



PREMIUM LINE

MANUAL DE INSTRUÇÕES **INSTRUCTION MANUAL**







FX1-50-14.4V-1500mAh-LION-2B

Ford

BERBEQUIM/APARAFUSADORA DRILL/SCREWDRIVER



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EN ENGLISH ORIGINAL INSTRUCTION MANUAL
PT PORTUGUÊS TRADUÇÃO DO MANUAL DE INSTRUÇÕES ORIGINAL



	FX1-50-14.4V-1500MAH-2B	EN
1	APPLICATION	3
2	DESCRIPTION (FIG A)	3
3	PACKAGE CONTENT LIST	3
4	SYMBOLS	4
5	GENERAL POWER TOOL SAFETY WARNINGS	4
5.1	Working area	4
5.2	Electrical safety	4
5.3	Personal safety	5
5.4	Power tool use and care	6
5.5	Battery tool use and care	6
5.6	Service	6
6	ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS	7
6.1	Batteries	7
6.2	Charger	7
7	OPERATION	8
7.1	Charging the battery pack (fig 2)	8
7.2	Charging indication:	8
7.3	Removal / insertion of battery (Fig. 3)	9
7.4	Switch (Fig. 4 & Fig.5)	10
7.5	SWITCH LOCK	10
7.6	Direction of rotation	10
7.7	Variable speed	11
7.8	Installing and Removing a Bit and a Drill (fig 6)	11
7.9	Adjusting the torque	11
7.10	Speed selector (Fig. 7)	11
7.11	LED light	12
7.12	Belt clip	12
7.13	Drilling	13
<u>7.13.1</u>	Drilling in wood	1 <u>3</u>

O.	FX1-50-14.4V-1500MAH-2B	EN
	drilling in metal	
8	CLEANING AND MAINTENANCE	13
8.1	Cleaning	13
8.2	Lubrication :	
9	TECHNICAL DETAILS	14
10	NOISE	14
11	WARRANTY	14
12	ENVIRONMENT	15
13	DECLARATION OF CONFORMITY	16



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CORDLESS DRILL/SCREWDRIVER 14.4V FX1-50-14.4V-1500MAH-2B

1 APPLICATION

The machine is intended for driving in and loosening screws and bolts as well as for tightening and loosening nuts within the respective range of dimension. It can also be used to drill holes in wood or metal. When drill the hole in the steel, let the machine in low speed (not full speed). Thus it can improve the drilling efficiency.

It is not designed for commercial use.



WARNING! Read this manual and general safety instructions carefully before using the appliance, for your own safety. Your power tool should only be passed on together with these instructions.

2 DESCRIPTION (FIG A)

- 1 Keyless chuck 7 Handstrap
- 2 Torque setting ring 8 Belt clip
- 3 Two-speed selector 9 Battery pack
- 4 Direction of rotation selector 10 release latch of battery pack
- 5 ON/OFF switch trigger 11 LED work-light
- 6 Soft grip

3 PACKAGE CONTENT LIST

- Remove all packaging materials.
- Remove remaining packing and package inserts (if included).
- Check that the package contents are complete.
- Check the appliance, the power cord, the power plug and all accessories for transportation damage.
- Keep the packing materials as far as possible till the end of the warranty period. Dispose it into your local waste disposal system afterwards.



WARNING: Packaging materials are not toys! Children must not play with plastic bags! Danger of suffocation!

1x cordless drill/screwdriver 14.4V

- 2x batteries
- 1x 1h charger
- 1x Manual



If any parts are missing or damaged, please contact your dealer.

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4 SYMBOLS

In this manual and/or on the machine the following symbols are used:				
\triangle	Denotes risk of personal injury or damage to the tool.		Wear noise protection	
	Read manual before use		Wear eye protection	
CE	In accordance with essential requirements of the European directive(s)		Wear a mask In dusty conditions	
	"Class II - The machine is double insulated; Earthing wire is therefore not necessary			
MAX. 40°C	Ambient temperature : 40°C max.		Only use in closed rooms.	
	Do not throw into water.	min in	Do not throw into fire.	

5 GENERAL POWER TOOL SAFETY WARNINGS

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

KEEP SAFETY WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

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

5.1 Working area

- **Keep working area clean and well lit**. Untidy and dark areas can lead to accidents.
- Do not operate power tools in potentially explosive surroundings, for example, in the presence of inflammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders at a distance when operating a power tool. Distractions can cause you to lose control of it.

5.2 Electrical safety

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



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- Avoid body contact with earthed surfaces such as pipes, radiators, kitchen ranges and refrigerators. There is an increased risk of a lethal electric shock if your body is earthed.
- **Do not expose power tools to rain or wet conditions.** If water gets inside a power tool, it will increase the risk of a lethal electric shock.
- Do not damage the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of a lethal electric shock.
- When operating a power tool outdoors, use an extension cable suitable for outdoor use. Using a cord suitable for outdoor use reduces the risk of a lethal electric shock.
- If operating a power tool in a damp location is unavoidable, use a power supply protected by a residual current device (RCD). Using an RCD reduces the risk of a lethal electric shock.

5.3 Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool when you are tired or under the influence of drugs, alcohol or medication. A moment of inattention when operating a power tool may result in serious personal injury.
- Use safety equipment. Always wear eye protection. Using safety equipment such as a dust mask, non-skid safety shoes, a hard hat, or hearing protection whenever it is needed will reduce the risk of personal injury.
- Avoid accidental starts. Ensure the switch is in the off position before inserting the plug. Carrying power tools with your finger on the switch or plugging in power tools when the switch is in the on position makes accidents more likely.
- Remove any adjusting keys or spanners before turning on the power tool. A spanner or key left attached to a rotating part of the power tool may result in personal injury.
- Do not reach out too far. Keep your feet firmly on the ground at all times. This will enable you retain control over the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from the power tool. Loose clothes, jewellery or long hair can become entangled in the moving parts.
- If there are devices for connecting dust extraction and collection facilities, please ensure that they are attached and used correctly. Using such devices can reduce dust-related hazards.

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5.4 Power tool use and care

- Do not expect the power tool to do more than it can. Use the correct power tool for what you want to do. A power tool will achieve better results and be safer if used in the context for which it was designed.
- Do not use the power tool if the switch cannot turn it on and off. A power tool with a broken switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store power tools, when not in use, out of the reach of children and do not allow people who are not familiar with the power tool or these instructions to operate it. Power tools are potentially dangerous in the hands of untrained users.
- Maintenance. Check for misalignment or jammed moving parts, breakages or any other feature that might affect the operation of the power tool. If it is damaged, the power tool must be repaired. Many accidents are caused by using poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to jam and are easier to control.
- Use the power tool, accessories and cutting tools, 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 which needs to be done. Using a power tool in ways for which it was not intended can lead to potentially hazardous situations.

5.5 Battery tool use and care

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact.
 - If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

5.6 Service

• Your power tool should be serviced by a qualified specialist using only standard spare parts. This will ensure that it meets the required safety standards.

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6 ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS

6.1 Batteries

- 1 Never attempt to open for any reason.
- 2 Do not store in locations where the temperature may exceed 40 °C.
- 3 Charge only at ambient temperatures between 4 °C and 40 °C.
- 4 Charge only using the charger provided with the tool.
- When disposing of batteries, follow the instructions given in the section "Protecting the environment".
- Do not cause short circuits. If connection is made between the positive (+) and negative (-) terminal directly or via accidental contact with metallic objects, the battery is short circuited and an intense current will flow causing heat generation which may lead to casing rupture or fire.
- Do not heat. If batteries are heated to above 100 °C, sealing and insulating separators and other polymer components may be damaged resulting in electrolyte leakage and/or internal short circuiting leading to heat generation causing rupture or file. Moreover do not dispose of the batteries in fire, explosion and/or intense burning may result.
- 8 Under extreme conditions, battery leakage may occur. When you notice liquid on the battery, proceed as follows:
 - Carefully wipe the liquid off using a cloth. Avoid skin contact.
 - In case of skin or eye contact, follow the instructions below:
 - Immediately rinse with water. Neutralize with a mild acid such as lemon juice or vinegar.
 - In case of eye contact, rinse abundantly with clean water for at least 10 minutes. Consult a physician.



Fire hazard! Avoid short-circuiting the contacts of a detached battery. Do not incinerate the battery.

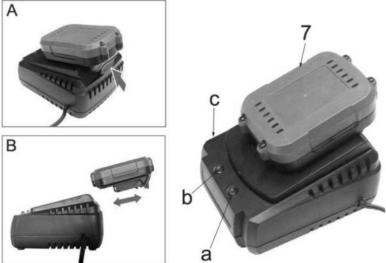
6.2 Charger

- 1 Use the charger provided with the tool only to charge the battery
- 2 Never attempt to charge non-rechargeable batteries.
- 3 Have defective cords replaced immediately.
- 4 Do not expose to water.
- 5 Do not open the charger.
- 6 Do not probe the charger.
- 7 The charger is intended for indoor use only.



7 OPERATION

7.1 Charging the battery pack (fig 2)



- a. Red LED light
- b. Green LED light **Fig. 2**
- c. Charger

The battery pack has been shipped in a low charge condition to prevent possible problem. You should charge them prior to use.

Note: Batteries will not reach full charge the first time they are charged. Allow several cycles (drilling followed by recharging) for the item to fully charge. The battery should only be used indoors.

The battery as supplied is not fully charged. Therefore, let the tool charge initially for 1.5 hours. After the initial Charge, under normal usage, your tool should be fully charged in 1 hour.

The battery pack will become slightly warm to the touch while charging, this is normal and does not indicate a problem.

Do not place the charger in an area of extreme heat or cold, it will best at normal room temperature.

NOTE:

- 1. Allow the battery pack to cool completely before charging.
- 2. Inspect the battery pack before charging; do not charge a cracked or leaking battery pack.

7.2 Charging indication:

The charger has two LED lights (Red and Green). (See Fig. 2)

- 1. Plug the adapter (d) into suitable outlet. The green LED light (b) will light to show the power is connected.
- 2. Slide the battery pack (9) into the charger and ensure to connect firmly. The red LED light (c) will illume to show the battery is charging and the green LED light (b) will continue to stay lit.
- 3. When the battery is loaded, the red LED light (c) will be extinguished and green LED light (b) still light until the charger disconnect from the mains.



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NOTE: If the battery does not fit properly, disconnect it and confirm that the battery pack is the correct model for this charger as shown on the specification chart. Do not charge any other battery pack or any battery pack that does not securely fit the charger.

- 1. Frequently monitor the charger and battery pack while connected.
- 2. Unplug the charger and disconnect it from the battery pack when finished.
- 3. Allow the battery pack to cool completely before using it.
- 4. Store the charger and battery pack indoors, out of reach of children.

NOTE: If battery is hot after continuous use in the tool, allow it to cool down to room temperature before charging. This will extend the life of your batteries.

7.3 Removal / insertion of battery (Fig. 3)





Fig. 3

WARNING:

- 1. Before making any adjustments ensure the drill is switched off with the reversing switch in the center position.
- 2. Hold the drill with one hand and the battery pack (9) with the other.
- 3. **To install:** pull and slide battery pack into battery port, make sure the latch (10) on the front side of the battery snap into place and battery is secure before begging operation.
- 4. **To remove:** use your thumb and fingers, press the battery release latch in and pull the battery pack off at the same time.

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7.4 Switch (Fig. 4 & Fig.5)

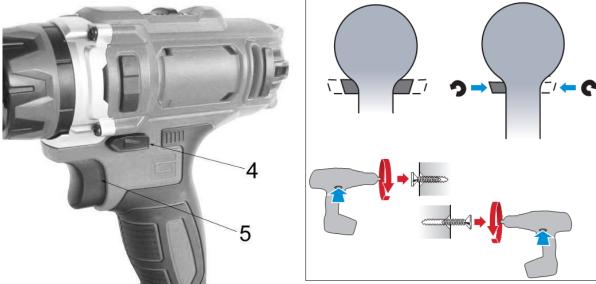


Fig. 4 Fig. 5

The drill is started and stopped by depressing and releasing the ON/OFF switch trigger (5).

This cordless drill is equipped with an electric brake, when the ON/OFF switch trigger is released completely the chuck stops immediately.

7.5 SWITCH LOCK

The switch trigger can be locked in the center position. (See **Fig. 5**)

This helps to reduce the possibility of accidental starting when not in use. To lock the switch trigger, place the direction of rotation selector in the center position.

7.6 Direction of rotation

Direction of rotation is controlled by the direction of rotation selector (3) located above the switch trigger.

To select forward rotation, release the on/off switch and push the forward/reverse lever to left side of the tool. To select reverse rotation, push the lever to right side of the tool. When the selector is in center position, the switch trigger is locked. (See **Fig. 5**)



Clockwise rotation:

To select forward rotation, release the on/off switch and push the forward/reverse lever to right side of the tool (See **Fig. 5**).



Anticlockwise rotation:

To select reverse rotation, push the lever to left side of the tool. When the selector is in center position, the switch trigger is locked and the machine cannot be switched on. (See **Fig. 5**)



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7.7 Variable speed

This tool has a variable speed switch that delivers higher speed and torque with increased trigger pressure. The rotational speed is controlled by the amount of switch trigger depression.

7.8 Installing and Removing a Bit and a Drill (fig 6)

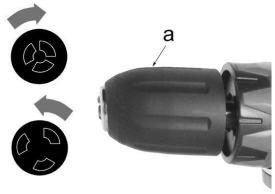


Fig. 6

This drill has a keyless chuck (1) to prevent the bit or drill from loosening.

- 1 Hold ring **a** of the drill chuck tight with one hand.
- 2 Turn the chuck ring (a) clockwise with the other hand until the drill chuck opening is large enough to accept the tool.
- Insert the drill or the screwdriver bit into the drill chuck.
- 4 Turn chuck ring **anti** clockwise until the tool is clamped tightly.

Remove the tool in the opposite way.

7.9 Adjusting the torque

The torque is adjusted by rotating the torque setting ring (2); the torque is greater when the torque setting is set on a higher position. The torque is less when the torque setting ring is set on a low position. Position "1" denotes the lowest and "2" denote the highest.

The torque force is set by means of a torque setting according to the size of screw and the kind of material. Select the suitable torque for the job to be performed .. long screws and/or hard material require a higher torque setting.

7.10 Speed selector (Fig. 7) LOW SPEED POSITION







Fig. 7

NOTE: the-mark "1"is the "Low speed" position, the -mark "2"is the "High speed" position (marks molded in the button of two speed selector (3).) The drill has a two-speed gear train designed for drilling at **LOW** or **HIGH** speed. A gear selector is located on top of the drill to select either low or high speed. When you select low speed range, the speed will decrease but will provide more power and torque. When using drill in the high speed range. Speed will increase



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but will provide less power and torque. Use low speed for high power and torque application and high speed for fast drilling applications

Important: NEVER adjust this two speed selector (3) while the drill is running. Always let it come to a complete stop.

7.11 LED light



Fig. 8

The LED work-light (11) can be lit prior to motor running. Press the on/off switch lightly, to keep the work area lighted. it also lights during operation.

WARNING:

Do not stare directly at the light beam. Never aim the beam at any person or an object other than the work piece.

Do not deliberately aim the beam at persons and ensure that it is not directed towards the eye of a person for longer than 0.25s.



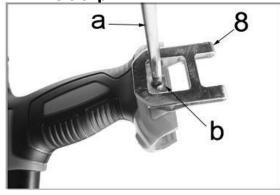




Fig. 9

This cordless drill has a belt clip (8) which convenient for carrying on the operator's belt (see **Fig. 9**). The belt clip can be installed on the both sides of bottom of cordless drill. Place the belt clip onto the groove and put the screw (b)



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through the screw hole (d), use the screwdriver (a) to turning it anticlockwise and finally check the belt clip lock firmly.

Disassembly: remove the belt clip in the opposite way.

NOTE: To prevent losing the nut (c) on the inside of battery port when installing or dismounting the belt clip.

7.13 Drilling

Before drilling, the torque setting should be set on the drill position "
"."
When drilling hard smooth surface, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off center as the hole is started. Hold the tool firmly and place the tip of the drill or bit into the work piece, applying only enough pressure to keep the bit cutting. Do not force or apply side pressure to elongate a hole.

7.13.1 Drilling in wood

For maximum performance, use high speed steel (HSS° drills for wood drilling, turn the torque setting on the drill position " Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material. When drilling through holes, place a block of wood behind the work piece to prevent ragged or edges on the back side of the hole.

7.13.2 <u>drilling in metal</u>

For maximum performance, use high speed steel (HSS) drill bits for metal or steel drilling. Turn the torque setting on the drill position ". Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will overheat the drill, wear the bearings, bend or burn bits, produce off-center or irregular shaped holes.

When drilling large holes in metal, it is recommended that you drill with a small bit at first, then finish with a large bit, also lubricate the bit with oil to improve drilling action and increase bit life.

8 CLEANING AND MAINTENANCE



Attention! - Before performing any work on the equipment, pull the power plug.

8.1 Cleaning

- Keep the ventilation slots of the machine clean to prevent overheating of the engine.
- Regularly clean the machine housing with a soft cloth, preferably after each use.
- Keep the ventilation slots free from dust and dirt.
- If the dirt does not come off use a soft cloth moistened with soapy water.



Never use solvents such as petrol, alcohol, ammonia water, etc. These solvents may damage the plastic parts.

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Page | **13**

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8.2 Lubrication:

The cordless drill is permanently lubricated and does not require oiling.

9 TECHNICAL DETAILS

Model nr.	FX1-50-14.4V-1500MAH-2B
No-load speed	0-350/0-1300min ⁻¹
Drill chuck capacity:	10mm
Torque setting:	12+1 positions
Left /right (clockwise/ counter- clockwise rotation)	yes
Battery	
Voltage	14.4V
capacity	1500mAh
Туре	Li-Ion
charger	
Charger input	220-240V~ 50/60Hz - 23W
Rated output	17.1V DC, 1A
Charge time	1hour

10 NOISE

Noise emission values measured according to relevant standard. (K=3)

Acoustic pressure level LpA	67 dB(A)
Acoustic power level LwA	78 dB(A)



ATTENTION! Wear hearing protection when sound pressure is over 85 dB(A).

aw (Vibration) 2.643 m/	$m/s^2 K = 1.5 m/s^2$
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11 WARRANTY

- This product is warranted as provided by law for a 24 -month period effective from the date of purchase by the first user.
- This warranty covers all material or production flaws excluding: batteries, chargers, defective parts subject to normal wear & tear such as bearings, brushes, cables, and plugs, or accessories such as drills, drill bits, saw blades, etc.; damage or defects resulting from maltreatment, accidents or alterations; nor the cost of transportation.
- Damage and/or defects resulting from inappropriate use also do not fall under the warranty provisions.
- We also disclaim all liability for any bodily injury resulting from inappropriate use of the tool.
- Repairs may only be carried out by an authorised customer service centre for FORD tools.
- You can always obtain more information at the number Customer phone number +351 234 604 097
- Any transportation costs shall always be borne by the customer, unless agreed otherwise in writing.

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Page | **14**

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- At the same time, no claim can be made on the warranty if the damage of the device is the result of negligent maintenance or overload.
- Definitely excluded from the warranty is damage resulting from fluid permeation, excessive dust penetration, intentional damage (on purpose or by gross carelessness), inappropriate usage (use for purposes for which the device is not suitable), incompetent usage (e.g. not following the instructions given in the manual), inexpert assembly, lightning strike, erroneous net voltage. This list is not exhaustive.
- Acceptance of claims under warranty can never lead to the prolongation of the warranty period nor commencement of a new warranty period in case of a device replacement.
- Devices or parts which are replaced under the warranty therefore remain the property of **Herculano Santos**, **Lda**.
- We reserve the right to reject a claim whenever the purchase cannot be verified or when it is clear that the product has not been properly maintained. (Clean ventilation slots, carbon brushes serviced regularly, etc.).
- Your purchase receipt must be kept as proof of date of purchase.
- Your appliance must be returned undismantled to your dealer in an acceptably clean state, (in its original blow-moulded case if applicable to the unit), accompanied by proof of purchase.

12 ENVIRONMENT



Should your appliance need replacement after extended use, do not dispose of it with the household refuse, but in an environmentally safe way.



Waste produced by electrical machine items should not be handled like normal household rubbish. Please recycle where recycle facilities exist. Check with your Local Authority or retailer for recycling advice.

Preparing battery pack for recycling

After removing cover the battery pack's terminal with heavy-duty adhesive tape. Do not attempt to destroy or take the battery pack apart or remove any of its components. Do not touch both terminals with metal object or body parts or short circuit may result. Keep away from children. Failure to comply these warning could result in fire and /or serious injury.



13 DECLARATION OF CONFORMITY



Herculano Santos, Lda, declares that,

Product: Cordless drill/screwdriver 14.4V

Trade mark: Ford-tools

Model: FX1-50-14.4V-1500MAH-2B

Is in conformity with the essential requirements and other relevant provisions of the applicable European Directives, based on the application of European harmonized standards. Any unauthorized modification of the apparatus voids this declaration.

European Directives (including, if applicable, their amendments): 2004/108/EC 2006/42/EC

European harmonized standards (including, if applicable, their amendments):

EN 55014-1:2006+A1+A2 EN 55014-2: 1997+A1+A2; EN 60745-2-2:2010; EN 60745-2-1:2010; EN 60745-1:2009+A11:10

Keeper of the technical documentation : Herculano Santos, Lda

The undersigned acts on behalf of the company management,

Agnelo Amaro

Engineering Department Director

Date: 01/03/15