



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx QPS 19.0004X**

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Certificate history:

Status: **Current**

Issue No: 4

[Issue 3 \(2022-06-17\)](#)

[Issue 2 \(2021-03-11\)](#)

[Issue 1 \(2020-03-10\)](#)

[Issue 0 \(2019-04-18\)](#)

Date of Issue: 2023-02-15

Applicant: **Ice Qube Inc.**
141 Wilson Ave.
Greensburg, PA
15601
United States of America

Equipment: **Zone 2 Heat Exchanger**

Optional accessory:

Type of Protection: **"ec"**

Marking: Ex ec IIC T6/T5/T4 Gc
Tamb= -40°C to +60°C / +65°C / +70°C / + 75° / +80°C

* Refer to Annex Page for detail.

Approved for issue on behalf of the IECEx
Certification Body:

D, Adams, P.Eng.

Position:

Manager, Hazardous Locations Department [Ex Equipment]

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada





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Manufacturer: **Ice Qube Inc.**
141 Wilson Ave.
Greensburg, PA
15601
United States of America

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

CA/QPS/ExTR19.0005/00
CA/QPS/ExTR19.0005/03

CA/QPS/ExTR19.0005/01

CA/QPS/ExTR19.0005/02

Quality Assessment Report:

CA/QPS/QAR20.0002/00



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Zone 2 Heat Exchanger Model: IQ675HE-Z2, IQ700HE-Z2, IQ800HE-Z2, IQ900HE-Z2, IQ2200HE-Z2, IQ6100HE-Z2, IQ7400HE-Z2 and IQ10000HE-Z2 are intended to be mounted to an adjacent enclosure. The air re-circulated compartment freely communicates with the adjacent, blowing the conditioned air. The ambient compartment is open to the surrounding atmosphere.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Read the "Heat Exchanger Operation and Installation".
2. "WARNING – Potential Electrostatic Charging Hazard-See Instructions"



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Making correction to the electrical rating of the Heat Exchanger models IQ6100HE-Z2, IQ7400HE-Z2 and IQ10000HE-Z2 according to the added alternate blowers models MH2589M, MSI2276H, MSI2577H, UF25GC, UF220PA and UF250APA Series in the previous test report update.

Annex:

[IECEx QPS 19.0004X_4-Annex_1.pdf](#)



QPS Evaluation Services Inc.

Testing, Certification and Field Evaluation Body
Accredited in Canada, the USA, and Internationally

ANNEX to IECEx QPS 19.0004X Issue No: 4, Date: 2023-02-15

Electrical and T code Rating for Zone 2 Heat Exchanger

Model	Input Voltage	Current (A)	FREQUENCY	Ambient Temperature (T _{amb} = -40°C to									
				+60°C	+65°C	+70°C	+75°C	+80°C					
				T Code									
IQ700HE-Z2	24 VDC	0.7	N/A	T6	T5	T5	-	-					
	48 VDC	0.3					T4	T4					
	120 VAC	0.24	50/60 Hz										
	230 VAC	0.13											
IQ800HE-Z2	24 VDC	2.94	N/A	T6	T5	T5	-	-					
	48 VDC	1.48											
IQ900HE-Z2	24 VDC	7.00	N/A	T6	T5	T5	T5	-					
	48 VDC	4.00				T5	T4	T4					
	120 VAC	2.80	50/60 Hz										
	230 VAC	0.96											
IQ2200HE-Z2	24 VDC	7.00	N/A	T6	T5	T5	T5	-					
	48 VDC	4.00				T5	T4	T4					
	120 VAC	2.80	50/60 Hz										
	230 VAC	0.96											
IQ6100HE-Z2	24 VDC	8.82	N/A	T6	T5	-	-	-					
	48 VDC	*6.2				-	-	-					
	120 VAC	3.70	50/60 Hz										
	230 VAC	1.80											
IQ7400HE-Z2	24 VDC	8.82	N/A	T6	T5	-	-	-					
	48 VDC	*6.2				-	-	-					
	120 VAC	3.70	50/60 Hz										
	230 VAC	1.80											
IQ10000HE-Z2	24 VDC	*14.5	N/A	T6	T5	-	-	-					
	48 VDC	*8.3				-	-	-					
	120 VAC	5.02	50/60 Hz										
	230 VAC	*2											

Note: An * is included before the title of documents that are revised.

An '-' - Corresponding models are not suitable at this ambient.