




- [1] **TYPE EXAMINATION CERTIFICATE** vers 00
- [2] **Equipment intended for use in potentially explosive atmospheres - Directive 2014/34/EU**
- [3] Type Examination Certificate number: **DTI 22ATEX0251X**
- [4] Equipment: Refrigerators and freezers
Type BioCompact II RR/RF 210, 310, 410 (see type key under item 15)
- [5] Manufacturer: Gram Scientific ApS
- [6] Address: Aage Grams Vej 1
DK-6500 Vojens, Denmark
- [7] This equipment and acceptable variation thereof are specified in the schedule to this certificate and in the documents that this 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. 21ATEX0160, order no: J170770
- The essential Health and Safety Requirements are assured by compliance with:
- EN IEC 60079-0:2018/AC:2020, EN 60079-11:2012,
EN 60079-15:2019, EN 60079-7:2015+A1:2018
- [9] 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.
- [10] 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.
- [11] The marking of the equipment shall include the following:



II 3G Ex ec nC ic IIB Tx Gc

Danish Technological Institute
Certifications & Inspection

2023-01-31


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[12]

Schedule

[13]

TYPE EXAMINATION CERTIFICATE vers 00 DTI 22ATEX0251X

[14]

Description of equipment

Gram BioLine BioCompact II range of refrigerators (RR) and freezers (RF) are designed and manufactured to provide safe and precise conditions for the items stored. The cabinets are designed for the following operating ranges RR +2 °C/+20 °C, RF -25 °C/-5 °C.

Variants covered by this certificate:

Cabinet	210								
Name	BioCompact II RR210 (10..)			BioCompact II RR210 (11..)			BioCompact II RF210 (10..)		
	HC	HFC		HC	HFC		HC	HFC	
Connection	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz
Temperature class	T6	T5	T5	T6	T5	T5	T3	T3	T3

Cabinet	310								
Name	BioCompact II RR310 (10..)			BioCompact II RR310 (11..)			BioCompact II RF310 (10..)		
	HC	HFC		HC	HFC		HC	HFC	
Application	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz
Temperature class	T6	T5	T5	T6	T5	T5	T3	T3	T3

Cabinet	410								
Name	BioCompact II RR410 (10..)			BioCompact II RR410 (11..)			BioCompact II RF410 (10..)		
	HC	HFC		HC	HFC		HC	HFC	
Application	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz	230V/50Hz	230V/50Hz	230V/60Hz
Temperature class	T6	T5	T5	T6	T4	T5	T3	T3	T3

Specified ambient temperature (10 - solid door): +10 °C < t_{amb} < +35 °C

Specified ambient temperature (11 - glass door): +10 °C < t_{amb} < +32 °C



In addition to the BioCompact II models, the below listed accessories are covered by this certificate.

The accessories are specified by the type number system below.

BioCompact II	
Temperature range (xx)	
RR	Regular refrigerator +2/+20 °C
RF	Regular freezer -25/-5 °C
Refrigerant (z)	
H	R134a (only outside EU)
G	R600a
Exterior (y)	
C	Stainless
L	White Lacquered
Equipment (ZZ)	
10	Solid door
11	Glass door
12	Customized door
15	RUKO lock (DK)
20	Right hinged self-closing door
21	Left hinged self-closing door
30	Wheels/castors H=125 mm
31	Castors, 360° castors, 2 w/brakes
33	Wheels/castors H=109 mm
35	Legs H=100/135 mm
36	Legs H=135/200 mm
38	Prepared for mounting on a plinth
39	Skids (only 210/310 units)
41	E-sensor
42	Customized sensor
81	Low temperature protection
82	60 Hz compressor
90	Combination kit
91	Wall mounting
..V	# of liquid containers incl. holder
..A	# of aluminium drawers
..AA	# of aluminium drawers 300 mm
..E	# of ABS drawer
..M	# of wire baskets in white plastic coating
..MM	# of wire baskets in white plastic coating 300 mm
..P	# of perforated shelves
..PP	# of perforated shelf in stainless steel 300 mm
..T	# of wire shelves in stainless steel
..TT	# of wire shelf in stainless steel 300 mm
..W	# of wire shelves in white plastic coating
..WW	# of wire shelves in white plastic coating 300 mm
..Z	# of perforated shelves in white
..ZZ	# of perforated shelves in white

[16] **Report number**
DTI 21ATEX0160X, order J170770

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

1. The power supply to the cabinets is via a plug and socket connection on the electronic control box. The manufacturer delivers appropriate supply cable.



The "Instructions for use" delivered with the product, incorporates the section "Connection to power" – which must be complied.

The mechanism to secure the connection between supply cable plug and cabinet socket must always be used. Connection shall be done in a non-hazardous area. If the cabinets are electrically connected in a zone classified area, the supply cable must be connected in a terminal box complying with national installation requirements e.g. EN 60079-14

2. To secure potential equalization of the unit – the appropriate cabinet equipotential bonding must be used in accordance with national installation requirements e.g. EN 60079-14.
3. The specified ambient temperature for BioCompact II cabinet is:
+10 °C < t_{amb} < +35 °C (solid door)
+10 °C < t_{amb} < +32 °C (glass door)
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".
6. Due to static hazards cleaning must be done with a damp cloth.

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

Concerning EHSR this schedule only verifies compliance with the Directive 2014/34/EU of 26th February 2014. The manufacturer's Declaration of Conformity declares compliance with other relevant directives.

[19] **Drawings and Documents**

Scheduled Documents:

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

Title	Document no.	Date
Risk analysis	RAC_BC, BCII, BIOBASIC_RR-RF_rev002.xlsm	13 th December 2021
Description of the product	Description of BioCompact II 210-310-410 and variants, rev. 003	9 th January 2023
Description of PE / bonding connections	141-2021_Bonding BCII, BIOBASIC.docx	10 th December 2021
Instructions for use	BioCompactII-Instruction for use 765042589	20230109
DoC (Declaration of Conformity)	BioCompact II DK 13.12.2022.pdf BioCompact II UK 13.12.2022.pdf	13 th December 2022
Measurement of surface temperatures	130-2021_Temperature classification of BioCompact II RR & RF 210-310-410.docx	14 th December 2021



The documentation and scheduled drawings specified for the BioCompact II are stored in the manufacturers "CCD homepage" version dated 30th January 2023. This "CCD homepage" contains information related to several other series of freezers and refrigerators. Only the information related to the type variants listed under item 15 of this certificate are listed as "Scheduled Drawings" and covered by this certification.

Additional information

This certificate has an expiry date on 2026-01-31

Taastrup, 2023-01-31

Danish Technological Institute
Certification & Inspection


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