

EU-TYPE EXAMINATION CERTIFICATE

According to
Directive 2014/68/EU of the European Parliament and of the Council of 15 May 2014 for Pressure Equipment

CERTIFICATE NO.: **24-1025584-102 Rev.0**

This Certificate consists of 2 pages

THIS IS TO CERTIFY THAT THE EQUIPMENT

Pressure Vessel

WITH THE TYPE DESIGNATION/EQUIPMENT DESCRIPTION

Brazed Heat Exchanger Type HML29

MANUFACTURED BY

Multichannel Technologies AB, SWEDEN

is found to comply with the requirements in Annex I, Essential Safety Requirements
and EN 13445:2021

The equipment has been examined with respect to the procedure of conformity assessment as
described for Module B Production Type - Annex III, point 3.1

APPLICATIONS

Category: I to III

Module: B(PT)

	Room 1.		Room 2.	
Allowable Pressure PS min/max:	-1	/ 45 to 31.9	-1	/ 30 to 21.3 bar(g)
Allowable Temperature TS min/max:	-195	/ 0 to 225	-195	/ 0 to 225 °C
Volume:	variable		variable	L
Fluid group:	1&2		1&2	
Fluid name:	gas		gas	

Effect: - kW

Further details of the product and conditions for the certification are given on next page.

This Certificate is valid until: 2034-01-16

MALMÖ 2024-01-24
SIGNED FOR AND BEHALF OF

Kiwa Sweden AB

Notified Body No.: 0409



Olof Pedersen
Senior Design Engineer



Notice: The certificate is subject to terms and conditions, if any, overleaf. Any significant changes in design or construction of the product, the quality system or amendments to the Directive 2014/68/EU or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with the Directive, as amended.

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CERTIFICATE NO.: 24-1025584-102 Rev.0

EXAMINED TECHNICAL DOCUMENTATION

02-4035 Rev.2

SM 426-1

SUPPORTING EVIDENCE

Performed experimental design as per EN 13445-3 Annex T.

LIMITATIONS

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SCOPE OF EXAMINATION

Technical design data and calculations	Yes	<input checked="" type="checkbox"/>	
Materials assessment	Yes	<input checked="" type="checkbox"/>	
Manufacturing drawings	Yes	<input checked="" type="checkbox"/>	
Welding – specifications WPS (procedures)	Yes	<input checked="" type="checkbox"/>	Brazing
Welding – personnel approval	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> Brazing
NDT – personnel verification	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/> N/A
NDT – scope, methods and procedures	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/> N/A
Operating instructions	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hazard or risk analysis	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
External loads	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
Fatigue	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/> max. 500 full pressure cycles
Creep design	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
Other tests or procedures	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>

TESTS CARRIED OUT

Production Type - Prototype vessel representative of type approval examined [report number and date]

S.N. 2023-10-269519 (1-6)/ Report M29/ 2023-12-27

MALMÖ 2024-01-24

Kiwa Sweden AB



DESIGN EXAMINATION CARRIED OUT BY

Rodica Teodorescu

Senior Design Engineer