

ECO **Compact** **Cabinet Type Fan**



Installation and **Operation Manual**



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Company Informations

Manufacturer or Importer Company

Title	Havart İklimlendirme Ltd. Şti.	Signature and Stamp of Company Official
Address	Besevler Mh. Yıldırım Cd. No: 336 Nilifer/Bursa - TÜRKİYE	
Communication Info	Tel : +90 0224 482 29 69 (pbx) / Fax : +90 0224 482 50 96	
Web Site	www.fanturk.com.tr	

Product

Type	Cabinet Type Fan
Brand	Fantürk
Model	ECO
Bandrole and Serial Number	-
Delivery Date, Place	-
Max. Repair Time	(20) Twenty work days
Warranty Period	(2) Two years

Seller Company

Title		Signature and Stamp of Company Official
Address		
Communication Info		
Web Site		
Invoice Date And Number		

Customer

Name - Surname	
Address	
Phone Number	

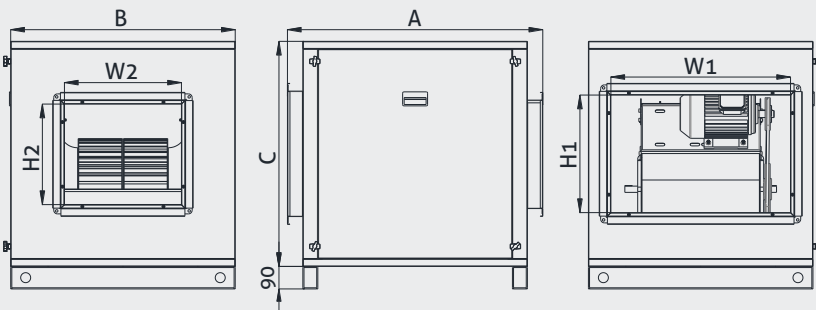
General Warnings



- *These devices contain rotating parts and electrical connections. Therefore, pay attention to safety warnings during their assembly, maintenance and operation.*
- *These devices are intended that should not be used by people with physical, sensory and mental disability (including children) or used by people who have lack of experience and knowledge, without the supervision and management of the usage these devices.*
- *Keep the fan away from children and do not let unauthorized people to use it.*
- *Electrical connections and assembly must be made by authorized persons.*
- *The product must have an air duct of its own.*
- *During transport, operation and maintenance, hands should be protected with gloves against cuts.*
- *The fan should not be touched while the fan is running.*
- *Avoiding of any kind of damage, periodic maintenance and cleaning should be done.*
- *Do not use the product at ambient temperatures above 80°C.*
- *The products produced by our company do not contain mercury.pcb (polychloride biphenyl) asbestos materials, which are harmful to human health.*

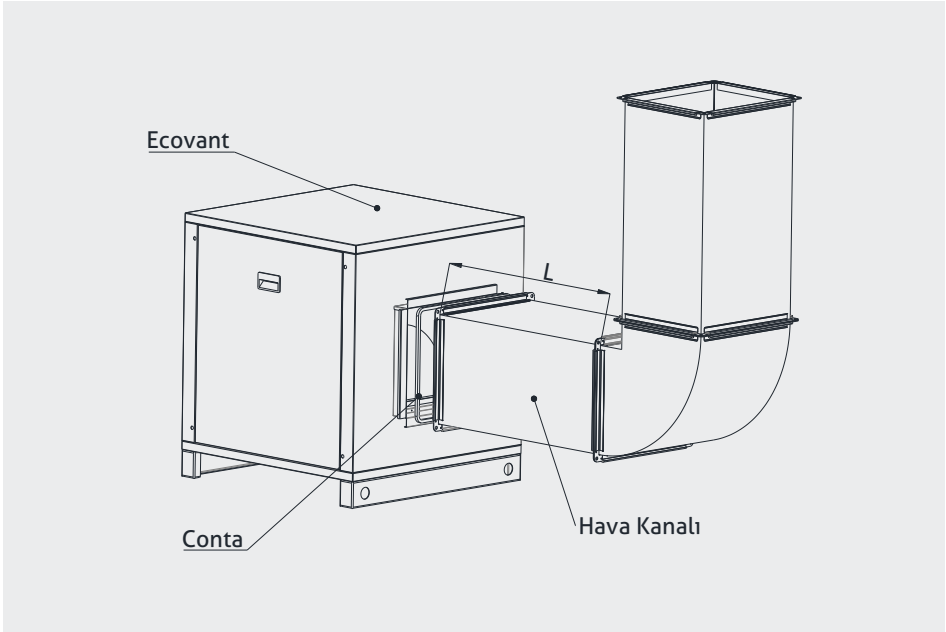
Technical Specifications

The values declared on the markings with the product or other printed documents supplied with product are the values obtained in a laboratory environment according to relevant standards. These values may vary depending on the usage and environmental conditions of the product.



MODEL	A	B	C	Inlet W1xH1	Outlet W2xH2	FLOW RATE	EXTERNAL PRESSURE	STATIC PRESSURE	VOLTAGE	FREQUENCY	MOTOR POWER	MOTOR SPEED	WEIGHT
	mm	mm	mm	mm	mm	m ³ /h	Pa	Pa	V	Hz	kW	rpm	kg
ECO-1	720	600	600	350x300	268x241	2500	270	274	380	50	0,75	1370	43
ECO-2	820	600	600	400x350	336x296	3500	400	406	380	50	1,1	1380	48
ECO-3	920	700	700	500x400	369x325	5000	320	326	380	50	1,5	1385	55
ECO-4	920	800	800	500x500	432x377	7500	300	306	380	50	2,2	1405	65
ECO-5	1020	900	900	750x500	509x439	10000	400	411	380	50	3	1405	80
ECO-6	1170	1050	1050	800x600	592x515	12500	345	355	380	50	3	1405	170
ECO-7	1170	1050	1050	800x600	592x515	15000	294	308	380	50	4	1425	174
ECO-8	1170	1050	1050	800x600	592x515	17500	380	400	380	50	5,5	1430	185

Mechanical Informations



- Products should be installed by authorized people.

- The input and output of the product should be used with connecting to ducts.. Sharp return duct connection should not be used in connection points. A minimum of 2.5 - 3 times the duct section should be used in a straight line and then elbow should be used.

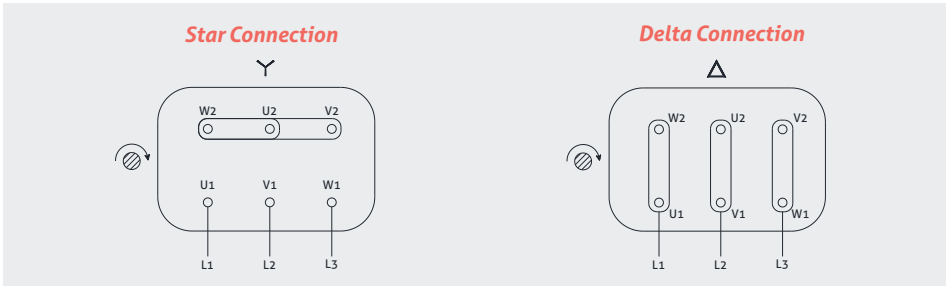
- When assembling the equipment, make sure that all connections are correct and that the mounting elements have the strength to bear the product weight.

- There should be no obstructions in the airflow path.

1. Mount the product on a flat surface with a duct connection at its inlet and outlet.
2. Make a connection between the duct and the product using a ventilation gasket.
3. Make a trial run of the fan, check whether there is vibration and error in the product.

- Do not carry the connected ducts to the flange, carry them to these carriers by making a suspension system to the floor or ceiling. When connecting the product, attention should be paid to the air flow direction specified on the label..

Electrical Connection Scheme and Installation



- Always cut off the electricity from the source before connecting the power cables.
- Make sure that the main power supply is off when connecting the apparatus even if the product is turned off.
- Check the compatibility of the electrical connection information (voltage, power, frequency, etc.) indicated on the product with the place of installation before the installation.
- For safety reasons, the ground terminal on the terminal must be connected to the building ground line.
- Make sure motor thermal and overload relay are properly connected.
- If at any problem opens the thermal circuit (when the product is not working), the system should be reset from the network and put into use again.
- The product wiring should be as in the wiring diagram.
- It must be connected to the fixed installation in accordance with the installation rules with a switch with contact separation at all poles.

Motor Connections References

Star Connection : 3 kW and smaller motor powers

Delta Connection : 4 kW and bigger motor powers

POWER	Recommended Minimum Cable Cross Sections
kW	
0,18 - 3	4x2,5 mm ²
4 - 7,5	4x4 mm ²
11 - 15	4x6 mm ²
18,5 - 22	4x10 mm ²
30 - 37	4x16 mm ²
45 - 55	4x25 mm ²

- If the cable length exceeds 30m, the cable cross section must be calculated again.

Usage

ECO Series Compact Type Cell Centrifugal Fans,

They are used to increase the air quality of indoor spaces. Fantürk ECO Compact Type Cell Fans work smoothly with high performance thanks to the double suction, close bladed radial fan and belt-pulley drive. Thanks to their compact structure, they can be directly connected to the channel without the need for converters.

Fanturk forward curved bladed cell fans are used in industrial and construction applications, factories, kitchens, bathrooms, toilets, swimming pools, gyms, warehouses, hospitals, hoods, offices, laboratories, shopping malls, restaurants, theaters, apartments, nightclubs, in poultry farms, equipment cooling, working areas and space ventilation, etc. can be used for purposes.



Users are obliged to carefully read the operation and maintenance manual before using ECO series Compact Type Fans.

The product lifetime is about 10 years.

At First Commissioning;

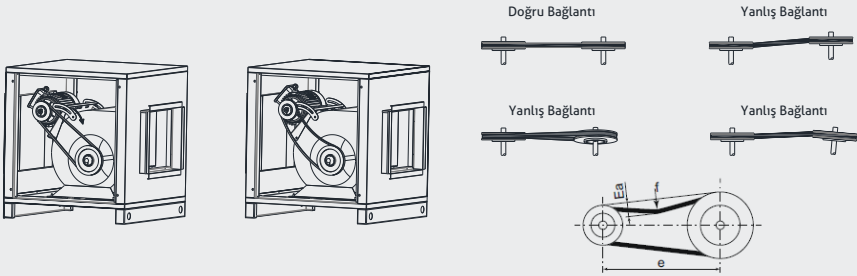
- Always cut the electricity from the source before connecting the electric cables.
- Make sure that the electrical connections of the product are made safely and correctly.
- Make sure the safety equipment is properly connected.
- Make sure that the ground connections are properly made.
- Ensure that the cable and electrical junction box are properly sealed.
- The direction of rotation of the wings, it must be in the direction marked by the label on the body.
- Air outlet direction; it must be in the direction marked by the label on the body. Make sure there are no obstructions in the airflow path.
- During the operation of the product, there should be no vibration and there should be no internal friction and impact sound caused by the rotation of the fan.
- Electricity source, current and frequency values should comply with the product label.
- As a result of any electrical safety device being burned, the electrical connection should be disconnected immediately from the main source. The entire installation should be carefully checked before operating the product.
- Inform the authorized persons if encounter any problems.

To Change Belt

First, slide the motor tension stand in the direction of the arrow. Then remove the loosened belt. After placing the new belt in the pulley groove, carefully slide the motor tension stand in the opposite direction of the arrow. You can use Table1 for belt tension adjustment control.

Pay attention to the side situations during the belt connection.

During commissioning, the belt tension should be checked after 48 hours of operation.



PULLEY TYPE	Force Applied to the Belt	Small Pulley Diameter	DEFORMATION OCCURING IN THE BELT WHEN THE DISTANCE BETWEEN TWO PULLEY CENTERS IS 100 mm
	$f(N)$	mm	mm
SPZ	25	$56 \leq 71$	2,45
		$<71 \leq 90$	2,2
		$<90 \leq 125$	2,05
		125	1,9
SPA	50	$71 \leq 100$	3,2
		$<100 \leq 140$	2,75
		$<140 \leq 200$	2,55
		200	2,45
SPB	75	$112 \leq 160$	3
		$<160 \leq 224$	2,55
		$<224 \leq 355$	2,22
		355	2,1
SPC	125	$180 \leq 250$	2,55
		$<250 \leq 355$	2,2
		$<355 \leq 560$	2
		560	1,9

Storage and Transportation

For Prevent Damages to The Product During Transportation;



- *The product is packaged in accordance with normal transportation conditions at the factory.*
- *The product should always be carried in its original packaging, to avoid any damage and damage.*
- *Until the product reaches the place to will be installed, it should be stored in its own package in a place that will not be exposed to vibration, dust, abrasive or chemical substances.*
- *Do not accept products that are not in their original packaging and have been found to be opened before reaching you.*
- *The product should be stored in a way that it will remain completely immobile against overturning and falling.*
- *During the transportation of heavy products ,use suitable lifters to protect the product or the persons for being damaged.*
- *All necessary precautions must be taken to prevent damage caused by imprudent, rapid lifting and lowering.*
- *The products should be carried one by one and by keeping them carefully. Tossing, throwing hand-to-hand should be avoided.*

For Prevent Damages to The Product During Transportation;

- *The accuracy of the delivered product should be checked.*
- *Should check damages after transportation. If there is a missing or damaged item, your carrier and company should be informed immediately, verbally and in writing.*
- *Do not lift the product by the junction box or electrical cables.*
- *Avoid applications that will damage the wings or protective cage during transport.*

Troubleshooting

ABNORMAL SITUATION	POSSIBLE REASON	SOLUTION
<i>Excessive sound (Noise)</i>	<i>Propoller imbalance</i>	<i>Change propeller</i>
<i>The device does not work</i>	<i>Motor damaged</i>	<i>Change motor</i>
	<i>Capacitor inoperative</i>	<i>Change capacitor</i>
	<i>Incorrect speed setting connection</i>	<i>Check the installation</i>
<i>Propoller turns slowly</i>	<i>Incorrect connection</i>	<i>Check the electrical conections</i>

Periodic Maintenance and Cleaning;

- *Make sure that the electrical connection is disconnected from the main source even if the product is turned off before cleaning or maintenance.*
- *All electrical equipment should be checked regularly, connections should be reviewed and damaged or old cables and equipment should be replaced.*
- *Periodic maintenance should be done at least once every six months or more depending on the frequency of use. Maintenance and cleaning of the product should be done by qualified personnel.*
- *Check the product regularly. To prevent contamination and debris in the blades, engine and grill, perform the maintenance in consideration of the operating conditions of the product. Otherwise, it may seriously shorten the working life of your product or cause danger.*
- *While cleaning the product, should be careful blades and turbine cleaning to avoiding to give harm to balance.*
- *The tightness of the bolts that may loosen should be checked during and after maintenance.*
- *If parts and spares are not suitable, they must be replaced immediately.*
- *Flammable and combustible cleaners should not be used for product cleaning, they should be cleaned with a moist cloth.*
- *Absolutely no water or pressurized water should be taken directly into the product.*

Warranty and Service

Our dear customer;;

We believe in the importance of providing good service as well as giving you good products. You can call us and meet with Technical Service Representatives and contact our Sales Representatives to get the most suitable service for you.

Follow The Precautions Below !

- 1. When you receive your product, confirm the Warranty Certificate.**
- 2. Use your product according to the user manual principles.**

This warranty given by Fantürk does not cover the elimination of the malfunctions occurring from the use of the product abnormal, and it is out of warranty in the following cases.

- a. Damages and failures occurring from usage errors*
 - b. Damages and malfunctions during loading, unloading and transportation after delivery of the product to the customer.*
 - c. Damages and failures that may occur due to low voltage or excess voltage, faulty electrical installation, use of voltage other than the voltage printed on the product's label.*
 - d. Fire, earthquake and lightning strike etc. damages and malfunctions to occur with.*
 - e. Malfunctions caused by using the product contrary to the points in the user manuals.*
- *Elimination of the above that mentioned faults is done for a fee.*
 - *The responsibility of approving and giving the warranty certificate to the customer belongs to the sellers, dealers, agents or representative offices where the consumer purchases the goods.*
 - *If a dispute arises during the warranty period, the user must maintain the invoice or a legible photocopy with the Warranty Certificate, since the invoice date will be based on.*
 - *Warranty certificate is void in case of falsification of the Warranty Certificate, removal or falsification of the original serial number on the product.*

Terms

- *The warranty period starts from the date of delivery of the goods and is 2 years.*
- *All mechanical parts of the product except motor and electrical parts are under warranty by our company.*
- *In case the product fails within the warranty period, the time spent in repair is added to the warranty period. The repair time of the goods cannot exceed 20 business days. This period starts from the date of notification to the service station of the malfunction of the goods, to the seller, importer or manufacturer of the goods, if there is no service station.*
- *Consumer failure notification; It is possible to do it by phone, fax, e-mail, registered letter or similar way. However, in case of a dispute, the burden of proof lies with the consumer.*
- *If the product fails due to material and workmanship or assembly errors during the warranty period, it will be repaired without any charge under the labor cost, the replacement part price or any other name.*

- *Despite the consumer uses his right to repair,*

From the date of delivery to the consumer, within one year, provided that they remain within the specified warranty period; In addition to malfunctioning at least four times or six times within the warranty period determined by the manufacturer-manufacturer and / or importer, these malfunctions continue to not be able to benefit from the goods,

Exceeding the maximum time required for repair,

In the event that the service station of the company is not available, the consumer may request a free replacement of the goods, a refund or a defective rate in the event that it is determined that the malfunction cannot be repaired with the report issued by one of the seller, importer or manufacturer of the goods.

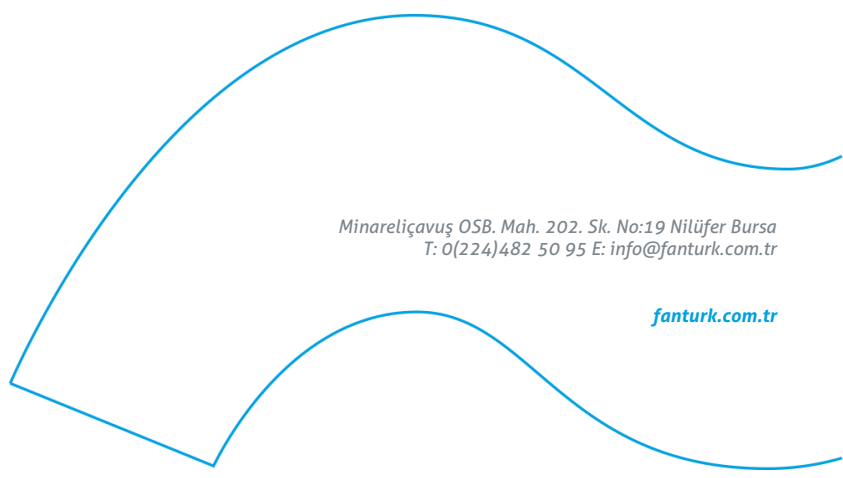
- *Malfunctions resulting from the use of the product contrary to the points in the user manual are out of warranty.*
- *For problems regarding the Warranty Certificate, the Ministry of Customs and Trade may apply to the General Directorate of Consumer Protection and Market Surveillance.*
- *They can make applications to consumers' complaints and objections to consumer courts and consumer arbitration committees.*
- *If it is understood that the goods are defective , consumer ;*

Returning from the contract by declaring that he is ready to return the sold,

Retaining the sold and requesting a discount from the sales price in the rate of shame,

Requesting free repair of the sold, at all costs, if the seller does not require excessive costs,

If possible, requesting that the seller be replaced in an indiscriminate fashion may use one of his optional rights. The seller is obliged to fulfill consumer preferred demand.



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