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To:

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Strong Ice Formation on Irios LT Islands

In some instances **strong frost and ice deposits** may form **on the evaporator ends** in Irios LT islands. Such an icing is attributable to **air flow short circuits** occurring between return and supply air within display cases. Due to fit inaccuracies at evaporator covers and case joints in some islands, hot and humid air encounters the cold case parts during a defrosting process, resulting in condensation of the humidity contained in the warm air and, finally, in frosting and icing.

Necessary maintenance work:

Caused by ice formation and the impaired air circulation and heat exchange, the cooling performance of the evaporator is reduced. For this reason the **defrosting of display cases** is imperative.

In addition, islands strongly tending to develop ice deposits must be provided with an **extra insulation** so as to avoid short-circuiting of the air flow between return and supply air and, thus, to prevent new icing.

The necessary working steps and materials are described in the following.

Optional measures:

In special instances, installing the **defrost sensor (R1)** at a different position can be advisable additionally. Due to the vicinity of the defrost heater, the present position of the defrost sensor on the evaporator sheet metal plate may impair the measuring result which, in turn, causes incomplete defrosting processes as defrosting cycles are terminated before ice deposits on evaporator ends are defrosted completely. In order to determine the exact melting point of water at evaporator pipes for defrosting to be terminated at the right point in time, a **sensor repositioning** may be useful. The working steps necessary for this are also described following the explanation of insulating work.

If there are any queries or statements, please contact Manfred Mahnert (Tel. 02236/601-2346, Manfred.Mahnert@Linde-KT.de)

Best regards,

Linde Kältetechnik GmbH & Co. KG



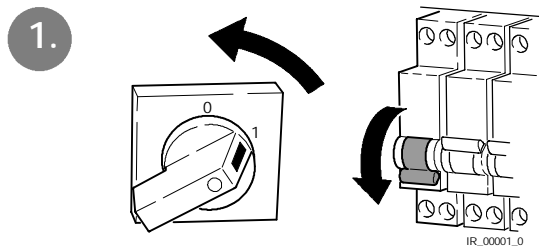
i.V. Brouwers



Subsequent application of insulation on Irios LT islands to avoid air flow short circuits

Preparative steps

- Unload merchandise and remove bottom display decks.
- Defrost display case and dry its interior space.
For defrosting, put display case out of service over night or for a weekend. To this end, the solenoid valve can be de-energized or, alternatively, the setpoint increased. When increasing the setpoint, make sure the alarm temperature is increased as well to avoid a warning signal being triggered. To defrost the display case by means of circulated air, simply switch on the fans.

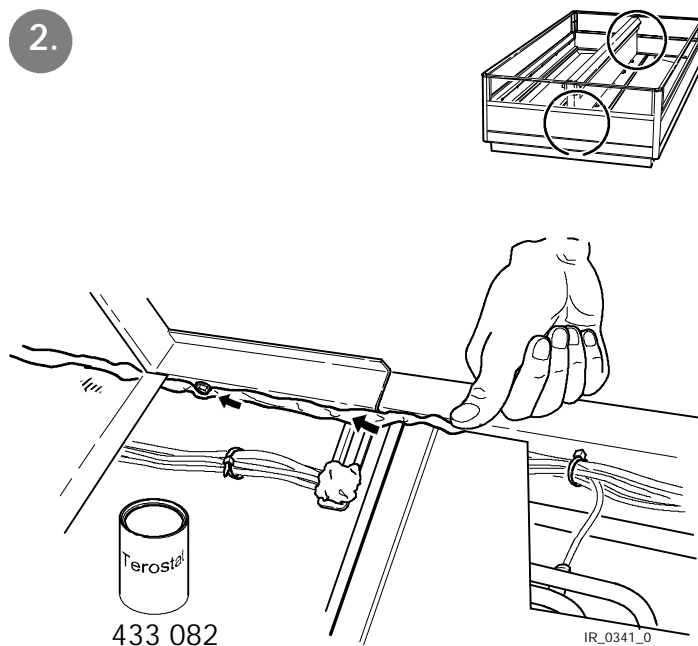


Prior to carrying out the work,

- switch off the central power supply by means of the main switch
- disconnect the fuse
- padlock the main switch and attach a warning sign to prevent restarting



Never work on a refrigerated display case, particularly on the electrical equipment, when it is energized. Acting contrary to this instruction involves a high risk of being hurt by an electric shock, arcing or burning. Failure to observe this warning is dangerous to life!



Before applying insulating material, make sure that the surface is dry!

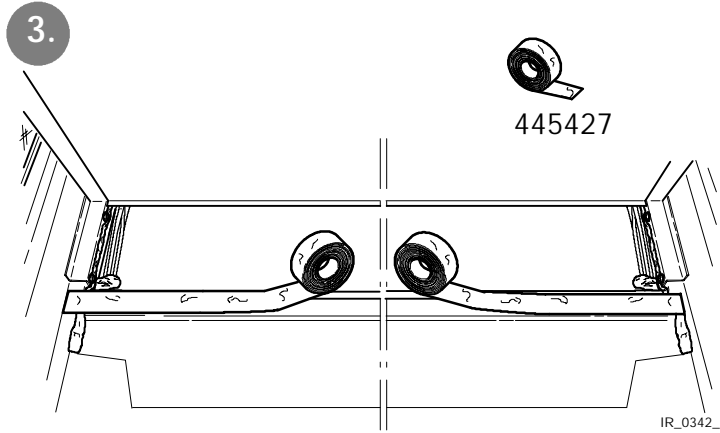
Seal the gap between evaporator cover and case joint with kneading compound (Terostat IX, Part No. 433 082).

To do so, form a string out of the kneading compound to push it below the interior wall from one side of the case through to the other one.

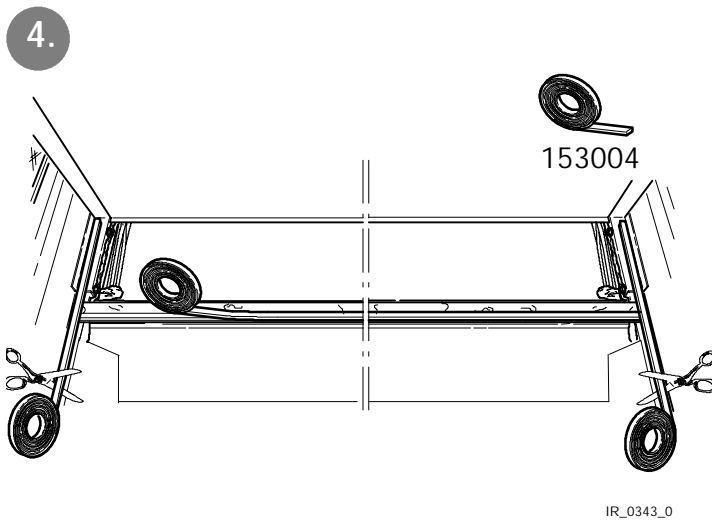
Make sure that the kneading compound is pressed to joint and cover everywhere, underneath the interior wall of the case as well!

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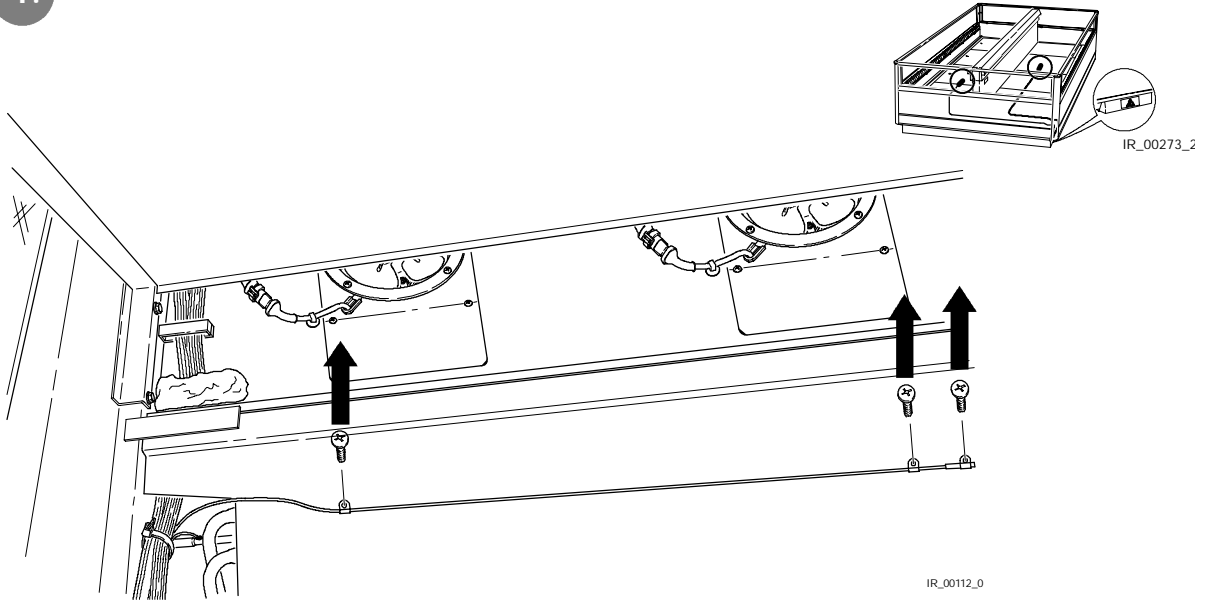
Seal the gap between evaporator cover and evaporator sheet metal plate with self-adhesive alu tape (Part No. 445 427).



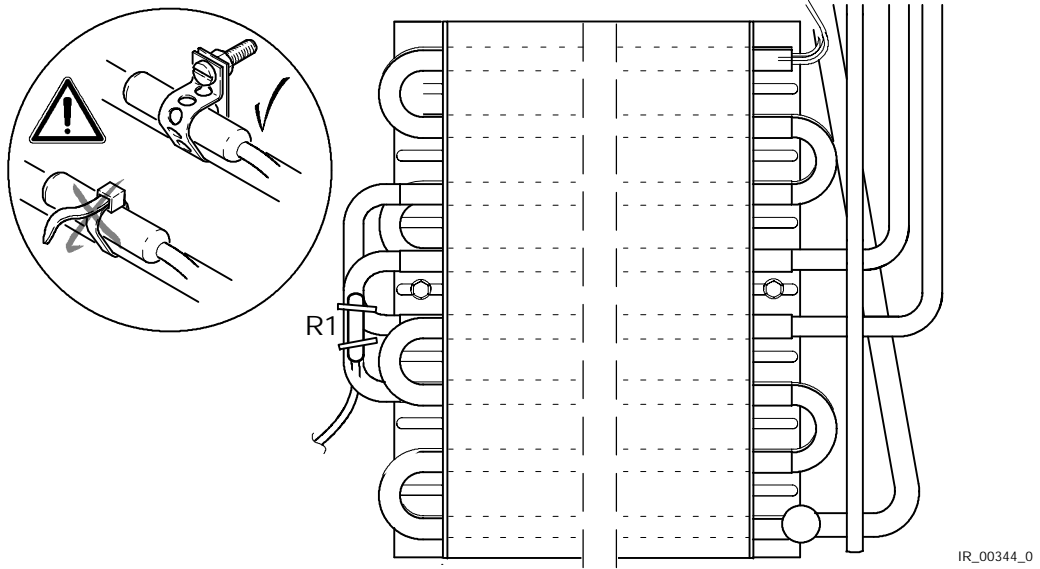
Provide case joint and alu tape with foam tape (Part No. 153 004).

New position of evaporator sensor (R1) for Irios LT islands

1.



2.



3.

