



IQ / OQ

Installation and Operational Qualification

PR 1400 / -ST



ARCTIKO

IQ/OQ for PR 1400 / -ST Model.:

The objective of this Installation and Operational Qualification (IQ/OQ) Checklist is to qualify the installation and operation of the Arctiko unit PR 1400 / -ST Refrigerator for routine laboratory use.

This Installation and Operation Qualification Check will define the minimum test procedures and acceptance criteria to be used to establish that the Arctiko unit PR 1400 / -ST Refrigerator is installed and operated as per our specifications.

This checklist is mentioned to be used as input for distributors of Arctiko unit PR 1400 / -ST Refrigerator. Please be aware that local circumstance can require additional control and verification during validation.

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1 Basic information

1.1 Basic information about the unit

Serial number: _____

Arctiko Purchase order: _____

Date of quality control: _____

Quality control carried out by: _____

Date & Sign: _____

| <i>Comments</i> |
|--|
| |

2 Component Verification

2.1 Cabinet check points:

| <i>Scope of supply</i> | | <i>Check</i> |
|------------------------------|--|--------------|
| <i>Delivered versus P.O.</i> | <i>All Items are delivered as stated in P.O.</i> | |

| <i>Cabinet check points</i> | | <i>Check</i> |
|-----------------------------|---|--------------|
| <i>Body</i> | <i>All packing material has been removed</i> | |
| | <i>No scratches. No dents. No rust</i> | |
| | <i>No cracks on plastic frames</i> | |
| <i>Door</i> | <i>Can open and close</i> | |
| | <i>Can be locked via the key</i> | |
| | <i>No gab between gasket and frame</i> | |
| <i>Controller</i> | <i>No scratches on display</i> | |
| | <i>All cable mounted as per safety requirements</i> | |
| <i>Inside compartment</i> | <i>No scratches. No dents. No rust</i> | |
| | <i>Sensor mounted at the right place</i> | |
| <i>Documentation</i> | <i>Operating Instruction Manual available</i> | |

| <i>Comments</i> |
|-----------------|
| |

3 Environmental Conditions Verification

3.1 Verify that the following is correct

| <i>Cabinet check points</i> | | <i>Check</i> |
|-----------------------------|-------------------------|--------------|
| <i>Alarms</i> | <i>High temp. alarm</i> | |
| | <i>Low temp. alarm</i> | |
| | <i>Power failure</i> | |
| <i>Fan</i> | <i>No unusual noise</i> | |
| <i>Compressor</i> | <i>No unusual noise</i> | |

| <i>Environment</i> | | <i>Check</i> |
|--------------------------|---|--------------|
| <i>Clima</i> | <i>Max. ambient temp. 25°C Class N. No direct sun on the refrigerator</i> | |
| <i>Electrical supply</i> | <i>As per stated in Operating Instruction Manual and in accordance to local regulations</i> | |
| <i>Surface</i> | <i>Refrigerator kept on a solid flat surface to eliminate any vibrations & irritating noise</i> | |
| <i>Airflow</i> | <i>The unit is installed with at least 10 cm free space to the sides and 15 cm free space at the back</i> | |

| <i>Comments</i> |
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4 Equipment File Verification

4.1 Verify that the documentation is available

| <i>Documentation</i> | <i>Check</i> |
|--|--------------|
| <i>Purchase Order</i> | |
| <i>Operating Instruction Manual</i> | |
| <i>Spare Parts List</i> | |
| <i>Declaration of Conformity (only for EU)</i> | |

| <i>Comments</i> |
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5 Operational Qualification Data Sheet

5.1 Make sure that the following parameters will be noted and filled

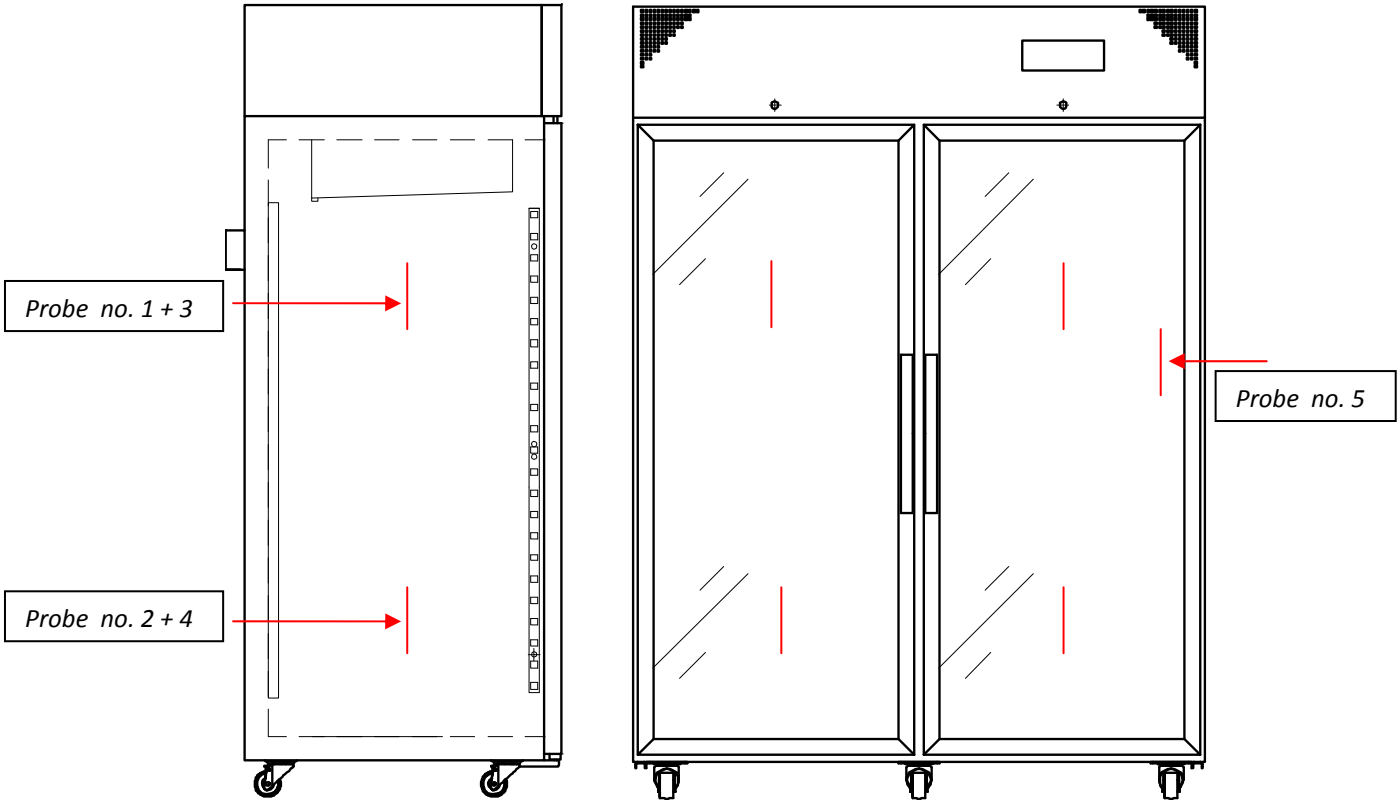
It is our recommendation that the parameters are checked app. Ones time every year.

| Description | Arctiko default settings | Customer setting. |
|--------------------------------|--------------------------|-------------------|
| Custom Settings | | |
| Password | 0000 | |
| Set point | | |
| Refrigerator | +4,0 | |
| | | |
| Alarm Settings: | | |
| Alarm Delay | | |
| Refrigerator | 15 min. | |
| | | |
| Door open alarm | | |
| Refrigerator | Enable | |
| | | |
| High temp. alarm | | |
| Refrigerator | +6 | |
| | | |
| Low temp. alarm | | |
| Refrigerator | +2 | |
| | | |
| Probe/eprom failure | | |
| Refrigerator | Enable | |
| | | |
| Power failure | | |
| Refrigerator | Enable | |
| | | |
| Alarm log time interval | | |
| Refrigerator | 1 | |
| | | |

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|-----------------|
| <i>Comments</i> |
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6 Placement of test probes.

The probes must be placed in the unit like following marked with red.
Probe no. 1 + 3 are placed 200mm down from the top of the rooms.
Probe no. 2 + 4 are placed 1100mm down from the top of the rooms.
Probe no. 5 is placed beside the probe for the controller.



| <i>Comments</i> |
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7 Requirement for accept.

7.1 Max. deviation and performance limits.

| | |
|--|-------------|
| Max. Ambient temperature | 25°C +/- 2K |
| Set point of controller | _____ |
| Max. deviation between warmest and coldest spot in the unit: | 5K |

Probe no. on pull down

| | |
|-------------------------------|-------|
| Actual value for probe no. 1: | |
| Max. temperature | _____ |
| Min. temperature | _____ |
| Passed Yes / No | _____ |
| Actual value for probe no. 2: | |
| Max. temperature | _____ |
| Min. temperature | _____ |
| Passed Yes / No | _____ |
| Actual value for probe no. 3: | |
| Max. temperature | _____ |
| Min. temperature | _____ |
| Passed Yes / No | _____ |
| Actual value for probe no. 4: | |
| Max. temperature | _____ |
| Min. temperature | _____ |
| Passed Yes / No | _____ |

Actual value for probe no. 5:

Max. temperature _____

Min. temperature _____

Passed Yes / No _____

If there are deviation between probe placed beside the probe for controller and display then change the parameter “calibration” .
Start new test if the controller has been calibrate.

Pull down time Max. 2 h

Passed Yes / No _____

| <i>Comments</i> |
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