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MASTER
CLIMATE SOLUTIONS



4106.227 Edition 19 - Rev. 10

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BEDIENUNGS- UND WARTUNGSANLEITUNG	de
MANUAL DE INSTRUCCIONES PARA EL USO Y MANTENIMIENTO	es
MANUEL D'UTILISATION ET DE MAINTENANCE	fr
HANDLEIDING VOOR GEBRUIK EN ONDERHOUD	nl
MANUAL DE USO E MANUTENÇÃO	pt
VEJLEDNING OM BRUG OG VEDLIGEHOLDELSE	da
KÄYTTÖ- JA HUOLTO-OHJE	fi
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BLP 11
BLP 16
BLP 17M
BLP 26
BLP 27

BLP 27M
BLP 33M
BLP 53M
BLP 73M

BLP 26DV
BLP 33DV
BLP 53DV
BLP 73DV
BLP 103M DV

BLP 33E
BLP 53E
BLP 73E
BLP 103E

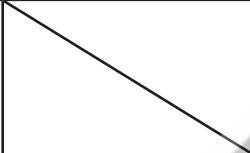
BLP 27ET
BLP 33ET
BLP 53ET
BLP 73ET
BLP 103ET

TECHNICAL DATA - DATI TECNICI - TECHNISCHE DATEN - DATOS TÉCNICOS - DONNÉES TECHNIQUES - TECHNISCHE GEGEVENS - DADOS TÉCNICOS - TEKNISCHE DATA - TEKNISET TIEDOT - TEKNISCHE DATA - TEKNISKA DATA - DANE TECHNICZNE - ТЕХНИЧЕСКИЕ ДАННЫЕ - TECHNICKÉ ÚDAJE - MŰSZAKI ADATOK - TEHNIČNI PODATKI - TEKNİK VERİLER - TEHNIČKI PODACI - TECHNINIAI DUOMENYS - TEHNISKIE DATI - TEHNILISED ANDMED - DATE TEHNICE - TECHNICKÉ ÚDAJE - ТЕХНИЧЕСКИ ДАННИ - ТЕХНІЧНІ ДАНІ - TEHNIČKI PODACI - ТЕХНІКА ДАДОМЕНА - 技术参数 - ТЕХНІКАЛЫҚ КӨРСЕТКІШТЕР

	BLP 11	BLP 16	BLP 17M	BLP 26
	~220-240 V-B 50 Hz-Гц 0,23 A 53 W-Вт	~220-240 V-B 50 Hz-Гц 0,23 A 53 W-Вт	~220-240 V-B 50 Hz-Гц 0,23 A 53 W-Вт	~220-240 V-B 50 Hz-Гц 0,26 A 60 W-Вт
 MAX	10,5 kW-кВт 9.000 kcal/ч-ккал/ч 35.700 Btu/ч-БТЕ/ч	16 kW-кВт 13.800 kcal/ч-ккал/ч 54.800 Btu/ч-БТЕ/ч	16 kW-кВт 13.800 kcal/ч-ккал/ч 54.800 Btu/ч-БТЕ/ч	33 kW-кВт 28.400 kcal/ч-ккал/ч 112.800 Btu/ч-БТЕ/ч
 MIN			10 kW-кВт 8.600 kcal/ч-ккал/ч 34.200 Btu/ч-БТЕ/ч	
	0,764 kg/ч-кг/ч	1,16 kg/ч-кг/ч	1,16 kg/ч-кг/ч	2,4 kg/ч-кг/ч
	300 m³/ч-м³/ч	300 m³/ч-м³/ч	300 m³/ч-м³/ч	1.000 m³/ч-м³/ч
	300 mbar-мбар	700 mbar-мбар		1.500 mbar-мбар
	30 кПа-кПа	70 кПа-кПа		150 кПа-кПа
	I3B/P			
	ΔT 1,5м-м:<70K IP 44			

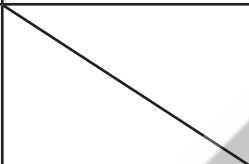
 **IMPORTANT:** In order to have a correct function you must use an electrical generator in class G3 or more (frequency variation ±1%, tension variation ±2%). The maximum power of electrical generator must be three time the nominal power of device that you must connect.

TECHNICAL DATA - DATI TECNICI - TECHNISCHE DATEN - DATOS TÉCNICOS - DONNÉES TECHNIQUES - TECHNISCHE GEGEVENS - DADOS TÉCNICOS - TEKNISCHE DATA - TEKNISSET TIEDOT - TEKNISCHE DATA - TEKNISKA DATA - DANE TECHNICZNE - ТЕХНИЧЕСКИЕ ДАННЫЕ - TECHNICKÉ ÚDAJE - MŰSZAKI ADATOK - TEHNIČNI PODATKI - TEKNİK VERİLER - TEHNIČKI PODACI - TECHNINIAI DUOMENYS - TEHNISKIE DATI - TEHNILISED ANDMED - DATE TEHNICE - TECHNICKÉ ÚDAJE - ТЕХНИЧЕСКИ ДАННИ - ТЕХНІЧНІ ДАНІ - TEHNIČKI PODACI - ТЕХНІКА ДЕДОМЕНА - 技术参数 - ТЕХНІКАЛЫҚ КӨРСЕТКІШТЕР

	BLP 27	BLP 27M	BLP 33M	BLP 53M	BLP 73M
	~220-240 V-B 50 Hz-Гц 0,26 A 60 W-Вт	~220-240 V-B 50 Hz-Гц 0,26 A 60 W-Вт	~220-240 V-B 50 Hz-Гц 0,26 A 60 W-Вт	~220-240 V-B 50 Hz-Гц 0,48 A 110 W-Вт	~220-240 V-B 50 Hz-Гц 0,95 A 218 W-Вт
 MAX	27 kW-кВт 23.200 kcal/h-ккал/ч 92.200 Btu/h-БТЕ/ч	27 kW-кВт 23.200 kcal/h-ккал/ч 92.200 Btu/h-БТЕ/ч	33 kW-кВт 28.400 kcal/h-ккал/ч 112.800 Btu/h-БТЕ/ч	53 kW-кВт 45.600 kcal/h-ккал/ч 181.000 Btu/h-БТЕ/ч	73 kW-кВт 62.800 kcal/h-ккал/ч 249.300 Btu/h-БТЕ/ч
 MIN		20 kW-кВт 17.200 kcal/h-ккал/ч 68.200 Btu/h-БТЕ/ч	18 kW-кВт 15.500 kcal/h-ккал/ч 61.500 Btu/h-БТЕ/ч	36 kW-кВт 31.000 kcal/h-ккал/ч 123.000 Btu/h-БТЕ/ч	49 kW-кВт 42.100 kcal/h-ккал/ч 167.100 Btu/h-БТЕ/ч
		1,87 kg/h-кг/ч	1,87 kg/h-кг/ч	2,4 kg/h-кг/ч	3,78 kg/h-кг/ч
	700 m³/h-м³/ч	700 m³/h-м³/ч	1.000 m³/h-м³/ч	1.450 m³/h-м³/ч	2.300 m³/h-м³/ч
	1.500 mbar-мбар	750÷1.500 mbar-мбар			
	150 кПа-кПа	75÷150 кПа-кПа			
	I3B/P				
	ΔT 1,5m-м:<70K IP 44				

 **IMPORTANT:** In order to have a correct function you must use an electrical generator in class G3 or more (frequency variation ±1%, tension variation ±2%). The maximum power of electrical generator must be three time the nominal power of device that you must connect.

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	BLP 26DV	BLP 33DV	BLP 53DV	BLP 73DV	BLP 103M DV
	~110/240 V-B 50 Hz-Гц 0,71/0,54 A 81/124 W-Вт	~110/240 V-B 50 Hz-Гц 0,71/0,54 A 81/124 W-Вт	~110/240 V-B 50 Hz-Гц 0,90/0,56 A 103/128 W-Вт	~110/240 V-B 50 Hz-Гц 1,64/0,98 A 188/225 W-Вт	~110/240 V-B 50 Hz-Гц 3/1,2 A 330/300 W-Вт
 MAX	33 kW-кВт 28.400 kcal/h-ккал/ч 112.800 Btu/h-БТЕ/ч	33 kW-кВт 28.400 kcal/h-ккал/ч 112.800 Btu/h-БТЕ/ч	53 kW-кВт 45.600 kcal/h-ккал/ч 181.000 Btu/h-БТЕ/ч	73 kW-кВт 62.800 kcal/h-ккал/ч 249.300 Btu/h-БТЕ/ч	103 kW-кВт 88.600 kcal/h-ккал/ч 351.700 Btu/h-БТЕ/ч
 MIN		18 kW-кВт 15.500 kcal/h-ккал/ч 61.500 Btu/h-БТЕ/ч	36 kW-кВт 31.000 kcal/h-ккал/ч 123.000 Btu/h-БТЕ/ч	49 kW-кВт 42.100 kcal/h-ккал/ч 167.100 Btu/h-БТЕ/ч	57 kW-кВт 49.000 kcal/h-ккал/ч 194.500 Btu/h-БТЕ/ч
		2,4 kg/h-кг/ч	2,4 kg/h-кг/ч	3,78 kg/h-кг/ч	5,02 kg/h-кг/ч
	1.000 m³/h-м³/ч	1.000 m³/h-м³/ч	1.450 m³/h-м³/ч	2.300 m³/h-м³/ч	3.260 m³/h-м³/ч
	1.500 mbar-мбар	750÷1.500 mbar-мбар			750÷2.000 mbar-мбар
	150 kPa-кПа	75÷150 kPa-кПа			75÷200 kPa-кПа
	I3B/P				
	ΔT 1,5m-м:<70K IP 44				

 **IMPORTANT:** In order to have a correct function you must use an electrical generator in class G3 or more (frequency variation ±1%, tension variation ±2%). The maximum power of electrical generator must be three time the nominal power of device that you must connect.

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	BLP 33E	BLP 53E	BLP 73E	BLP 103E
	~220-240 V-B 50 Hz-Гц 0,32 A 74 W-Вт	~220-240 V-B 50 Hz-Гц 0,55 A 126 W-Вт	~220-240 V-B 50 Hz-Гц 1 A 230 W-Вт	~220-240 V-B 50 Hz-Гц 1 A 230 W-Вт
 MAX	33 kW-кВт 28.400 kcal/h-ккал/ч 112.800 Btu/h-БТЕ/ч	53 kW-кВт 45.600 kcal/h-ккал/ч 181.000 Btu/h-БТЕ/ч	73 kW-кВт 62.800 kcal/h-ккал/ч 249.300 Btu/h-БТЕ/ч	103 kW-кВт 88.600 kcal/h-ккал/ч 351.700 Btu/h-БТЕ/ч
 MIN	18 kW-кВт 15.500 kcal/h-ккал/ч 61.500 Btu/h-БТЕ/ч	36 kW-кВт 31.000 kcal/h-ккал/ч 123.000 Btu/h-БТЕ/ч	49 kW-кВт 42.100 kcal/h-ккал/ч 167.100 Btu/h-БТЕ/ч	57 kW-кВт 49.000 kcal/h-ккал/ч 194.500 Btu/h-БТЕ/ч
	2,4 kg/h-кг/ч	3,78 kg/h-кг/ч	5,02 kg/h-кг/ч	6,66 kg/h-кг/ч
	1.000 m³/h-м³/ч	1.450 m³/h-м³/ч	2.300 m³/h-м³/ч	3.260 m³/h-м³/ч
	750÷1.500 mbar-мбар			750÷2.000 mbar-мбар
	75÷150 kPa-кПа			75÷200 kPa-кПа
	I3B/P			
	ΔT 1,5m-m:<70K IP 44			

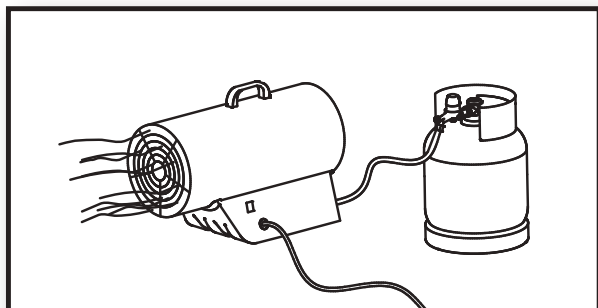
⚠ IMPORTANT: In order to have a correct function you must use an electrical generator in class G3 or more (frequency variation ±1%, tension variation ±2%). The maximum power of electrical generator must be three time the nominal power of device that you must connect.

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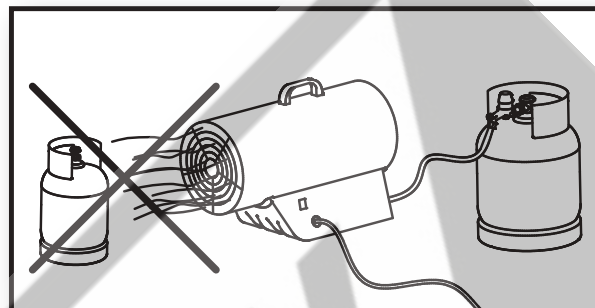
	BLP 27ET	BLP 33ET	BLP 53ET	BLP 73ET	BLP 103ET
	~220-240 V-B 50 Hz-Гц 0,32 A 74 W-Вт	~220-240 V-B 50 Hz-Гц 0,32 A 74 W-Вт	~220-240 V-B 50 Hz-Гц 0,55 A 126 W-Вт	~220-240 V-B 50 Hz-Гц 1 A 230 W-Вт	~220-240 V-B 50 Hz-Гц 1 A 230 W-Вт
 MAX	27 kW-кВт 23.200 kcal/h-ккал/ч 92.200 Btu/h-БТЕ/ч	33 kW-кВт 28.400 kcal/h-ккал/ч 112.800 Btu/h-БТЕ/ч	53 kW-кВт 45.600 kcal/h-ккал/ч 181.000 Btu/h-БТЕ/ч	73 kW-кВт 62.800 kcal/h-ккал/ч 249.300 Btu/h-БТЕ/ч	103 kW-кВт 88.600 kcal/h-ккал/ч 351.700 Btu/h-БТЕ/ч
 MIN	20 kW-кВт 17.200 kcal/h-ккал/ч 68.200 Btu/h-БТЕ/ч	18 kW-кВт 15.500 kcal/h-ккал/ч 61.500 Btu/h-БТЕ/ч	36 kW-кВт 31.000 kcal/h-ккал/ч 123.000 Btu/h-БТЕ/ч	49 kW-кВт 42.100 kcal/h-ккал/ч 167.100 Btu/h-БТЕ/ч	57 kW-кВт 49.000 kcal/h-ккал/ч 194.500 Btu/h-БТЕ/ч
	1,87 kg/h-кг/ч	2,4 kg/h-кг/ч	3,78 kg/h-кг/ч	5,02 kg/h-кг/ч	6,66 kg/h-кг/ч
	700 m³/h-м³/ч	1.000 m³/h-м³/ч	1.450 m³/h-м³/ч	2.300 m³/h-м³/ч	3.260 m³/h-м³/ч
	750÷1.500 mbar-мбар				750÷2.000 mbar-мбар
	75÷150 kPa-кПа				75÷200 kPa-кПа
	I3B/P				
	ΔT 1,5m-м:<70K IP 44				

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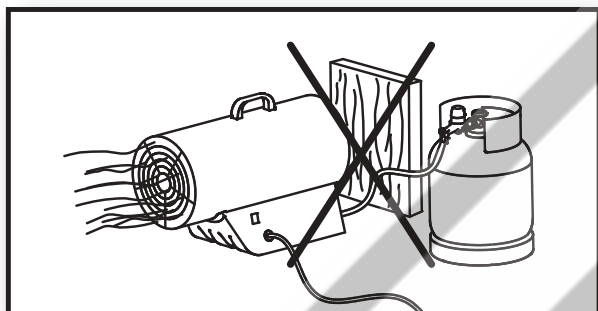
**PICTURES - FIGURE - ABBILDUNGEN - FIGURAS - FIGURES - FIGUREN
- FIGURAS - FIGURER - KUVAT - FIGURER - FIGURER - ILUSTRACJE
- ИЛЛЮСТРАЦИИ - OBRÁZKY - ÁBRÁK - SLIKE - ŞEKİLLER - SLIKE -
ILIUSTRACIJOS - ATTĒLI - JOONISED - IMAGINI - OBRÁZKY - СХЕМИ -
МАЛЮНКИ - SLIKE - ΕΙΚΟΝΕΣ - 图示 - СУРЕТТЕМЕЛЕР**



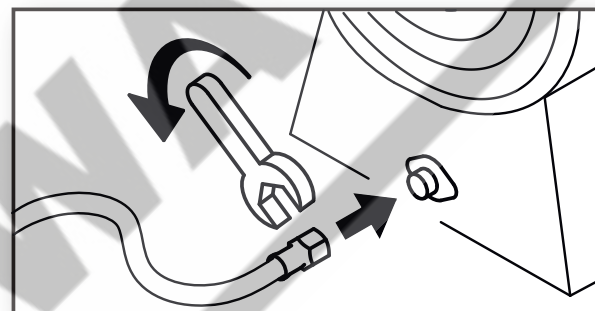
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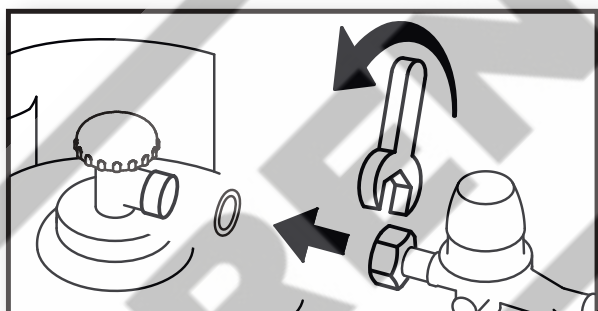
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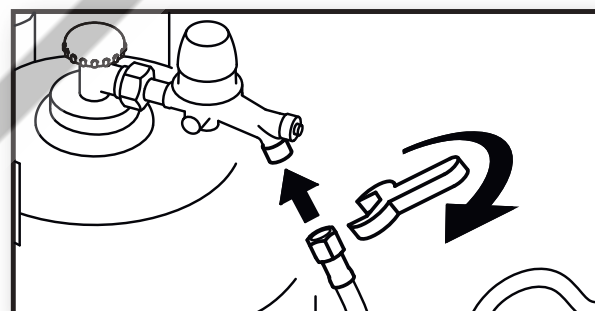
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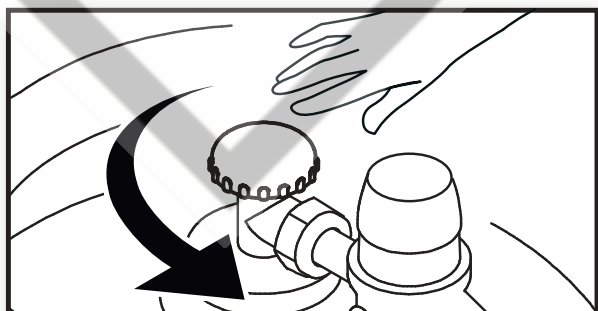
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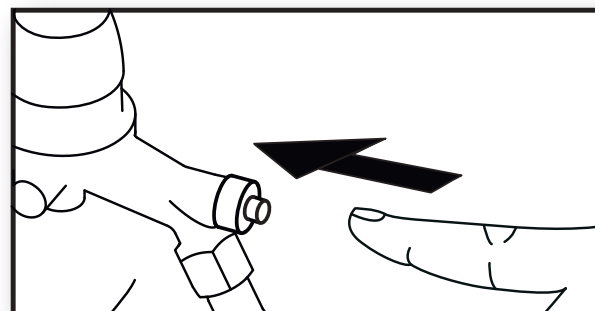
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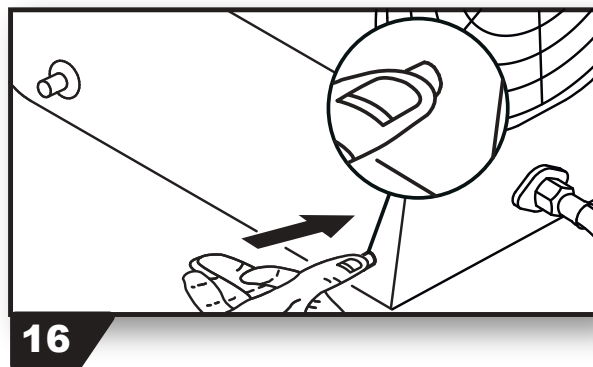
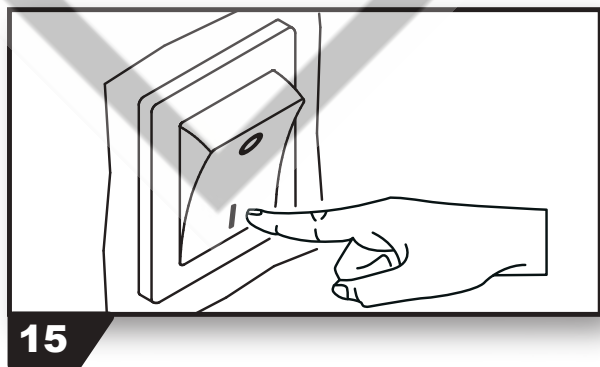
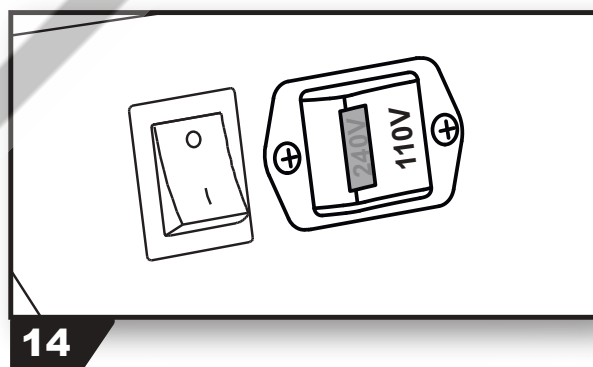
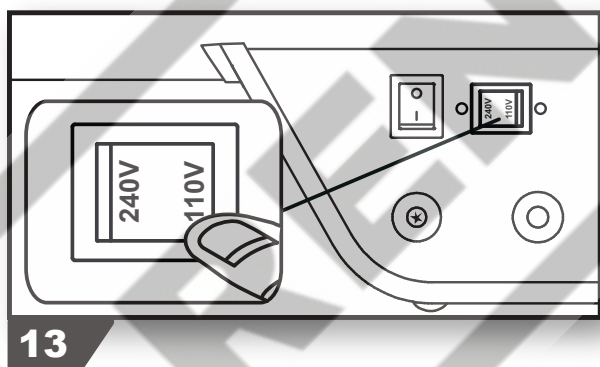
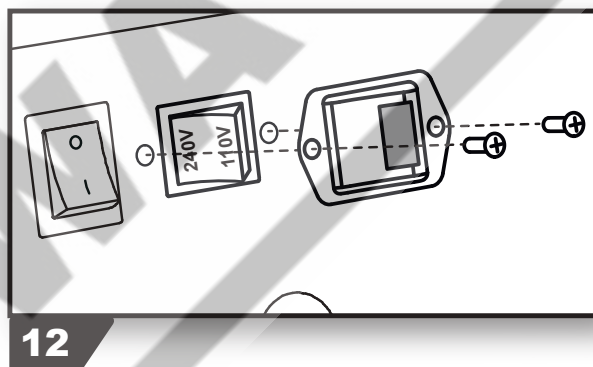
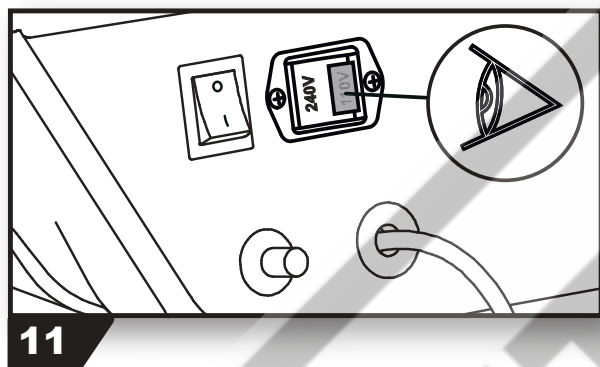
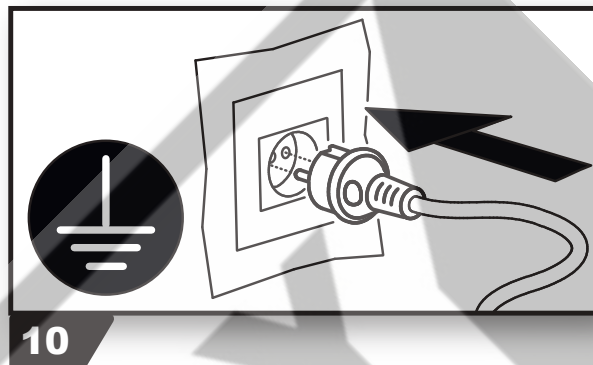
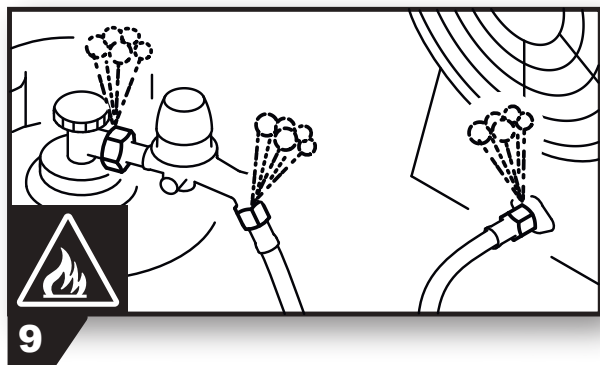


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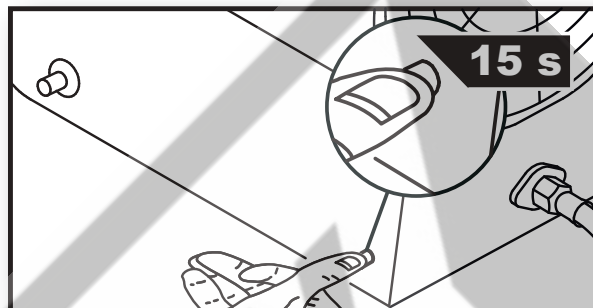
**PICTURES - FIGURE - ABBILDUNGEN - FIGURAS - FIGURES - FIGUREN
 - FIGURAS - FIGURER - KUVAT - FIGURER - FIGURER - ILUSTRACJE
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 МАЛЮНКИ - SLIKE - ΕΙΚΟΝΕΣ - 图示 - СУРЕТТЕМЕЛЕР**



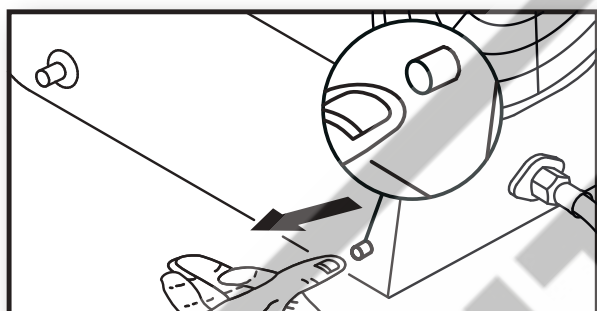
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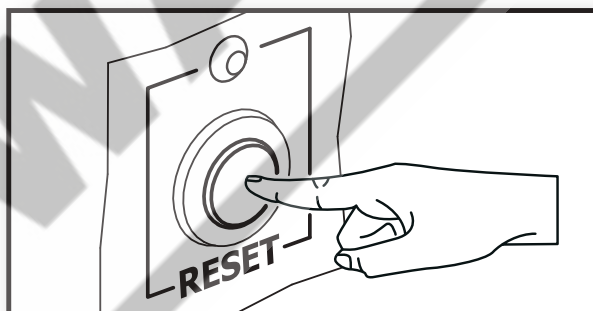
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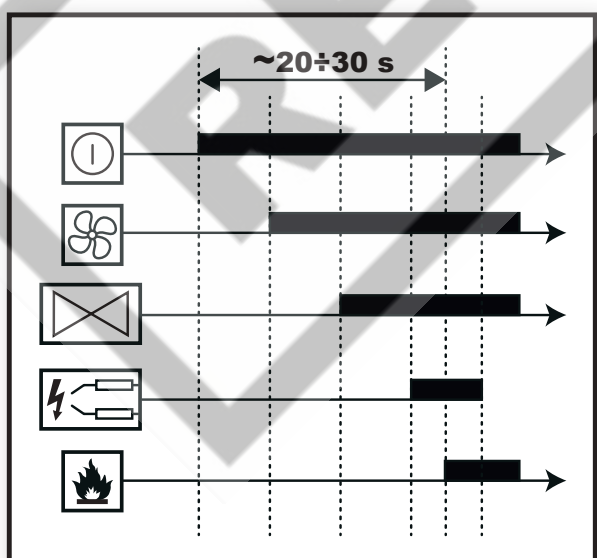
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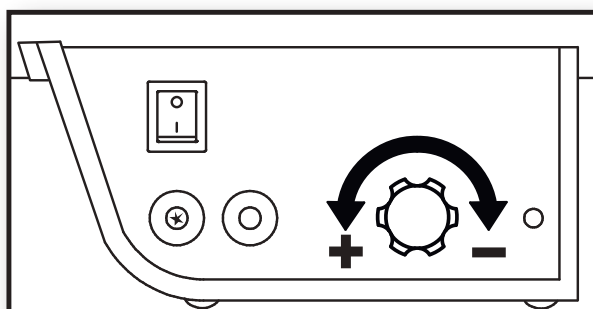
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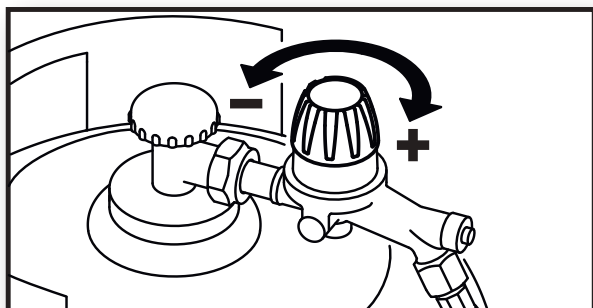


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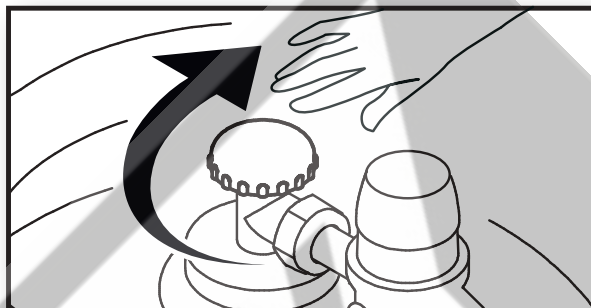


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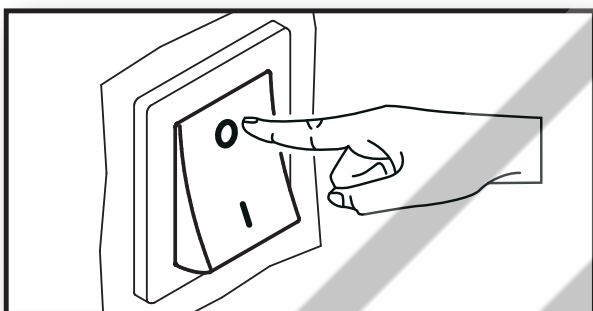
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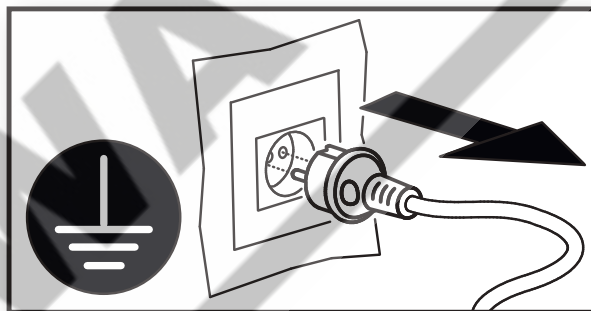
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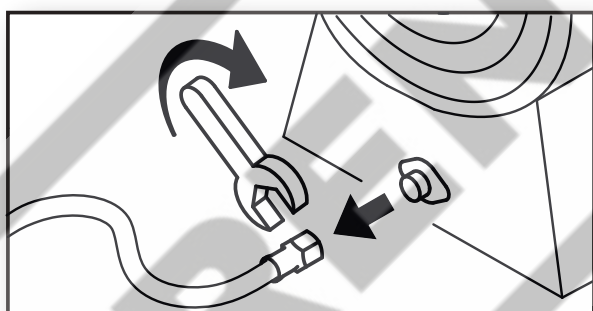
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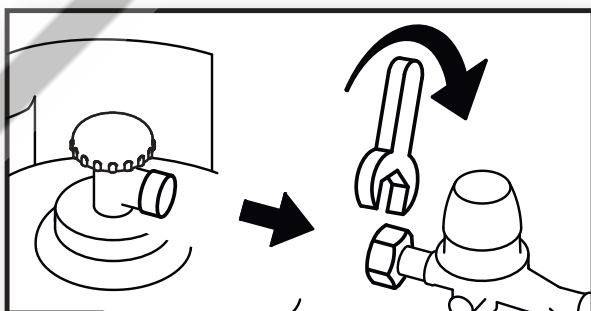
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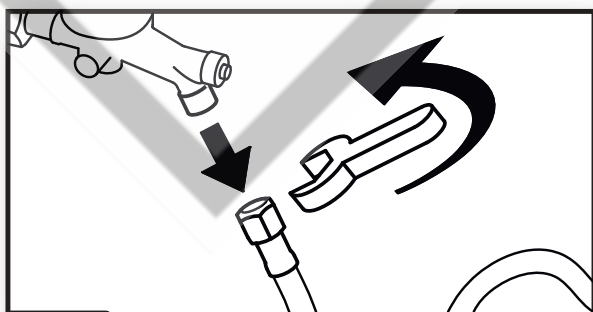
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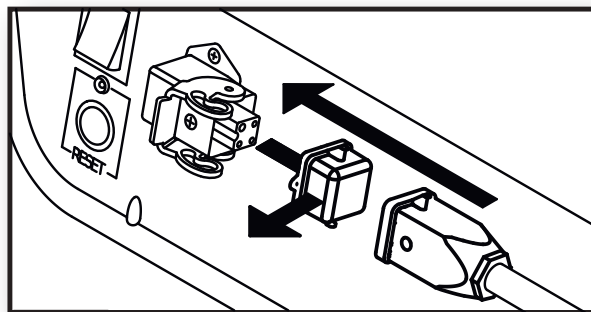
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PARAGRAPH SUMMARY

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3...	TYPE OF FUEL
4...	CONNECTION AND REPLACEMENT OF THE GAS CYLINDER
5...	CONNECTION TO THE MAINS ELECTRICITY
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IMPORTANT: READ AND UNDERSTAND THIS OPERATIONAL MANUAL BEFORE PERFORMING ASSEMBLY, COMMISSIONING OR MAINTENANCE ON THIS HEATER. INCORRECT USE OF THE HEATER CAN CAUSE SERIOUS INJURY. KEEP THIS MANUAL FOR FURTHER REFERENCE.

►► 1. DESCRIPTION

This heater is a portable air heater functioning with liquid gas, characterised by the total use of the fuel, by heat exchange due to direct mixing of the intake air and the combustion products. It has a practical handle for easier transport and handling. The appliance is manufactured in compliance with the EN 1596 Standard.

►► 2. WARNINGS

►⚠ **IMPORTANT:** This air heater has been designed for mobile and temporary professional applications. It has not been designed for domestic use nor for thermal comfort of human.

►⚠ **IMPORTANT:** Do not use to heat homes and residential buildings; for use in public buildings, refer to national regulations.

►⚠ **IMPORTANT:** This appliance is not suitable for use by persons (including

children) with reduced physical, sensory and mental capacities or with lack of experience or knowledge unless supervised by a person responsible for their safety. Children must be supervised to make sure they do not play with the appliance. Keep animals at a safe distance from the appliance.

►⚠ **IMPORTANT:** Improper use of this heater can cause damage, injuries, burns, explosions, electric shock poisoning or endanger life. The first symptoms of suffocation by carbon monoxide are similar to those of flu with headache, light-headedness and/or nausea. These symptoms could be caused by the faulty functioning of the heater. IF THESE SYMPTOMS SHOULD OCCUR, GO OUTDOORS IMMEDIATELY and have the heater repaired by the technical after-sales assistance.

► **⚠️ IMPORTANT:** All cleaning, maintenance and repairs that envision access to dangerous parts (such as replacement of a damaged power supply cable) must be performed by the manufacturer, by its technical after-sales service, by a person with similar qualification, in a way to prevent all risks, even if disconnection from the mains power supply is envisioned.

► **⚠️ IMPORTANT:** Do not use the heater if damaged. In case of any damage, contact the after-sales assistance.

► **2.1.** For correct use of the heater and for preservation of the fuel, follow all local regulations and the Standard in force.

► **2.2.** The heater requires suitable fresh air in order to function. It is therefore used outdoors or in rooms with assured and continuous supply of fresh air. Good airing is supplied when the volume of the room is calculated on the heat capacity, using the formula of 1 m³ every 100 W of power. In no case the recommended volume of the room must be smaller than 100 m³. Good ventilation is guaranteed by an opening that satisfies the formula stating 25 cm² per kW of heat power, with minimum of 250 cm², equally divided between the upper and lower part of the room. National Standards in force are valid for installation, including the Technical Standards and the provisions regarding accident-prevention and the prevention of fires.

► **2.3.** The appliance must only be used as a hot air heater (heating mode) or fan (ventilation mode, for models that envision this functionality). Follow these instructions scrupulously.

► **2.4.** The Manufacturer declines all liability for damage/injury to objects/persons deriving from improper use of the appliance.

► **2.5.** Only power the heater using the type of fuel expressly specified and with current having the voltage and frequency

indicated on the data plate applied to the heater.

► **2.6.** Make sure the heater is only connected to suitable electric networks with differential switch and suitable earth.

► **2.7.** Only use extensions with suitable section, appropriately connected to earth.

► **2.8.** The heater must function on a stable level and fire-proof surface, in a way to prevent the risk of fire.

► **2.9.** It is prohibited to use the appliance in basements and rooms below ground level.

► **2.10.** The heater must not be used in places where explosive dusts, fumes, gases, fuels, solvents and paints are present.

► **2.11.** Whenever the heater is used in proximity of tarpaulin, awnings or similar covering materials, it is considered to use additional fire-proof protections. Make sure the hot parts of the heater are kept at a suitable distance from inflammable materials (material, paper, wood, etc.) or thermolabile materials (including the power supply cable), which in no case is less than 2,5 m.

► **2.12.** Position the gas cylinder in a protected position, behind the appliance (Pic. 1). The heater must never face the gas cylinder (Pic. 2).

► **2.13.** The air vent (rear side) and/or the air outlet vent (front side) cannot be totally or partially obstructed for any reason (Pic. 3). Do not use any air ducting from or to the heater. Make sure air intake slots, present on the bottom of the base, are not obstructed (for models using this solution).

► **2.14.** If the heater does not switch on or switch-on is anomalous, consult the relative section (Par. 13. "TROUBLESHOOTING").

► **2.15.** The heater must never be moved, handled or subjected to any maintenance interventions when it is running.

► **2.16.** In any condition of use or appliance standstill, make sure that the flexible gas

en hose is not damaged (crushed, bent, twisted, taught).

► **2.17.** If the smell of gas is perceived, switch the appliance off immediately, close the gas cylinder, disconnect the mains plug and then contact the after-sales assistance.

► **2.18.** If the gas hose must be replaced, only use the flexible type suitable for the pressure used, referring to national regulations. The gas hose must measure 1,5 m.

► **2.19.** When the appliance is controlled by a room thermostat (optional article), the heater can switch back on at any time i.e. when the temperature drops below the threshold set.

► **2.20.** When it is not used, disconnect the heater from the network plug, close the gas supply, disconnect the gas hose from the heater and plug the gas inlet on the heater.

► **2.21.** Have the after-sales assistance check correct functioning of the heater at least once a year and/or according to need.

►► **3. TYPE OF FUEL**

Use category I3B/P gas only.

►► **4. CONNECTION AND REPLACEMENT OF THE GAS CYLINDER**

The gas cylinder must be replaced in the open air, away from heat sources, in an atmosphere without flames.

Only the following accessories must be used for connection of the gas cylinder to the heater:

- Liquid gas flexible pipe.
- Liquid gas pressure regulator complete with safety valve.

CHECK THE INTEGRITY OF THE GAS SUPPLY PIPE. IF THE GAS HOSE MUST BE REPLACED, ONLY USE THE FLEXIBLE TYPE SUITABLE FOR THE

PRESSURE USED, REFERRING TO NATIONAL REGULATIONS.

► To connect the heater to the gas cylinder:

ATTENTION: ALL THREADING IS SINISTRAL, I.E. THEY ARE TIGHTENED IN AN ANTI-CLOCKWISE DIRECTION.

► **4.1.** Screw the gas hose to the heater fitting (Pic. 4).

► **4.2.** Install the pressure regulator on the gas cylinder. Make sure there is a gasket present on the regulator (if envisioned by the type of connection) (Pic. 5).

► **4.3.** Connect the gas hose to the pressure regulator (Pic. 6).

► **4.4.** Open the gas cylinder cock (Pic. 7).

► **4.5.** Press the regulator release button (Pic. 8). **Check tightness of fittings using soapy water: bubbles indicate a gas leak (Pic. 9).** Several gas cylinders can be fitted together to obtain greater autonomy. **The use of 30 kg gas cylinders is recommended, up to heating capacity of 33 kW. Over the power of 33 kW use gas cylinders with greater capacity. The use of gas cylinders with suitable capacity is recommended in order to prevent problems due to lack of gasification of the fuel.** The correct functioning pressure (see data plate applied to the heater) is given by the regulator supplied or an equivalent model.

►► **5. CONNECTION TO THE MAINS ELECTRICITY** **CHECK YOUR ELECTRIC SYSTEM IS EARTHED CORRECTLY.**

Before connecting the heater to the mains electricity, make sure that the power supply voltage and frequency are correct (see data plate applied to the heater). The connection to the mains electricity (Pic. 10) must be made in compliance with the National Standards in force.

►► 6. IGNITION FOR MANUAL

MODELS (... / ...M / ...DV / ...M DV)

IMPORTANT: For ...DV / ...M DV models, check the position of the transformer switch (220-240V / 110-120V) (Pic. 11). If the voltage set on the appliance does not correspond to that supplied by the mains, the voltage must be adapted. Loosen the 2 lid screw fasteners (Pic. 12), shift the switch onto the voltage value supplied (Pic. 13) and re-mount the lid (Pic. 14).

VERIFY BETWEEN SUPPLY, VOLTAGE SWITCH PLUG, MAY CAUSE DAMAGE TO THE HEATER.	THE POWER SETTING OF DUAL	CONGRUENCE TENSION TYPE OF
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• 6.1. HEATING MODE:

► 6.1.1. Take the “O/I” switch to position “I” (Pic. 15).

► 6.1.2. Press the gas button fully home and hold it down (Pic. 16).

► 6.1.3. Activate the piezoelectric igniter fully home and repeatedly (Pic. 17), keeping the gas button pressed (Pic. 16).

► 6.1.4. After ignition of the flame, hold the gas button down for about 15 s (Pic. 18).

► 6.1.5. Release the gas button (Pic. 19).

In the event of a power cut or if there is no gas supply, the appliance will switch off. The heater does not switch back on automatically. It must be switched on manually by repeating the switch-on procedure.

If the appliance does not switch on, consult the relative section (Par. 13. “TROUBLESHOOTING”).

• 6.2. VENTILATION MODE:

The heater can also be used as a fan. Connect the heater to the mains electricity (Pic. 10) and take the “O/I” switch to position “I” (Pic. 15).

N.B.: With the heater functioning in heating mode, before passing to ventilation mode, carry out the correct switch off sequence for the manual models [Par. 9. “SWITCH-OFF FOR MANUAL MODELS (... / ...M / ...DV / ...M DV)”].

►► 7. IGNITION FOR ELECTRONIC MODELS (...E / ...ET)

► 7.1. Take the “O/I” switch to position “I” (Pic. 15).

► 7.2. Press the “RESET” button (Pic. 20). The heater starts the analysis sequence and the flame ignites after about 20÷30 s (see functioning layout Pic. 21).

In the event of a power cut or if there is no gas supply, the appliance will switch off. The heater does not switch back on automatically. It must be switched on manually by pressing the “RESET” button (Pic. 20).

If the appliance does not switch on, consult the relative section (Par. 13. “TROUBLESHOOTING”).

ATTENTION: If the heater stops due to the intervention of the room thermostat (optional article), the appliance will switch back on automatically when the temperature drops below the threshold set.

►► 8. HEAT CAPACITY REGULATION

Depending on the type of heater, the appliance heat capacity can be regulated. The heat capacity can be regulated by acting on the knob positioned on the base of the heater (Pic. 22) or on the pressure regulator installed on the gas cylinder (Pic. 23), depending on the model.

►► 9. SWITCH-OFF FOR MANUAL MODELS (... / ...M / ...DV / ...M DV)

► 9.1. Close the gas cylinder (Pic. 24).

► **9.2.** Leave the fan to cool for about 60 s, in order to prevent internal damage due to overheating (heater internal cooling).

► **9.3.** Take the “O/I” switch to position “O” (Pic. 25).

► **9.4.** Disconnect the heater from the mains electricity (Pic. 26).

► **9.5.** Disconnect the heater from the gas supply pipe (Pic. 27-28-29).

►► **10. SWITCH-OFF FOR ELECTRONIC MODELS (...E / ...ET)**

► **10.1.** Take the “O/I” switch to position “O” (Pic. 25). The flame goes out and the heater performs the post-ventilation phase. Wait for the cycle to be completed in order to prevent internal damage due to overheating (the phase is automatic and can last 50 s÷5 min depending on the internal/external temperature at the heater).

► **10.2.** Close the gas cylinder (Pic. 24).

► **10.3.** Disconnect the heater from the mains electricity (Pic. 26).

► **10.4.** Disconnect the heater from the gas supply pipe (Pic. 27-28-29).

N.B.: Do not disconnect the heater from the mains electricity, before the end of the post-ventilation phase, in order to prevent internal damage due to overheating.

►► **11. CLEANING AND MAINTENANCE**

Have the after-sales assistance check correct functioning of the heater at least once a year and/or as required. The appliance must be cleaned before it is put away after use.

► **11.1.** Before starting any type of maintenance, care and repairs of the appliance, carry out the switch-off sequence [Par. 9. “SWITCH-OFF FOR MANUAL MODELS (... / ...M / ...DV / ...M DV)” or “10. SWITCH-OFF FOR ELECTRONIC MODELS (...E / ...ET)"].

► **11.2.** Cleaning only concerns the air vent (rear side) of the heater.

► **11.3.** When the appliance is used again, check the state of integrity of the gas hose and power supply cable. If in doubt regarding their integrity, request the assistance of the technical after-sales service.

► **11.4.** Do not carry out unauthorised interventions.

►► **12. ROOM THERMOSTAT CONNECTION (...E / ...ET) (optional)**

Remove the plug connected to the appliance and connect the room thermostat (optional) (Pic. 30).

See wiring diagram (...E / ...ET).

►► 13. TROUBLESHOOTING

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FUNCTIONING ANOMALIES	M ...DV ...M DV	...E ...ET	CAUSES	SOLUTIONS
The motor does not start	X	X	No voltage	1°Check the mains system 2°After-sales assistance
	X	X	Power supply cable faulty/damaged	After-sales assistance
	X	X	Faulty motor	After-sales assistance
		X	Incorrect connection of the room thermostat	Connect the room thermostat correctly
The flame does not ignite	X	X	Gas cylinder empty	Replace the gas cylinder (Par. 4)
	X	X	Regulator safety valve blocked	1°Press the regulator gas release button (Pic. 8) 2°After-sales assistance
	X	X	Gas cylinder cock closed	Open the gas cylinder cock (Pic. 7)
	X	X	Faulty ignition circuit	After-sales assistance
		X	Inefficient earthing	Check your system is earthed correctly
The flame does not stay on	X		Gas button not pressed for long enough	Press the gas button for longer (Par. 6.1.4.)
	X	X	Faulty heater	After-sales assistance
Flame goes out during functioning	X	X	Insufficient gas supply	1°Replace the gas cylinder (Par. 4) 2°After-sales assistance
	X	X	No gasification of the fuel	Use gas cylinders with suitable capacity (Par. 4)
	X	X	Appliance overheating	1°Clean the air vent (rear side) 2°After-sales assistance
	X	X	Faulty heater	After-sales assistance

SOMMARIO PARAGRAFI

1...	DESCRIZIONE
2...	AVVERTENZE
3...	TIPO DI COMBUSTIBILE
4...	COLLEGAMENTO E SOSTITUZIONE DELLA BOMBOLA GAS
5...	COLLEGAMENTO ALLA RETE ELETTRICA
6...	ACCENSIONE PER I MODELLI MANUALI (... / ...M / ...DV / ...M DV)
7...	ACCENSIONE PER I MODELLI ELETTRONICI (...E / ...ET)
8...	REGOLAZIONE POTENZA TERMICA
9...	SPEGNIMENTO PER I MODELLI MANUALI (... / ...M / ...DV / ...M DV)
10...	SPEGNIMENTO PER I MODELLI ELETTRONICI (...E / ...ET)
11...	PULIZIA E MANUTENZIONE
12...	COLLEGAMENTO TERMOSTATO AMBIENTE (...E / ...ET)
13...	ANOMALIE DI FUNZIONAMENTO, CAUSE E RIMEDI

IMPORTANTE: LEGGERE E COMPRENDERE QUESTO MANUALE OPERATIVO PRIMA DI EFFETTUARE L'ASSEMBLAGGIO, LA MESSA IN FUNZIONE O LA MANUTENZIONE DI QUESTO RISCALDATORE. L'USO ERRATO DEL RISCALDATORE PUÒ CAUSARE LESIONI GRAVI. CONSERVARE QUESTO MANUALE A TITOLO DI FUTURO RIFERIMENTO.

►► 1. DESCRIZIONE

Questo è un riscaldatore d'aria portatile funzionante a gas liquido, caratterizzato dallo sfruttamento totale del combustibile, mediante scambio termico per miscelazione diretta tra l'aria aspirata ed i prodotti della combustione. È dotato di una pratica maniglia per facilitarne il trasporto e la movimentazione. Il riscaldatore è realizzato secondo la Norma EN 1596.

►► 2. AVVERTENZE

►⚠ **IMPORTANTE:** Questo riscaldatore d'aria è stato progettato per applicazioni professionali mobili e temporanee. Non è destinato all'uso domestico, né al comfort termico delle persone.

►⚠ **IMPORTANTE:** Non utilizzare per il riscaldamento delle aree abitabili di edifici residenziali; per l'uso in edifici pubblici, fare riferimento ai regolamenti nazionali.

►⚠ **IMPORTANTE:** Questo riscaldatore non è adatto all'uso da parte di persone (incluse bambini) con capacità fisiche, sensoriali e mentali ridotte, o inesperte, a meno che non vengano supervisionate da una persona responsabile per la loro sicurezza. I bambini devono essere controllati, per assicurarsi che non giochino con il riscaldatore. Tenere gli animali a distanza di sicurezza dal riscaldatore.

►⚠ **IMPORTANTE:** L'uso improprio di questo riscaldatore può provocare danni o pericolo di vita a persone, lesioni, ustioni, esplosioni, elettroshock o avvelenamento. I primi sintomi di asfissia da ossido di carbonio assomigliano a quelli dell'influenza, con cefalee, capogiri e/o nausea. Tali sintomi potrebbero essere causati dal funzionamento difettoso del riscaldatore. **NEL**

CASO SI PRESENTASSERO QUESTI SINTOMI, USCIRE IMMEDIATAMENTE ALL'APERTO e far riparare il riscaldatore dall'assistenza tecnica.

► **⚠️ IMPORTANTE:** Tutte le operazioni di pulizia, manutenzione e riparazione che prevedano l'accesso a parti pericolose (come la sostituzione del cavo di alimentazione danneggiato) devono essere svolte dal costruttore, dal suo servizio di assistenza tecnica, da una persona con qualifica simile, in modo da prevenire ogni rischio, anche se è prevista la disconnessione dalla rete di alimentazione.

► **2.1.** Per un corretto uso del riscaldatore e per la conservazione del combustibile, attenersi a tutte le ordinanze locali ed alla normativa vigente.

► **2.2.** Il riscaldatore necessita per il funzionamento di un adeguato ricambio di aria. Pertanto esso va impiegato all'aperto o in stanze con ricambio d'aria assicurato e continuo. Una buona aerazione è assicurata quando il volume della stanza è calcolato sulla potenza termica, con la formula di 1 m³ ogni 100 W di potenza. In nessun caso il volume raccomandato della stanza deve essere minore di 100 m³. Una buona ventilazione è garantita da un'apertura che soddisfi la formula di 25 cm² per kW di potenza termica, con un minimo di 250 cm², equamente diviso tra parte superiore e parte inferiore della stanza. Per l'installazione, valgono le norme nazionali vigenti, incluse le norme tecniche e le disposizioni in materia antinfortunistica e di prevenzione degli incendi.

► **2.3.** L'apparecchio deve essere usato solamente come riscaldatore d'aria calda (modalità riscaldamento), o ventilatore (modalità ventilazione, per i modelli che prevedono questa funzionalità). Per l'uti-

lizzo seguire scrupolosamente le presenti istruzioni.

► **2.4.** Il costruttore declina ogni responsabilità per danni a cose e/o persone derivanti dall'uso improprio dell'apparecchio.

► **2.5.** Alimentare il riscaldatore solamente con il tipo di combustibile espressamente specificato e con corrente avente tensione e frequenza indicate sulla targhetta dati applicata sul riscaldatore.

► **2.6.** Assicurarsi di collegare il riscaldatore solo a reti elettriche opportunamente dotate di interruttore differenziale e di adeguata messa a terra.

► **2.7.** Usare solamente prolunghe di adeguata sezione, con filo di messa a terra.

► **2.8.** Il riscaldatore deve funzionare su una superficie livellata, stabile e ignifuga, in modo da evitare rischi di incendio.

► **2.9.** È assolutamente vietato usare l'apparecchio in locali seminterrati o sotto il livello del suolo.

► **2.10.** Il riscaldatore non deve essere usato in locali in cui sono presenti polveri esplosive, fumi, gas, combustibili, solventi, vernici.

► **2.11.** Qualora il riscaldatore sia utilizzato in prossimità di teloni, tende o materiali simili di copertura, si consiglia di usare protezioni aggiuntive di tipo ignifugo. Avere cura di mantenere una distanza adeguata, che in nessun caso deve essere inferiore a 2,5 m da materiali infiammabili (stoffa, carta, legno, ecc.) o termolabili (compreso il cavo di alimentazione), dalle parti calde del riscaldatore.

► **2.12.** Posizionare la bombola gas in posizione protetta, dietro l'apparecchio (Fig. 1). Il riscaldatore non deve mai essere orientato verso la bombola del gas (Fig. 2).

► **2.13.** Per qualsiasi motivo è vietato ostruire completamente, o parzialmente, la presa d'aria (lato posteriore) e/o la bocca d'uscita aria (lato anteriore) (Fig. 3). Evitare di utilizzare qualsiasi canalizzazione aria

dal/al riscaldatore. Assicurarsi che non vengano ostruite le feritoie di aspirazione aria presenti sul fondo della base (per i modelli che adottano questa soluzione).

► **2.14.** Nel caso di mancata accensione, o accensione anomala del riscaldatore, consultare l'apposita sezione (Parag. "13. ANOMALIE DI FUNZIONAMENTO, CAUSE E RIMEDI").

► **2.15.** Il riscaldatore quando è in funzione non deve mai essere spostato, maneggiato, né soggetto ad alcun intervento di manutenzione.

► **2.16.** In qualsiasi condizione d'uso, o di stazionamento dell'apparecchio, fare attenzione che il tubo gas flessibile, non venga danneggiato (schiacciato, piegato, torto, teso).

► **2.17.** Se viene percepito odore di gas, spegnere subito l'apparecchio, chiudere la bombola gas, staccare la spina di rete e successivamente contattare l'assistenza tecnica.

► **2.18.** In caso di sostituzione del tubo gas, utilizzare solo tubi di tipo flessibile adeguato alla pressione di utilizzo, facendo riferimento alle regolamentazioni nazionali. Il tubo gas deve avere una lunghezza di 1,5 m.

► **2.19.** Quando l'apparecchio è controllato da un termostato ambiente (articolo optional), il riscaldatore può riaccendersi in qualsiasi momento e cioè quando la temperatura scende sotto la soglia impostata.

► **2.20.** Quando non è utilizzato, scollegare il riscaldatore dalla presa di rete, chiudere l'alimentazione gas, scollegare il tubo gas dal riscaldatore e tappare l'entrata gas sul riscaldatore.

► **2.21.** Far verificare dall'assistenza tecnica almeno una volta all'anno e/o secondo l'esigenza, il corretto funzionamento del riscaldatore.

►► 3. TIPO DI COMBUSTIBILE

Usare solo gas della categoria I3B/P.

►► 4. COLLEGAMENTO E SOSTITUZIONE DELLA BOMBOLA GAS

La bombola gas deve essere sostituita all'aria aperta, lontana da fonti di calore, in atmosfera priva di fiamme.

Per il collegamento della bombola gas al riscaldatore, devono essere utilizzati solo i seguenti accessori:

- Tubo flessibile per gas liquido.
- Regolatore di pressione per gas liquido completo di valvola di sicurezza.

VERIFICARE L'INTEGRITÀ DEL TUBO GAS DI ALIMENTAZIONE. NEL CASO NECESSITI DI ESSERE SOSTITUITO, UTILIZZARE SOLO TUBO DI TIPO FLESSIBILE, ADEGUATO ALLA PRESSIONE DI UTILIZZO, FACENDO RIFERIMENTO ALLE REGOLAMENTAZIONI NAZIONALI.

► Per collegare il riscaldatore alla bombola gas:

ATTENZIONE: TUTTE LE FILETTATURE SONO SINISTRORE, CIOÈ VANNO SERRATE IN SENSO ANTIORARIO.

► **4.1.** Avvitare il tubo gas al raccordo del riscaldatore (Fig. 4).

► **4.2.** Installare il regolatore di pressione sulla bombola gas. Assicurarsi che sul regolatore sia presente la guarnizione (se il tipo di attacco la prevede) (Fig. 5).

► **4.3.** Collegare il tubo gas al regolatore di pressione (Fig. 6).

► **4.4.** Aprire il rubinetto della bombola gas (Fig. 7).

► **4.5.** Premere il pulsante sblocco regolatore (Fig. 8). **Verificare la tenuta dei raccordi con acqua saponata: la comparsa di bolle segnerà eventuali perdite di gas (Fig. 9).** È possibile raccordare fra loro più bombole gas per ottenere una maggiore autonomia. **Si consiglia l'utilizzo di**