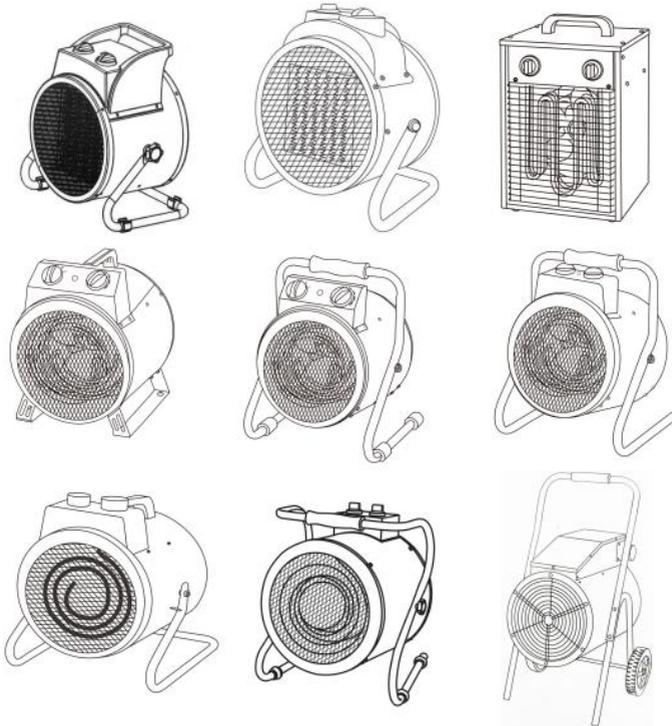


Instruction Manual

Industrial Fan Heater



▲ WARNING

1.1 This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction

concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



1.2 WARNING: In order to avoid overheating, do not cover the heater.

1.3 Children of less than 3 years should be kept away unless continuously supervised.

1.4 Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

1.5 CAUTION-some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

2. Introduction

2.1 Depending on the power cord type this fan heater may be used only in household, warehouses and workshops, building sites or greenhouses depending. It incorporates a thermostat and a self-resetting thermal cut-out to control the heating elements. The thermostat feels the air temperature and controls the surrounding temperature. The fan motor is not controlled by thermostat and it keeps on working when the thermostat cuts off the heating element. The self-resetting thermal cut-out will switch off the heater to ensure the safety when overheating.

2.2 When using the heater for the first time, you may notice a slight emission of smoke. This is quite normal and it stops after a short time. The heating element is made of stainless steel and was coated with protection oil by production. The smoke is caused by the left oil when heated .

3. Technical specifications

Model	TSE-2000R	TSE-3000R	TSE-20K	TSE-30K
Waterproof Class	IP24	IP24	IP24	IP24
Voltage	220-240V	220-240V	220-240V	220-240V
required power	2000W	3000W	2000W	3000W
current	9.1A	13.06A	9.1A	13.06A
Required Fuse	10A	16A	10A	16A
Setting(W)	25/1000/2000	25/1500/3000	25/1000/2000	25/1500/3000
Size of heater (mm)	215*185*250	245*210*285	260*256*335	260*256*335

N.W.(KG)	2.0	2.6	4.4	4.4
Model	TSE-20A	TSE-30A	TSE-33A	TSE-50A
Waterproof Class	IP24	IP24	IP24	IP24
Voltage	220-240V	220-240V	220-240V	380V
required power	2000W	3000W	3300W	5000W
current	9.1A	13.6A	13.0A	22.7A/7.6A
Required Fuse	10A	16A	16A	32A/10A
Setting(W)	25/1000/2000	25/1500/3000	25/1650/3300	30/2500/5000
Size of heater (mm)	230x200x310	270x260x395	270x260x395	270x260x395
N.W.(KG)	3.5	4.8	4.8	5.6
Model	TSE-90A	TSE-20FA	TSE-30FA	TSE-20FB
Waterproof Class	IP24	IP24	IP24	IP24
Voltage	380V	220-240V	220-240V	220-240V
required power	9000W	2000W	3000W	2000W
current	13.7A	9.1A	13.6A	9.1A
Required Fuse	16A	10A	16A	10A
Setting(W)	52/4500/9000	25/1000/2000	25/1500/3000	25/1000/2000
Size of heater (mm)	305x285x460	257*220*305	257*220*305	254X305X365
N.W.(KG)	9.0	2.5	2.5	4.5
Model	TSE-30FB	TSE-20L	TSE-30L	TSE-30G
Waterproof Class	IP24	IP24	IP24	IP24
Voltage	220-240V	220-240V	220-240V	220-240V
required power	3000W	2000W	3000W	3000W
current	13.6A	9.1A	13.6A	13.6A
Required Fuse	16A	10A	16A	10A
Setting(W)	25/1500/3000	25/1000/2000	25/1500/3000	25/1500/3000
Size of heater (mm)	254X305X365	325X250X325	325X250X325	315X330X400
N.W.(KG)	4.5	3.4	3.4	6.9
Model	TSE-50G	TSE-90G	TSE-150G	TSE-300G
Waterproof Class	IP24	IP24	IP24	IP24
Voltage	220-240V/380v	380V	380V	380V

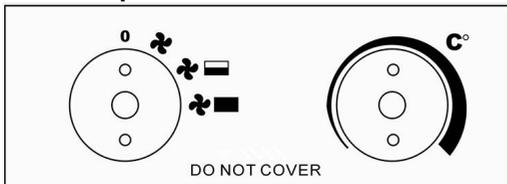
required power	5000W	9000W	15000W	30000W
current	22.7A/7.6A	13.7A	23A	46A
Required Fuse	32A/10A	32A	32A	63A
Setting(W)	30/2500/5000	52/4500/9000	90/7500/15000	110/15000/30000
Size of heater (mm)	315X330X400	410X380X430	495*520*860	565*645*860
N.W.(KG)	8.9	11.9	22.30	32.50

Housing of steel plate and heat-resistant lacquer

2-3.3kw, supplied complete with cord and plug

15kw-30kw electrical connection: through coupler and plug, detail please see 5 point

4. Description of Control Panel



4.1 Left Knob : selector with heat setting

4.2 Right Knob : Thermostat dial

5. Special safety regulations

5.1 When using electrical appliance basic precautions should always be followed including below :

5.1.1 The fan heater is not suitable for use outdoors in damp weather, in bathrooms or in other wet or damp environments.

5.1.2 Please note that the fan heater can become very hot and should, therefore, be placed at a safe distance from flammable objects such as furniture, curtains and similar.

5.1.3 Do not cover the fan heater.

5.1.4 The fan heater must not be located immediately below a wall socket.

5.1.5 Do not connect the fan heater using an on/off timer or other equipment which can automatically switch the device on.

5.1.6 The fan heater must not be placed in rooms where flammable liquids or gases are used or stored.

5.1.7 If an extension cord is used, it must be as short as possible and always be fully extended.

5.1.8 You must not connect other appliances to the same mains socket as the fan

heater.

5.1.9 Do not use this fan heater in the immediate surroundings of a bath, a shower or a swimming pool

5.1.10 If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

5.1.11 Make sure heater is always under surveillance and keep children and animals away from it;

5.1.12 Do not place the appliance on moving vehicles or some where easy to be tipped over .

5.1.13 When you don't use the appliance for a long time, unplug the appliance .Don't leave the heater for a considerable amount of time when in use. Pull the plug straight out ,never remove the plug by pulling on the cord .

5.1.14 Keep the heater far from curtain or places where the air inlet can easily be blocked.

5.1.15 The power coupler is waterproof when not in sue. In order to prevent possible electric shock or leakage current ,never use the appliance with wet hand or operate the appliance when there is water on the power cord.

5.1.16 Do not dispose of electrical appliances as unsorted municipal waste,use separate collection facilities. Contact you local government for information regarding the collection systems available.If electrical appliance are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain,damaging your health and well-being.

5.1.17 This appliance is not intended for use by persons (including children) with reduced physical, sensory 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.

5.1.18 Children should be supervised to ensure that they do not play with the appliance.

6. 380V, 3 phase, 5-30KW. Instructions of couplerr

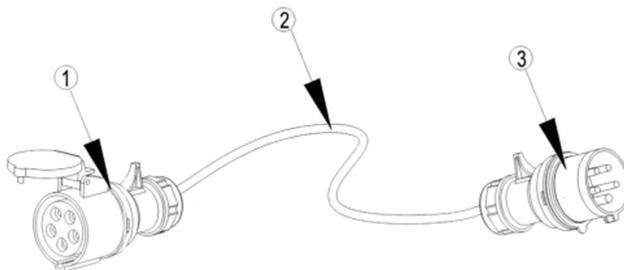


Figure1

1. **Five pins connector 380VI415V 50Hz**
2. **Power cord**
3. **Five pins plug 380VI415V 50Hz IPX4**

6.1 The user should use a power coupler as showed in the figure. The coupler should match with the appliance and earthing protocol. The coupler should be VDE approved . The length of the power cord can be more than 1.8m but less than 3m. If the power cord is too long and heavy ,it can cause the coupler to fall off, electric shock risk or trip and fall risk the specification for each model please see below:

Model	Type of Power cord	Plug Current
TSE-150G	HO7RNF	32A
TSE-300G	HO7RNF	63A

6.2 When you connect the power connector with the appliance, open the lid in the direction of the arrowhead.

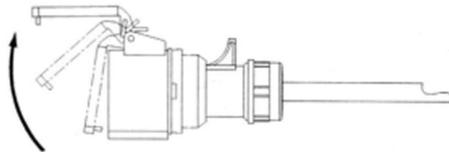


Figure2

6.3 Open the lid of the coupler, push in the direction as shown by arrow in figure 3. The position pin on the lid will fasten in the position buckle as figure 4, after the installation of the coupler it will look as showed in the figure. Before you turn on the appliance make sure that the selector switch and the thermostat are switched OFF, so that when you connect the plug with power supply , there will be no sparks induced between the plug and the socket outlet. This can extend the work life of the plug. Then connect the plug to the power to operate the appliance . During the operation if sparks was detected at the connection, shut off the appliance and connect again.

6.4 After use, first shut down the appliance , then pull out the plug , then remove the position pin and remove the coupler.

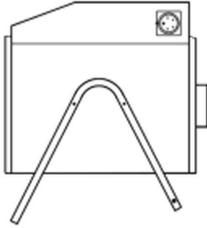


Figure 3

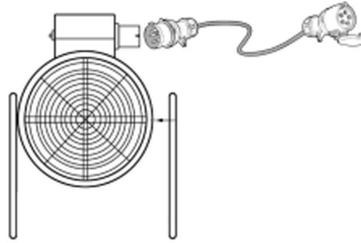


Figure 4

7. Using Instructions

7.1 Connect heater with coupler as FIG 4

7.2 Position the fan heater so that it stands upright on a firm surface and at a safe distance from wet environments and flammable objects.

7.3 Connect the fan heater to the mains.

7.4 Set the thermostat knob to the MAX and let the heater operate with full power .

7.5 The fan heater will switch on when the heating selector is set to one of the power settings.

7.6 Once the room reaches the required temperature, the heating element will stop but the fan will continue . Once the temperature decreases, the heating element will bere-commence working automatically.

7.7 The fan heater now starts and stops automatically and thus keeps the room temperature constant.

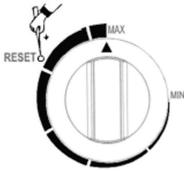
7.8 Before turning off , please turn the thermostat to OFF position and turn the Selector to Fan or off , let the appliance cool down for two minutes.

7.9 Time-delay thermostat cut-off:- if you forgot to turn the thermostat to OFF position before turning off heater ,Thermostat cut-off and Fan will operate when the temperature of front grill of heater is near 50°C .

When temperature reduced to about 40°C The thermostat cut-off and fan will stop working. It will cool the heater

7.10 After using , turn off the heater then , pull out the plug .

7.11 If overheating occurs the Non-self-reset thermostat will shut down the appliance . Remove the plug from the socket and let the appliance cool down , then use a steel pin to touch the Non-self-reset thermostat button. When you hear a clear click it means the electric circuit is reset , put the plug back into the socket and switch the heater on. Please see the figure manual "RESET" button as below:



6. Using Instructions

6.1 Position the fan heater so that it stands upright on a firm surface and at a safe distance from wet environments and flammable objects.

6.2 Connect the fan heater to the mains.

6.3 Set the thermostat knob to the MAX and let the heater operate with full power.

6.4 The fan heater will switch on when the heating selector is set to one of the power settings.

6.5 Once the room reaches the required temperature, heating element will stop working but fan also working .Once the temperature decreased, the heating element will be working. The fan heater now starts and stops automatically and thus keeps the room temperature constant.

6.6 Before switch off the heater, please turn the thermostat to MIN position and turn the switch to fan position, let the appliance cool down for two minutes then turn off the heater and pull out the plug.

6.7 there is an additional thermostat to control the fan motor. If the temperature inside heater is high, the thermostat will also turn on the fan heater despite that the heater is turned off. For example, after operation, when the heater is turn off, the fan motor will still operate to cool down the temperature inside.

8. Cleaning and Maintenance

8.1 Before cleaning the appliance,disconnect it from the socket and let it cool down. The enclosure is easily to get dirty, wipe it often with soft sponge. For every dirty parts, wipe with a sponge dipped in <50°C water and mild detergent,then dry the heater enclosure with clean cloth. Be careful not to let the water enter the appliance inner. Don't splash water onto the heater,never use solvent like gasoline etc. to clean the heater,in order to protect the enclosure.

8.2 Clean the cord and plug,dry and pack it in a plastic bag.

8.3 When you store the heater, let it cool down first, keep it dry. Then cover it with a plastic bag, put in a packing box and store it in a dry, ventilated place.

9. Trouble shooting:

You can solve many common problems easily, saving you the cost of a possible service call. Try the suggestions below to see if you can solve the problem before calling the service centre.

Problem	Possible cause	Treatment
---------	----------------	-----------

The heater does not operate, even when it is plugged in and the switch, thermostat are switched on .	The plug is loose, bad connection	Pull out the plug, check the connection of the plug and socket. Then connect again.
	No power in socket outlet	Insert the plug in a proper socket
The heating element glowing	The input voltage is too high or too low	Use power supply according to the rating on the label
	The air inlet grill is blocked	Keep the heater far way from articles like curtain, plastic bag, paper and other things which can cover the inlet or can be easily cover on the air inlet
The appliance didn't heat up, only ventilator worked	The switch was not put at heating setting	Turn the switch to heat setting
	The thermostat operated	Turn the thermostat and listen if there is open/close voice. If there is no click and the thermostat is not damaged, the heater will automatic switch on when the appliance cooled down
	The self resetting cut-out operated	Turn the heater off and inspect the blockage of inlet or outlet. Disconnect the plug and wait at least 10 minutes for the protection system to reset before attempting to restart the heater.
Abnormal noise	The appliance is not stands upright	Put the heater on a level surface

Disposal



Environmental Protection

Waste electrical production should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.