Breeze®
We bring better air to life

USER'S MANUAL

AWC Series

AWC 15
AWC 20
AWC 25
AWC 30

Certificate No.: VN18/00293

WALL MOUNTED FAN

Thank you for choosing domestic wall mounted fan. Please read and save this user's manual for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and property damage.

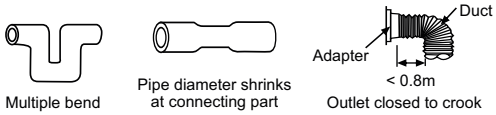
the London Fan company

2020

1. GENERAL SAFETY INFORMATION

- Please read the user's manual carefully prior to installing and operating the unit.
- This user's manual is the primary operating document intended for technical, maintenance and operations staff.
- 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!		While installing the unit, follow the safety regulations specific to the use of electric tools.
	Do not change the power cable length at your own 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 operate the unit in aggressive or explosive environments.
	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. Protect the electric parts of the unit against ingress of water.
	Do not allow children to operate the unit.		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.
	• Before installing this product, ensure that the voltage and frequency consistent with the product nameplate. • When connected to power supply, all-pole power switch with more than 3mm contact separation is necessary to be installed on the power supply circuit. Please do the connection according to the local electrical equipment technical regulations. • Please set up vent and spot inspection. • Installation height should be more than 2.3m. • Should be firmly installed. Gradient installation forbidden.		• Do not disassemble the junction box by yourself, if the power cord is damaged, it should repair by qualified serviceman • Installation on window or outdoor is forbidden. • Places with overmuch lampblack or steam forbidden. • Below connection way of air duct is forbidden. 

The product must be disposed separately at the end of its service life. Do not dispose the unit as unsorted municipal waste.

2. PRODUCTS OVERVIEW

The AWC series is a range of wall exhaust fan designed for use as unducted wall mounted extractions.

Material:

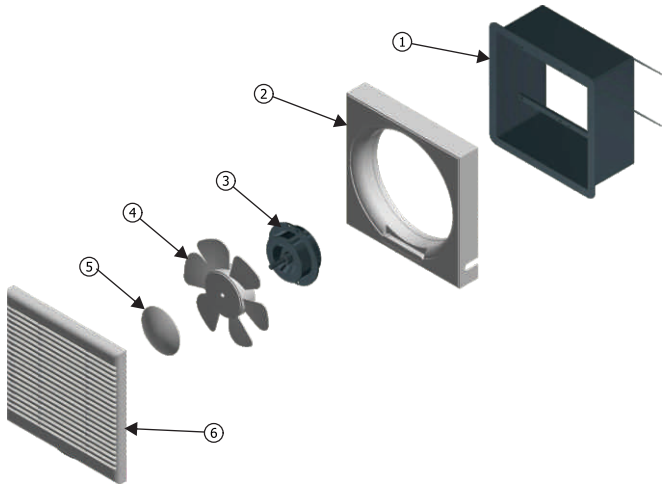
- Casing and louver: Injection moulded by ABS polymer.
- Impeller: ABS polymer and high efficiency axial impeller driven with sealed for by long life bearing.
- Motor: 100% copper coil and fitted with high quality ball bearing, high efficiency, low noise, maintenance free and long service life. Equipped with thermal overload protection.
- Standard motor range is protected to IP 44, class B insulation.

Application: Shopping malls, entertainment and residential area, bathroom, bedroom, office, living room, store, toilets, hotels and exhaust ventilation.

Construction.

The domestic wall mounted fan consists of the following main parts:

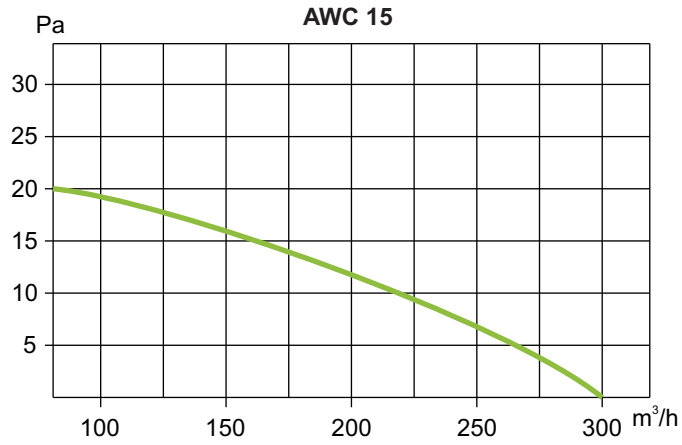
1. Frame Casing and Auto Shutter
2. Louver
3. Motor
4. Impeller
5. Front Cover
6. Grille

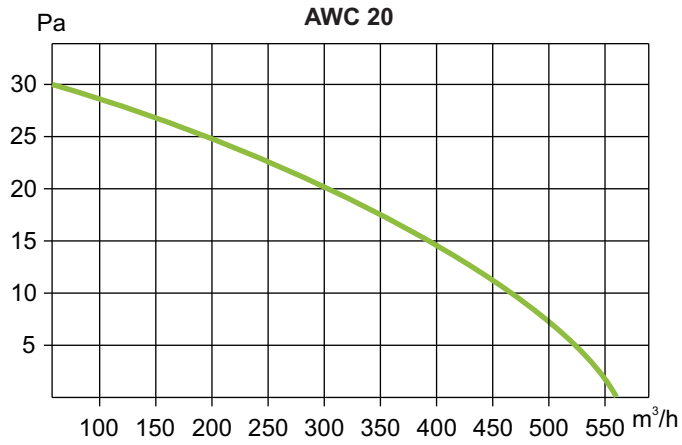


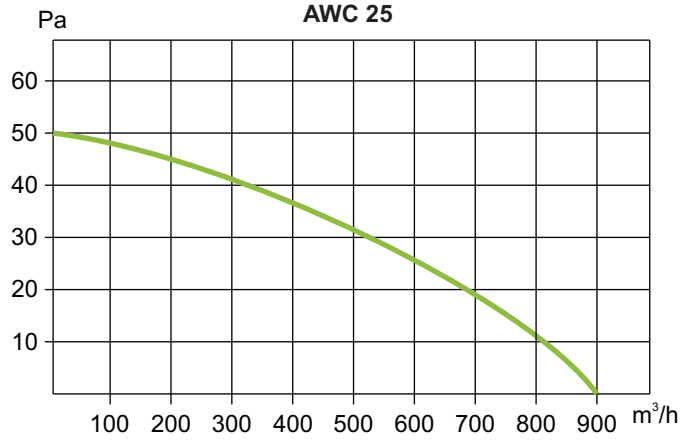
Domestic wall mounted fan with standard motor are suitable for ventilation of:

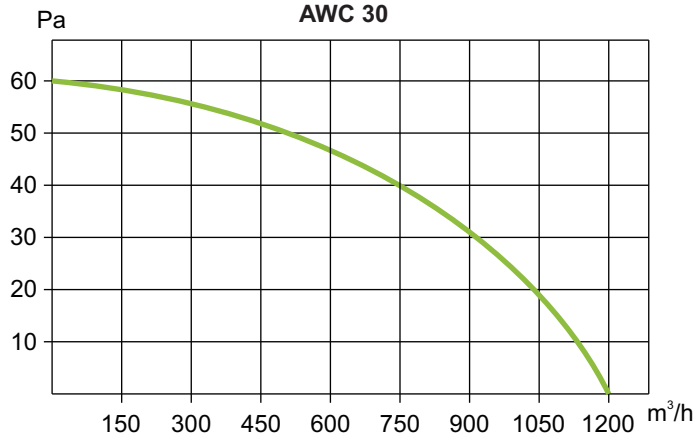
- Clean air
- Slightly dusty and greasy air
- Slightly aggressive gases and vapour
- Mediums up to an atmospheric density of 1.2 kg/m3
- Mediums with a temperature of -20°C up to +40°C
- Mediums up to a max. Humidity of 85%
- The ambient temperature of the motor must be between -20°C and +40°C make sure and adhere to the specifications of the motor manufacturer.

3. PERFORMANCE CURVE





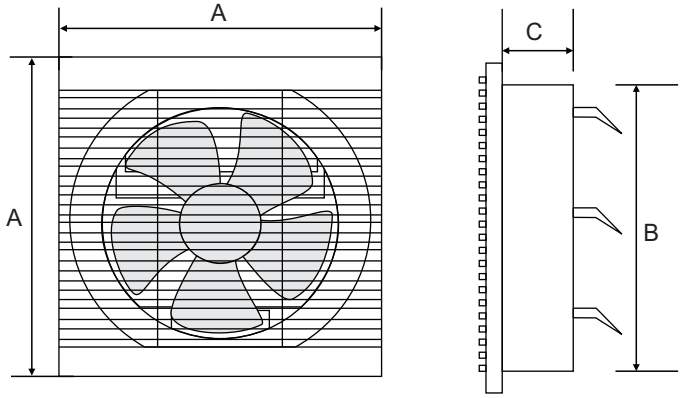




4. PERFORMANCE PARAMETERS

Model	Max. Air Volume (m^3/h)	Power (W)	Speed (rpm/min)	Voltage (V/P/Hz)	Noise dBA (at 3m)	Installation (mm)	Weight (Kg)
AWC 15	300	25	1390	220/1/50	35	205x205	2.0
AWC 20	560	30	1300	220/1/50	39	255x255	3.0
AWC 25	900	35	1200	220/1/50	45	305x305	4.0
AWC 30	1200	45	1000	220/1/50	49	355x355	4.5

5. DIMENSION INFORMATION



Model	A	B	C
AWC 15	245	200	150
AWC 20	295	250	150
AWC 25	345	300	150
AWC 30	400	350	150

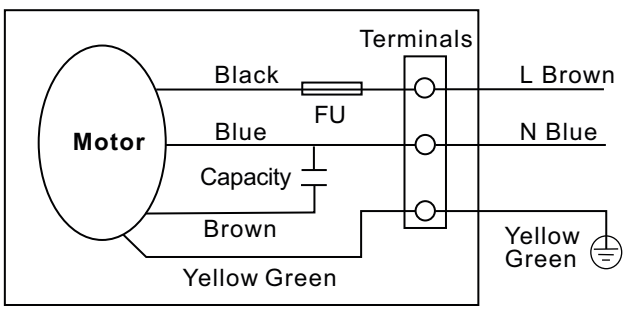
All dimensions in mm.

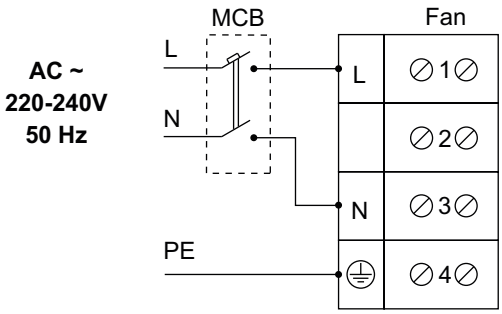
6. ELECTRIC INSTALLATION

Electric Connection

- The fan is designed for 220-240V/50Hz (single-phase).
- The fan shall be connected to power supply by means of insulated, durable and thermal-resistant cords (cables, wires).
- Electric wiring must be in accordance with technical connection regulations and local ordinances and national electric codes as per enclosed wiring diagram in the terminal box or on the casing.
- The recommended wire cross section is minimum 0.75 mm2.
- The actual conductor cross-section selection must be based on its type, maximum permissible heating, insulation, length and installation method (in the air, pipes or inside walls). Connect the cables to the terminal block incorporated inside the terminal box located on the fan casing in compliance with the fan wiring diagram and the terminal designation. The terminal designations are shown on the sticker inside the fan casing.
- Check that supply is according to data on nameplate.
- Insert cable according to the instructions in the junction box and seal it (Avoid water enter).The equipment connected ground for motor protection according to the instructions - Unless the guarantee isn't accepted. Connect electric supply.
- After connecting the wiring, install the terminal cover with screws.

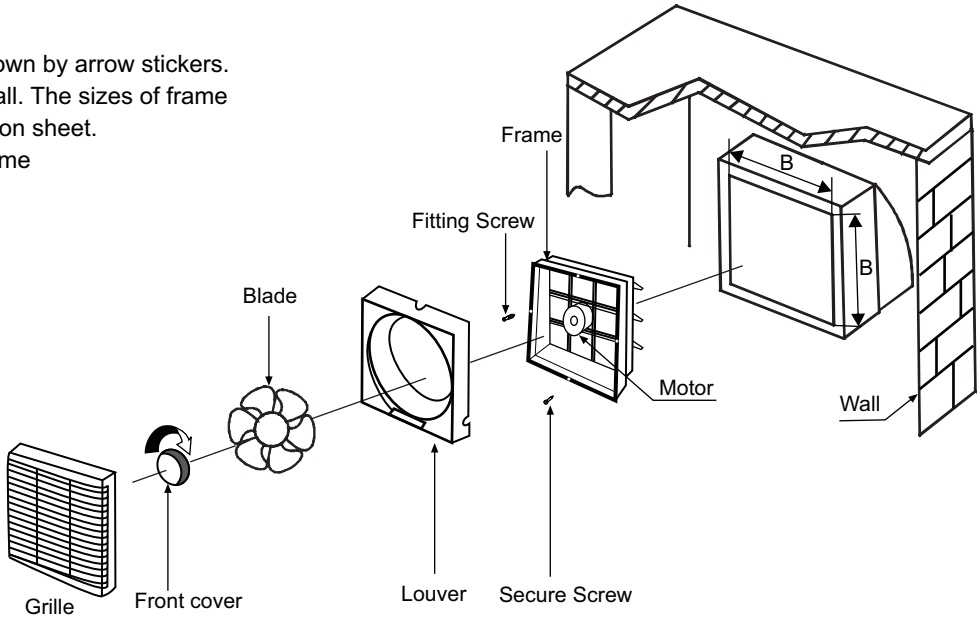
Wiring Diagram





7. INSTALLATION METHOD

- Take care of direction of air flow shown by arrow stickers.
- Make a frame and install it to the wall. The sizes of frame and hole refer to the above dimension sheet.
- Install the fan with screws to the frame (refer to the right picture).



8. OPERATION INSTRUCTION

Visual Inspection of Equipment

- The equipment type and arrangement should be verified as ordered at once when it arrives at the jobsite. When a discrepancy is found, the local Breeze Sales Representative must be notified immediately so that corrective action may be investigated, also verify electrical conformance to specifications. Unauthorized alterations and unauthorized backcharges will not be recognized by Breeze Fan.
- After the unit has been assembled, installed and all utilities have been hooked up, the unit is now ready for operation.

Check

Before starting the unit, check the following:

- Confirm that building supply voltage matches the voltage for which the unit is wired.
- Check all piping and wiring penetrations
- Made by contractors for water tightness. All penetrations must be made watertight to prevent water damage to the unit and building.
- Rotate the fan impeller manually to be sure that it is free to operate. Remove any dirt or debris that may have accumulated during installation.
- Inspect all fasteners to ensure that none have loosened during shipment.
- Check all electrical connections for proper attachment.
- Check casing and ductwork, if accessible, for obstructions and foreign material that may damage the fan impeller.

Checks prior to initial start-up

Proceed with the fan's initial start-up in the following sequence:

- Check that the mechanical assembly has been carried out properly
- Remove foreign bodies located in the suction and outflow areas and in the fan space
- Check that the electrical installation has been completed in accordance with regulations
- Does the mains voltage match the motor voltage specified on the rating plate?
- Is the motor protection system set correctly with regard to the motor's nominal current? The setting must be carried out in
- accordance with the corresponding details contained on the motor output plate.
- Has the motor been connected correctly in accordance with the wiring diagram? The connection schematic supplied by the motor suppliers applies for the connection of the motor.

Starting up the fan for the first time.

Only put the fan into operation after it has been assembled in accordance with the regulations:

- Put the fan into operation.
- Monitor its correct function (quiet running, vibration, imbalance, power consumption, controllability)

Once the unit has been put into operation, a routine maintenance schedule should be set up to accomplish the following:

- Lubrication of bearings and motor.
- Impeller, casing, bolts and set screws on the entire fan should be checked for tightness.
- Any dirt accumulation on the impeller or in the casing should be removed to prevent unbalance and possible damage.
- Inspect fan impeller and casing looking for fatigue, corrosion or wear.

Checks after initial start-up

Check the mechanical connections after initial start-up, especially the joints at the fan.

9. ROUTINE MAINTENANCE

- Regular maintenance is needed each year. The impeller blades require thorough cleaning once in 6 months.
- Before any maintenance work is undertaken:
  - Stop fan in accordance to regulations and disconnect all poles from mains supply.
  - Wait until impeller is stationary.
  - Make sure that a restart is not possible
- Use only original spare parts tested and approved by the manufacturer.
- The following safety notes must be observed when maintaining the machine.
- Replace the ball bearings of the motor whenever the grease utilization period has elapsed in accordance with the maintenance instructions of the manufacturer.
- The technical maintenance includes periodic cleaning of the surfaces from accumulated dust and dirt.
- Use a soft dry brush or a vacuum cleaner to remove dust.
- Only use usual commercial cleaning material paying attention to the prescribed safety measures and do not use any abrasive tools (surface protection will be destroyed).

Prior to all servicing work:

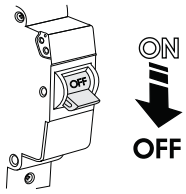
- Bring the fan to a halt in the prescribed manner and completely isolate the fan from the mains supply.
- Wait until the rotor has come to a halt.
- Ensure that the machine cannot be switched on again.
- Clean the fan.

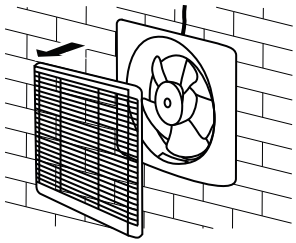
General Check:

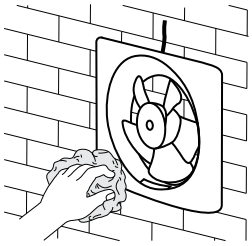
- Too much bearing play?
- Lubricant leaking from the bearings?
- Surface protective coating damaged?
- Attention: Conveyed medium too aggressive?
- Unusual noises during operation?
- Fan output still sufficient for possibly extended or shortened ducting system?

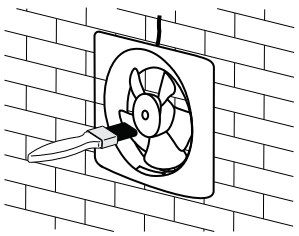
Clean fan:

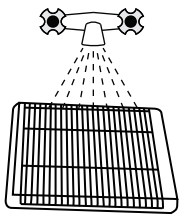
- Remove louver.
- Push out font cover and remove impeller.
- Unscrews and push out motor.
- Remove the frame casing in the wall or wooden frame.
- Clean dirt on fan frame casing. Wash and clean louver.
- Clean impeller.
  - Do not flood motor.
  - Do not bend impeller, blades.
- Assembly fan.
- Control whether installation is correct:
  - Motor impeller must rotate free
  - The gap between impeller and casing must be regular.
  - Checking direction of rotation is correct.
- Install the fan into the wall or wooden frame.
- Push into operation after clean.
- Connect electric supply of motor.

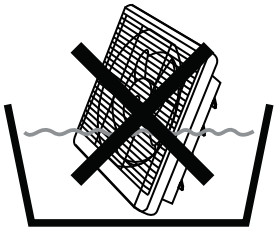












10. REPAIR

Before any repairs are undertaken please:

- Stop fan in accordance to regulations and disconnect all poles from mains supply.
- Wait until impeller is stationary.
- Make sure that a restart is not possible.
- Only use original spare parts manufactured and supplied by Breeze Fan.

Change of the motor or impeller:

- Disconnect electric supply.
- Remove louver, font cover and impeller.
- Unscrew motor suspension and pull out of frame casing with motor.
- Change new motor or impeller and insert in frame casing and secure with screws.
- Insert font cover and louver.
- Control whether direction of rotation is correct.
  - Motor and impeller must rotate free.
  - Annular gap between impeller and wall plate must be regular.
  - Control whether direction of rotation is correct.
  - Install maintenance cover if have.
- Push into operation after repaired.
- Connect electric supply of motor.

11. TROUBLESHOOTING TABLE

PROBLEM	POSSIBLE REASONS	TROUBLESHOOTING
• When switching on the unit the fan does not start.	• No power supply.	• Check the electrical connections and the power switch status.
	• Motor jamming.	• Turn off the fan. • Troubleshoot the impeller jamming. • Restart the fan.
• Circuit breaker tripping during the fan start.	• The automatic circuit breaker is triggered by an abnormally high current consumption due to a short circuit.	• Disconnect the fan from power mains and contact the Breeze Seller. • Do not turn on the fan again.
• Low air flow.	• Clogging of air ducts or other ventilation system elements. Impeller clogging. Damaged air ducts. Air damper closure.	• Clean the air ducts and other ventilation system elements as well as the impeller. • Check the air ducts for damage. • Make sure the air dampers and louver shutters are open.
• Poor foundation	• Excessive noise • Excessive vibration	• Reinforce the foundation
• Fault installation	• Excessive noise Excessive vibration	• Re-adjust the installation
• Low voltage	• Insufficient air flow	• Check power source
• Sucked in objects / Adhere dust	• Motor too hot • Excessive noise • Excessive vibration	• Inspect and clean
• Incorrect wiring	• Run abnormally	• Change wiring

12. TRANSPORT AND STORAGE

Transport

- Our products are packed at the factory to suit the respectively agreed mode of transportation. Transport the fan in its original packaging.
- Fans are protected against damage during shipment. If the unit cannot be installed and operated immediately, precautions need to be taken to prevent deterioration of the unit during storage. The user assumes responsibility of the fan and accessories while in storage. The manufacturer will not be responsible for damage during storage. These suggestions are provided solely as a convenience to the user.
- Only use suitable means of transport, such as pallet trucks or fork-lift trucks or hoist machine.
- If the fan is to be transported by hand, ensure that supporting and carrying loads are kept within reasonable limits for the personnel involved.
- The fans must not be dropped or thrown. Avoid scratches or rough handling during loading and unloading.
- Parts which have been stacked too high can collapse.
- Avoid a distortion of casing or blades or other damage.
- Danger ! Do not step under hanging loads.

Storage

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5˚C up to +40˚C and relative humidity up to 85%.
- Store the fan in a dry, weather-protected location in its original packaging or protect it from the effects of dirt and the weather until final assembly. Storage environment must not contain aggressive vapours and chemical mixtures provoking corrosion, insulation and sealing deformation.
- Rotate fan impeller monthly and purge bearings once every three months.
- If storage of fan is in a humid, dusty or corrosive atmosphere, rotate the fan and purge the bearings once a month. Improper storage which results in damage to the fan will void the warranty.
- Avoid lengthy storage periods (a maximum of one year is recommended) and check that the motor bearing assembly is in good functional order prior to fitting. With storage times of more than 1 year, please check the bearings on soft running before installation (turn by hand).

Thank you for your cooperations!

Applied standard:

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