



- [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 22ATEX0249X**
- [4] Equipment: Refrigerators
Type ExGuard xx600W series, (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 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. 19.0113-01, order no: J170770
- [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:



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Danish Technological Institute
Certifications & Inspection

2023-01-31


Jakob Nittegaard
ATEX Manager



[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE vers.00 DTI 22ATEX0249X

[15]

Description of equipment

The ExGuard 600W series are designed and manufactured for temperature-controlled storage of items potentially emitting noxious, malodorous and /or explosive atmospheres, where there is a risk that these atmospheres may pose a health hazard to the user and cabinet surroundings. It is designed for the temperature range from -2 °C to +20 °C.

In chemical refrigerators used for storage of various toxic chemicals, there is a risk that the chemicals are present as vapor in such high concentrations that they become hazardous for the end user.

For this reason, the ExGuard 600W refrigerators have been fitted with an additional actuator and damper for connection to an external ventilation system that can remove these chemical vapours before a door opening, and this protects the user against unhealthy hazards.

Type variants covered by this certificate:

The ExGuard xx600W series can be delivered in several type variants with different kind of options and accessories. The basis versions is:

ExGuard ER600W, 230 V / 50 Hz

The type number system is specified to the following concept:

ExGuard xx600W yz ZZ

Where "ZZ" are defined in a sequence (no space in between) of the below listed equipment variants. (e.g. ExGuard ER600W CH 1020304165)

ExGuard xx 600W	
Temperature range (xx)	
RR	Regular refrigerator +2/+20 °C
ER	Extended refrigerator -2/+20 °C
RF	-25/-5 °C
Refrigerant (z)	
H	R134A
	R404A (only outside EU)
G	R290
F	Prepared for external compressor
Exterior (y)	
C	Stainless steel
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
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*
65	ExGuard – ATEX exhaust solution
70	Draught shield, hinged
78	Water cooled condenser (only HFC)
79	Hybrid – water and fan cooled condenser
82	60 Hz compressor
..V	# of liquid containers incl. Holder
..P	# of perforated shelves
..T	# of wire shelves in stainless steel
..W	# of wire shelves in white plastic coating
..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
..C	# of divider sets in stainless

Specified ambient temperature:

+10 °C < T_{amb} < +38 °C with glass door

+10 °C < T_{amb} < +43 °C with massive door

Ingress protection: IP 2X

[16] **Report number**
19.0113-01, J170770

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

1. The power supply to the refrigerator is 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 refrigerator is 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.
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 ExGuard refrigerators are limited as specified under item [15] of this certificate.
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_ExGuard_600_rev001.xlsm	11. May 2020
Description of the product	Beskrivelse af ExGuard ER 600 og varianter heraf_002.docx	6. January 2023
Description of PE / bonding connections	18-2020_Jording i ExGuard ER 600W.docx Rev 001	3. June 2020
User Manual	ExGuard_Instructions for use, 765042431	20230109
DoC (Declaration of Conformity)	ExGuard_DK-13.12.2022.pdf ExGuard_UK-13.12.2022.pdf	13. December 2022
Measurement of surface temperatures	ExGuard-temperaturmåling_og_temperaturklassificering.docx, 23. februar 2021	3. december 2020
Codes in regard to ATEX on Sprint 2019 products	2021000303_rev001	March 2021

The documentation and scheduled drawings specified for the ExGuard are stored in the manufacturers "CCD homepage" package, downloaded by DTI on the 30th January 2023. This "CCD homepage" contains information related to several other series of freezers and refrigerators. Only the information related to the above-mentioned type variants are listed as "Scheduled Drawings" and covered by this certification.

Additional information

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

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Date 2023-01-31


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ATEX Manager

