

1) **Declaration of Conformity.**

(2) Expo Technologies Document Number EXPO 09 ATEX 1122X Issue 4.

(3) This declaration is issued for the electrical apparatus:

**Cabinet Vortex Coolers AVC-0000-006, AVC-0000-007 and AVC-0000-012**

(4) Manufacturer:

Expo Technologies Ltd  
Unit 2, The Summit  
Hanworth Road  
Sunbury on Thames  
TW16 5DB  
UK

(5) This electrical apparatus and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

(6) This declaration and schedule confirms compliance of each unit with the following standards:

EN 60079-0:2012	General requirements
EN 60079-15:2010	Type 'n' protection
EN 60079-18:2009	Type 'm' encapsulation

(7) This apparatus fulfils all the requirements for Group II Category 3 equipment in accordance with European Directive 94/9/EC.

(8) The design is documented in Expo-Technologies Technical Construction File number SC28.

(9) The apparatus marking:

**Ex mc nA IIC T4 Gc Tamb -20°C to +40°C**       II 3 G

Or

**Ex mc nA IIC T4 Gc Tamb -20°C to +55°C**       II 3 G

For and on behalf of Expo Technologies Ltd.  
Thames Ditton, 24<sup>th</sup> October 2014.



Sarah Wickson  
Certification Engineer

## Annex to Declaration of Conformity EXPO 09 ATEX 1122X Issue 4.

### 10) Description:

The Expo Technologies Cabinet Vortex Cooler has been designed for use for Group IIC application when fitted with an IP4X enclosure.  
The cooler is provided with an air solenoid valve, temperature controller and fitted with an IP54 hot exhaust muffler.

### 11) Specification

Air supply	4-7barg
Supply voltage	110Vac, 230Vac or 24Vdc (depending on model)
Cooling capacity	400W @ 7barg
Ambient temperature range	-20 °C to + 40°C or -20 °C to + 55°C

### 12) Special conditions of safe use:

- The device adjuster screw located beneath the air silencer has been pinned to limit the maximum exit air temperature. It shall not under any circumstances be altered or any attempt be made to adjust it.
- The maximum supply air temperature shall not exceed 40°C or 55°C depending on the version of cabinet vortex cooler in use.
- The cooler must be installed to conform to the instructions in the manual. Measures shall be taken to limit the enclosure pressure to safe levels.
- The unit must be fixed inside an enclosure with a minimum protection of IP4X.

### 13) Certificates

Description	Mark	Doc. ref
Solenoid Housing type N	Ex nA IIC T6 or T4	EXPO 03ATEX 1009
Cabinet Vortex Cooler	II 2G T4 -20°C to +40°C II 2G T4 -20°C to +55°C	Expo 12ATEX1212X

### 14) Documentation

Description	Doc. ref	Rev.
Vortex Cooler Control IP66 Box	AGE-GE00-142 GA	1
Vortex Cooler 24 VDC	AVC-0000-007	3
Vortex Cooler Controller 24 VDC	AGE-WC00-176	1
Vortex Cooler 230 Vac	AVC-0000-006	4
Vortex Cooler Controller 230 Vac	AGE-WC00-177	2
Vortex Cooler 110 Vac	AVC-0000-012	2
Vortex Cooler Controller 110 Vac	AGE-WC00-220	1
Encapsulated Fuse Assembly	SD8034	1
Vortex Cooler Handbook	ML463	