

CERTIFICATE

CERTIFICADO ◆ CERTIFIKAT ◆ 認証証書 ◆ CERTIFICATE ◆ ZERTIFIKAT

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

[2] **Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

TÜV IT 14 ATEX 065 X Rev.1

[4] Equipment or Protective System: Three phase and single phase asynchronous electric motors
ATEX Regal series, type AB..r 63 – AB..r 315
Three phase and single phase brake motors
ATEX Regal series, type DB..r63 – DB..r315 and
type HB..r71 – HB..r160

[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 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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 14 EX 052 Rev.1

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

EN 60079-0 : 2012; EN 60079-1 : 2007; EN 60079-7 : 2007; EN 60079-31 : 2009;

[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 EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:



II 2G Ex d IIB T6...T3 Gb
II 2G Ex d e IIB T6...T3 Gb

Tamb: -50°C ÷ +80°C
Tamb: -50°C ÷ +80°C

II 2D Ex tb IIIC (or IIIB) T85°C...T150°C Db Tamb: -50°C ÷ +80°C

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Emission date: 07th November 2014

Revision date: 10th June 2015



Approved
Gennaro Oliva
Industrie Service 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 236780.

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[15] **Description of equipment**

The electric motors covered by this certificate are asynchronous three-phase and single phase motors, by type of protection “Ex d” or “Ex d e” and protected from dust penetration, by type of protection “Ex t”.

The motors are made of cast iron with separate compartments: motor enclosure and terminal box for supply and auxiliary circuits connection. Motor enclosure is designed in Ex d type of protection, while terminal box can be Ex d or Ex e type of protection. The motor enclosure satisfy also Ex tb type of protection, mechanical protection IP6X.

The three phase asynchronous motors with brakes series DB/HB series are made of cast iron with separate compartments: motor enclosure and terminal box for supply and auxiliary circuits connection. Motor enclosure is designed in Ex d type of protection, while terminal box can be Ex d or Ex e type of protection. The motor enclosure satisfy also Ex tb type of protection, mechanical protection IP6X. The electromechanical brake device is located in the flameproof enclosure with Ex d type of protection.

The motors can be used for continuous or intermittent duty, as defined by EN 60034.1 for : S1, S2, S3, S4, S6 and S9.

The motors can be equipped with auxiliary devices: heaters, thermal detectors, encoders etc.

The anti condensate heaters installed inside the motor enclosure have maximum power of 200 W and are allowed to be in operation only when motor is not powered.

The motor supplied by inverter is equipped inside of stator winding with PTC or PT100 thermal detectors for temperature control.

Rating data are specified on supplementary plate.

The presence of the thermal detectors inside the motor is shown by appropriate warning label.

The PTC thermal detectors are calibrated for an operation of:

- Max 120°C for temperature class T4/T125°C
- Max 130°C for temperature class T4/T135°C
- Max 140°C for temperature class T3/T150°C

According to IEC 60034-6 standard, the cooling is achieved by one of the following methods:

- Self-cooled motor by metal fan fitted on shaft IC 411
- Fan directly coupled IC 418
- Totally enclosed not ventilated IC 410
- Forced ventilation by means of auxiliary motor IC 416

The motors in type of protection Ex d can be equipped with separately certified draining devices II2GD Ex d IIB.

The motors can be made for different ambient temperatures as described below

- Frame size 63-160: ambient temperature from -50°C/-20°C to +80°C
- Frame size 180-250: ambient temperature from -50°C/-20°C to +80°C
- Frame size 180-250: ambient temperature from -50°C/-20°C to +80°C (it's necessary to de-rate power in proportion to the ambient temperature)
- Frame size 280-315: ambient temperature from -50°C/-20°C to +80°C
- Frame size 280-315: ambient temperature from -50°C/-20°C to +80°C (it's necessary to de-rate power in proportion to the ambient temperature)

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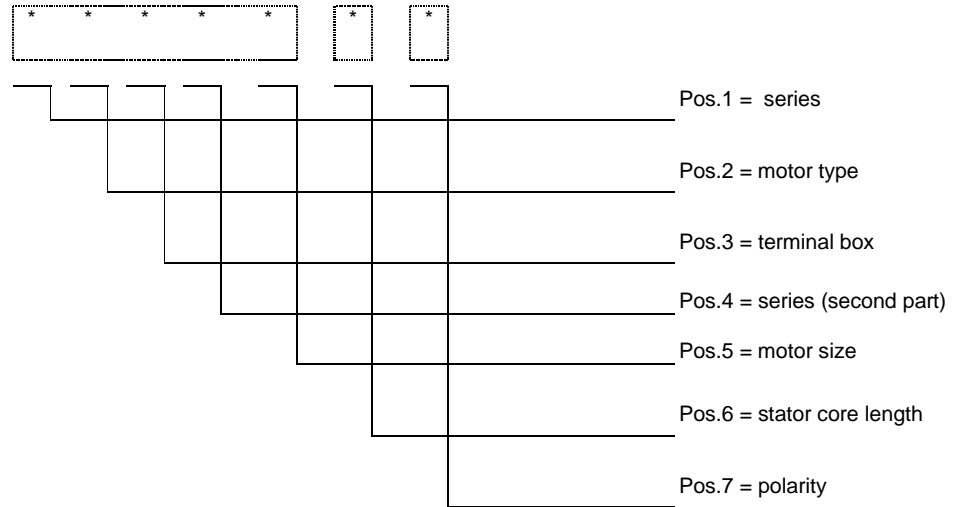
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- Single phase motors: ambient temperature from -35°C to +80°C
- Motors with brake: ambient temperature from -20°C to +80°C

In order to identify the relation between size of motor, ambient temperature and temperature class see instructions.

The products with the identification codes are listed in the following table:



Pos.1 : Motor series

AB	Flame proof electric motors for gas group IIB and for dust group IIIC/IIIB
DB	Flame proof brake motors IC410 for gas group IIB and for dust group IIIC / IIIB
HB	Flame proof brake motors IC411 for gas group IIB and for dust group IIIC / IIIB

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)	5	Terminal box in Ex e version

Pos.4 : Motor series (second part)

r	REGAL series
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Pos.5 : 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.6 : Stator core length

A	Short (motors size 63-71-80)	M	Medium (motors size 112-180-225-250-280-315)
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 90-160-180)	MA	Medium short (motors size 160)
LA	Short (motors size 100-160-200)	MB	Medium (motors size 132-160)
LB	Long (motors size 100 -160-200)	ML	Long (motors size 132-225-280)

Pos.7 : Polarity number

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

Rated characteristics

	Motor type 63-100	Motor type 112	Motor type 132-160	Motor type 180-250	Motor type 280-315
Maximum current [A]	30	30	60	210	280
Maximum voltage [V]	690	690	750	1000	1000
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60
Speed [r.p.m.]	5200	4200	4200	3600	3600
Insultation class	F	F	F	F	F

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Warning label

“To be energized with cable suitable for temperature 90°C”

“Restore greasing at every opening”

“Use screws quality 8.8 ISO 898-1”

In case of use of anticondensate heaters:

- “Warning – energized resistors” or
- “Caution: heater energized”

For motors supplied by auxiliaries:

- “Winding protected with PTC thermistors” or
- “Winding protected with bimetallic thermistors” or
- “Winding protected with PT100 detectors calibrate at xxx°C” (for Tx or Txxx°C)

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Routine tests

For motor and brakes enclosures, manufacturer shall carry out the following routine test:

Motor enclosures:

- Size 80, 90 and 100: overpressure test according to EN60079-1 with pressure not less than 22.8 bar for at least 10 seconds
- Size 132 provided with welded sleeve for fixing the drain valve: overpressure test according to EN60079-1 with pressure not less than 13.2 bar static for at least 10 seconds
- Size 160 provided with welded sleeve for fixing the drain valve: overpressure test according to EN60079-1 with pressure not less than 13.5 bar static for at least 10 seconds
- Size 180: overpressure test according to EN60079-1 with pressure not less than 27 bar static for at least 10 seconds
- Size 200: overpressure test according to EN60079-1 with pressure not less than 27.2 bar static for at least 10 seconds
- Size 225: overpressure test according to EN60079-1 with pressure not less than 31 bar static for at least 10 seconds
- Size 250: overpressure test according to EN60079-1 with pressure not less than 23 bar static for at least 10 seconds
- Size 280 and 315 intended for minimum ambient temperature of -50°C: overpressure test according to EN60079-1 with pressure not less than 52 bar static for at least 10 seconds

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- Size 280 and 315 intended for minimum ambient temperature of -20°C: overpressure test according to EN60079-1 with pressure not less than 33 bar static for at least 10 seconds

Motor enclosures size 63, 71, 80, 90, 100, 132, 160 satisfied overpressure test with 4x Pref, so it is not necessary to perform routine overpressure test.

Brake enclosures:

- Size 71: overpressure test according to EN60079-1 with pressure not less than 16.5 bar for at least 10 seconds
- Size 100: overpressure test according to EN60079-1 with pressure not less than 24.2 bar for at least 10 seconds
- Size 132 and 160: overpressure test according to EN60079-1 with pressure not less than 20.9 bar for at least 10 seconds

Brake enclosures size 180 satisfied overpressure test with 4x Pref, so it is not necessary to perform routine overpressure test.

Ex d terminal boxes:

Ex d terminal boxes satisfied overpressure test with 4x Pref, so it is not necessary to perform routine overpressure test.

Motor with Exe terminal box:

- Dielectric strength test according to EN60079-7 with voltage (2Un+1000)V in period of at least 60 s or 1.2x(2Un+1000)V for at least 100 ms.

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Listed documents (prot. 236780)

Title:	Description:	Pages:	Rev:	Date:
NT/BM/0631/C_B/IE C	Technical note (motors)	40	..	07/08/2014
NT/DP/0631/HD-C-B	Technical note (brakes)	24	..	19/03/2015
..	Safety instructions
D-G63_C, D-G63_B, D-D63_IIIC, D-D63_IIIB, D-G71_C, D-G71_B, D-D71_IIIC, D-D71_IIIB, D-G80_C, D-G80_B, D-D80_IIIC, D-D80_IIIB, D-G90_C, D-G90_B, D-D90_IIIC, D-D90_IIIB, D-G100_C D-G100_B, D-D100_IIIC D-D100_IIIB, H-G63_C, H-G63_B, H-D63_IIIC, H-D63_IIIB, H-G71_C, H-G71_B, H-D71_IIIC, H-D71_IIIB, H-G80_C, H-G80_B, H-D80_IIIC, H-D80_IIIB, H-G90_C, H-G90_B, H-D90_IIIC, H-D90_IIIB, H-G100_C, H-G100_B, H-D100_IIIC, H-D100_IIIB	Nameplate motor Gas and Dust	40	0	20/03/2015
D-G112_C, D-G112_B, D-D112_IIIC, D-D112_IIIB, D-G132_C, D-G132_B, D-D132_IIIC, D-D132_IIIB, D-G160_C, D-G160_B, D-D160_IIIC, D-D160_IIIB, H-G112_C, H-G112_B, H-D112_IIIC, H-D112_IIIB, H-G132_C, H-G132_B, H-D132_IIIC, H-D132_IIIB, H-G160_C, H-G160_B, H-D160_IIIC, H-D160_IIIB	Nameplate motor Gas and Dust	24	0	20/03/2015
D-G180_C, D-G180_B, D-D180_IIIC, D-D180_IIIB, D-G200_C, D-G200_B, D-D200_IIIC, D-D200_IIIB, D-G225_C, D-G225_B, D-D225_IIIC, D-D225_IIIB, D-G250_C, D-G250_B, D-D250_IIIC, D-D250_IIIB	Nameplate motor Gas and Dust	16	0	03/03/2015
D-G280_C, D-G280_B, D-D280_IIIC, D-D280_IIIB, D-G315_C, D-G315_B, D-D315_IIIC, D-D315_IIIB	Nameplate motor Gas and Dust	8	0	03/03/2015
D280315_C	Name plate - dust	1	0	18/07/2014
G280315_C	Name plate - gas	1	0	18/07/2014

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Title:	Description:	Pages:	Rev:	Date:
GD280315_BIG	Name plate – bigger	1	0	18/07/2014
GD280315_C	Name plate – gas_dust	1	0	18/07/2014
GD280715	Auxiliary plate	1	0	25/06/2014
C63315-I	Inverter nameplate	1	0	07/08/2014
D63315-C	Motor nameplate	1	0	03/12/2014
GD63315_BIG	Name plate – bigger	1	0	03/12/2014
GD63315-C	Motor nameplate	1	0	03/12/2014
C12610_A	Auxiliary nameplate	1	0	30.06.2014
Motors Size 63-112				
GD280740	Cable entries plate	1	0	25.06.2014
GD280700	Overall dimensional drawing for motor std terminal box	1	0	25.06.2014
GD280728	Overall dimensional drawing for motor oversized terminal box	1	0	25.06.2014
GD280732	Overall dimensional drawing for motor with plate	1	0	25.06.2014
GD280701	Overall dimensional drawing with Joints and IP mains	1	0	25.06.2014
GD280741	Overall dimensional drawing with forced ventilation 90	1	0	25.06.2014
GD280718	Overall dimensional drawing with forced ventilation 100	1	0	25.06.2014
GD280703	Overall dimensional drawing for motor IC410	1	0	25.06.2014
GD280702	Standard Terminal box with joint dimensions	1	0	25.06.2014
GD280727	Oversized Terminal box with joint dimensions, version with capacitor	1	0	25.06.2014
GD280739_1	Oversized Terminal box with joint dimensions	1	1	25.06.2014
GD280710	Shaft/shield joint (L1)	1	0	25.06.2014
GD280709	Shield/frame joint (L3)	1	0	25.06.2014
GD280704	Standard Terminal box/frame joint (L2) - Terminal box/cover joint (L5)	1	0	25.06.2014
GD280707	Oversized Terminal box/frame joint (L2) - Terminal box/cover joint (L4)	1	0	25.06.2014
GD280737	Drain valve joint (L12)	1	0	25.06.2014
GD280714	Drilled area for cable entries terminal box	1	0	25.06.2014
GD58061201	Drilled area for cable entries plate	1	0	25.06.2014
GD50068086_1	Main terminal	1	1	25.06.2014
GD700.00_2	Auxiliary terminal	1	2	25.06.2014
GD7821007	Earth screw	1	0	25.06.2014
GD72061001	Fan cover	1	0	25.06.2014
GD71061001	Plastic fan	1	0	25.06.2014
GD71061002	Aluminum fan	1	0	25.06.2014
GD280708	Plate/frame joint (L7)	1	0	25.06.2014
GD280717	Overall dimensional drawing with Joints and IP mains with plate	1	0	25.06.2014
GD28102001_2	Drawing EndShield - Rear	1	2	25.06.2014
GD28103001	Drawing End Shield - Front	1	0	25.06.2014

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Title:	Description:	Pages:	Rev:	Date:
GD48100001_2	Drawing Shaft 100	1	2	25.06.2014
GD58062001_3	Drawing Terminal box lid	1	3	25.06.2014
GD58063001_8	Drawing Terminal box	1	8	25.06.2014
GD38103001_2	Drawing Frame B3	1	2	25.06.2014
Motors Size 112-160				
GD281602	Overall dimensional drawing for motors size 112-132	1	0	25.06.2014
GD281603	Overall dimensional drawing for motors size 112-132 (joint position)	1	0	25.06.2014
GD281625	Overall dimensional drawing for motor size 160 simplified version (joint position)	1	0	25.06.2014
GD281601	Overall dimensional drawing for motor size 160 doubled cup version	1	0	25.06.2014
GD281604	Overall dimensional drawing for motor 160 doubled cup version (joint position)	1	0	25.06.2014
GD281623	Overall dimensional drawing for motor 160 simplified version	1	0	25.06.2014
GD281616	Overall dimensional drawing with forced ventilation size 112 – 132	1	0	25.06.2014
GD281639	Overall dimensional drawing with forced ventilation size 160 simplified version	1	0	25.06.2014
GD281619	Overall dimensional drawing with forced ventilation size 160 doubled cup version	1	0	25.06.2014
GD281608	Terminal box mounting and joint positions size 112-132-160	1	0	25.06.2014
GD281615	Terminal box Drilled area	1	0	25.06.2014
GD281605	Shaft/shield joint (L1) motors size 112-132	1	0	25.06.2014
GD281624	Shaft /rear shield joint (L8) motors size 160 simplified version	1	0	25.06.2014
GD281618	Shaft /inner cup joint (L1 - L2 - L7) motors size 160	1	0	25.06.2014
GD281606	shield/frame joint (L2) motors size 112-132	1	0	25.06.2014
GD281607	Terminal box/frame joint (L3) Terminal box/cover joint (L4) motors size 112-132-160	1	0	25.06.2014
GD281612	Drain valve joint (L5)	1	0	25.06.2014
GD50118086	Main terminal	1	0	25.06.2014
GD700.00_2	Auxiliary terminal	1	2	25.06.2014
GD7821007 / GD7821008	Earth screw Internal / external	2	0	25.06.2014
GD721_TAB	Fan cover motors size 112/132/160	1	0	25.06.2014
GD71111001	Plastic fan motors size 112/132/160	1	0	25.06.2014
GD7111-TAB	Aluminium fan motors size 112/132	1	0	25.06.2014
GD112-160	Aluminium fan motors size 112/132/160	1	0	25.06.2014
GD71165021	Conical aluminum fan motors size 112-160	1	0	25.06.2014
GD281630	Motor without ventilation - Overall dimensional drawing size 112-132	1	0	25.06.2014
GD281631	Motor without ventilation - Overall dimensional drawing size 160 simplified	1	0	25.06.2014
GD281632	Motor without ventilation - Overall dimensional drawing size 160 double inner cup	1	0	25.06.2014
GD281626	Motor without terminal box size 112-132	1	0	25.06.2014

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Title:	Description:	Pages:	Rev:	Date:
GD281613	Motor without terminal box size 112 - 132 joint position	1	0	25.06.2014
GD281638	Motor without terminal box size 160 joint position	1	0	25.06.2014
GD281627	Motor without terminal box size 160 simplified version	1	0	25.06.2014
GD281628	Motor without terminal box size 160 double inner cup	1	0	25.06.2014
GD281629	Motor without terminal box size 160 joint position simplified	1	0	25.06.2014
GD281617	Motor without terminal box size 160 doubled cup version (joint position)	1	0	25.06.2014
GD281614	Plate/frame joint (L3)	1	0	25.06.2014
GD58111201	Cable exit plate dimensions	1	0	25.06.2014
GD28162101	Drawing EndShield – Rear Composed	1	0	25.06.2014
GD28162701	Drawing End Shield – Rear Simplified	1	0	25.06.2014
GD28163101	Drawing End Shield - Front	1	0	25.06.2014
GD28168001_1	Drawing Inner bearing cap	1	1	25.06.2014
GD28169001_5	Drawing End cap bearing	1	5	25.06.2014
GD38163001_1	Drawing Frame B3	1	1	25.06.2014
GD48160001_4	Drawing shaft composed	1	4	25.06.2014
GD48165001_2	Drawing shaft simplified	1	2	25.06.2014
GD58112001	Drawing Terminal box lid	1	0	25.06.2014
GD58113001_6	Drawing Terminal box	1	6	25.06.2014
GD28163001	Motor 160, end shield – Rear, B3	1	0	25.06.2014
GD28162501	Motor 160, end shield – Rear, B3	1	0	25.06.2014
GD28162001	Motor 160, end shield – Rear, B3	1	0	25.06.2014
Motors Size 180				
GD183028	Overall dimensional drawing for motor simplified version	1	1	25.06.2014
GD183029	Overall dimensional drawing for motor double cup version (joint and IP mains)	1	1	25.06.2014
GD183030	Overall dimensional drawing for motor simplified version (Joint and IP mains)	1	1	25.06.2014
GD183032	Overall dimensional drawing with forced ventilation	1	1	25.06.2014
GD183040	Overall dimensional drawing for motor simplified version IC410	1	1	25.06.2014
GD183041	Overall dimensional drawing for motor doubled cup version IC410	1	1	25.06.2014
GD183031	External bearing cup – plane joint dimensions	1	1	25.06.2014
GD183016	Terminal box with joint dimensions	1	0	25.06.2014
GD183017	Shaft /inner cup joint (L5)	1	1	25.06.2014
GD183018	Shaft/shield joint (L1)	1	1	25.06.2014
GD183019	Cup/shield joint (L6)	1	1	25.06.2014
GD183002	Front shield/frame joint (L3) size 180	1	1	25.06.2014
GD183004	Back shield/frame joint (L3 Bis) size 180	1	1	25.06.2014
GD183008	Terminal box/frame joint (L7) - Terminal box/cover joint (L8)	1	1	25.06.2014
GD183009	Threaded joint for main terminal (L9)	1	1	25.06.2014
GD183013	Drain valve joint (L12)	1	1	25.06.2014
GD183015	Drilled area for cable entries terminal box	1	0	25.06.2014
GD50184096	Main terminal	1	1	25.06.2014
GD50188090 / GD50189091	Insulating plate	2	1	25.06.2014

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Title:	Description:	Pages:	Rev:	Date:
GD183022 / GD183023 / GD183024	Terminal box Connection : Star / Delta / 6 wires	3	1	25.06.2014
GD700.00_2	Auxiliary terminal	1	2	25.06.2014
GD7821008	Earth screw	1	0	25.06.2014
GD28103001	Motor 180 – Front shield	1	0	25.06.2014
GD28102501	Motor 180 – simplified rear shield	1	0	25.06.2014
GD28102001	Motor 180 – composite rear shield	1	0	25.06.2014
GD28228001 / GD28228002	Motor 180 – inner cup ,front and rear	2	0	25.06.2014
GD72181001	Fan cover	1	1	25.06.2014
GD71180070	Plastic fan	1	1	25.06.2014
GD71185021	Aluminum conical fan size 180-200	1	1	25.06.2014
GD71184121	Aluminum fan size 180	1	0	25.06.2014
GD183033	Motor without terminal box - Overall dimensional drawing	1	1	25.06.2014
GD183034	Motor double cup version without terminal box – IP and joints	1	1	25.06.2014
GD183035	Motor simplified version without terminal box – IP and joints	1	1	25.06.2014
GD183036	Plate/frame joint (L7)	1	0	25.06.2014
GD58181201	Plate with radial exit	1	1	25.06.2014
GD58181301	Plate with axial exit	1	1	25.06.2014
Motors Size 200-225-250				
GD183028	Overall dimensional drawing for motor simplified version	1	1	25.06.2014
GD183029	Overall dimensional drawing for motor double cup version (joint and IP mains)	1	1	25.06.2014
GD183030	Overall dimensional drawing for motor simplified version (Joint and IP mains)	1	1	25.06.2014
GD183032	Overall dimensional drawing with forced ventilation	1	1	25.06.2014
GD183040	Overall dimensional drawing for motor simplified version IC410	1	1	25.06.2014
GD183041	Overall dimensional drawing for motor doubled cup version IC410	1	1	25.06.2014
GD183031	External bearing cup – plane joint dimensions	1	1	25.06.2014
GD183016	Terminal box with joint dimensions	1	0	25.06.2014
GD183017	Shaft /inner cup joint (L5) size 180÷250	1	1	25.06.2014
GD183018	Shaft/shield joint (L1) size 180÷250	1	1	25.06.2014
GD183019	Cup/shield joint (L6) size 180÷250	1	1	25.06.2014
GD183002	Front shield/frame joint (L3) size 180÷225	1	1	25.06.2014
GD183003	Front shield/frame joint (L3) size 250	1	0	25.06.2014
GD183004	Back shield/frame joint (L3 Bis) size 180÷225	1	1	25.06.2014
GD183005	Back shield/frame joint (L3 Bis) size 250	1	0	25.06.2014
GD183008	Terminal box/frame joint (L7) - Terminal box/cover joint (L8)	1	1	25.06.2014
GD183009	Threaded joint for main terminal (L9)	1	1	25.06.2014
GD183013	Drain valve joint (L12)	1	1	25.06.2014
GD183015	Drilled area for cable entries terminal box	1	0	25.06.2014
GD50184096	Main terminal	1	1	25.06.2014

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Title:	Description:	Pages:	Rev:	Date:
GD50188090 / GD50189091	Insulating plate	2	1	25.06.2014
GD183022 / GD183023 / GD183024	Terminal box Connection : Star / Delta / 6 wires	3	1	25.06.2014
GD700.00_2	Auxiliary terminal	1	2	25.06.2014
GD7821008	Earth screw	1	0	25.06.2014
GD28203001	Motor 200 – Front shield	1	1	25.06.2014
GD28202501	Motor 200 – simplified rear shield	1	0	25.06.2014
GD28202001	Motor 200 – composite rear shield	1	0	25.06.2014
GD28208001 / GD28208002	Motor 200 – inner cup ,front and rear	2	0	25.06.2014
GD28223001	Motor 225 – Front shield	1	0	25.06.2014
GD28222501	Motor 225 –simplified rear shield	1	0	25.06.2014
GD28222001	Motor 225 –composite rear shield	1	0	25.06.2014
GD28228001 / GD28228002	Motor 225 – inner cup ,front and rear	2	0	25.06.2014
GD28253001	Motor 250 – Front shield	1	1	25.06.2014
GD28252501	Motor 250 –simplified rear shield	1	1	25.06.2014
GD28252001	Motor 250 –composite rear shield	1	0	25.06.2014
GD28258003	Motor 250 – inner cup ,front and rear	1	0	25.06.2014
GD28258002	Motor 250 – inner cup ,front and rear	1	1	25.06.2014
GD38203001	Frame 200	1	1	25.06.2014
GD38223001	Frame 225	1	1	25.06.2014
GD38253001	Frame 250	1	0	25.06.2014
GD48200001	Shafts 200	1	1	25.06.2014
GD48205001	Shafts 200	1	1	25.06.2014
GD48220001	Shafts 225	1	1	25.06.2014
GD48225001	Shafts 225	1	0	25.06.2014
GD48250001 GD48255001	Shafts 250	2	0	25.06.2014
GD58183502	Terminal box 200÷250	1	3	25.06.2014
GD58182001	Terminal box lid 200÷250	1	0	25.06.2014
GD72181001	Fan cover	1	1	25.06.2014
GD71180070	Plastic fan	1	1	25.06.2014
GD71185021	Aluminium conical fan size 180÷200	1	1	25.06.2014
GD71204121	Aluminum fan size 200	1	0	25.06.2014
GD71224121	Aluminium fan size 225÷250	1	0	25.06.2014
GD71225021	Aluminium conical fan size 225÷250 2 pole	0	0	25.06.2014
GD183033	Motor without terminal box - Overall dimensional drawing	1	1	25.06.2014
GD183034	Motor double cup version without terminal box – IP and joints	1	1	25.06.2014
GD183035	Motor simplified version without terminal box – IP and joints	1	1	25.06.2014
GD183036	Plate/frame joint (L7)	1	0	25.06.2014
GD58181201	Plate with radial exit	1	1	25.06.2014
GD58181301	Plate with axial exit	1	1	25.06.2014
Motors Size 280-315				
GD283139	Cable entries plate	1	0	25/06/2014
GD283125	Overall dimensional drawing motor 280	1	0	25/06/2014
GD283100	Overall dimensional drawing for motor 280-315 (joint and IP mains)	1	0	25/06/2014
GD283107	Overall dimensional drawing for motor 315	1	0	25/06/2014
GD283124	Overall dimensional drawing with forced ventilation	1	0	25/06/2014

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Title:	Description:	Pages:	Rev:	Date:
GD283119	Drilled area	1	0	25/06/2014
GD283120	Terminal box connection	1	0	25/06/2014
GD283129	External bearing cup – OR dimensions	1	0	25/06/2014
GD283114	Overall drawing for Terminal box joint	1	1	25/06/2014
GD283101	Shaft /bearing cup joint (L1)	1	1	25/06/2014
GD283102	Shield/frame joint (L3)	1	0	25/06/2014
GD283116	Bearing cap/shield joint (L2)	1	0	25/06/2014
GD283103	Terminal box/frame joint (L4)	1	0	25/06/2014
GD283104	Terminal box/ Terminal box lid (L5)	1	1	25/06/2014
GD283106	Earth screw	1	0	25/06/2014
GD283110	Rubber bushing joint Bartec (L7)	1	0	25/06/2014
GD283105	Threaded joint for main terminal L6)	1	1	25/06/2014
GD313111	Drain valve joint (L8)	1	1	25/06/2014
GD283140	Rubber bushing joint (L9)	1	0	25/06/2014
GD50283093	Main terminal Ex de	1	0	25/06/2014
GD58283090	Main terminal Exd	1	0	25/06/2014
GD50283092	Clamp for passing	1	0	25/06/2014
GD700.00_2	Auxiliary terminal	1	2	25/06/2014
GD283118	Earth screw	1	0	25/06/2014
GD28283001	Endshield 280-315	1	0	25/06/2014
GD28285001	Flange 280	1	0	25/06/2014
GD28287001	Flange 315	1	0	25/06/2014
GD28288003	Inner bearing	1	0	25/06/2014
GD283126	Aluminum fan 2 poles	1	0	25/06/2014
GD283127	Aluminum fan 4-6-8 poles	1	0	25/06/2014
GD28289001	End cap bearing	1	0	25/06/2014
GD28289901	Grease sealing ring	1	0	25/06/2014
GD38285001	Frame 315	1	0	25/06/2014
GD38285501	Frame 280	1	0	25/06/2014
GD38287001	Removable feet 280	1	0	25/06/2014
GD38288001	Removable feet 315	1	0	25/06/2014
GD58282001	Terminal box lid	1	0	25/06/2014
GD28283001	Terminal box	1	1	25/06/2014
GD58284001	Plate	1	0	25/06/2014
GD72281001	Fan cover	1	0	25/06/2014
Brakes Size 63-112				
GD290700	Overall dimensional drawing for brake motor IC410	1	0	19/12/2014
GD290701	Overall dimensional drawing for brake motor IC411	1	0	19/12/2014
GD290702	Overall dimensional drawing for brake motor IC416	1	0	19/12/2014
GD290719	Overall dimensional drawing with joints and IP mains IC410	1	0	19/12/2014
GD290720	Overall dimensional drawing with joints and IP mains IC411	1	0	19/12/2014
GD291100	Overall dimensional drawing for brake motor D112 IC410	1	0	19/12/2014
GD291101	Overall dimensional drawing for brake motor D112 IC411	1	0	19/12/2014
GD291102	Overall dimensional drawing for brake motor D112 IC416	1	0	19/12/2014
GD290703	Brake assembly	1	0	19/12/2014
GD290725	Mounting terminal box 63-112	1	2	19/12/2014
GD291127	Mounting terminal box 112	1	2	19/12/2014
GD290721	Shaft/Brake cover joint (L10)	1	0	19/12/2014
GD290722	End shield/Brake cover joint (L9)	1	0	19/12/2014
GD290724	Brake cables joints (L11)	1	0	19/12/2014

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Title:	Description:	Pages:	Rev:	Date:
GD290704	Fan cover	1	0	19/12/2014
GD71071071	Cooling fan	1	0	19/12/2014
GD28061001	Drawing brake cover 63	1	0	19/12/2014
GD28060001	Drawing brake end shield 63	1	0	19/12/2014
GD28071004	Drawing brake cover 71	1	0	19/12/2014
GD28070001	Drawing brake end shield 71	1	0	19/12/2014
GD28081004	Drawing brake cover 80	1	1	19/12/2014
GD28080001	Drawing brake end shield 80	1	0	19/12/2014
GD28091004	Drawing brake cover 90	1	0	19/12/2014
GD28090001	Drawing brake end shield 90	1	0	19/12/2014
GD28101005	Drawing brake cover 100	1	0	19/12/2014
GD28100001	Drawing brake end shield 100	1	0	19/12/2014
GD28111006	Drawing brake cover 112	1	0	19/12/2014
GD28110001	Drawing brake end shield 112	1	0	19/12/2014
Brakes Size 112-160				
GD291100	Overall dimensional drawing for brake motor size 112-132-160 IC410	1	0	19/12/2014
GD291101	Overall dimensional drawing for brake motor size 112-132-160 IC411	1	0	19/12/2014
GD291102	Overall dimensional drawing for brake motor size 112-132-160 IC416	1	0	19/12/2014
GD291103	Brake assembly	1	0	19/12/2014
GD291119	Overall dimensional drawing for motor 112-132-160 IC410 (joint position)	1	0	19/12/2014
GD291120	Overall dimensional drawing for motor 112-132-160 IC411 (joint position)	1	0	19/12/2014
GD291127	Terminal box mounting	1	2	19/12/2014
GD291121	Shaft/Brake cover joint (L10)	1	0	19/12/2014
GD291124	Brake cable joint (L9)	1	0	19/12/2014
GD291125	End shield/Brake cover joints (L11)	1	0	19/12/2014
GD291104	Fan cover motors size 112/132/160	1	0	19/12/2014
GD71711071	Plastic and aluminum fan motor size 112/132/160	1	0	19/12/2014
GD71711081	Aluminum fan motors size 132/160	1	0	19/12/2014
GD28110006	Drawing brake cover 112	1	0	19/12/2014
GD28110001	Drawing brake end shield 112	1	0	19/12/2014
GD28131006	Drawing brake cover 132	1	0	19/12/2014
GD28130001	Drawing brake end shield 132	1	0	19/03/2015
GD28161005	Drawing brake cover 160	1	0	19/03/2015
GD28160002	Drawing brake end shield 160	1	0	19/03/2015
Brakes Size 180-250				
GD183005	Overall dimensional drawing IC410	1	0	23/12/2014
GD183006	Overall dimensional drawing IC416	1	0	23/12/2014
GD183007	Overall dimensional drawing (joint and IP mains)			23/12/2014
GD183008	Brake assembling	1	0	23/12/2014
GD183011	Mounting brake terminal box and joint dimension	1	0	23/12/2014
GD183014	Terminal box brake with encoder and micro switch	1	0	23/12/2014
GD183004	Terminal box brake with encoder	1	0	23/12/2014
GD183001	Brake enclosure / shield joint (L13)	1	0	23/12/2014
GD183002	Brake enclosure / cover joint (L14)	1	0	23/12/2014
GD183003	Shaft/shield back joint (L1)	1	0	23/12/2014
GD183009	Terminal box brake/frame joint (L15) Terminal box brake/cover brake joint (L16)	1	0	23/12/2014

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Title:	Description:	Pages:	Rev:	Date:
GD183010	Rear shield / frame stud bolts	1	0	23/12/2014
GD183012	Rubber bushing joint (L17)	1	0	23/12/2014
GD_702.00	Auxiliary terminal	1	0	23/12/2014
GD7111_TAB	Aluminum fan	1	0	23/12/2014
GD72251061	Cover fan IC416	1	0	23/12/2014
GD28180001	Brake shield 180	1	0	23/12/2014
GD28200001	Brake shield 200	1	0	23/12/2014
GD28220001	Brake shield 225	1	0	23/12/2014
GD28250001	Brake shield 250	1	0	23/12/2014
GD28251001	Brake cover 180-250	1	0	23/12/2014
GD28251501	Brake cover lid 180-250	1	0	23/12/2014
Brakes Size 280-315				
GD283150	Overall dimensional drawing for motor 280 IC410	1	0	23/12/2014
GD283151	Overall dimensional drawing for motor 280-315 IC416	1	0	23/12/2014
GD283152	Overall dimensional drawing for motor 315 IC410	1	0	23/12/2014
GD283112	Brake assembly	1	0	23/12/2014
GD283154	Assembly brake shield/rear motor shield	1	0	23/12/2014
GD283101	Brake cover / brake shield joint (L13)	1	0	23/12/2014
GD283102	Brake cover / brake cover lid joint (L14)	1	0	23/12/2014
GD283103	Shaft / Brake shield joint (L18)	1	0	23/12/2014
GD283109	Terminal box brake/frame joint (L15) Terminal box brake/cover brake joint (L16)	1	0	23/12/2014
GD283111	Manual brake release lid (L17)	1	0	23/12/2014
GD283155	Brake cover / Brake cover lid joint with forced ventilation (L14)	1	0	23/12/2014
GD28251001	Brake cover 280-315	1	0	23/12/2014
GD28251502	Brake cover lid 280-315	1	2	23/12/2014
GD28280001	Brake shield 280-315	1	0	23/12/2014
GD28284001	Endshield 280-315	1	0	23/12/2014
GD72281091	Fan cover IC416	1	0	23/12/2014
GD71280021	Aluminum fan 4-6-8 poles	1	0	23/12/2014

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EC-TYPE EXAMINATION CERTIFICATE no. TÜV IT 14 ATEX 065 X Rev.1

[17] Special conditions for safe use

- The motor intended for use with ambient temperature > 50°C shall be feed with cable of thermal stability not less of 90°C
- The dimensions of the joints are different from those indicated in the reference standards. For information about dimensions of the flameproof joints the manufacturer shall be contacted
- The motor when provided with cables permanently connected shall have these cables protected against the risk of damage due to mechanical stresses. The end connection shall be made according to one of the types of protection indicated in the EN60079-0 standard and in accordance with the installation rules in force in the site of installation
- The motor supplied by inverter is equipped in the drive end stator winding overhang with PTC or PT100 thermal detectors per phase for temperature control. These are to be connected to a protection circuit so as to limit the stator temperature to:
 - Max 120°C for temperature class T4/T125°C
 - Max 130°C for temperature class T4/T135°C
 - Max 140°C for temperature class T3/T150°C

[18] Essential Health and Safety Requirements

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