TB STEEL SINGLE DOOR

Please read these instructions and the Safety section carefully before using your refrigerator.

MODELS TB STEEL SINGLE DOOR

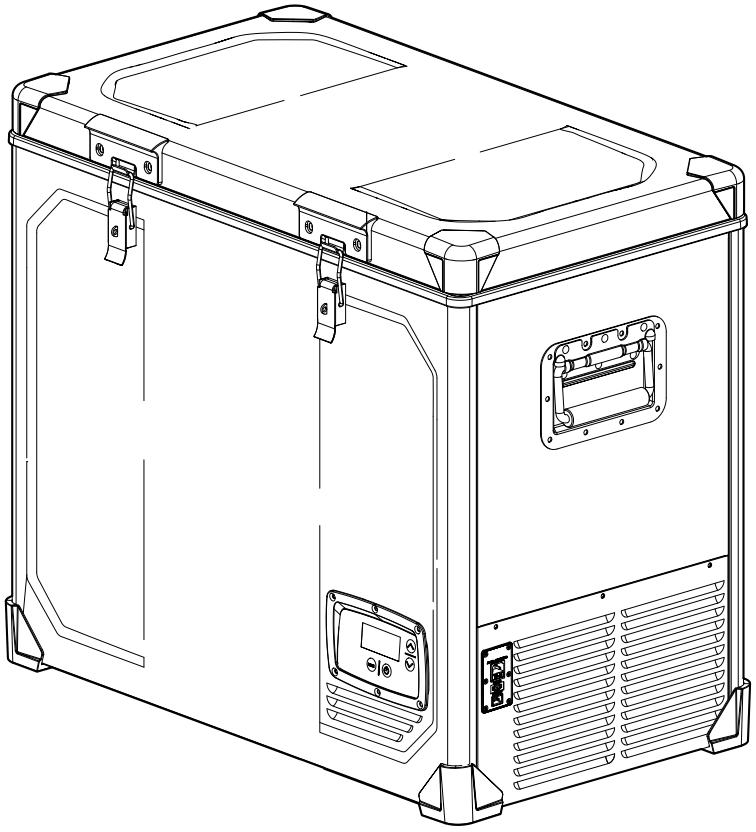
TB46 STEEL

TB60 STEEL

TB74 STEEL

TB100 STEEL

TB130 STEEL



TECHNICAL FEATURES

EN

TECHNICAL DATA	TB 46 STEEL	TB 60 STEEL	TB 74 STEEL	TB 100 STEEL	TB 130 STEEL
Gross capacity	45 L / 1,589 ft^3 / 47,6 Quarts	59 L / 1,926 ft^3 / 57,6 Quarts	71 L / 2,513 ft^3 / 75,2 Quarts	97 L / 3,428 ft^3 / 102,6 Quarts	124 L / 4,380 ft^3 / 131,1 Quarts
External dimensions HxWxD	490 x 695 x 410 mm 19,3 x 27,36 x 16,14 in	590 x 820 x 410 mm 23,23 x 32,28 x 16,14 in	495 x 820 x 495 mm 19,49 x 32,28 x 19,49 in	615 x 820 x 495 mm 24,21 x 32,28 x 19,49 in	745 x 820 x 495 mm 29,33 x 32,28 x 19,45 in
Weight	22 Kg / 48,5 lbs	24 Kg / 52,91 lbs	28 Kg / 61,73 lbs	31 Kg / 68,34 lbs	34 Kg / 74,96 lbs
Installed power	85 Watt	85 Watt	85 Watt	85 Watt	85 Watt
Voltage	DC 12/24 V	DC 12/24 V	DC 12/24 V	DC 12/24 V	DC 12/24 V
Refrigerant gas and charge	R134a 0,055 Kg (CO_2 eq. 0,079 t)	R134a 0,055 Kg (CO_2 eq. 0,079 t)	R134a 0,080 kg (CO_2 eq. 0,114 t)	R134a 0,090 kg (CO_2 eq. 0,129 t)	R134a 0,100 kg (CO_2 eq. 0,143 t)

This appliance contains fluorinated greenhouse gas R134a within an hermetically sealed system and its operations depends on the presence of this gas.

Further information is provided on the technical data label inside the product.

⚠ WARNINGS

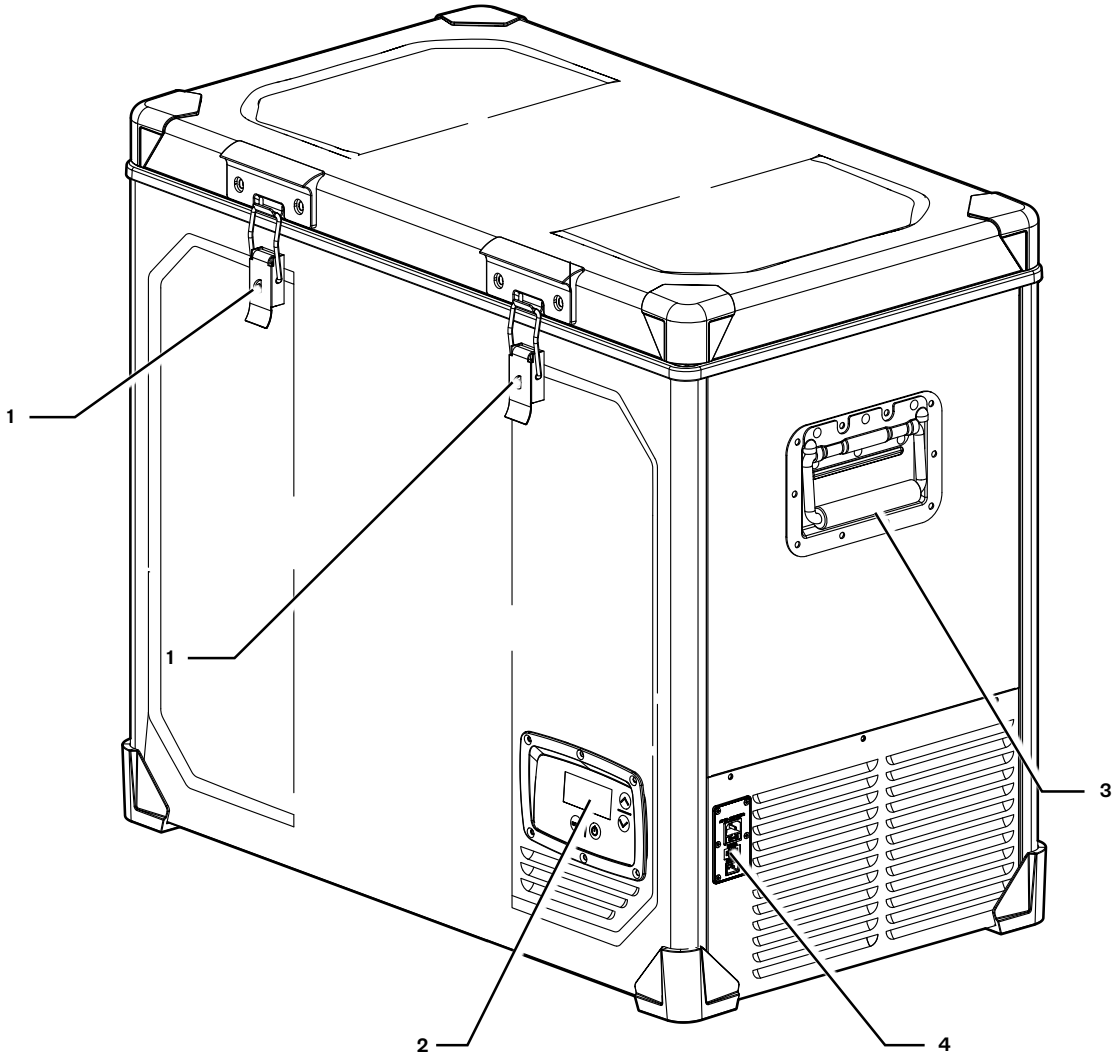
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Risk of fire and electrical shock or fire.
- Do not let hot items to touch the plastic parts of the appliance.
- Do not store flammable gas and liquid in the appliance.
- Do not put flammable products or items that are wet with flammable products in, near or on the appliance.
- Do not touch the compressor or the condenser. They are hot.
- Do not use multi-plug adapters and extension cables.
- Make sure not to cause damage to the electrical components (e.g. mains plug, mains cable, compressor). Contact the Service or an electrician to change the electrical components.
- Frequency band(s) in which the radio equipment operates: 2402MHz-2480MHz;
- Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates: -6dBm

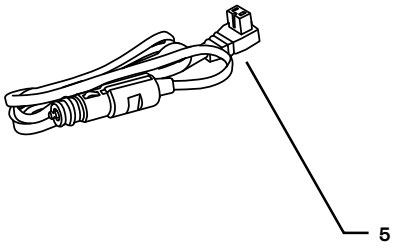
⚠ ATTENTION!

- The cooler is suitable for cooling and freezing foods.
- Use the travel box exclusively for cooling and storing closed beverages and snacks.
- Do not store any perishable food in the travel box.
- Food may only be stored in its original packaging or in suitable containers.
- The travel box is not intended to be brought into contact with food.
- The travel box is not intended for the proper storage of medicines. See the instructions in the package leaflet for the medicinal product.

DESCRIPTION

1 Lid Latches
2 Control Panel
3 Carry Handle
4 Power Input Panel
5 12V/24V DC Power Cable
6 240V AC Power Cable



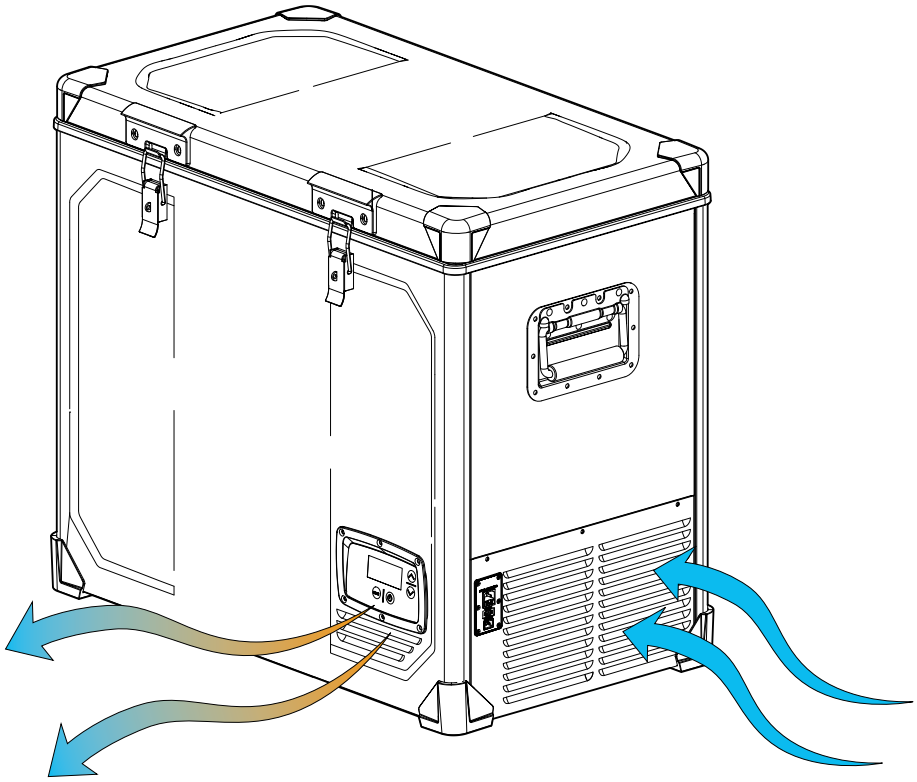


INSTALLATION

It is important that your appliance is installed and operated in accordance with the manufacturer's instructions to guarantee the performance, efficiency and operation.

- Position the appliance in a safe and secure location. Limit exposure to heat sources or direct sunlight which can affect the unit's performance and efficiency.

- The normal operation of the appliance requires heat to be radiated away from the condenser located in rear end of the cabinet. Adequate airflow is required to be available around the compressor at all times.



POWER MANAGEMENT

POWER REQUIREMENTS

The appliance is designed to operate on DC voltage input.

DC input	12V or 24V CC

For optimum performance and efficiency, it is important that the appliance has a reliable 15A fuse protected DC supply in good condition.

It is important that the correct cable size is used for the installation of the DC supply as over distance the voltage can decrease if the incorrect sized cable is being used.

DISTANCE CABLE GAUGE FOR DC INPUT

4.5m or less	2.1mm^2 (AWG14)
4.6m and over	3.3mm^2 (AWG12)

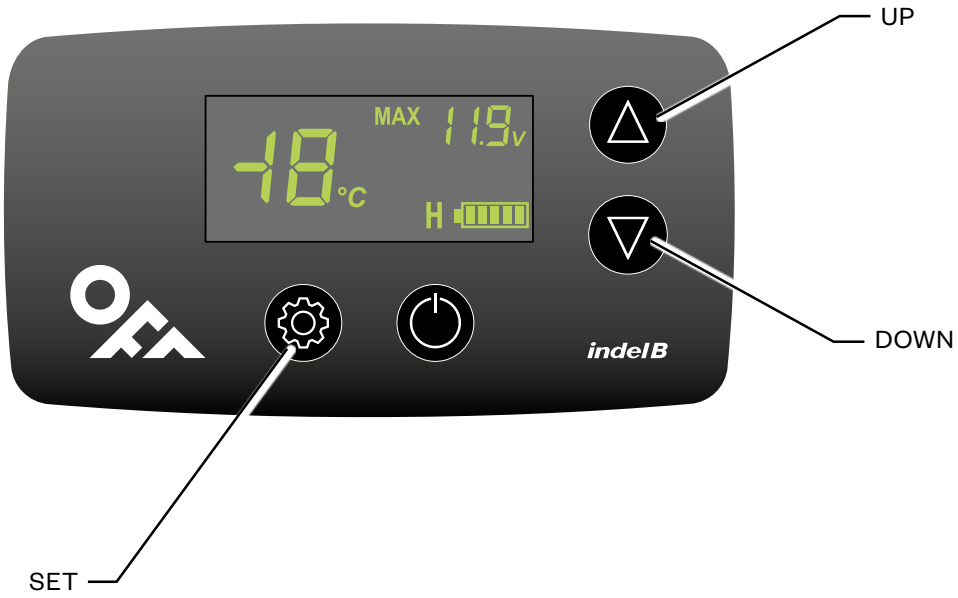
BATTERY MONITOR

The device is equipped with a multi-level battery monitor that protects your vehicle battery against excessive discharging when the appliance is connected to supply.

If the appliance is operated when the vehicle ignition is switched off, the appliance switches off automatically as soon as the supply voltage falls below a set level.

The appliance will switch back on once the battery has been recharged to the cut in voltage level.
The default battery saver setting is M. To change the battery saver value, press the SET button three times. The value (L/M/H) currently selected will start to flash.
While the indicator light is flashing, press the "UP" and "DOWN" buttons to change the selected value and wait until it stops flashing.

MODE		INPUT POWER: 12V		INPUT POWER: 24V	
		CUT-OUT	CUT-IN	CUT-OUT	CUT-IN
BATTERY PROTECTION	LOW	9,6 V	10,9 V	21,3 V	22,6 V
	MID	11,1 V	12,4 V	22,3 V	23,6 V
	HIGH	11,8 V	13,1 V	24,3 V	25,6 V



STARTING AND OPERATING

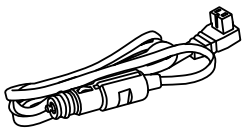
EN

DC CONNECTION

The unit is equipped with an electronic control system that will prevent polarity reversal. In the event that the battery connection is reversed the unit will not start or operate.

The power inlet socket is fitted with a 15A fuse for protection.

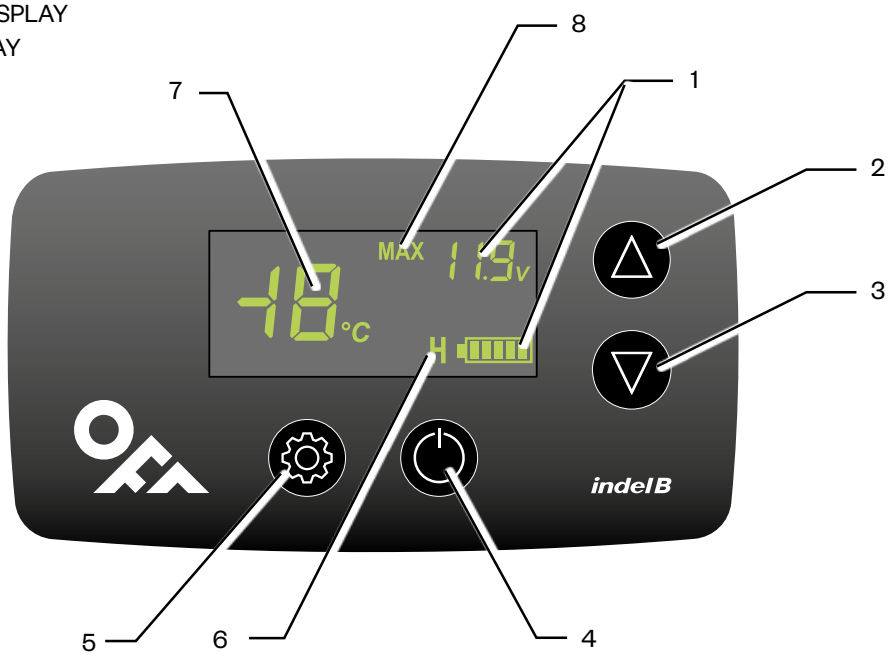
Plug the 12/24V connection cable into the DC voltage socket on the rear and then connect to the cigarette lighter or a suitable 12V or 24V power source.



DC Power Cable

DISPLAY AND FEATURES

1 INPUT VOLTAGE DISPLAY
2 UP BUTTON
3 DOWN BUTTON
4 POWER ON/OFF BUTTON
5 SET BUTTON
6 BATTERY MONITOR DISPLAY
7 TEMPERATURE DISPLAY
8 MODE DISPLAY

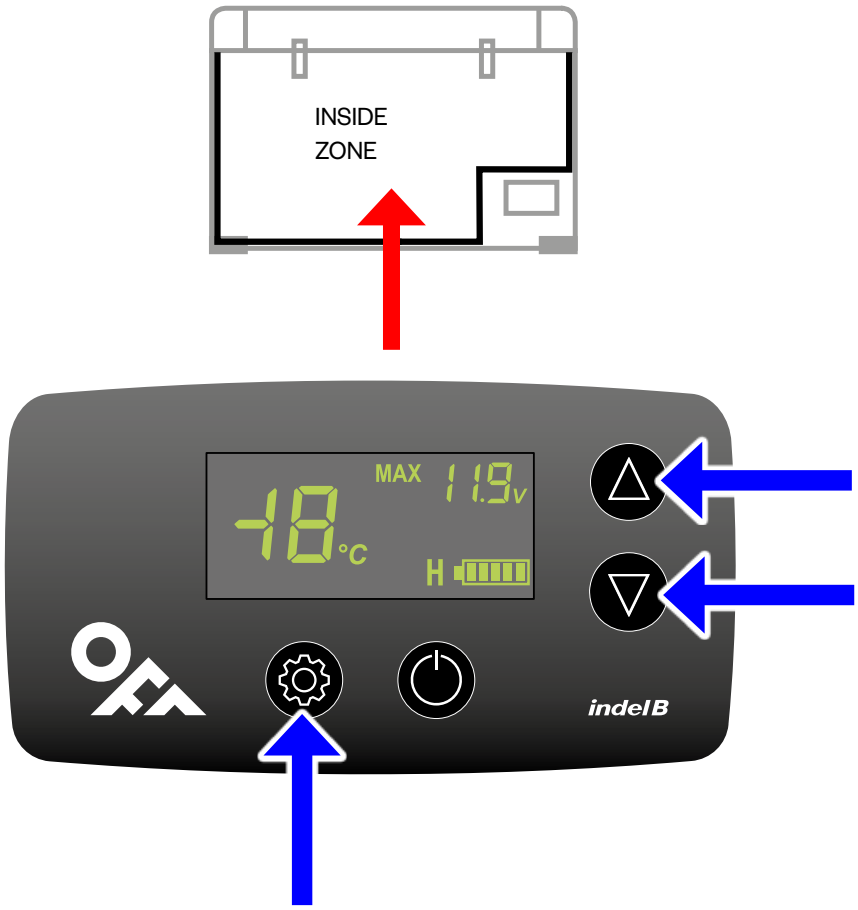


POWERING ON

Connect to the desired voltage input and press and hold the ON/OFF button for three seconds to switch the unit on: the display will show the current internal temperature of the appliance.

TEMPERATURE CONTROLLER

The Temperature Controller provides the ability to set the desired temperature level and displays information on the cabinet and set temperature.



When your appliance is first connected to DC input the digital read out will show the current cabinet temperature, to adjust the temperature follow these steps:
To change the temperature, proceed as follows: press the SET button once and the temperature will start to flash. While the temperature is flashing, press UP to increase the temperature and DOWN to reduce it until the desired temperature appears on the display.
Once selected the display will flash a number of times before returning to the current temperature.
To change the display from °C to °F (or vice versa), press the SET button 4 times. Press the "UP" and "DOWN" buttons while the unit of measurement is flashing to pass from one to the other.

OFF-SET VALUE

This is the information needed to align the temperature shown on the display with the actual temperature inside the refrigerated compartment. Each off-set can be adjusted within a range of from -10 to +10.
After running the refrigeration system for a few hours, place a digital thermometer (not supplied) inside the compartment, in a location where a more accurate temperature is required, and check that the temperature shown on the display coincides with the temperature shown on the digital thermometer. If the temperature is not the same, the off-sets must be adjusted in relation to the temperature T you want the inside of the compartment to reach, so that the temperature reading on the display coincides with the temperature indicated by the thermometer. The following table shows the factory off-set setting for each temperature range and the adjustment range for changing these settings.

OFF-SET	TEMPERATURE RANGE	FACTORY SETTING	ADJUSTMENT RANGE
F1	T ≥ -6°C	-2°C	+10°C ÷ -10°C
F2	-12°C ≤ T ≤ -6°C	-4°C	+10°C ÷ -10°C
F3	T ≤ -13°C	-6°C	+10°C ÷ -10°C

With the refrigerator switched off, press and hold the SET + ▲ + ▼ buttons at the same time for a few seconds to access the OFF-SET value adjustment.
Press the ▲ and ▼ buttons number of times to scroll through the three functions (F1-F2-F3) in succession. Once you have selected the function you wish to change, press the SET button to access the selected OFF-SET value and press the ▲ and ▼ buttons to change the factory setting, while remaining within the +10°C ÷ -10°C range. Without having to press any other button to confirm, the display will automatically save the setting and exit programming mode.

MIN/MAX FUNCTION

This function allows the compressor speed to be slowed down to increase operating efficiencies (MIN) or increase the compressor speed to provide “quick” cool down times (MAX).

The refrigerator is set by default to MAX. To change this setting, press the SET button twice. While the indicator light is flashing, you can pass from one setting to another with the "UP" and "DOWN” buttons. Once the setting is chosen, leave the indicator light to flash for 3 to 5 seconds, without pressing any buttons, to confirm the choice.

ENERGY SAVING TIPS

Choose a well ventilated installation location which is protected from direct sunlight and allows air to circulate around the cabinet.

Allow hot food to cool down first before you place it into the cabinet.

Do not open or leave the lid open more often than necessary.

If ice forms on the internal walls or lid defrost the appliance.

Select the desired cabinet temperature in relation to the intended use, avoid setting unnecessarily low temperatures.

USING YOUR APPLIANCE WITH ACCESSORIES

USING SOLAR PANELS

The power consumption and efficiency of your appliance makes it ideal to be used in conjunction with solar panels to provide recharging of the DC supply. Solar panels will provide charge into the battery during the daylight hours even while the appliance is operating.

As the output from solar panels changes depending on the level of sunlight and intensity, your appliance cannot be connected directly to the solar panels. The appliance must be connected to a suitable DC battery and then the solar panels connected to the battery.
We recommend the use of Portable Solar Panel Kits from 60 to 120 watts for use with your appliance.

⚠ You cannot connect the appliance directly to the solar panel as it will not work. Connection must be via the battery.

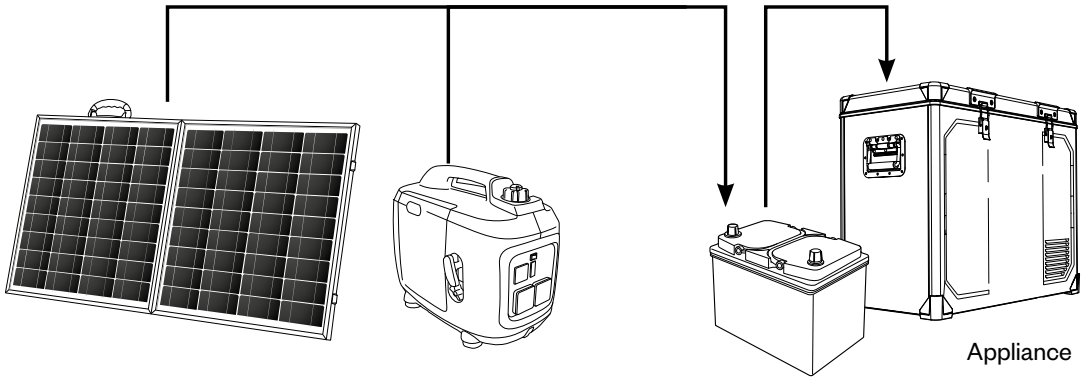
USING PORTABLE GENERATORS

It is important that the correct generator is used with your appliance. An incorrect generator or output may result in reduced performance or damage to your appliance which may void your appliance warranty.

Most generators are fitted with a DC output - DO NOT connect your appliance directly to the DC output of the generator as this will result in damage to your appliance and void warranty.

It is recommended that the appliance remains connected to the DC power source. Then using the DC output of the generator connect this to the battery to recharge it. It is important that you monitor the battery being charged, ensuring that an oversupply of charge is not being provided to it causing damage.

⚠ You cannot connect the appliance directly to the DC output of the generator as it will not work. Connection must be via the battery.



USEFUL ADVICE

When the appliance is being set at 0°, do not store glass bottles or liquids such as beer, milk, juices or soft drinks in the unit as these may freeze and shatter.

Items such as fruit and vegetables should be stored closer to the top of the cabinet as this area is normally slightly warmer. This will reduce the risk of spoiling and ensures that damage is not caused by being crushed by heavier items.

To improve the efficiency of your appliance it is better to have the cabinet as full as possible at all times. A full cabinet will provide lower power consumption over 24 hours than a half empty one. When the cabinet is full there is little air space between the goods so the cold air is trapped, when there is lots of air the coldness cannot be captured and held. On a trip it is a good idea to replace finished products with bottles of water or similar. This will fill the empty spaces and allow the coldness to remain within the cabinet.

Make your selection of what you wish to remove from the cabinet before you open the door. This will reduce the time that the cabinet is open and the level of warm air that will enter the cabinet while the door is open.

When located in the rear of a car or trailer, it is recommended that the appliance be kept away from direct sunlight to reduce the risk of increased heat. It should also be provided with suitable ventilation to guarantee efficient power consumption and performance. You must remember that when a vehicle is parked in the sun that on a day where the ambient temperature is +30°C, the interior of the vehicle can reach +55°C.

MAINTENANCE

Before carrying out any maintenance operation on the refrigerator, take the power cable out of its socket.

CLEANING

Regularly clean the inside and outside of the refrigerator using only warm water and a neutral detergent.
Subsequent to washing, rinse with clean water and dry thoroughly using a soft cloth.
Do not use the following: special glass and mirror cleaning products, liquid, powder, or spray detergents, alcohol, ammonia or abrasive products.
If you are not using the refrigerator, we suggest cleaning it well inside and leaving the door ajar to ventilate the interior.

Should the device fail to work or work badly, before referring to our after-sales service, make sure that:
- the feeding voltage is not missing;
- the voltage is the same as the one shown on the plate;
- the connections and the polarities are right;
- the airing grids are not covered over;
- the refrigerator unit is not near any heat source;
- the fuse of the feeding line is not blown.

The power supply cable must be replaced only by qualified technical personnel and in any case by an after sales service authorised by the Manufacturer..

Indel B OFF is not liable in any way if you do not comply strictly with all the previsions in this manual.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the appliance.

FAULTS

ERROR CODE	ERROR TYPE
E1	Battery protection cut-out (The voltage is outside the cut-out setting).
E2	Fan over-current cut-out (The fan loads the electronic unit with more than 1Apeak).
E3	Motor start error (The rotor is blocked or the differential pressure in the refrigeration system is too high (>5 bar)).
E4	Minimum motor speed error (If the refrigeration system is too heavily loaded, the motor cannot maintain minimum speed 1,850 rpm).
E5	Thermal cut-out of electronic unit (If the refrigeration system has been too heavily loaded, or if the ambient temperature is high, the electronic unit will run too hot).
E6	Faulty temperature sensor (the temperature sensor is disconnected or defective)

ONLY FOR SALES WITHIN THE EUROPEAN COMMUNITY (EU)

This appliance is marked according to the European Directive 2012/19 / EU (WEEE). The symbol on the product indicates

that this product should not be treated as household waste.
Ensure that this product is not entered as part of the flows of municipal waste but treated as professional WEEE.