

The products from CUBIC are tested and approved by the most recognized test laboratories including DEKRA, KIWA and UL. UL are testing CUBIC production at random, and KIWA makes audit at relevant products and procedures. In addition, CUBIC Q-system is certified according to ISO 9001. The Q-system is at survey by DNV and Bureau Veritas.

# **DESIGN VERIFICATION** 100321

is part of certificate enclosure.

In accordance with IEC/EN 62208)	VERIFIED BY	
ARKING (9.3) abeling apply to requirements of mechanical exposure and petroleum durability test.	DEKRA Certification	
STATIC LOADS (9.4)  Mounting plate and doors loaded and approved for maximum load specified in CUBIC manual. Doors up to 40 kg and mounting Plates up to 150 kg.	DEKRA Certification	
LIFTING (9.5) Lifting eyes loaded and tested for unit load up to 440 kg. Forklift transportation up to 440 kg per unit.	DEKRA Certification	
AXIAL LOADS OF METAL INSERTS (9.6) nserts are tested 10s up to 500N for M8 dimensions.	DEKRA Certification	
DEGREE OF PROTECTION AGAINST EXTERNAL MECHANICAL IMPACTS (IK CODE) (9.7) Powder coated enclosures are tested IK10, and PC windows IK02. Stainless enclosures are tested IK10, and reinforced windows IK10.	DEKRA Certification	
DEGREE OF PROTECTION AGAINST ACCESS TO HAZARDOUS PARTS AND AGAINST NGRESS OF SOLID OBJECTS AND/OR WATER (IP CODE) (9.8) Powder coated enclosures are tested IP66, and Stainless enclosures are tested IP69.	DEKRA Certification	
owaci coated eletosares are tested if oo, and stallitess eletosares are tested if or.		
"HERMAL STABILITY (9.9.1) Insulating material (plastics) including gasket material is durability tested at 70°C.	DEKRA Certification	
THERMAL STABILITY (9.9.1)	DEKRA Certification  DEKRA Certification	
HERMAL STABILITY (9.9.1) Insulating material (plastics) including gasket material is durability tested at 70°C. RESISTANCE TO ABNORMAL HEAT AND FIRE (9.9.3)		
CHERMAL STABILITY (9.9.1) Insulating material (plastics) including gasket material is durability tested at 70°C.  RESISTANCE TO ABNORMAL HEAT AND FIRE (9.9.3) Insulating material (plastics) not current carrying is glow wire tested 650°C.  CONTINUITY OF THE PROTECTIVE CIRCUIT (9.11) Proven effective continuity between exposed conductive parts is protection against electric	DEKRA Certification	
THERMAL STABILITY (9.9.1) Insulating material (plastics) including gasket material is durability tested at 70°C.  RESISTANCE TO ABNORMAL HEAT AND FIRE (9.9.3) Insulating material (plastics) not current carrying is glow wire tested 650°C.  CONTINUITY OF THE PROTECTIVE CIRCUIT (9.11)  Proven effective continuity between exposed conductive parts is protection against electric hock. Measured below the maximum of 0.1 Ω.  RESISTANCE TO ULTRA-VIOLET (UV) RADIATION (9.12)	DEKRA Certification  DEKRA Certification	

## **UL TESTS**

(In accordance with UL)

	KLM	STA, HYG, STB and GLV.	OBR	
ACCORDING TO	UL50, UL50E CSA C22.2 no 94.1 and no 94.2	UL50, UL50E CSA C22.2 no 94.1 and no 94.2	UL508A CSA C22.2 no 14- M95	UL International Demko A/S
ENVIRONMENTAL RATING	1, 3R, 4 and 4x.	1, 3R, 4 and 4x.	1, 2, 3R, 4 and 4x.	UL International Demko A/S
IMPACT TEST	5 ft lbs 20°C and -35°C	5 ft lbs 20°C and -35°C	5 ft lbs 20°C and -35°C	UL International Demko A/S
FLAMEABILITY	UL 746C 5 inch test	UL 746C 5 inch test	UL 746C 5 inch test	UL International Demko A/S
AGING, GASKET	70°C at 168 hours	70°C at 168 hours	70°C at 168 hours	UL International Demko A/S

## **OTHER TESTS**

## **VERIFIED BY**

#### SURFACE TREATMENT.

Painted Enclosures is surface treated with a CUBIC RAL7035 epoxy-polyester powder coating to a thickness at 60-80  $\mu$ m with a minimum of 50  $\mu$ m. Tropical test is performed according to ISO 6270: Constant climate, air temperature 40 +/-2°C, 100% relative humidity for 240 hours with excellent result.

Mild steel double-coated enclosures are surface treated with a primer and polyester powder coating to a thickness at 120-160  $\mu m$  with a minimum of 120  $\mu m$ . CUBIC Epoxy-polyester powder RAL 7035 corrosion class C3h according to EN ISO 12944.

SP Technical Research Institute of Sweden. Axalta Powder Coating Systems Nordic AB. AG Henkel Norden AB.

ISO 6270, ISO 7253/9227, ISO 1520, ISO 2409, ISO 12944.

#### 2 EMC

Customized enclosures with CuBe EMC sealing is tested Min 50dB in magnetic and electrical field range  $0.15-1000\ MHz$ .

EMC enclosures std CUBIC attenuation test according to NSA 65-6/ EN50147-1:1996 at frequency levels  $10 \, \text{kHz}/150 \, \text{kHz}/10 \, \text{MHz}$ .

Delta

## EX/ATEX, KLM AND STA TYPES OF ENCLOSURES

Identification according to 2014/34/EU (ATEX):

€x>

II 2G Ex eb IIC Gb II 2D Ex tb IIIC Db TÜV Nord

TÜV 12ATEX109611U

IECEx TUN 12.0035U

Identification according to IECEx Scheme:



Ex eb IIC Gb Ex tb IIIC Db



## **QUALITY AND ENVIRONMENT**

## **VERIFIED BY**

#### DS/EN ISO 9001:

The certificate is a documentation for the quality system of the company, which is certified in compliance with the international standard DS/ISO 9001. This certification is a quality mark to the entire company and its way of acting.

### DS/EN 14001 - Applicable to CUBIC-Modulsystem A/S - Denmark:

ISO 14001 specifies requirements for the environmental management system and makes it possible to constantly develop and implement policies and objectives that takes in account legal requirements and environmental conditions.

DS/OHSAS 18001 - Applicable to CUBIC-Modulsystem A/S - Denmark:
Occupational Health and Safety Assessment Series is an international system of governance of Health and Safety in the workplace. The system aims to help companies control and minimize health and safety risks.

## **HEAD OFFICE - DENMARK**

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