

CERTIFICATE

[1] **EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 2014/34/EU**

[3] EU-Type Examination Certificate number:

TÜV IT 13 ATEX 006 X Rev.1

[4] Equipment or Protective System: Three phase and single phase asynchronous electric motor
AD, AQ, AN, DD, HD

[5] Manufacturer: CEMP S.r.l.

[6] Address: Via Piemonte, 16
I-20030 Senago (MI) - ITALY

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] TÜV Italia, notified body no. 0948 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies 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 confidential report no. R 13 EX 003


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

EN 60079-0:2012+A11:2013; EN 60079-15:2010; EN 60079-31:2014

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 **II 3G Ex nA IIC / IIB 170°C T3 Gc** or
II 2D Ex tb IIIC / IIIB T150°C...T135°C...T125°C...T100°C...T85°C Db or
II 3D Ex tc IIIC / IIIB T150°C...T135°C...T125°C...T100°C...T85°C Dc

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Issue date: 28th April 2017



SGQ N° 049A SSI N° 055G ISP N° 057E
SGA N° 018D ITX N° 001L LAB N° 0076
SCR N° 009F SGE N° 013M PRD N° 081B
EMAS N° 013P PRS N° 077C

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual
Recognition Agreements



**TÜV Italia S.r.l.
Notified Body N° 0948**

Paolo Marcone
Paolo Marcone

**Industry Service - Real Estate & Infrastructure
Managing Director**

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The internal reference code is 722136357

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[14]

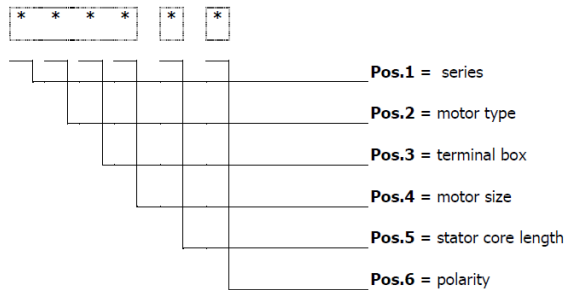
EU-TYPE EXAMINATION CERTIFICATE no. TÜV IT 13 ATEX 006 X Rev.1

Certificate History

Revision:	Description:	Report no:	Issue Date:
-	First Emission	0	27/05/2013
1	Standards updated	1	28/04/2017

[15] **Description of equipment**

The three phase asynchronous electric motor series AD, AQ and AN are identified by the following code:



Pos.1 : Motor series

AD	Dust proof motor – Extb IIIC T135°C Db IP65
DD	Dust proof brake motor IC410 – Extb IIIC T135°C Db IP65
HD	Dust proof brake motor IC411 or IC410 with second shaft end – Extb IIIC T135°C Db IP65
AN	Non sparking motor – Ex nA IIC T3 Gc - IP55/IP65
AQ	Non sparking / dust proof motor – Ex nA IIC T3 Gc / Extb IIIC T135°C Db IP65

Pos.2 : Motor type (electrical features)

1	Single phase motor	4	Three phase motor double polarity quadratic torque
2	Three phase motor double polarity constant torque	5	Three phase motor for hoist
3	Three phase motor one polarity	7	Three phase motor suitable for frequency converter

Pos.3 : Terminal box

0	With standard terminal box	3	Plate and cable gland version
2	With bigger terminal box (just for frame 63-100)		

Pos.4 : Size

63	Motor size 63	160	Motor size 160
71	Motor size 71	180	Motor size 180
80	Motor size 80	200	Motor size 200
90	Motor size 90	225	Motor size 225
100	Motor size 100	250	Motor size 250
112	Motor size 112	280	Motor size 280
132	Motor size 132	315	Motor size 315

Pos.5 : Stator core length

A	short (motors size 63/71/80)	M	medium (motors size 112-180-225-280-315)
B	long (motors size 63/71/80)	SA	short (motor size 132)
S	short (motors size 90-225-280-315)	SB	short medium (motors size 132)
L	long (motors size 090-160-180)	MA	medium short (motors size 160)
LA	short (motors size 100-160-200-315)	MB	medium (motors size 132-160)
LB	long (motors size 100-160-200-315)	ML	long (motors size 132-280)
LC	Extra long (motors size 315)		

Pos.6 : Polarity number

2	2 pole	21	Double polarity : 2/12 pole
4	4 pole	26	Double polarity : 2/6 pole
6	6 pole	28	Double polarity : 2/8 pole
8	8 pole	41	Double polarity : 4/12 pole
10	10 pole	43	Double polarity : 4/16 pole
12	12 pole	61	Double polarity : 6/12 pole
16	16 pole	44	Double polarity : 4/24 pole
24	Double polarity : 2/4 pole	83	Double polarity : 8/16 pole
48	Double polarity : 4/8 pole	60	Double polarity : 6/10 pole
46	Double polarity : 4/6 pole	81	Double polarity : 8/12 pole
68	Double polarity : 6/8 pole		

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Rated characteristics

Maximum rated power	0.37 ... 240 kW*
Maximum rated voltage	690 ... 1100 V*
Maximum current	5 ... 450 A*
Frequency	50/60 Hz
Speed	3600 ... 250 rpm*
Insulation class	F / H
Protection degree	IP55 / IP65
Ambient temperature	-50 °C ... +80 °C **

*Refer to the technical note referenced in this certificate for the specific data of each motor size.

**Different temperature values inside this temperature range are foreseen as described in the technical note referenced in this certificate).

The motors can be used for continuous or intermittent duty, as defined by IEC 60034.1 for :

- S1, S2, S3, S4, S6 and S9 (see point 17 for limitations).

Motors for frequency converter electrical supply:

the electrical characteristics are indicated in a suitable label on the motor and in the safety instructions. For the other electrical characteristics and the de-rating criteria see the technical note referenced in this certificate (see point 17 for limitations).

Motors for dust:

The protection degree is IP65 or IP55 according to EN 60529. The gasket materials are:

- TEMPSEAL 180 or
- SIL70

Refer to safety instruction for detailed information.

Warning label

AQ and AN series:

“WARNING – POTENTIAL ELECTROSTATIC CHARGES HAZARD – SEE SAFETY INSTRUCTIONS”

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[16] **Report no. R 13 EX 003**

Routine test

The manufacturer shall carry the following routine test:

Dielectric strength test according to EN60079-15 §6.5.1 with voltage $(2U_n+1000)V$ for period of at least 60 s or $1.2 \times (2U_n+1000)V$ for at least 100 ms.

[17] **Special conditions for safe use**

Duty:

- S2: working time limited (maximum 30 minutes),
- S3: intermittent duty no influence on the heating during the starting phase. The user shall limit the starting current (by using a soft starter) to a maximum limit of 300%.
- S9 : see frequency converter use remarks.

Frequency converter use:

- Each motor shall be equipped with a suitable thermal protectors (thermistor PTC in each the winding phase) which shall be connected to the motor control circuit in such a manner as to disconnect the source of supply in order to prevent the nominated temperature class from being exceeded. Refer to safety instruction for set point.

Cable:

- The motor shall be feed with cable of thermal stability not less of 90°C

[18] **Essential Health and Safety Requirements**

Assured by compliance with the standards set out in the [9].

[19] **Drawings and Documents**

Listed documents (prot. 229540 + 722129184)

Title:	Description:	Pages:	Rev:	Date:
NT/DP/171303/N	Technical note AN motors (addendum)	2	-	24/03/2017
NT/DP/176331/D	Technical note AD motors (addendum)	2	-	24/03/2017
NT/DP/176331/Q	Technical note AQ motors (addendum)	2	-	24/03/2017
AD1363_T_targa	Drawing: nameplate AD	1	-	21/03/2017
AN1363_T_targa	Drawing: nameplate AN	1	-	21/03/2017

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AQ1363_T_targa	Drawing: nameplate AQ	1	-	21/03/2017
-	Declaration of conformity AN, AQ, AD motors (fac simile)	6	-	21/03/2017
NT/DP/1303/NIEC	Technical note AN motors	32	-	21/02/2013
NT/DP/6331/D	Technical note AD motors	12	-	11/05/2013
NT/DP/6331/Q	Technical note AQ motors	4	-	11/05/2013
PE183000	IC410 dimensions DD180-DD250	1	-	17/05/2013
PE183001	IC416 dimensions DD180-DD250	1	-	17/05/2013
PE183002	General mounting DD280	1	-	17/05/2013
PE183003	Brake cover DD180-DD315	1	-	17/05/2013
PE183004	Brake joints DD180-DD315	1	-	17/05/2013
PE183005	IC416 dimensions DD280	1	-	17/05/2013
PE183006	General mounting DD315M	1	-	17/05/2013
PE183007	IC416 dimensions DD315M	1	-	17/05/2013
PE280700	General mounting 63-112	1	-	16/05/2013
PE280701	Motor Joints 63-132	1	-	17/05/2013
PE280702	Terminal boxes 63-112	1	-	23/05/2013
PE281300	General mounting 132	1	-	17/05/2013
PE281600	General mounting 160 (simplified version)	1	-	17/05/2013
PE281601	General mounting 160 (composed version)	1	-	17/05/2013
PE281602	General mounting 160-250 (composed version)	1	-	17/05/2013
PE281603	External bearing/ cap shield coupling 160-250	1	-	20/05/2013
PE281604	Motor joints 160-250	1	-	17/05/2013
PE283100	General mounting 280	1	-	17/05/2013
PE283101	General mounting 315	1	-	17/05/2013
PE283102	Motor Joints 280-315L	1	-	17/05/2013
PE283103	External bearing/ cap shield coupling 280-315L	1	-	20/05/2013
PE290700	General mounting DD63-DD112	1	-	17/05/2013
PE290701	General mounting HD71-HD112	1	-	17/05/2013
PE290702	Motor Joints DD63-160	1	-	17/05/2013

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PE290703	Brake manual release DD/HD71-DD/HD160	1	-	17/05/2013
PE291100	General mounting DD112-DD160	1	-	17/05/2013
PE291101	General mounting HD132-160	1	-	17/05/2013
PE313100	General mounting 315L	1	-	17/05/2013
062013	Safety instructions	3	-	06/2013

One copy of all documents is kept in TÜV Italia files.

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