



TYPE EXAMINATION CERTIFICATE

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

Type Examination Certificate Number: **CSANe 25ATEX1182X** Issue: **0**

Equipment: **Recovery Unit for Flammable Refrigerants
4689021/ENVIRO-DUO-EX**

Manufacturer: **REFCO Manufacturing Ltd.**

Address: Industriestrasse 11
6285 Hitzkirch
Switzerland

This product and any acceptable variation thereto, is specified in the schedule to this certificate and the documents therein referred to.

CSA Group Netherlands B.V., certifies, based on voluntary assessment, that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in item 16.2.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018	EN IEC 60079-7:2015+A1:2018	EN 60079-11:2012
EN IEC 60079-15:2019	EN ISO 80079-36:2016	EN ISO 80079-37:2016

Where additional criteria beyond those given here have been used, they are listed in item 18 in the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed in item 17 of this certificate.

This Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product, these are not covered by this certificate.

The marking of the product shall include the following (additional marking is provided in the Schedule as a part of item 15, if applicable):



II 3G
Ex ec ic nC h IIA T4 Gc
Ta = 0°C - +40°C

Signed:

M Halliwell

Title: Senior Director of Operations
Date: 11 November 2025



SCHEDULE

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14 **Type Examination Certificate Number:** CSANe 25ATEX1182X Issue: 0

15 **Description:**

The model 4689021/ENVIRO-DUO-EX Recovery Unit for Flammable Refrigerants are intended to be used for flammable and explosive refrigerant recovery. It consists of a plastic enclosure, a compressor, motor, cooling fan and the condenser. The part of plastic enclosure of model 4689021/ENVIRO-DUO-EX is covered by elastic material (TPE). All the bare conductive live parts belong to protection type "ec" are in additional IP54 enclosure, and the Recovery Unit enclosure is in accordance with IP20. The motor is with protection type "ec", the compressor is with protection type "h", main board of Recovery Unit is with protection type "ec" and "ic" and LCD board is with protection type "ic". The maximum operation pressure of Recovery Unit is 38.5bar (3.85MPa).

16 **Drawings and documents:**

16.1 **Technical documents:**

Refer to Certificate Annex.

16.2 **Associated reports and certificate history:**

Issue	Date	Report number	Comment
0	11 November 2025	R80272097A	The release of the prime certificate.

17 **Specific conditions of use** (denoted by "X" after the certificate number):

17.1 Provision shall be made external to the equipment that ensures that the circuits are limited to overvoltage category II as defined in EN 60664-1.

17.2 In the final use, the OFP port shall comply with at least IP20.

17.3 Maximum recovery weight of refrigerant shall not exceed 80kg at any time. After the working, the Recovery Unit for Flammable Refrigerants shall be stopped and ensured the refrigerant to be cooling.

17.4 Equipment shall be operated such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque.

17.5 Equipment shall be used for recovery of pure refrigerant without oxygen.

18 **Essential health and safety requirements of Annex II** (EHSRs):

The relevant EHSRs that are not addressed by the standards listed in item 9 of this certificate have been identified and conformity of the product demonstrated in the reports listed in item 16.2.

19 **Remarks and additional information:**

The use of this certificate is subject to the regulations applicable to holders of CSA Group Netherlands B.V. certificates.

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

19.1 **Conditions of manufacture:**

19.1.1 4689021/ENVIRO-DUO-EX Recovery Unit for Flammable Refrigerants shall be subjected to a dielectric strength test with 1500Vac at least 1 s without dielectric breakdown occurring between input and the earthing. Alternatively, the test may be carried out at 2125Vdc for at least 1 s without dielectric



breakdown occurring between input and the earthing. The testing is based on clause 13.3 of standard IEC 60335-1.

- 19.1.2 4689021/ENVIRO-DUO-EX Recovery Unit for Flammable Refrigerants shall be subjected to a dielectric strength test with 3600Vac at least 1 s without dielectric breakdown occurring between input and the non-metallic surface of the equipment. Alternatively, the test may be carried out at 5091Vdc for at least 1 s without dielectric breakdown occurring between input and the non-metallic surface of the equipment. The testing is based on clause 13.3 of standard IEC 60335-1.
- 19.1.3 The motor of 4689021/ENVIRO-DUO-EX Recovery Unit for Flammable Refrigerants shall be subjected to a dielectric strength test with 1500Vac for least 1 s without dielectric breakdown occurring between input of motor and the earthing. Alternatively, the test may be carried out at 2125Vdc for at least 1 s without dielectric breakdown occurring between input of motor and the earthing. The testing is based on clause 13.3 of standard IEC 60335-1.



Certificate Annexe

Document History

Issue – 0

Documents Introduced or Revised

Drawing	Sheets	Rev.	Date (Stamp)	Title
4689021-22-X	1 of 1	01	29 Oct 25	ENVIRO-DUO-EX LABEL

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