



- [1] **TYPE EXAMINATION CERTIFICATE** vers.02
- [2] **Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU**
- [3] Type Examination Certificate number: **DTI 19ATEX0114X**
- [4] Equipment: Refrigerators and freezers
Type BIOBASIC 600 series, (see type key under item 15)
- [5] Manufacturer: Gram Commercial, branch of Hoshizaki Europe BV, Holland
- [6] Address: Aage Grams Vej 1
DK-6500 Vojens, Denmark
- [7] This equipment and acceptable variation thereto are specified in the schedule to this certificate and in the documents that the certificate refers to.
- [8] Danish Technological Institute certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the ATEX Directive.
- The examinations and test results are recorded in confidential report no. 19.0114-00, order no: 901970
- [9] The essential Health and Safety Requirements are assured by compliance with:
EN 60079-0:2018/AC:2020, EN 60079-11:2012,
EN 60079-15:2019, EN 60079-7:2015+A1:2018
- [10] The sign "X" placed after the certificate number, indicates that the equipment or protective system is subject to special conditions for safety use specified in the schedule to this certificate.
- [11] This certification relates to the design, examination and tests of the specified equipment or protective system. Further requirements of the directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment shall include the following:

 II 3G Ex ec nC ic IIB Tx Gc

Danish Technological Institute
Certifications & Inspection

2022-05-16


Jakob Nittegaard
ATEX Manager

Kongsvang Allé 29
DK-8000 Århus C
Denmark

Tel. +45 72 20 10 00
Fax +45 72 20 10 19
www.teknologisk.dk



[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE

DTI 19ATEX0114X vers. 02

[15]

Description of equipment

BIOBASIC 600 is a series of freezers/refrigerators used by hospitals, laboratories, biobanks, research institutes and similar users, which need to store vital biological material in the temperature range from +15 °C to -25 °C. This is e.g. storage of blood, tissue, DNA and other laboratory materials that is desired to be stored under the safest and most stable conditions.

Changes implemented by this version 02 of the certificate:

The Temperature Class for BIOBASIC RR600 LG has been corrected to T5. No further changes are introduced to the product.

This certificate replaces the previously issued version 01.

Type variants covered by this certificate:

The BIOBASIC 600 series can be delivered in several type variants with different kind of options and accessories. The basis version is:

1. "BIOBASIC RR600 G", 230 V / 50 Hz
2. "BIOBASIC RF600 G", 230 V / 50 Hz

Air cooled compressor

RR: Regular Refrigerator

RF: Regular Freezer

Refrigerant info: "G" = R290

Ingress Protection: IP 2X

Temperature Class Tx is specified as below:

| | RR600 LG | RF600 LG |
|----------|-----------|-----------|
| BIOBASIC | T5 | T1 |

Specified ambient temperature: +10 °C < T_{amb} < +43 °C

The type number system is specified to the following concept:

BIOBASIC xx600yz ZZ

Where "ZZ" are defined in a sequence (no space in between) of the below listed equipment variants. (e.g., BIOBASIC RF600LG 102036482)

| BIOBASIC 600 | |
|-------------------------------|--------------------------------|
| Temperature range (xx) | |
| RR | Regular refrigerator +2/+15 °C |
| RF | -25/-5 °C |
| Refrigerant (z) | |
| G | R290 |



| Exterior (y) | |
|----------------|--|
| L | White Lacquered |
| Equipment (ZZ) | |
| 10 | Solid door |
| 11 | Glass door |
| 12 | Customized door |
| 15 | RUKO lock (DK) |
| 20 | Right hinged incl. self door closing mechanism |
| 21 | Left hinged incl. self door closing mechanism |
| 30 | Wheels/castors H=125 mm |
| 31 | Castors, 4 360° castors, 2 w/brakes |
| 33 | Wheels/castors H=109 mm |
| 34 | Wheels/skids (only 200L cabinets) |
| 35 | Legs H=100/135 mm |
| 36 | Legs H=135/200 mm |
| 37 | Legs H=185/250 mm (Not BioCompact) |
| 38 | Prepared for mounting on a plinth |
| 41 | E-sensor |
| 42 | Customized sensor* |
| 82 | 60 Hz compressor |
| ..V | # of liquid containers incl. Holder |
| ..A | # of aluminium drawers |
| ..P | # of perforated shelves |
| ..T | # of wire shelves in stainless steel |
| ..W | # of wire shelves in white plastic coating |
| ..WW | # of wire shelves in white plastic coating 300mm |
| ..N | # of wire shelves in grey plastic coating |
| ..R | # of stainless steel drawers 30Kg |
| ..S | # of stainless steel drawers 40Kg |
| ..J | # of drawers in stainless steel with transparent front 30 Kg |
| ..K | # of drawers in stainless steel with transparent front 40 Kg |

[16] **Report number**
19.0114-01

[17] **Special conditions for safe use:**

1. The power supply to the freezers/refrigerators are through a plug/socket connection on the electronic control box. The manufacturer delivers the belonging supply cable. The locking mechanism on the plug/socket connection must always be used. The supply cord/plug must only be connected in a non-hazardous area. If the freezers/refrigerators are electrically connected in a zone classified area, the supply cord must be connected in a terminal box complying with national installation requirements e.g. EN 60079-14, typically an Ex "e" terminal box.



2. To secure potential equalization of the unit – the mounted external bonding/ground connector must be used in accordance with national installation requirements e.g. EN 60079-14.
3. The specified ambient temperature for “BIOBASIC” freezers/refrigerators are limited to: $+10\text{ °C} < T_{\text{amb}} < +43\text{ °C}$.
4. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1 (Indoor laboratories / Office environment).
5. Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.

[18] **Essential Health and Safety Requirements**

Concerning EHSR this schedule only verifies compliance with the Directive 2014/34/EU of 26 February 2014.

The manufacturer’s Declaration of Conformity declares compliance with other relevant directives.

[19] **Drawings and Documents**

Documentation with relevance for the Ex-safety of the product.

| Title | Document no. | Date |
|--|--|-------------------|
| Risk analysis | RAC_BioBasic_RR-RF_600_rev001.xlsm | 11. May 2020 |
| Description of the product | Beskrivelse af BioBASIC og varianter heraf_002.docx | 3. June 2020 |
| Description of PE / bonding connections | 17-2020_Jording i BIOBASIC 600.docx | 3. June 2020 |
| User Manual | BioBASIC 600 Brugermanual_04.pdf | 4. June 2020 |
| DoC (Declaration of Conformity) | BIOBASIC_600_DK_30.09.2020.docx BIOBASIC_600_ENG_30.09.2020.docx | 30 September 2020 |
| Measurement of surface temperatures | Biobasic- Temperaturmåling_og_temperaturklassificering.docx , 23 feb. 2021 | 3. december 2020 |
| Codes in regards to ATEX on Sprint 2019 products | 2021000303_rev001 | March 2021 |

The documentation and scheduled drawings specified for the BIOBASIC are stored in the manufacturers “CCD homepage” package, downloaded by DTI on the 16th March 2021. This “CCD homepage” contains information related to several other series of freezers and refrigerators. Only the information related to the two above mentioned type variants are listed as “Scheduled Drawings” covered by this certification.

Additional information

This certificate has an expiry date on 2024-03-31

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Date 2022-05-16


Jakob Nittegaard
ATEX Manager