

User Manual

6 Troubleshooting

All work on electrical parts or electrical connections and the refrigerant circuit must be carried out by qualified and authorised personnel.

Warning: Disconnect electrical power before performing any operations on electrical parts or on electrical connections.

Defect	Possible cause	Intervention
The refrigerator does not cool, the compressor will not start.	No electrical power. Battery in poor conditions. Faulty thermostat. Defective electronic control unit.	Check to make sure that the electronic control unit is receiving sufficient power and voltage; check the fuse. Verify that the internal lighting is working and that the compressor is receiving power. Check the cables, lugs and connectors. Verify that the battery is charging properly. Check the thermostat: Bridge T - C with a separate cable. If the compressor will not start, its electronics are probably defective. Replace. If the compressor starts up with the bridge, the thermostat is defective. Replace the thermostat.
The compressor only performs brief attempts at starting up.	There is insufficient voltage or else a drop in voltage during the attempt to start. The protection device is activated. The Batteries are drained.	Check the cables and connections; remove any traces of oxidation or corrosion. Charge the batteries, start the motor or connect the battery charger.
The compressor functions but doesn't cool.	Loss of refrigerant through the evaporator or the tubing. Tubing clogged.	Carry out a leak check and repair any leaks, drain and refill the proper amount of R134a refrigerant. (This operation must be carried out by a qualified technician.)
The compressor runs for a long time but doesn't cool properly (reduced efficiency).	Insufficient ventilation, the condensation unit is overheating. The fan is not working properly. There is too much frost on the evaporator. The door does not close properly and lets in warm, moist air. The condenser is blocked by dust.	Increase the ventilation. Replace the fan. Defrost the unit. Correct the position of the door and check the gasket. Clean the condensing unit.

The fuse blows.	The wrong fuse is being used. Defective electronic control unit.	Check the fuse: see table in section 4.4. Replace the electronic control unit.
The compressor is operating intermittently.	Battery low or electrical cables in poor conditions.	Check wiring conditions, examining for loose connections, rust or verdigris. If wiring needs to be replaced, see the manual for correct sizing. If wiring is in good conditions, check battery function and replace if in poor condition.
The compressor never stops (correct fridge performance)	Incorrect thermostat connection on the electronic control unit. Thermostat broken. Condensation is not working properly, evaporator cools but not enough to cause the thermostat to stop the compressor.	Rotate the thermostat to off position. If the refrigerator continues to function, then there is continuity on the control unit. Correct the problem on thermostat connections (make sure the bridge is present on C and P and not on C and T on the electronic control unit). Rotate the thermostat to off position. If the compressor switches off but it is impossible to regulate temperature, replace the thermostat or recharge the cooling system.
The compressor never stops (poor fridge performance)	Environment very hot + insufficient ventilation or little gas in the refrigerant circuit.	Check ventilation. The compressor must be installed in a well-ventilated location. If possible, remove the refrigerator from the installation hole. If the refrigerator operates better, improve ventilation, consulting the manual for correct installation. If ventilation is instead optimal, check for the presence of gas in the system, contacting a specialised technician.
The freezer compartment is cold but the refrigerator is not	Insufficient ventilation, little gas in the refrigerant circuit, electrical power not continuous.	Check ventilation. The compressor must be installed in a well-ventilated location. If possible, remove the refrigerator from the installation hole. If the refrigerator operates better, improve ventilation, consulting the manual for correct installation. Check electrical connection and battery conditions. If ventilation is instead optimal, check for the presence of gas in the system, contacting a specialised technician.

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Excess ice on the evaporator.	Moisture infiltrations in the refrigerator.	Check the conditions of the gasket on all four sides of the door. The gasket must close perfectly on the unit. If the formation of ice is thicker on one side, most likely there is moisture infiltration in the refrigerator is coming from that side. Use a moderate heat source to model the gasket into position. If the gasket cannot be modelled, replace the entire door.
The refrigerator cools too much.	The thermostat sensor is too covered or incorrectly positioned	The end of the sensor must be in contact with the evaporator. Set the sensor in the correct position. If the refrigerator continues to cool too much, replace the thermostat.
The compressor is noisier than normal.	The compressor is not properly secured on its support or it is touching the wall.	Check that compressor screws are properly tightened and that nothing is in contact with it. The compressor vibrates and, if something is in contact with it, vibrations increase.
The fan/s is/are noisier than normal.	The fan structure is bent or the fan is broken.	Remove the clamps/screws used to secure the fan. Replace if the fan continues to make noise. Make sure that all of the fan is intact. Replace if one or more fins is missing.
The internal light does not switch on.	Polarity reversed or broken bulb.	Check bulb polarity. Replace light bulb if polarity is correct.
Door/Drawer not closing properly.	Incorrect position of hinges or deformed gasket.	Re-position hinges so that the door closes correctly. Use a moderate heat source to remodel the gasket. Replace door if problem persists. In the case of drawer refrigerators, use the adjustable guides to align the door.

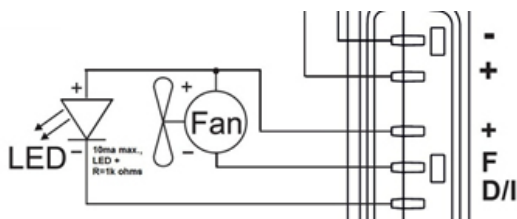
For more complicated defects requiring specialised assistance, please contact Indel Webasto Marine S.r.l. Italia or your nearest Isotherm retailer.

7 LEDs for diagnostics

The electronic control unit has a troubleshooting function when a LED is connected as shown below.

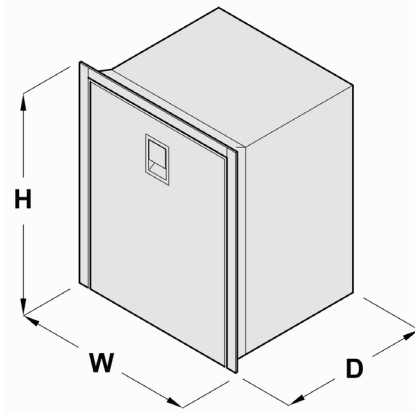
The number of flashes indicates the type of error.

Number of LED Flashes	Type of Error	Solution
6	Defective sensor (the sensor is defective or disconnected).	Re-connect the sensor and verify that the compressor starts working again. Replace sensor if the compressor does not work.
5	Thermal protection of the electronic control unit. (the electronic control unit overheats if the refrigeration system has become overloaded or the environmental temperature is too high)	Remove excess gas or increase ventilation.
4	Minimum motor speed error. (if the refrigeration system has been overloaded, the motor cannot maintain minimum speed of approximately 1.850 RPM).	Remove excess gas.
3	Motor starting error [the rotor is blocked or pressure inside the refrigerant circuit is too high (> 5 bar)]. Defective electronic control unit.	The first operation to attempt is to replace the electronic control unit. Replace compressor if problem persists.
2	Fan short-circuited (the fan absorbs more than 1A from the electronic control unit).	Replace the fan.
1	Battery protection (voltage is outside the maximum and minimum voltages).	Check power cable conditions. Replace with new cables if necessary. Check battery conditions.



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8 Dimensions



Model	Width (mm) [W]	Height (mm) [H]	Depth (mm) [D]	Door Thickness (mm) [S]	Cut-Out (mm) W:H	Flange Size (mm) Left:Right:Top:Bottom	Notes
CR 36	440	250	550+135(1)	35	442:252	/:/:./	REM
CR 40 CUBE	420	430	500+90(2)	40	422:432	/:/:./	REM
CR 42 BD Micro	381	523	325+120	40	383:526	/:/:5:/	REM
CR 42 ELEGANCE	381	523	325+120	50	383:526	/:/:5:/	REM
CR 49	386	523	450	40	391:528	20:20:20:/	
CR 49 ELEGANCE	381	520	450	50	383:525	/:/:9:/	
CR 50	412	532	360+130(1)	40	416:537	/:/:10:/	REM
CR 63 FREEZER	477	620	515	40	481:625	/:/:10:/	
CR 65	455	527	480	40	460:532	20:20:20:/	
CR 65 ELEGANCE	448	527	480	50	450:532	/:/:9:/	
CR 65 FREEZER	527	610	540	40	531:615	/:/:10:/	
CR 85	477	620	505	40	481:625	/:/:10:/	
CR 85 ELEGANCE	477	620	505	50	479:625	/:/:9:/	
CR 90 FREEZER	527	746	520	40	531:751	/:/:10:/	
CR 90 BIG	478	845	430	40	482:847	/:/:./	
CR 100	487	746	455	40	491:748	/:/:./	

CR 130	527	746	505	40	531:751	/:/:10:/	
CR 130 ELEGANCE	528	746	505	50	530:751	/:/:9:/	
CR 130 DRINK	527	746	520	40	531:751	/:/:10:/	
CR 195	550	1345	580	/	555:1350	35:35:30:/	
CR 200	730	880	620	/	735:890	20:20:20:/	
CR 36 INOX	453	255	580+135(1)	/	458:260	30:30:30:30	REM
CR 42 INOX	400	520	380+135(1)	/	405:525	20:20:20:/	REM
CR 49 INOX	400	520	510	/	405:525	20:20:20:/	
CR 63F INOX	495	620	555	/	500:625	20:20:20:/	
CR 65 INOX	470	527	545	/	475:532	20:20:20:/	
CR 65F INOX	545	610	580	/	550:620	20:20:20:/	
CR 85 INOX	495	625	555	/	500:625	20:20:20:/	
CR 90F INOX	545	743	555	/	550:748	20:20:20:/	
CR 130 INOX	545	743	545	/	550:748	20:20:20:/	
CR 130D INOX	545	743	560	/	550:748	20:20:20:/	
CR 195 INOX	545	1345	580	/	550:1350	20:20:20:/	
CR 200 INOX	730	868	620	/	735:873	20:20:20:/	

REM: the product is provided with the possibility of moving the compressor unit based on the length of the supplied hoses.

Note(1) depth that takes into account the curvature of the tube at the point of tube exit from the trunk "D"=35mm

Note(2) depth that takes into account the curvature of the tube in the case of remote control "D"=80mm (the tube is very rigid)

FOR AC/DC VERSIONS, KEEP IN MIND THAT, DUE TO LACK OF SPACE, DEPTHS EXCEEDING 50 mm WILL HAVE TO BE EVALUATED ON A CASE BY CASE BASIS.

AS PER REGULATIONS AND FOR PROPER OPERATION, THE WALLS OUTSIDE OF THE REGRIGERATOR SHOULD BE SET AT THE FOLLOWING DISTANCES FROM THE INTERNAL WALLS OF THE UNIT: 20mm ON WALLS WHERE THE COMPRESSOR IS NOT PRESENT AND 50MM ON THE WALLS WHERE THE COMPRESSOR IS PRESENT. IF THESE RULES CANNOT COMPLIED WITH, THE MINIMUM DISTANCE MEASUREMENTS MUST BE 5mm AND THE MATERIALS WITH WHICH THE WALLS ARE MADE MUST BE EXPLOSION PROOF.

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9 Warranty

The Indel Webasto Marine warranty complies with EU Directive 1999/44/EC.

Validity period

The warranty for Isotherm marine refrigerators and freezers is valid for 2 years with regard to the cost of labour for repair or replacement, but only if carried out by IWM network, and therefore authorised, service centres.

The validity period starts from:

- a) The date of sale indicated on the product invoice or sales receipt
- b) The date of the invoice or registration document of the first sale of the boat in which it is installed, if installed by the manufacturer of the vehicle
- c) In the absence of one of the above documents, the week of production indicated in the S/N (serial number)

Replacement of a product or component does not change the validity period.

The warranty covers:

- Replacement or repair of the product or of one or more components acknowledged to be faulty due to manufacturing defects.
- Breakage or malfunction of components under warranty validity despite proven proper installation and proper use.
- Labour and transport according to the operating methods described below.
- Costs for shipping the replacement product (not including charges for customs clearance).

The warranty does not cover defects, damage or malfunctions caused by:

- Negligence, neglect or improper use
- Incorrect installation or incautious handling
- Insufficient ventilation
- Incorrect electrical connection
- Undersized wiring
- Improper maintenance or maintenance performed by unauthorised personnel
- Failure to follow the instructions contained in this manual
- Transport damage
- Charges for customs clearance
- Items subject to wear, fuses etc.
- Professional use
- Damage caused by weathering

Essential information for determining whether the case is covered by the warranty:

- Product code (indicated on the product label)
- S/N (serial number) (indicated on the product label)
- Invoice or sales receipt (or possibly registration document, see above in Validity period section)
- Detailed description of the defect (Attach photos if possible)
- Description of installation with particular attention to ventilation and wiring (Attach photos if possible)

(If it is determined that the case is not covered under warranty, the customer must pay all expenses for repairs, replacements, labour, travel of persons and transport. IWM is not required to bear any expense.)

Operating procedures to be applied once it is ascertained that the case is covered by warranty:Refrigerators installed on boats:

Warranty repairs must be performed exclusively by service centres (CAT) that are part of the Indel Webasto Marine network. IWM does not cover costs for service performed by others. Find the service centre nearest to you at www.indelwebasto-marine.com

For products installed on boats, an IWM authorised CAT technician will come to the boat if it is located at a distance of maximum 100km from the CAT. IWM shall cover the cost of this transfer. If the boat is over 100km away, the customer can choose whether to pay the cost of the technician's transfer (in this case paying the technician directly), or to move the boat closer.

IWM does not reimburse any expense for spare parts purchased elsewhere, not of the IWM network.

Refrigerators installed on Recreational vehicles (RV):

Warranty repairs must be performed exclusively by service centres that are part of the Webasto network.

The vehicle must be brought to the service centre.

Find the service centre nearest to you at www.webasto.com