ENERGER





SAFETY AND OPERATING MANUAL

Original Instructions 1.0

1300W CIRCULAR SAW ENB455CSW



Read all safety warnings and all instructions before use. 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.

GENERAL SAFETY INSTRUCTIONS



VARNING! Read all safety warnings designated by the symbol and all instructions.

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

- a) Keep work area clean and well lit. Cluttered and 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 loose 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 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 the 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 using 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.

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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your fingers on the switch or plugging in power tools that have the switch in 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 a 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 get 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 these devices 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 is 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 preventative safety measures reduce the risk of starting power tools accidentally.

- d) Store idle power tools out of 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 tools 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 easier to control.
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, 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

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.

SPECIAL SAFETY INSTRUCTIONS

- a) DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.
- b) **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- c) Adjust the cutting depth to the thickness of the workpiece. Less than a full tooth of the blade teeth should be visible below the workpiece.
- d) Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e) Hold power 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 also make exposed metal parts of the power tool "live" and shock the operator.
- f) When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
- g) Always use blades with correct size and shape (diamond versus round) of arbour holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- h) Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

Further safety instructions

Causes and operator prevention of kickback:

- kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
- when the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
- if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a) Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- b) When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
- c) When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- d) Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- e) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- f) Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
- g) Use extra caution when making a "plunge cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

Safety instructions for circular saws

- a) Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- b) Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- c) Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- d) Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

Additional safety instrucionts

- 1. Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.
- 2. Fully unwind extension cords to avoid potential overheating.
- 3. When an extension cord is required, please ensure it has the correct ampere rating for the power tool and that it is in a safe electrical condition.
- 4. Ensure the supply voltage is same as rating voltage.
- 5. The tool is double insulated for additional protection against a possible electrical insulation failure within the tool.
- 6. After long working periods, external metal parts and accessories could be hot.
- 7. Wear eye protection when operating this tool.
- 8. Always check the workpiece before operation and remove any obstructions such as nails, staples, screws, string, rags, cloths and other debris. Do not cut into nails, screws or other metal objects.
- 9. Check the position of power cables before commencing work ensuring they are well away from the work area.
- 10. Do not use worn or damaged blades. This may result in motor overload and substandard work.
- 11. Keep hands and other body parts well away from the blades while the circular saw is in use. Do not attempt to remove cut material whilst the machine is in operation or reach underneath for any reason.

CAUTION!

The blunt blade may burn the cutting surface. In such case, please replace the blade immediately. Overheated blade tips may loosen off and cause serious injury.



WARNING!

Some dust created by power Planing, cutting 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,
- 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.

NOISE INFORMATION

Wear hearing protection!

Measured sound values determined according to EN 60745.

The noise figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of work-force include the characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes, and the length of time for which an operator is exposed to the noise. Also the permissible exposure level can vary from country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reduce hand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a

power tool can be used safely on a daily basis and the choice of tool.

Further advice can be found at www.hse.gov.uk

Vibration total values (triax vector sum) determined according to EN 60745:				
cutting wood	Level of vibration a _{h.W} = 4.021 m / s ²			
	Uncertainty K = 1.5 m/s ²			

The declared vibration emission value should be used as a minimum level and should be used with the current quidance on vibration.

The declared vibration emission been measured in accordance with a standardised test stated above and may be used to compare one tool with another tool. The declared vibration emission value may also be used in a preliminary assessment of exposure.



WARNING

The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependent on the following examples and other variations on how the tool is used:

How the tool is being used and the materials being cutting.

The tool being in good condition and well maintained

The use the correct accessory for the tool and ensuring it is sharp and in good condition.

The tightness of the grip on the handles.

And the tool is being used as intended by its design and these instructions.

While working with this power tool, hand/arm vibrations occur. Adopt the correct working practices in order to reduce the exposure to vibration.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed.

WARNING!

Identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Vibration and noise reduction

To reduce the sanding of noise and vibration emission, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment.

Take the following points into account to minimize the vibration and noise exposure risks:

- 1. Only use the product as intended by its design and these instructions.
- 2. Ensure that the product is in good condition and well maintained.
- 3. Use correct application tools for the product and ensure they in good condition.
- 4. Keep tight grip on the handles/grip surface.
- 5. Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
- 6. Plan your work schedule to spread any high vibration tool use across a number of days.

Emergency

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

- 1. Always be alert when using this product, so that you can recognise and handle risks early. Fast intervention can prevent serious injury and damage to property.
- 2. Switch off and disconnect from the power supply if there is any malfunction. Have the product checked by a qualified specialist and repaired, if necessary, before you put it into operation again.

Health Surveillance

All employees should be part of an employer's health surveillance scheme to help identity any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

Residual risks

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

- 1. Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
- 2. Injuries and damage to property due to broken application tools or the sudden impact of hidden objects during use.
- 3. Danger of injury and property damage caused by flying objects.

WARNING!

This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

Important note

Be sure the supply is the same as the voltage given on the rating plate. Remove the mains plug before carrying out any adjustment or servicing.

Intended use

The machine is intended for making separating cuts and cut-outs in wood while resting firmly on the workpiece. It is suitable for straight and curved cuts with mitre angles to 45°.

SYMBOLS

The symbols shown on the product has great significance for the safe use of the product.



WARNING - To reduce the risk of injury, user must read the instruction manual



Wear eye protection.



Wear hearing protection.



Wear breathing protection.



Wear safety gloves.



This product is of protectionclass II. That means it is quipped with enhanced or double insulation.

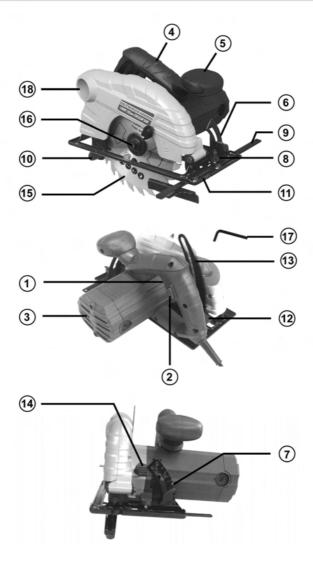


This product complies with all applicable European Directives.

yyWxx Manufacturing date code:

Year of manufacturing (20yy) and week of manufacturing (Wxx);

Components and controls



- 1. On/Off switch
- 2. Lock-off switch
- 3. Motor housing
- 4. Main handle
- 5. Auxiliary handle
- 6. Bevel adjustment lever
- 7. Bevel angle scale
- 8. Butterfly nuts for parallel guide
- 9. Parallel guide
- 10. Blade guard
- 11. Base plate
- 12. Depth locking lever
- 13. Cutting depth scale
- 14. Spindle-lock button
- 15. Blade
- 16. Hex nut
- 17. Hex key
- 18. Dust suction tube

TECHNICAL DATA

Model ENB455CSW Rated voltage 220-240V 50Hz

Rated power 1300W No load speed 4700 min-1

Blade size Ø 185 / 184 mm x 2.5 mm x Ø 30 mm x 24T

Max. cutting depth at 90 degree 64mm
Max. cutting depth at 45 degree 44mm

Weight 3.9kg

NOISE DATA

Sound pressure level: LpA = 93.8dB (A) uncertainty K= 3dB (A) Sound power level: LWA = 104.8dB (A) uncertainty K= 3dB (A)

Wear ear protection when sound pressure is over 80 dB(A)

ACCESSOIRES

The machine comes with the following accessories:

- 1pc Parallel guide
- 1pc Hex key 6mm
- 1pc Saw blade: Ø 185 mm x 2.5 mm x Ø 30 mm x 24T

BEFORE USE

Before making assembly, changing and adjustment for any accessory, disconnect the tool from the mains supply to avoid any unintentional starting.

Please always check the mains supply voltage before use! It must correspond with the rating label on the appliance.

Remove any packing material and loose parts from unit.

Check the accessories before use. They must be fixed correctly and fit for use.

Check the blade before use. It shall not jam or touch with any enclosure during working.

Never use any damaged or deformed blade.

Check all the devices intended for covering the saw blade operate correctly.

- The blade guard must not be jammed.
- The damaged or deformed blade guard must be repaired immediately before starting work.

Never use any abrasive wheels in circular saw.

Operating instructions



Fig.1



Fig.2



Fig.3

1. On/Off switch (Fig.1)

Use the On/Off switch and lock off switch to start the machine and keep holding it for continuous operation. The machine can only be started by depressing the lock off switch first, preventing any unintentional operation. To switch the machine off, release the On/Off switch. Before putting the circular saw down, please make sure it has stopped completely

CAUTION!

Always hold the machine by both hands.

Never start the machine with the blade in contact with the workpiece. Start cutting only after the motor reached its full speed. And always remove the machine from the workpiece before switching it off.

Never stop the blade by exerting pressure on the side of the blade

Always carry out a test run before starting work and after every tool change! Always ensure that the tools are in good condition, correctly mounted and able to turn freely. The trial run should be at last 30 sec.

2. Using the Parallel Guide Fence (Fig. 2)

The parallel guide fence is an effective aid for cutting in a straight line.

To set the cutting width, install the guide in the machine and rotate the knob to the required width. Then lock the guide in place.

Note: If the distance between the side of the work piece and the cutting position is too wide, or the side of the work piece is not straight, firmly clamp a straight board to the work piece and use this as a guide.

3. Mounting blade (Fig. 3)

The mounting hole of blade must fit with the mounting flange. Do not use reducers or adapters.

The direction-of-rotation arrow on blade and machine (see direction-of-rotation arrow on the machine enclosure) should be same.

To assemble the blade, press the spindle-lock button in deep and hold it in this position continuously. If necessary, turn the spindle slightly with the free hand until it locks into position.

Put the blade between two parts of flange, place the washer and screw in position and then tighten it with hex key provided.



Fig.4



Fig. 5



Fig. 6

CAUTION!

Never use blade whose diameter is larger than that indicated.

The maximum rotation speed of blade must be greater than the idling speed of the machine.

4. Removing blade (Fig. 4)

To remove the blade, press the spindle-lock button in deep and hold it in this position continuously. If necessary, turn the spindle slightly with the free hand until it locks into position.

Loosen the flange with hey key provided and then remove the blade from spindle.

CAUTION!

Check the blade regularly during use. If it has been jammed or is deformed, replace it!

5. Adjusting the cutting depth (Fig. 5)

For optimal quality of cutting, the saw blade should not extend more than 3 mm below the workpiece. It is also the best way to avoid overheating of blade tips.

To adjust the cutting depth (0-64mm), please follow below steps:

- 1. Loosen the depth locking lever by hand.
- 2. Raise/lower the base plate and set the blade to the required depth as shown on the cutting depth scale.
- 3. Tighten the depth locking lever.

CAUTION!

Always check the locking lever before working. A loose locking lever may cause serious injury.

6. Adjusting the cutting angle (Fig. 6)

CAUTION!

When bevel cutting, cutting depth does not correspond with value on cutting depth scale

Always check the bevel adjustment lever before working. A loose adjustment lever may cause serious injury.

To adjust the cutting angle (0-45°), please follow below steps:

- 1. Loosen the bevel adjustment lever by hand.
- 2. Adjust the base plate and set the blade to the required angle as shown on the bevel angle scale.
- 3. Tighten the bevel adjustment lever.

TERMS OF USE

When all precautions have been taken and the previous operations were done, you can start working. The stress on the machine should not be such that the speed is reduced by more than 25% for significant

When overloaded happened, run the machine empty for 3 to 5 minutes to cool the engine.

Do not use the saw with a cracked, blunt or damaged blade.

Do not attempt to cut objects thicker than the maximum cutting depth of the blade or when there is not enough space under the object for the blade.

The saw blades have different types for different materials. Please select it carefully and make sure it fits with

the machine and your purpose before use.

CARE AND MAINTENANCE

Before maintenance and cleaning, please always remove the plug from power source.

The retracting blade guard must always be able to move freely and retract automatically. Keep the area around the retracting blade guard clean. Remove dust and chips by blowing out with compressed air or with a brush before storage.

Saw blades that are not coated can be protected against corrosion with a thin coat of acid-free oil. Before use, the oil must be removed again; otherwise the wood will become soiled.

Resin and glue residue on the saw blade produces poor cuts. Clean the saw blade immediately after use.

Keep the ventilation openings clear and clean the product regularly. This machine requires no special mechanical maintenance such as greasing the bearings.

If something unusual occurs during use, switch off the supply and disconnect the plug. Inspect and repair the tool before using it again. The repairs must be carried out by a qualified technician.

Repair of the tool must only be carried out by a qualified repair technician.

Repair or maintenance by unqualified personnel can lead to a risk of injury.

Use only identical spare parts for repairing a tool.

If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the service organization.

Care and cleaning

Cleaning of plastic parts is disconnected machines, using a soft damp cloth and a mild soap.

Never immerse the machine and do not use detergent, alcohol, petrol, etc..

In case of problems or for a deep cleaning, consult the manufacturer, its service agent or a similarly qualified person to avoid a hazard.

STORING

Store the machine, operating instructions and where necessary the accessories in the original packaging. In this way you will always have all the information and parts ready to hand.

Pack the device well or use the original packaging in order to avoid transit damage.

Always keep the machine in dry place.

GUARANTEE

This ENERGER product carries a guarantee of 12 months.

If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods This guarantee does not affect your statutory rights.

This guarantee is only valid in the UK. For any enquiries relating to the guarantee please refer to your retailer.

ENVIRONMENTAL PROTECTION



This product is marked with the selective sorting symbol on waste electrical and electronic equipment. This means that this product should not be disposed of with household waste but must be supported by a collection system in accordance with Directive 2012/19/EU. It will then be recycled or dismantled to minimize impacts on the environment, electrical and electronic products are potentially hazardous to the environment and human health due to the presence of hazardous substances.

PLUG REPLACEMENT (UK & IRELAND ONLY)

If you need to replace the fitted plug then follow the instructions below.

IMPORTANT

The wires in the mains lead are colored in accordance with the following code:

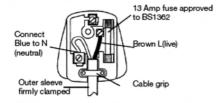
BLUE =NEUTRAL Brown = Live

As the colors of the wires in the mains lead of this appliance may not correspond with the colored markings identifying the terminals in your plug, proceed as follows. The wire which is colored blue must be connected to the terminal which is marked with N. The wire which is colored brown must be connected to the terminal which is marked with L.

Warning:

Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved 13AMP BS1363/A plug and the correct rated fuse.

Note: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.





Declaration of Conformity

We, Importer
Powersmith (UK) LTD.
Trade house, Mead Avenue, BA22 8RT

Declare that the product:

Designation: CIRCULAR SAW 1300W

Model: ENB455CSW

Complies with the following Directives:

2004/108/EC Electromagnetic Compatibility Directive

2006/42/EC Machinery Directive

2006/95/EC Low Voltage Directive

2011/65/EU Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic

Equipment (A/CFL) Wests Floating lend Floating Equipment (A/CFL)

2012/19/EU Waste Electrical and Electronic Equipment (WEEE)

Standards and technical specifications referred to:

EN 55014-1 EN 55014-2 EN 61000-3-2 EN 61000-3-3 EN60745-1 EN60745-2-5

Authorised Signatory and technical file holder

Date: 04/06/2014

Signature: Pc Hamos

 $C \in$

Name / title: Peter Harries / Quality Manager

Powersmith (UK) LTD. Trade House, Mead Avenue, BA22 8RT