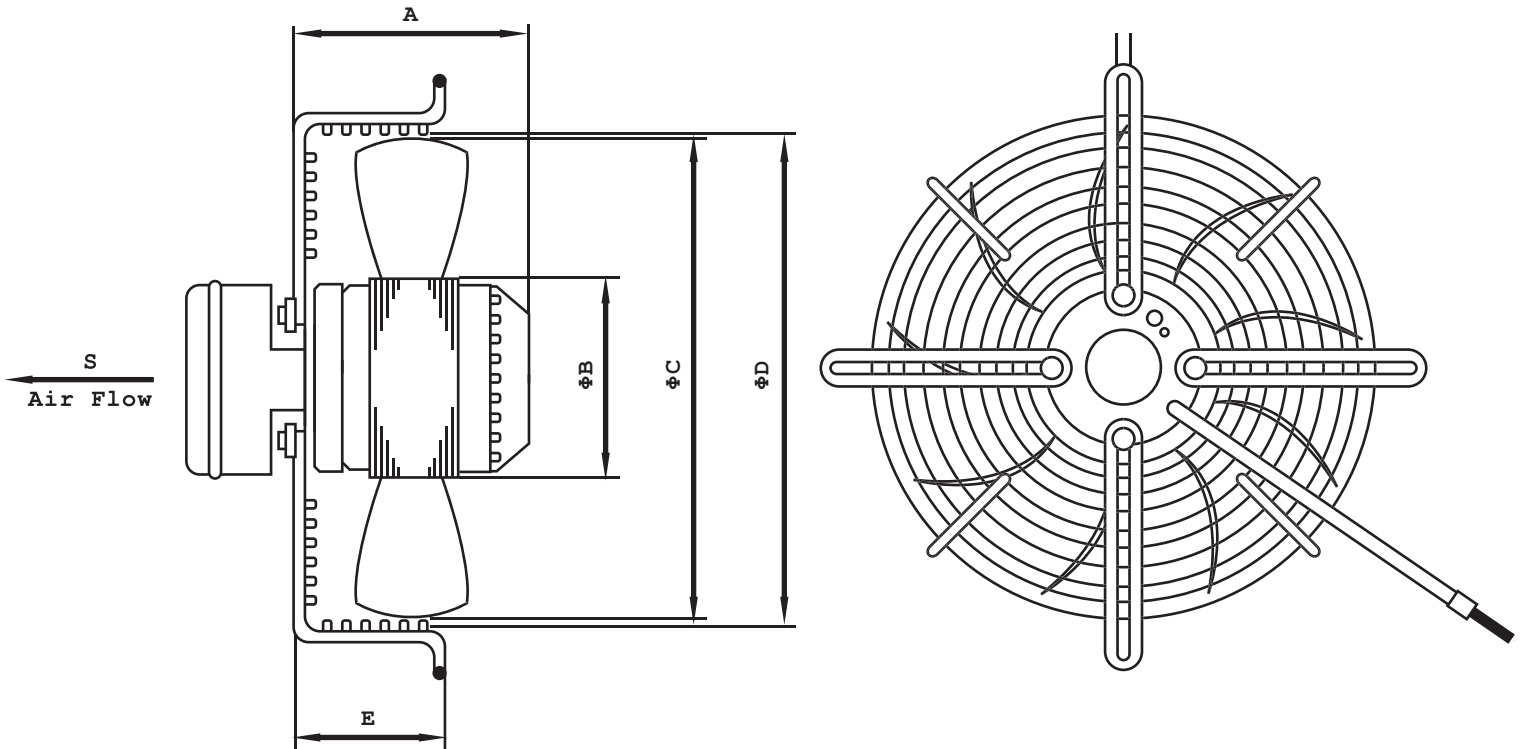


AXIAL FAN WITH PROTECTIVE GRID, BLOWING



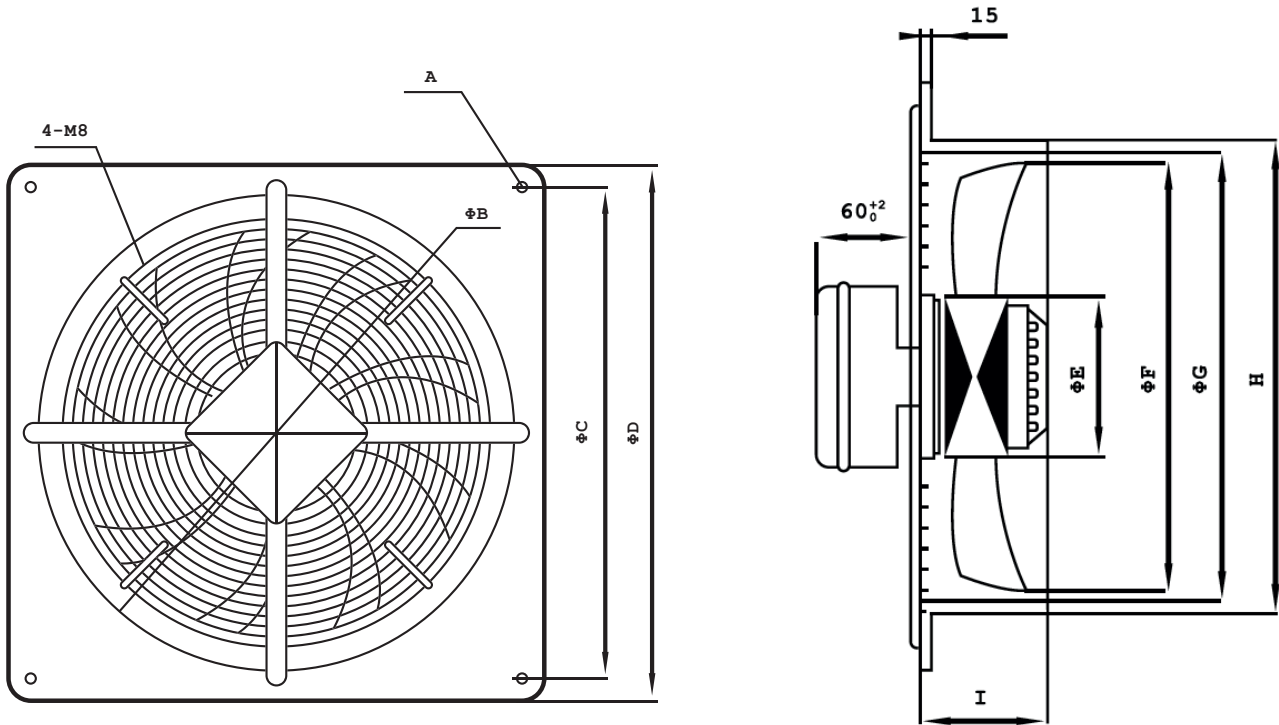
	A	ΦB	ΦC	ΦD	E
FR-250-BG	80±1	92	250 ₋₅ ⁰	275 ₀ ⁺⁵	60±1
FR-300-BG	116±2	92	300 ₋₅ ⁰	320 ₀ ⁺⁵	80 ₀ ⁺⁵
FR-350-BG	134±1	102	350 ₋₅ ⁰	370 ₀ ⁺⁵	80 ₀ ⁺⁵
FR-400-BG	147±1	102	400 ₋₅ ⁰	420 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-450-BG	160±1	102	450 ₋₅ ⁰	470 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-500-BG	143±1	137	500 ₋₅ ⁰	520 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-550-BG	158±1	137	550 ₋₅ ⁰	575 ₀ ⁺⁵	100 ₀ ⁺⁵
FR-630-BG	183±1	137	630 ₋₅ ⁰	650 ₀ ⁺⁵	100 ₀ ⁺⁵
FR-710-BG	240±1	180	703 ₋₅ ⁰	770 ₀ ⁺⁵	175 ₀ ⁺⁵
FR-800-BG	240±1	180	784 ₋₅	857 ₀	175 ₀ ⁺⁵

AXIAL FAN WITH PROTECTIVE GRID, SUCKING



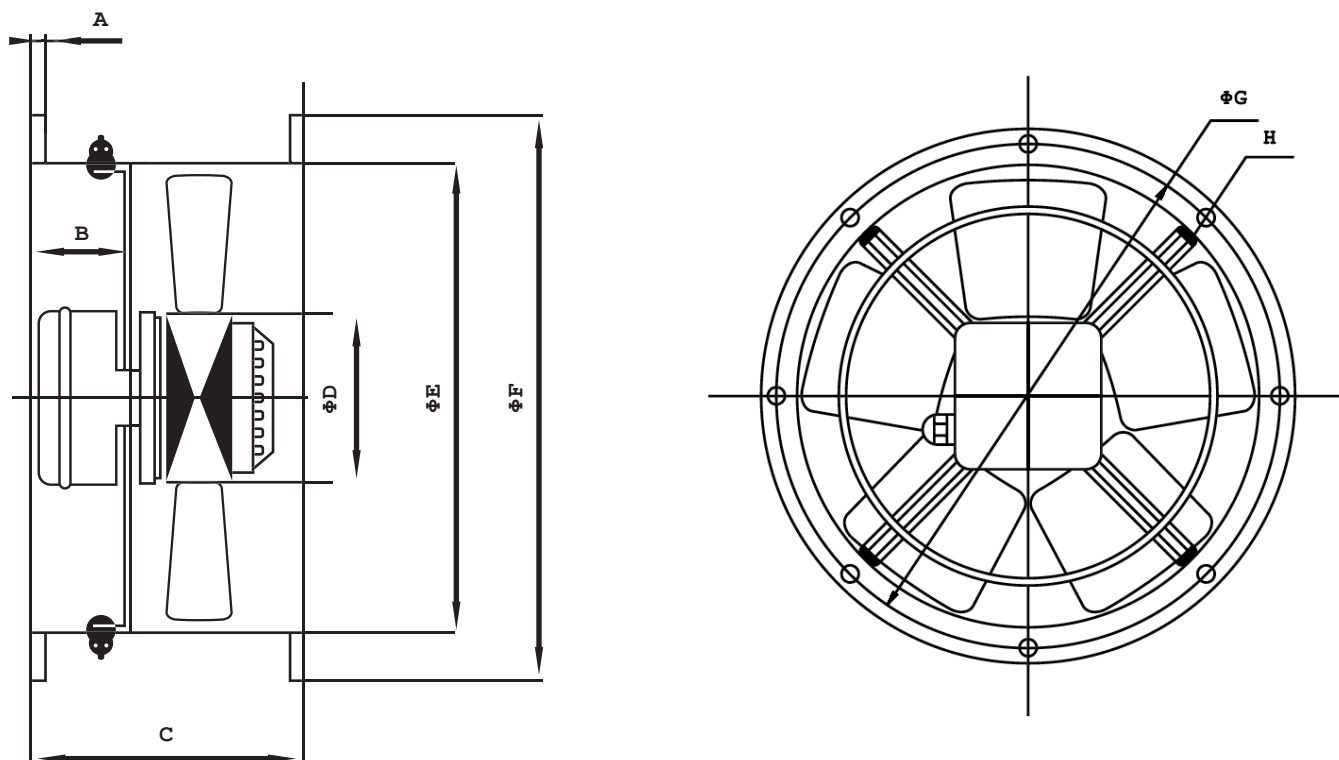
	A	ΦB	ΦC	ΦD	E
FR-250-SG	80±1	92	250 ₋₅ ⁰	275 ₀ ⁺⁵	60±1
FR-300-SG	116±2	92	300 ₋₅ ⁰	320 ₀ ⁺⁵	80 ₀ ⁺⁵
FR-350-SG	134±1	102	350 ₋₅ ⁰	370 ₀ ⁺⁵	80 ₀ ⁺⁵
FR-400-SG	147±1	102	400 ₋₅ ⁰	420 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-450-SG	160±1	102	450 ₋₅ ⁰	470 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-500-SG	143±1	137	500 ₋₅ ⁰	520 ₀ ⁺⁵	90 ₀ ⁺⁵
FR-550-SG	158±1	137	550 ₋₅ ⁰	575 ₀ ⁺⁵	100 ₀ ⁺⁵
FR-630-SG	183±1	137	630 ₋₅ ⁰	650 ₀ ⁺⁵	100 ₀ ⁺⁵
FR-710-SG	240±1	180	703 ₋₅ ⁰	770 ₀ ⁺⁵	175 ₀ ⁺⁵
FR-800-SG	240±1	180	784 ₋₅	857 ₀	175 ₀ ⁺⁵

AXIAL FAN WITH SQUARE FRAME



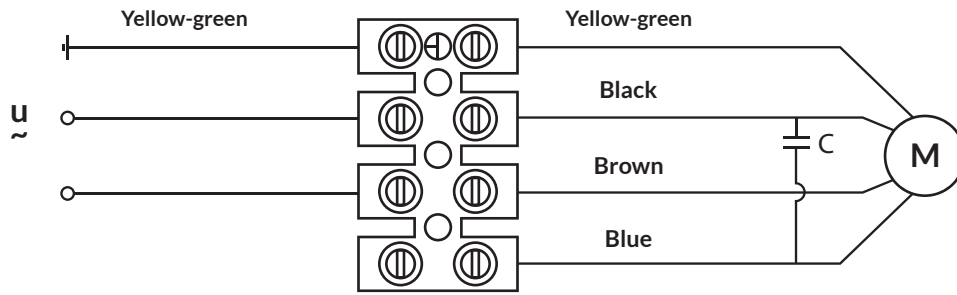
	A	ΦB	ΦC	ΦD	ΦE	ΦF	ΦG	ΦH	I
FR-200-BS	4xΦ7 ⁰ _{-0,2}	260	260	310	92	200 ⁰ ₋₅	203	210	68
FR-250-BS	4xΦ7 ⁰ _{-0,2}	320	320	370	92	250 ⁰ ₋₅	260	280	90
FR-300-BS	4xΦ7 ⁰ _{-0,2}	380	380	430	92	300 ⁰ ₋₅	315	325	90
FR-350-BS	4xΦ10.5 ⁰ _{-0,2}	415	435	485	102	350 ⁰ ₋₅	360	380	95
FR-400-BS	4xΦ10.5 ⁰ _{-0,2}	470	490	540	102	400 ⁰ ₋₅	410	430	110
FR-450-BS	4xΦ10.5 ⁰ _{-0,2}	520	535	575	102	450 ⁰ ₋₅	460	480	110
FR-500-BS	4xΦ10.5 ⁰ _{-0,2}	580	615	655	137	500 ⁰ ₋₅	510	530	115
FR-550-BS	4xΦ10.5 ⁰ _{-0,2}	650	670	725	137	550 ⁰ ₋₅	560	570	115
FR-630-BS	4xΦ10.5 ⁰ _{-0,2}	730	750	805	137	630 ⁰ ₋₅	640	660	125
FR-710-BS	4xΦ14.5 ⁰ _{-0,2}	795	810	845	180	695 ⁰ ₋₅	705	718	250
FR-800-BS	4xΦ14.5 ⁰ _{-0,2}	950	910	970	180	784 ⁰ ₋₅	795	830	265

AXIAL DUCT FAN



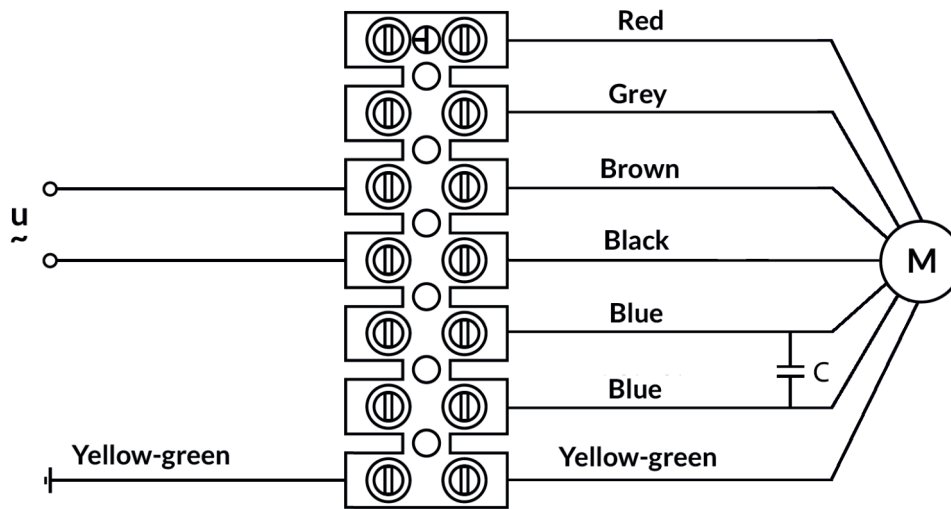
	A	B	C	ΦD	ΦE	ΦF	ΦG	ΦH
FR-200-BC	8	60_0^{+2}	180	92	205_{-5}^0	250	222.5	8-Φ7
FR-250-BC	8	60_0^{+2}	180	92	250_0^{+2}	306	285	8-Φ7
FR-300-BC	8	60_0^{+2}	180	92	315	382	360	8-Φ9.5
FR-350-BC	8	60_0^{+2}	180	102	350	421	395.5	8-Φ9.5
FR-400-BC	8	60_0^{+2}	190	102	400	466	437	12-Φ9.5
FR-450-BC	9	60_0^{+2}	190	102	450	515	489.5	12-Φ9.5
FR-500-BC	9	60	250	137	500	567	542	12-Φ10.5
FR-550-BC	9	60	250	137	560	635	606	12-Φ10
FR-630-BC	9	60	250	137	630	705	675.5	12-Φ10

SINGLE-PHASE



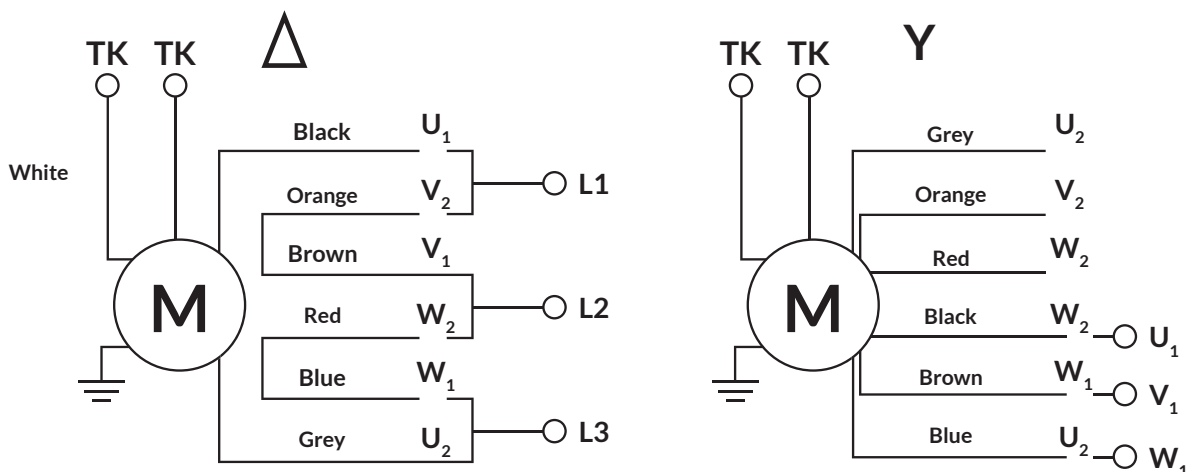
SINGLE-PHASE

(it applies only FR-300-BG, FR-350-BG, FR-400-BG and FR-450-BG)*



* if you connect the live wire to the terminal red or grey, the fan will operate with lower rotational speed

THREE-PHASE



Warranty card

Factory number of the device:	Address and place of assembly
Stamp and signature of the installation company:	

Warranty form

The company reporting the complaint:	Date of assembly:	Address and place of assembly the device:
	Date and circumstances of noticing the defect:	
The company installing the device:		
Factory number of the device:	Date of declaration the complaint:	
Description of the defect:		
Contact Name and Surname, telephone number/ e-mail address:		

Service card

Date of declaration the complaint:	Description of the repair:	Service stamp:
Date of repair:		

Reventon Group Sp. z o.o. [Ltd.], 556 Wyzwolenia Street, 43-340 Kozy, Poland

WWW.REVENTONGROUP.EU

biuro@reventongroup.eu

+48 33 482 74 97

+48 793 40 40 40