

IQ – Installation Qualification / OQ – Operation Qualification Report

Report

Report reference no.

Tested by (+ signature)

Date of testing

Reviewed by (+ signature)

Date of review

Total number of pages

Installation location

Name

Address

Contact Person

Commissioner for installation

Name

Address

Contact Person

Test item

Description

Model and/or type reference

Serial number

Rating(s)

Remark(s)

Manufacturer of test item

Name

Liebherr Hausgeräte Lienz GmbH

Address

Dr. Hans Liebherr-Strasse 1, A - 9900 Lienz / Austria

Test Report Form originator: Liebherr

This report shall not be reproduced except in full and with the written approval of the Manufacturer.
The results presented in this report relate only to the items tested.

The purpose of this IQ/OQ report is to show documented evidence that the test item from Liebherr has been installed in accordance to the specifications provided within this document.

"(see Enclosure #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

Possible test case verdicts:

- test case does not apply to the test item : N/A (not applicable)
- test item does meet the requirement : P (Pass)
- test item does not meet the requirement : F (Fail)

IQ/OQ	Requirement + Test	Result - Remark	Verdict
Delivery information			
IQ	Nameplate inside test item	<i>[visual check]</i>	
IQ	Serial number on name plate	<i>[state serial number]</i>	
IQ	Invoice and delivery note correspond with nameplate	<i>[check model and serial number]</i>	
IQ	Operating/Installation instructions delivered with test item	<i>[state document number]</i>	
IQ	EC-conformity statement delivered with test item	<i>[state document number]</i>	
IQ	Wiring diagram delivered with test item	<i>[state document number]</i>	
IQ	Test item and/or accessories delivered without damage and injury	<i>[check test item and/or accessories]</i>	
Setting up			
IQ	Operation/Installation instructions have been read before switching on for the first time	<i>[yes/no]</i>	
IQ	Operation/Installation instructions stored in a proper way to have it available any time	<i>[yes/no - describe]</i>	
IQ	New users have examined the operation/installation instructions for the first time	<i>[yes/no]</i>	
IQ	Does new users have been trained according this IQ/OQ report	<i>[yes/no]</i>	
IQ	Test item levelled	<i>[check floor/adjustable feet]</i>	
IQ	No sources of heat (sunlight, cookers, radiators...) next to the test item	<i>[check installation location]</i>	
IQ	No sources of vibration next to the test item	<i>[check installation location]</i>	
IQ	Ventilation openings of test item not blocked (rear wall condenser and top)	<i>[check test item]</i>	
IQ	Under counter test item: Installed according operation/installation instructions	<i>[yes/no if applicable]</i>	

IQ	Built in test item: Installed according operation/installation instructions	<i>[yes/no if applicable]</i>	
IQ	Freestanding test item: Installed according operation/installation instructions	<i>[yes/no if applicable]</i>	
IQ	Test item door can be opened and closed in an adequate way during handling	<i>[check door opening; check insertion and removal of products]</i>	
IQ	Door closes / door gasket seals correctly	<i>[visual check]</i>	
IQ	Door lock	<i>[visual check]</i>	
IQ	Function of door lock	<i>[check operation]</i>	
IQ	Room size according EN 378 → 1m ³ /8g of HC refrigerant	<i>[state room size and refrigerant charge size]</i>	
Connecting to the mains			
IQ	Power supply according name plate	<i>[state power supply]</i>	
IQ	Power socket fused with 10A and higher	<i>[state fuse size]</i>	
IQ	Power socket grounded	<i>[yes/no]</i>	
IQ	Power socket easily accessible and away from rear of the test item	<i>[check installation location]</i>	
IQ	No extension socket or power strip used	<i>[yes/no]</i>	
IQ	No stand-alone inverter used	<i>[yes/no]</i>	
Climate rating			
IQ	Ambient conditions correspond with climate class of test item	<i>[describe ambient conditions and climate class of test item]</i>	
Range of test item use			
IQ	Test item correspond with user requirements - Temperature range - Gross/net capacity - Size of shelves/drawers	<i>[yes/no, describe requirements]</i>	
Accessories			
IQ	Product sensor connected to the optional temperature sensor connection according operation/installation instructions	<i>[yes/no]</i>	
IQ	Product sensor fitted in a proper way inside the test item	<i>[describe]</i>	
IQ	Product sensor activated according operation/installation instructions	<i>[yes/no]</i>	

IQ	External temperature sensor used	[yes/no]	
IQ	External temperature sensor fitted according operation/installation instructions	[yes/no]	
IQ	External alarm relay used	[yes/no]	
IQ	External alarm relay connected according operation/installation instructions	[yes/no]	
IQ	When an alarm occurs, does the user be aware of the further requirements/steps	[describe]	
IQ	In case of an alarm or malfunction all important phone numbers of service staff or maintenance team are available	[yes/no]	
IQ	Test item equipped with interior light	[yes/no]	
IQ	RS485 interface connected according operation/installation instructions	[yes/no]	
IQ	Liebherr LTM software is used for monitoring and installed according LTM operating instructions	[yes/no]	
IQ	LTM operation instructions stored in a proper way to have it available any time	[yes/no - describe]	
IQ	If a spark free model is used, the Ex-classification is in agreement with the working conditions	[describe]	
IQ	A copy of the relevant ATEX certificate for the spark free model is available at any time	[yes/no]	
Operating			
OQ	<u>Connecting to the main supply:</u> Connect the test item to the main supply → Display reads OFF	[visual check]	
OQ	<u>Switching ON:</u> Press  button for 5 seconds for the first time → Display reads ON	[check function]	
OQ	<u>Temperature change:</u> Press  button for 1 second → the temperature display flashes. Press the temperature setting buttons   → temperature is changing. Press  button again → temperature is saved.	[check function]	

OQ	<p><u>Switching ON/OFF the light:</u></p> <p>Press  button → light is switching on and off</p>	[check function]	
OQ	<p><u>Fan cut-out:</u></p> <p>Open the door of the test item and check the door operated fan cut-out.</p>	[visual check]	
OQ	<p><u>Door open alarm:</u></p> <p>Open the door for a period of 60 seconds and more → the door open alarm sounds, the  flashes and the display shows dor</p>	[check function]	
OQ	<p><u>Alarm test for internal and any external alarm:</u></p> <p>Press  +  button for 5 seconds</p> <p>The  LED will light during the test.</p> <p>The test sequence is stated in the operational/installation instructions.</p> <p>The electronic control system will automatically switch back after the alarm test to normal operating mode.</p>	[check function]	
OQ	RS485 interface - function of the monitoring system is correctly	[describe]	
OQ	<p>Power failure Battery fully charged and checked.</p> <p>In case the battery is discharged, not fully operating or not connected, the alarm btE is showed</p>	[yes/no]	
OQ	LTM software is correctly installed on the monitoring computer	[yes/no]	
OQ	LTM software addresses and monitors the cabinets correctly	[yes/no]	
Calibration			
OQ	Control sensor calibrated according operation/installation instructions	[yes/no]	
Product Sensor			
OQ	<p><u>Change display:</u></p> <p>Press  button for 5 seconds → Press   until the display shows !</p> <p>Press the  button until the display shows .</p> <p>Press temperature setting button  until the display reads </p>	[check function]	

	<p>→  appears in the display when the product sensor is activated</p> <p>→ the temperature lower and upper alarm limits refers now to the product sensor.</p>		
Additional customized Functions / Notes:			