Questions? See us on the World Wide Web at www.dewalt.com

INSTRUCTION MANUAL

INSTRUCTION MANUAL, SERVICE CENTER LISTINGS, AND WARRANTY CARD.
WARNING: READ THE INSTRUCTION MANUAL BEFORE USING THE PRODUCT.

DEWALT®

DWE6411
1/4 Sheet Sander

FINAL PRINT SIZE: 8.5 x 5.5"

Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

⚠***DANGER:*** *Indicates an imminently hazardous situation which, if not avoided,* ***will*** *result in* ***death or serious injury****.*

⚠***WARNING:*** *Indicates a potentially hazardous situation which, if not avoided,* ***could*** *result in* ***death or serious injury****.*

⚠***CAUTION:*** *Indicates a potentially hazardous situation which, if not avoided,* ***may*** *result in* ***minor or moderate injury****.*

NOTICE: *indicates a practice* ***not related to personal injury*** *which, if not avoided,* ***may*** *result in* ***property damage.***

WARNING: *To reduce the risk of injury, read the instruction manual.*

General Power Tool Safety Warnings

WARNING! Read all safety warnings and all instructions *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) WORK AREA SAFETY

a) ***Keep work area clean and well lit.*** *Cluttered or dark areas invite accidents.*

b) ***Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.*** *Power tools create sparks which may ignite the dust or fumes.*

c) ***Keep children and bystanders away while operating a power tool.*** *Distractions can cause you to lose control.*

2) ELECTRICAL SAFETY

a) ***Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.*** *Unmodified plugs and matching outlets will reduce risk of electric shock.*

b) ***Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.*** *There is an increased risk of electric shock if your body is earthed or grounded.*

c) ***Do not expose power tools to rain or wet conditions.*** *Water entering a power tool will increase the risk of electric shock.*

d) ***Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.*** *Damaged or entangled cords increase the risk of electric shock.*

e) ***When operating a power tool outdoors, use an extension cord suitable for outdoor use.*** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

f) ***If operating a power tool IN A DAmp location is unavoidable, use a residual current device (RCD) protected supply.*** *Use of an RCD reduces the risk of electric shock.*

3) PERSONAL SAFETY

a) ***Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.*** *A moment of inattention while operating power tools may result in serious personal injury.*

b) ***Use personal protective equipment. Always wear eye protection.*** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

English

c) ***Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/ or battery pack, picking up or carrying the tool.*** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*

d) ***Remove any adjusting key or wrench before turning the power tool on.*** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

e) ***Do not overreach. Keep proper footing and balance at all times.*** *This enables better control of the power tool in unexpected situations.*

f) ***Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.*** *Loose clothes, jewellery or long hair can be caught in moving parts.*

g) ***If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.*** *Use of dust collection can reduce dust-related hazards.*

4) POWER TOOL USE AND CARE

a) ***Do not force the power tool. Use the correct power tool for your application.*** *The correct power tool will do the job better and safer at the rate for which it was designed.*

b) ***Do not use the power tool if the switch does not turn it on and off.*** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

c) ***Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.*** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

d) ***Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.*** *Power tools are dangerous in the hands of untrained users.*

e) ***Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.*** *Many accidents are caused by poorly maintained power tools.*

f) ***Keep cutting tools sharp and clean.*** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g) ***Use the power tool, accessories and tool bits etc., in accordance with these instructions taking into account the working conditions and the work to be performed.*** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

5) SERVICE

a) ***Have your power tool serviced by a qualified repair person using only identical replacement parts.*** *This will ensure that the safety of the power tool is maintained.*

Additional Specific Safety Rules

- ***Accessories must be rated for at least the speed recommended on the tool warning label.*** *Wheels and other accessories running over rated speed can fly apart and cause injury. Accessory ratings must be above listed minimum wheel speed as shown on tool nameplate.*
- ***Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.*** *Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.*
- ***Always wear eye protection and a respirator when sanding.***
- ***Sanding of lead-based paint is not recommended.*** *See Precautions To Take When Sanding Paint for additional information before sanding paint.*
- ***Do not operate the unit without the dust collection bag.***
- ***Clean your tool out periodically.***

- ***Empty dust bag frequently, especially when sanding resin coated surfaces such as polyurethane, varnish, shellac, etc.*** *Dispose of coated dust particles according to the finish manufacturer's guidelines, or place in a metal can with a tight-fitting metal lid. Remove coated dust particles from the premises daily. The accumulation of fine sanding dust particles may self ignite and cause fire.*
- ***Air vents often cover moving parts and should be avoided.*** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- ***An extension cord must have adequate wire size for safety.*** *An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.*

Voltage (Volts)	**Total length of cord in meters (m)**			
120–127V	0–7	7–15	15–30	30–50
220–240V	0–15	15–30	30–60	60–100
Rated Ampere range	**Minimal cross-sectional area of the cord in meters (mm^2)**			
0–6A	1.0	1.5	1.5	2.5
6–10A	1.0	1.5	2.5	4.0
10–12A	1.5	1.5	2.5	4.0
12–16A	2.5	4.0	Not Recommended	

⚠***WARNING:*** *Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:*

- *lead from lead-based paints,*
- *crystalline silica from bricks and cement and other masonry products, and*
- *arsenic and chromium from chemically-treated lumber.*

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

- ***Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water.*** *Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.*

⚠***WARNING:*** *Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.*

⚠***WARNING: ALWAYS*** *USE SAFETY GLASSES. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALL USERS AND BYSTANDERS MUST ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:*

- *ANSI Z87.1 eye protection (CAN/CSA Z94.3),*
- *ANSI S12.6 (S3.19) hearing protection,*
- *NIOSH/OSHA/MSHA respiratory protection.*

- *The label on your tool may include the following symbols. The symbols and their definitions are as follows:*

V..... volts	*A..... amperes*
Hz..... hertz	*W..... watts*
min ..... minutes	*~ or AC..... alternating current*
⎓ or DC... direct current	

English

⏚	*Class I Construction (grounded)*	≂ or AC/DC	*alternating or direct current*
⧈	*Class II Construction (double insulated)*	n_o	*no load speed*
…/min	*revolutions per minute*	n	*rated speed*
BPM	*beats per minute*	⏚	*earthing terminal*
IPM	*impacts per minute*	⚠	*safety alert symbol*
SPM	*strokes per minute*		
sfpm	*surface feet per minute*		

DESCRIPTION (FIG. 1)

⚠***WARNING:*** *Never modify the power tool or any part of it. Damage or personal injury could result.*

A. On/Off switch
B. Front paper clamp
C. Front clamp button
D. Base plate/pad
E. Paper-limiting ribs
F. Rear paper clamp
G. Side clamp levers
H. Holding tabs
I. Vac-adapter
J. Dust bag
K. Dust bag collar

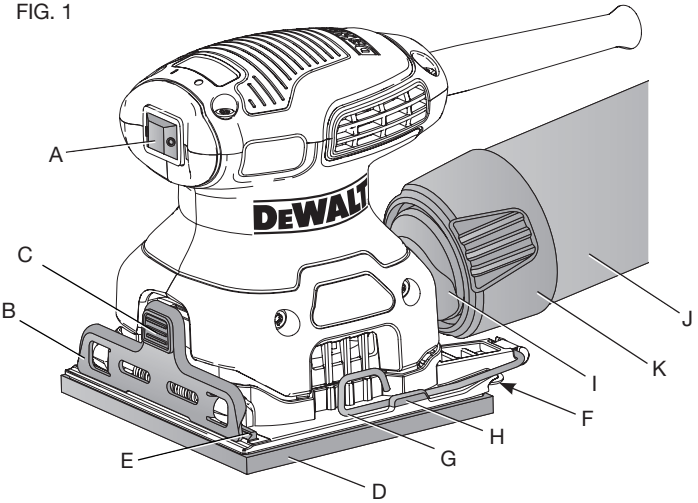
INTENDED USE

This sander is designed for professional sanding applications.

DO NOT use under wet conditions or in presence of flammable liquids or gases.

This sander is a professional power tool. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

FIG. 1



ASSEMBLY AND ADJUSTMENTS

⚠***WARNING: To reduce the risk of injury, turn unit off and disconnect tool from power source before installing and removing accessories, before making any adjustments or removing/installing attachments or accessories.*** *An accidental start-up can cause injury.*

⚠***WARNING:*** *Prior to assembly and adjustment, always unplug tool.*

Attaching Abrasive Paper (Fig. 2–6)

⚠***CAUTION:*** *Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories. Be sure the switch is in the OFF position.*

Your sander is designed to use 1/4-sized sanding sheets. Pre-cut 4-1/2" x 5-1/2" sandpaper is available at extra cost.

English

TO MAKE 4-1/2" X 5-1/2" SANDPAPER

a. Cut full-sized (9" x 11") sandpaper into 1/4 sheets of 4-1/2" x 5-1/2".

b. Cut 1/2 sheet sandpaper into two 4-1/2" x 5-1/2" sheets.

FIG. 2

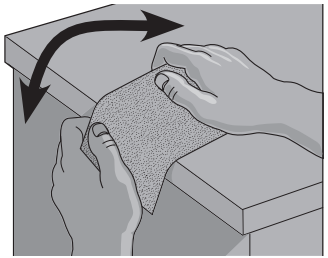


FIG. 3

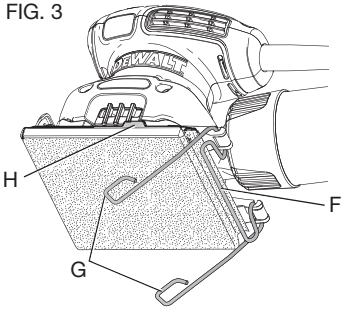


FIG. 4

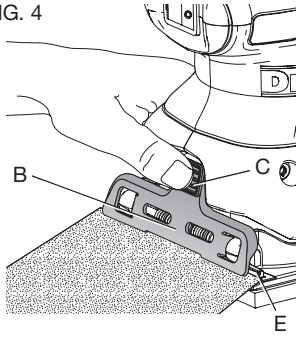
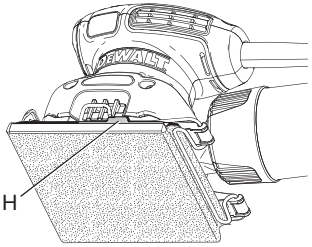


FIG. 5



FITTING REGULAR SANDING SHEETS (FIG. 2–5)

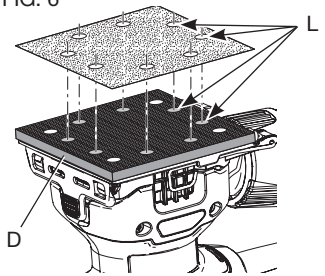
For normal operation, assemble the abrasive paper to your unit as follows:

1. Soften the stiff sandpaper by pulling it over the 90° edge of a table or other straight edge, as shown in Figure 2. Concentrate on softening the edges to be clamped.
2. Release the rear paper clamp (F) by pulling up on the side clamp levers (G) and disengaging them from the tabs (H) on the base plate/pad (D) as shown in Figure 3.
3. Disengage the front paper clamp (B, Fig. 4) by applying and holding pressure on the front clamp button (C) while inserting the 4-1/2" edge of the abrasive paper under the front paper clamp (B) until if hits the paper-limiting ribs (E). Release the front paper clamp to secure the front of the paper.
4. Stretch paper over the base plate/pad (D) and begin to pivot the rear paper clamp (F) around to its locking position. Lock one side clamp lever (G) by placing it behind the tab (H, Fig. 5) on the base plate/pad and then repeat with the second side clamp lever.
5. If you are using the dust extraction feature, perforate the sandpaper (see **Paper Punch**).

FITTING HOOK AND LOOP SANDING SHEETS (FIG. 6)

1. Place the tool on a table, base plate/pad (D) up.
2. Place the sanding sheet directly on top of the base plate/pad (D).
3. Hold the base plate/pad with one hand and align the dust extraction holes (L).
4. Press the sheet firmly onto the base plate/pad.

FIG. 6



English

Switch (Fig. 1)

To turn the unit on, depress the side of the dust-protected switch (A) that corresponds to the symbol “I”. To turn the tool off, depress the side of the switch that corresponds to the symbol “O”.

Paper Punch (Fig. 7)

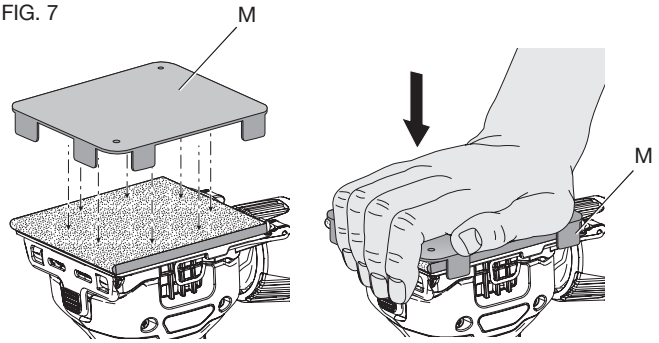
⚠***CAUTION:*** *Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories. Be sure the switch is in the OFF position.*

A paper punch (M) is provided with your sander to let you perforate regular sandpaper to make dust collection possible.

TO PERFORATE YOUR SANDPAPER

Install the sandpaper on the tool as instructed in this manual. With the sander turned off and unplugged, place the paper punch on the paper so that the tabs at the edges of the punch are against any two adjacent sides of the sanding pad, as shown. Press the punch against the pad so that the 8 points penetrate the paper, as shown in Figure 7. (Press the punch into the pad as far as it will go.) Remove the paper punch and the paper is ready.

FIG. 7



An alternate method of perforating the paper is to securely fasten the punch to a suitable work surface. Two holes are provided in the punch for this purpose. Use #8 flat head screws. Press the sander (with the paper attached) down on the punch.

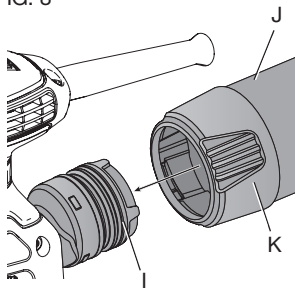
Dust Extraction (Fig. 1, 8)

Your sander has a built-in vac-adapter (I) which allows either the supplied dust bag (J) or a shop vacuum system to be connected. The built-in outlet utilizes the DEWALT AirLock connection making it compatible with the DEWALT dust extractor.

TO ATTACH THE DUST BAG

1. While holding the sander, fit the dust bag collar (K) to the vac-adapter (I) as shown in Figure 8.
2. Turn the collar (K) clockwise to lock the dust bag (J) in place.

FIG. 8



TO EMPTY THE DUST BAG

1. While holding the sander, turn the collar (K) counterclockwise to unlock the dust bag (J).
2. Remove dust bag from the sander and gently shake or tap the dust bag to empty.
3. Reattach the dust bag back onto the outlet and lock into place by turning the dust bag collar clockwise.

You may notice that all the dust will not come free from the bag. This will not affect sanding performance but will reduce the sander’s dust collection efficiency. To restore your sander’s dust collection efficiency, depress the spring inside the dust bag when you are emptying it and tap it on the side of the trash can or dust receptacle.

⚠***CAUTION: Never operate these tools unless the dust collector is in place.*** *Sanding dust exhaust may create a breathing hazard.*

English

OPERATION

⚠***WARNING:*** *Always observe the safety instructions and applicable regulations.*

⚠***WARNING: To reduce the risk of injury, turn unit off and disconnect tool from power source before installing and removing accessories, before making any adjustments or removing/installing attachments or accessories.*** *An accidental start-up can cause injury.*

NOTICE*: This sander is not to be used in drywall applications.*

To operate your sander, grasp it as shown in Figure 9A or 9B and turn it on. Move it in long, sweeping strokes along the surface being sanded, letting the sander do the work. Pushing down on the tool while sanding actually slows the removal rate and produces an inferior quality surface. Be sure to check your work often, this sander is capable of removing material rapidly, especially with coarse paper.

Your sander is designed to sand flush on three sides for sanding in corners, and its small size and light weight make it ideal for overhead work.

FIG. 9A

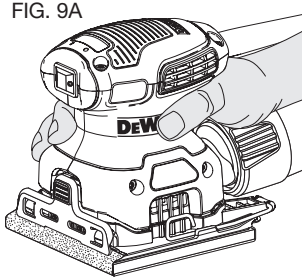
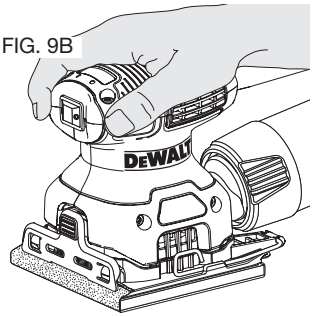


FIG. 9B



The orbital action of your sander allows you to sand with the grain or at any angle across it for most sanding jobs. On the final sanding steps, as discussed below, a better finish will result if you sand only with the grain.

To produce the best finish possible, start with coarse grit sandpaper and change gradually to finer and finer paper. A final sanding with a piece of well-worn fine sandpaper will produce a professional-looking finish that in many cases will need no hand sanding at all. The rate at which the dust collection bag will fill up will vary with the type of material being sanded and the coarseness of the sandpaper. For best results, empty the bag frequently and check the opening for clogging.

When sanding painted surfaces, you may find that the sandpaper loads up and clogs with paint. A heat gun will work much better to remove paint before sanding. FOLLOW ALL SAFETY INSTRUCTIONS IN HEAT GUN INSTRUCTION MANUAL.

Precautions to Take When Sanding Paint

1. Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.
2. Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

PERSONAL SAFETY

1. No children or pregnant women should enter the work area where the paint sanding is being done until all clean-up is completed.
2. A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing. See your local hardware store for the proper NIOSH-approved dust mask.
3. NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up BEFORE eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.

ENVIRONMENTAL SAFETY

1. Paint should be removed in such a manner as to minimize the amount of dust generated.
2. Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.
3. Sanding should be done in a manner to reduce tracking of paint dust outside the work area.

CLEANING AND DISPOSAL

1. All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
2. Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removal debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
3. All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

Tool Care

- Keep your machine as clean as possible by wiping with a clean cloth and blowing through it with air after every 5 hours of use.
- Don't use harsh chemicals or solvents to clean the tool. These chemicals could seriously damage the plastic.
- Avoid overloading your sander. Overloading will result in a considerable reduction in speed and efficiency and the unit will become hot. In this event, run sander at a "no load" condition for a minute or two.
- Brush inspection and replacement should be completed by your local dealer or authorized service center.

MAINTENANCE

⚠***WARNING: To reduce the risk of injury, turn unit off and disconnect tool from power source before installing and removing accessories, before making any adjustments or removing/installing attachments or accessories.*** *An accidental start-up can cause injury.*

Your DEWALT power tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

Lubrication

Your power tool requires no additional lubrication.

Cleaning

⚠***WARNING:*** *Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the air vents. Wear approved eye protection and approved dust mask when performing this procedure.*

⚠***WARNING:*** *Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.*

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

Accessories

⚠WARNING: *Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT, recommended accessories should be used with this product.*

Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center.

Protecting the Environment

Separate collection. Products and batteries marked with this symbol must not be disposed of with normal household waste.

Products and batteries contain materials that can be recovered or recycled reducing the demand for raw materials. Please recycle electrical products and batteries according to local provisions.

SPECIFICATIONS

	AR	B2	BR	B3
Voltage	220 V	220 V	127 V	120 V
Frequency	50 Hz	50–60 Hz	60 Hz	50/60 Hz
Power input	230 W	230 W	230 W	230 W
Speed	14000/min	14000/min	14000/min	14000/min
Vibration Emission Value a_h =	<4,0 m/s^2	<4,0 m/s^2	<4,0 m/s^2	<4,0 m/s^2

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