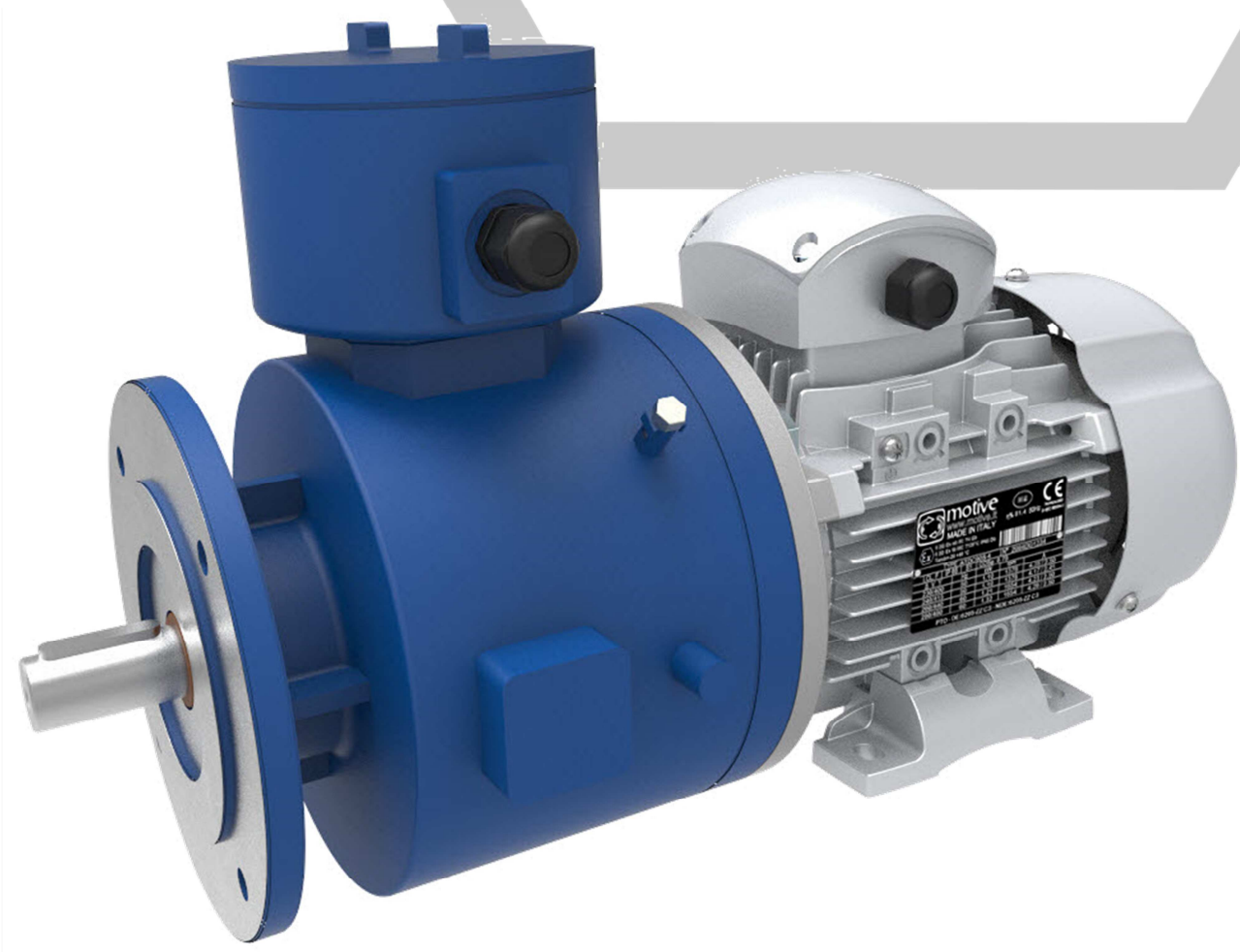
motive®

# manual addendum

# brake motors

# DELPHI ATDC Ex 2GD



**II 2G Ex eb IIC T4 *(T3) Gb**
**II 2D Ex tb IIIC T135°C IP65 Db**
**Tamb=-20 +40 *(+50) °C**

**II 2G Ex db IIC T4 Gb**
**II 2D Ex tb IIIC T135°C IP66 Db**
**Tamb=-20 +55°C**

** Option only for IE3 motors*

**Reference list:**

| Norm (last issue) | Title |
|---|---|
| **Dir. 2014/34/EU** | **Equipment and Protective systems intended for use in Potentially Explosive Atmospheres. Safety requirements** |
| **IEC 60034-5:2020** | Rotating electrical machines – Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) – Classification Internal methods Tests not related to standards, developed by laboratory or under client's specification |
| **EN IEC 60079-0:2018** | Explosive atmospheres – Part 0: Equipment – General requirements |
| **EN IEC 60079-7:2015/A1:2018** | Explosive atmospheres – Part 7: Equipment protection by increased safety "e" |
| **EN 60079-31:2014** | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t" |
| **IEC 60204-1:2018** | Safety of machinery – Electrical equipment of machines – Part 1: General requirements |

**Field of application**

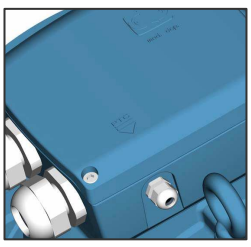
The person authorized to do the work is responsible for the zones sharing. He must follow the norms EN 60079-31, EN60079-14, EN 60079-17 and EN 60079-19 (whenever their application is possible) when choosing the suitable motor. The eventual dust deposits mustn't have a thickness > 5mm.

**Conformity declaration**

The conformity declaration reported in this addendum, is the document that testifies the product conformity to the Directive 2014/34/EU.
The validity of such certificate is related to the respect of the instructions specified in the use and maintenance manual, together with the following additional instructions.

**Additional instructions**

The persons authorized to do the work in an ambient exposed to explosion risk must be instructed about the right procedure for the use of the motor, respecting all norms related to safety, installation and use.
Motors must be protected against over-heating by suitable control means that must be chosen, considering the working conditions, according to the norm EN60079-15, EN60079-0 and EN60079-31.



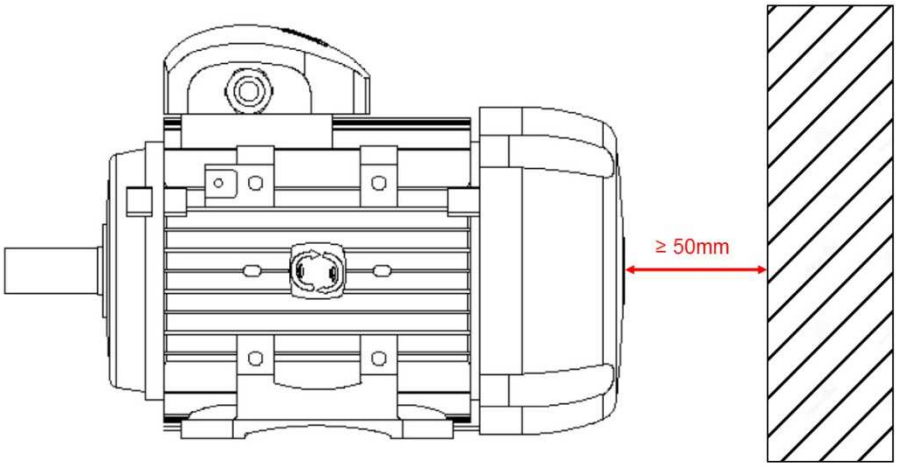
All Motive Delphi-Ex motors are standard equipped with temperature probes (up to size 132, included, 3 PTO 130°C probes; from size 160, included, 3 PTC 130°C thermistors), to be connected to a suitable release device as reported in EN 50495 standard.

**It is forbidden to open the terminal box to connect electric wires or make any intervention in presence of explosive atmosphere. Before any of such operations, disconnect the motor from the electric power supply and avoid the possibility of any accidental switching on of the motor.**

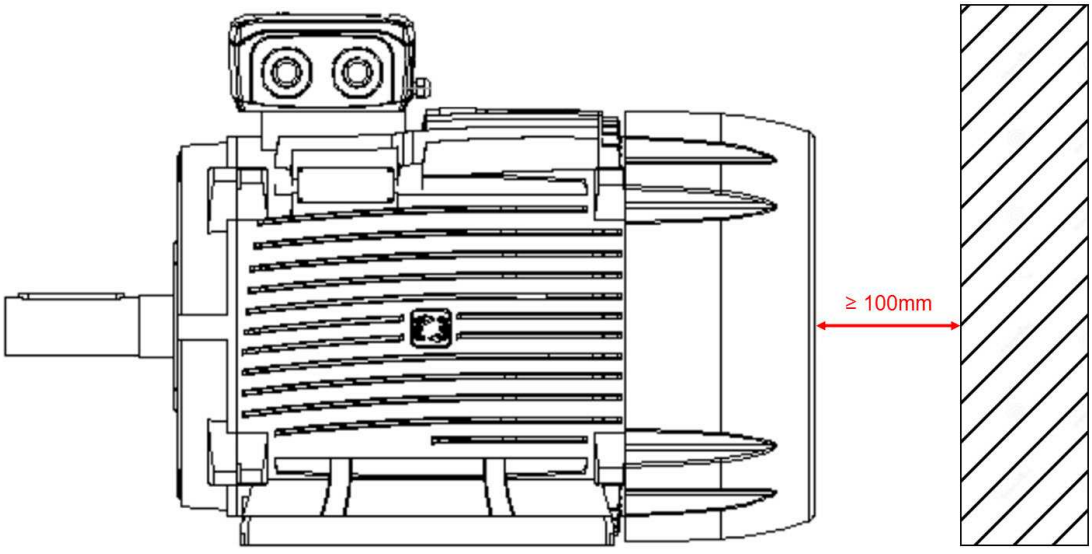
**These ATDC motors with brakes can be used in potential explosive atmospheres in the zone 21 (II 2 D T135°C) and/or zone 1 (II 2 G T4) only if used as a parking brake.**

**This addendum is supplied with the "installation and maintenance standards" manual of the electromagnetic brake on board. The end user is required to read it and check the requirements.**

For correct motor ventilation, it's recommended to maintain a minimum distance from walls or obstructions equal to 50mm for motors from size 56 to 160 and 100mm from size 180 to 355.




Motors size 56÷160




Motors size 180÷355

Ground connection must be done (with galvanized screw and spring washer supplied) inside the terminal box (fig.1) and by using the screw on the frame (fig.2).
The section of the ground wire connected to the motor frame must have a minimum section of 4 mmq.

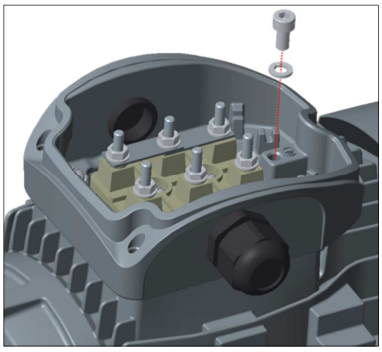


fig.1

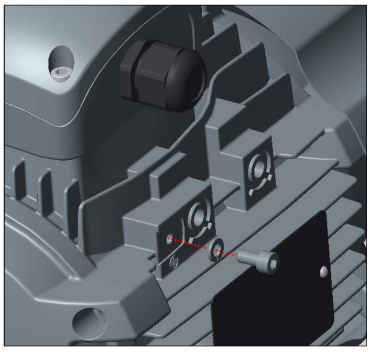


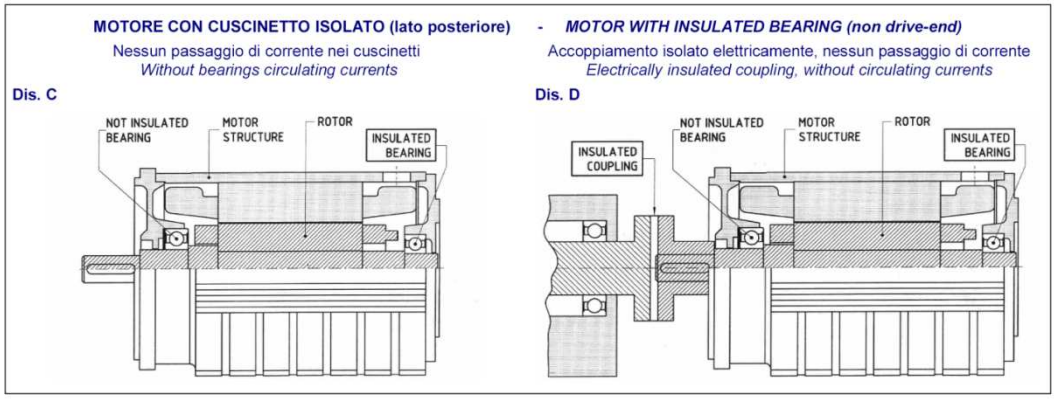
fig.2

For correct tightening of the grounding screws, please refer to the table below.

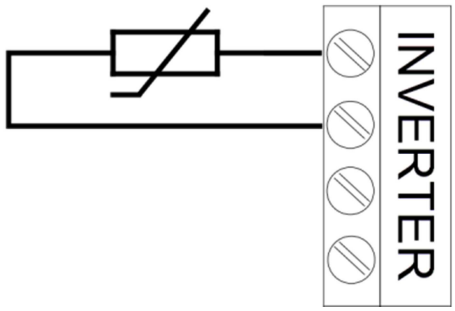
| | M4 | M5 | M6 | M8 | M10 | M12 | M16 |
|---|---|---|---|---|---|---|---|
| **Nm** | 2 | 3,2 | 5 | 10 | 20 | 35 | 65 |

**Use with converters**
When Delphi-Ex motors are used with converters, in addition to the general selection criteria (limit values: rated voltage <830V, peak voltage <2,2kV, voltage gradients <2,2kV/1µs), consideration should be given the following points:

- Motors powered by inverter have a voltage (or current) which is not purely sinusoidal. This leads to an increase in losses, vibration, noise, and a different temperature rise.
- Possibility of spikes is linked to the value of the converter power supply voltage and the length of the motor power cable.
  To limit the phenomenon, it's advisable to use specific filters connected between the converter and the motor (mandatory for motor power cables over 50 mt).
  All Delphi-Ex motors are equipped as standard with a reinforcing Nomex film between phases to protect against the voltage peaks.
- The correct grounding of the motor and the driven machine is very important to avoid voltage and stray currents in the bearings.
  To prevent the current circulation in the bearing if the motor it is not equipped with an insulated bearing, use a proper filter to reduce the high frequency harmonic voltage above 50kHz.
- Motors with power from 110kW and up must be equipped with insulated bearing and the coupling must be insulated.



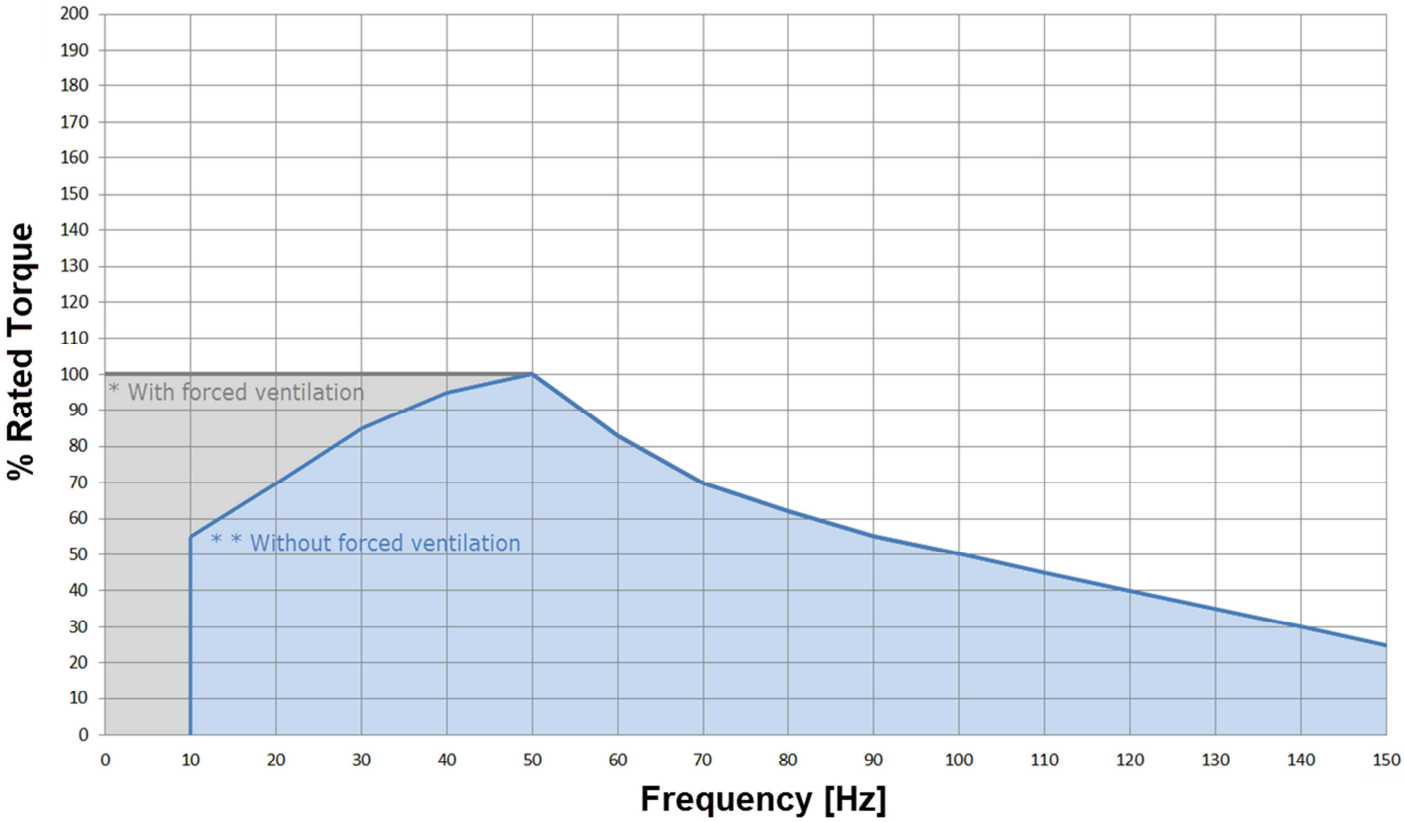
• It's mandatory connect thermal probes to the converter to safeguard the motor from the overheating which could be generate by a misuse.




These probes have two terminals for connection marked with a label and located inside the main terminal box.

• For inverter power supply the switching frequency must be higher than 4kHz (PWM type), output frequency range 0÷150Hz.

• Atex forced ventilation assembly is mandatory if the motor is used at frequencies lower than 50Hz at constant torque load.
If the motor is used at frequencies lower than 50Hz at quadratic torque load, please refer to the following graph for the maximum percentage of torque load admitted.




For motor Speed/Torque curves, refer to following link: https://www.motive.it/en/rapporti.php

When Delphi-ATDC-Ex 2GD brake motors are used with variable speed drives, in addition to the general selection standards and requirements contained in this addendum, the end user must consider the maximum speed limits applicable at the input of the brake, as indicated in the following tablechart.

| Frame IEC | Maximum speed applicable [rpm] | |
|---|---|---|
| **63** | 3600 | Duty **S1** |
| | 4320 | Duty **S3 40%** |
| **71** | 3600 | Duty **S1** |
| | 4320 | Duty **S3 40%** |
| **80** | 3600 | Duty **S1** |
| | 4320 | Duty **S3 40%** |
| **90** | 3600 | Duty **S1** |
| | 4320 | Duty **S3 40%** |
| **100** | 3600 | Duty **S1** |
| | 4000 | Duty **S3 40%** |
| **112** | 3600 | Duty **S1** |
| | 4000 | Duty **S3 40%** |
| **132** | 3600 | Duty **S1** |
| | 4000 | Duty **S3 40%** |
| **160** | 3600 | Duty **S1** |
| | 2900 | Duty **S3 40%** |
| **180** | 2500 | Duty **S1** |
| | 2800 | Duty **S3 40%** |
| **200** | 2500 | Duty **S1** |
| | 2800 | Duty **S3 40%** |
| **225** | 2500 | Duty **S1** |
| | 2800 | Duty **S3 40%** |
| **250** | 1800 | Duty **S1** |
| | 2200 | Duty **S3 40%** |
| **280** | 1800 | Duty **S1** |
| | 2200 | Duty **S3 40%** |

**Installation precautions**

For the installation of the motor please consider the following:

- make sure that no damages have occurred during transport.
- remove carefully the components of the plant from the wrapping material and any other protective devices.
- make sure that the value of the voltage on the motor plate is the same as the voltage of mains.
- surfaces in contact with the electric bonding and the rating plate must not be varnished.
- set the motor on a flat surface.
- make sure that the bearings or the flange are well fixed and, in case of direct coupling, the motor is perfectly aligned.
- rotate the rotor manually in order to verify the absence of any dragging.
- verify the rotation sense removing the coupling.
- splice (extract) the output components (i.e. coupling, belt pulley, etc.) only using correct devices (shrinking-on). Avoid not allowed tension on the pulley.
- in the models in which the shaft is with the end downwards, use the protective cover. If the end of the shaft is upwards, use a cover preventing any penetration of external parts into the fan.
- do not hinder the ventilation. The discharged air, together with the air coming from other groups, must not be immediately re-aspirated.
- verify the correct grounding of the motor.

**Maintenance warnings: clean the motor only with a wet or antistatic cloth.**

## Electrical and thermal protections

Protections must be chosen based on the specific running conditions, according to standards EN60079-14 and EN61241-14.

**External protections:**

- Protection against overcurrent and short-circuits; this protection can be made with the magnetothermic circuit breaker or with fuses; these must be calibrated on the motor current.
- Protection against overload by thermal relay that controls a power line contactor upstream the motor.
- If the application requires, protection against excessive speed of the electric motor, for example if the mechanical load may drive the electric motor itself and thereby create a hazardous situation.
- If special conditions or synchronised operation with other machines or parts of machines require it, protection against power failures or dips by means of a minimum voltage relay that controls an automatic power knife switch.

**Internal protections:**

The electrical protections on the motor power supply may not be sufficient to protect against overloads.
Connecting built-in protections on the windings solves this problem:

- PTO bimetallic probe (normally-closed electromechanical device that becomes open when the threshold temperature is reached).
  The reset of this cut-out must be performed manually only, and not automatically. The user, in compliance with the norms, must use a tripping relay out in compliance with IEC 61508 standard (Fail Safe type).
  Motive Delphi-Ex motors, up to size 132 included, are equipped as standard with 3 PTO 130°C bimetallic probes.
- PTC thermistor (device that suddenly changes positively its resistance when the threshold temperature is reached).
  Motive Delphi-Ex motors, from size 160 included, are equipped as standard with 3 PTC 130°C thermistors.

**Bearings lubrication**

Motors with shielded self-lubricating bearings “ZZ” (as standard up to motor size 280 included) do not require any periodic lubrication.

Bearings life ranges from 3 up to 5 years according to the axial and radial loads that are charged on the shaft and to environmental conditions the motor is used in.

Motors from size 180 provided with the bearings lubrication unit must be lubricated while running according to the lubricating intervals and the grease quantity as reported in table 1.

For not standard roller "NU" bearings and angular contact ball bearings "7.." , the lubrication intervals timing, reported in table 1, is the half.

Lubrication intervals timing is also the half for motors supplied by converter, because the grease vetrification caused by the currents arc between stator and rotor.

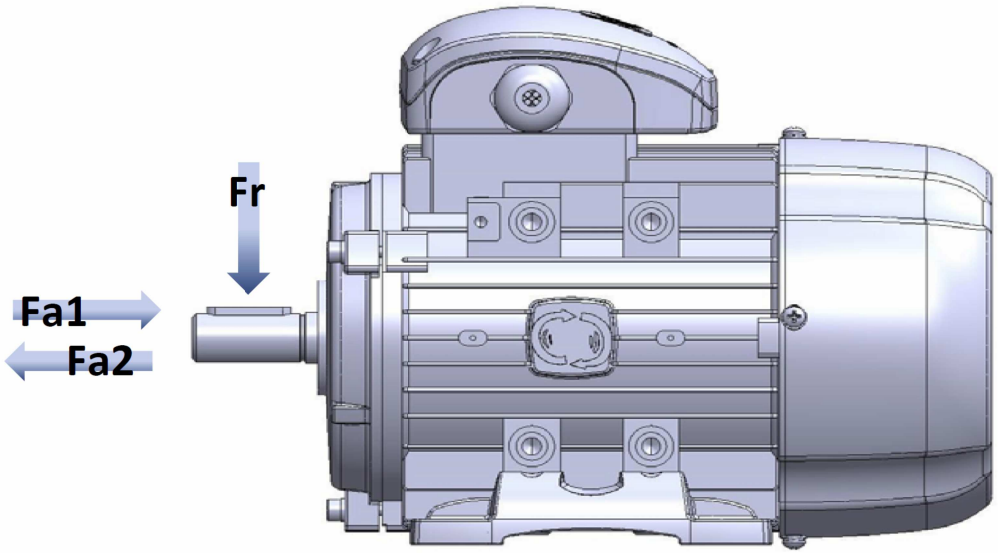
For this reason, insulated bearings (special execution) are recommended on such motors, especially when the rated power is ≥110kW.

Use lithium o polyurea grease with mineral oil basis suitable for a maximum working temperature of at least 190°C.

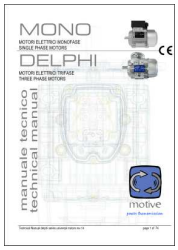
**Table 1**

| Motor Size | Grease quantity [g] | | Lubrication intervals in operation hours | | | |
|---|---|---|---|---|---|---|
| | 2 Poles | 4-6-8 Poles | 2 Poles | 4 Poles | 6 Poles | 8 Poles |
| **315** | 36 | 45 | 800 | 2300 | 4100 | 5100 |
| **355** | 45 | 60 | 700 | 2000 | 4000 | 4500 |

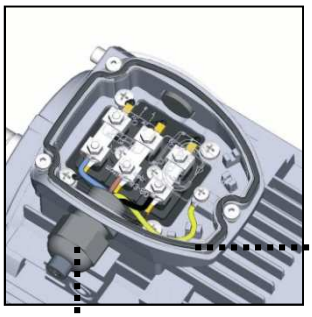
| | Fr [N] standard | | | | Fa1 / Fa2 [N] standard | | | | Fa1 / Fa2 [N] special option | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3000rpm | 1500rpm | 1000rpm | 750rpm | 3000rpm | 1500rpm | 1000rpm | 750rpm | 3000rpm | 1500rpm | 1000rpm | 750rpm |
| **56** | 275 | 360 | | | 120 | 160 | | | 380 | 500 | | |
| **63** | 300 | 375 | | | 120 | 160 | | | 380 | 500 | | |
| **71** | 330 | 410 | 480 | 500 | 200 | 250 | 300 | 320 | 640 | 800 | 960 | 1000 |
| **80** | 550 | 690 | 800 | 900 | 260 | 340 | 400 | 460 | 890 | 1160 | 1370 | 1440 |
| **90** | 600 | 770 | 880 | 980 | 340 | 460 | 570 | 650 | 1480 | 2000 | 2480 | 2080 |
| **100** | 880 | 1100 | 1250 | 1400 | 480 | 590 | 750 | 850 | 1960 | 2410 | 3070 | 2900 |
| **112** | 1000 | 1200 | 1400 | 1500 | 480 | 590 | 750 | 850 | 1960 | 2410 | 3070 | 3700 |
| **132** | 1350 | 1700 | 1950 | 2200 | 600 | 1000 | 1300 | 1500 | 1110 | 1840 | 2390 | 6130 |
| **160** | 2300 | 2700 | 3000 | 3200 | 1300 | 1500 | 1900 | 2200 | 1990 | 2290 | 2900 | 8980 |
| **180** | 3000 | 4000 | 4600 | 5300 | 2400 | 2700 | 3000 | 3300 | 3560 | 4000 | 4450 | 6070 |
| **200** | 3800 | 4800 | 5500 | 5500 | 3000 | 3900 | 4800 | 4800 | 3700 | 4810 | 5920 | 7320 |
| **225** | 4200 | 5200 | 6000 | 6000 | 3600 | 4900 | 5700 | 5700 | 5400 | 7350 | 8550 | 8450 |
| **250** | 4800 | 6000 | 6000 | 6000 | 4100 | 5500 | 6500 | 6500 | 5930 | 7950 | 9390 | 8010 |
| **280** | 4800 | 7800 | 6900 | 6900 | 4200 | 6800 | 6800 | 6800 | 6070 | 9830 | 9830 | 10200 |
| **315** | 5800 | 15000 | 15000 | 17500 | 4600 | 7000 | 7000 | 7000 | 6580 | 10000 | 10000 | 10120 |
| **355** | 7700 | 19000 | 19000 | 19000 | 5800 | 7200 | 7200 | 7200 | 7740 | 9600 | 9600 | 10400 |
| **400** | 9000 | 20500 | 20500 | | 7300 | 12500 | 14600 | | 9960 | 17050 | 19910 | |



## PECULIAR FEATURES OF DELPHI ATDC Ex 2GD MOTORS




User manual + addendum



• Terminals protected against corrosion, unscrewing and rotation
• Shock absorbing rubber IP65

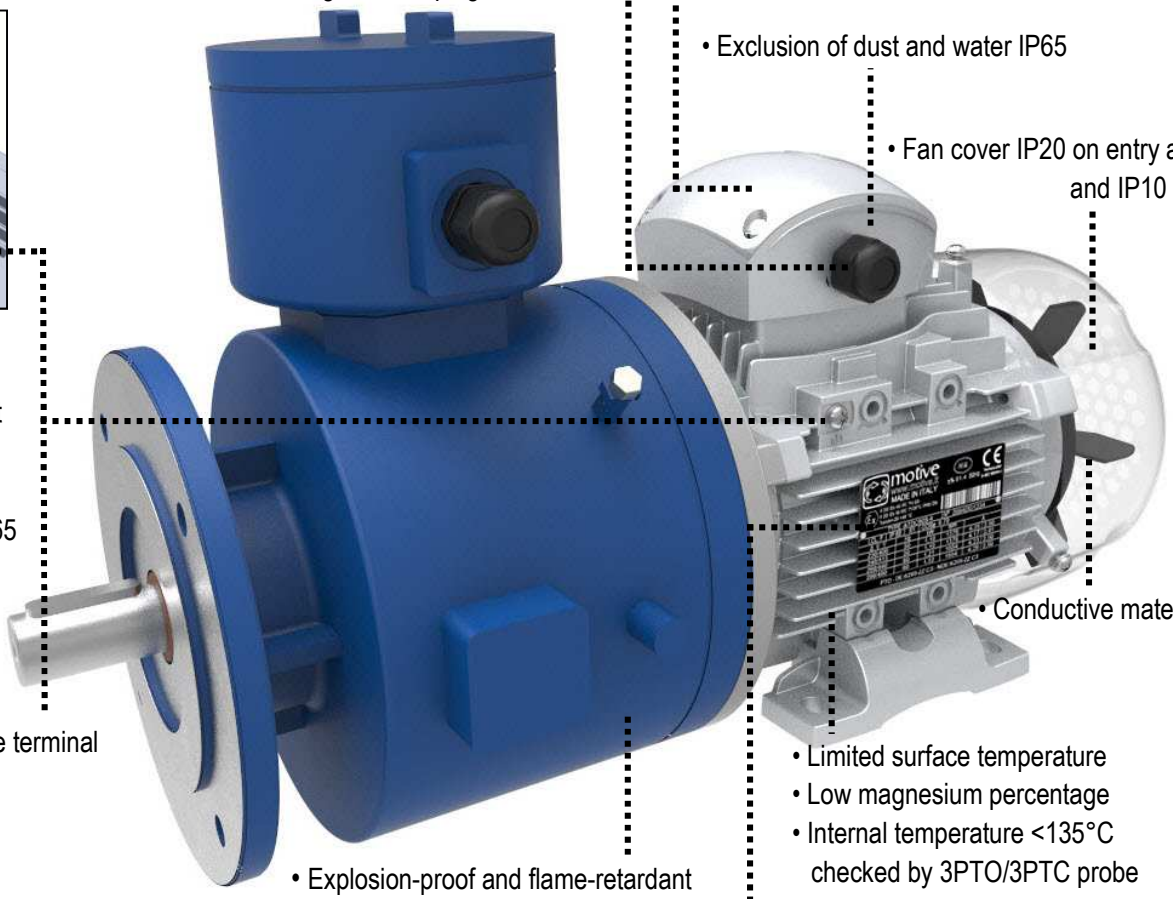
• Earth connection inside the terminal box or on the housing

• Reinforced t-box for high collision resistance

• Certified anti-pulling cable gland and plug II 2GD

• Exclusion of dust and water IP65

• Fan cover IP20 on entry air side and IP10 on exit




• Conductive material fan

• Limited surface temperature
• Low magnesium percentage
• Internal temperature <135°C checked by 3PTO/3PTC probe mounted as standard

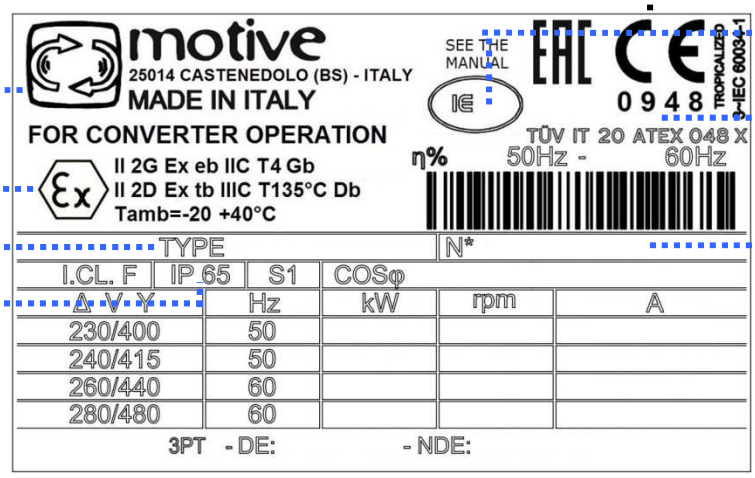
• Explosion-proof and flame-retardant 2GD brake equipped with PTO probe

Manufacturer's mark

Protection against explosion

Motor type

IP protection index




Motor efficiency class (IE2 – IE3)

Notified body number
ATEX certificate number

YYMM production date
Serial number

## DELPHI ATDC Ex 2GD CLASSIFICATION

# MOTOR

For GAS G

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CE | Ex | II | 2 | G | Ex | eb | IIC | T4 | Gb |
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present during normal operations (Zone 1) |
| ⑤ | Protection against gas combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Increased safety |
| ⑧ | For instance, for Hydrogen. Equipment marked as suitable for Group IIC is also suitable for IIB and IIA |
| ⑨ | T4 for maximum surface temperature of 135°C |
| ⑩ | Extended level of protection in hazardous zones with explosive gas mixtures |

For DUST D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CE | Ex | II | 2 | D | Ex | tb | IIIC | T135°C | Db |
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present, in the form of a flammable cloud of dust in the air, during normal operations (Zone 21) |
| ⑤ | Protection against dust combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Enclosure protection |
| ⑧ | For conductive dust. Equipment marked as suitable for Group IIIC is also suitable for IIIB and IIIA |
| ⑨ | Maximum surface temperature of 135°C |
| ⑩ | Extended level of protection in flammable dust atmospheres |

Marking applicable only on DELPHI Ex **IE3** motors (with Tamb=-20 +50 °C)

For GAS G

| CE | Ex | II | 2 | G | Ex | eb | IIC | T3 | Gb |
|---|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present during normal operations (Zone 1) |
| ⑤ | Protection against gas combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Increased safety |
| ⑧ | For instance, for Hydrogen. Equipment marked as suitable for Group IIC is also suitable for IIB and IIA |
| ⑨ | T3 for maximum surface temperature of 200°C |
| ⑩ | Extended level of protection in hazardous zones with explosive gas mixtures |

For DUST D

| CE | Ex | II | 2 | D | Ex | tb | IIIC | T135°C | Db |
|---|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present, in the form of a flammable cloud of dust in the air, during normal operations (Zone 21) |
| ⑤ | Protection against dust combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Enclosure protection |
| ⑧ | For conductive dust. Equipment marked as suitable for Group IIIC is also suitable for IIIB and IIIA |
| ⑨ | Maximum surface temperature of 135°C |
| ⑩ | Extended level of protection in flammable dust atmospheres |

# BRAKE

For GAS G

| CE | Ex | II | 2 | G | Ex | db | IIC | T4 | Gb |
|---|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present during normal operations (Zone 1) |
| ⑤ | Protection against gas combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Explosion-proof housing with barrier-type connector cable outlet |
| ⑧ | Equipment marked for Group IIC |
| ⑨ | T4 for maximum surface temperature of 135°C |
| ⑩ | Extended level of protection in hazardous zones with explosive gas mixtures |

For DUST D

| CE | Ex | II | 2 | D | Ex | tb | IIIC | T135°C | IP66 | Db |
|---|---|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | | ⑩ |

| | |
|---|---|
| ① | CE marking |
| ② | ATEX code for prevention of explosion |
| ③ | Surface industries |
| ④ | An area where explosive atmospheres may be present, in the form of a flammable cloud of dust in the air, during normal operations (Zone 21) |
| ⑤ | Protection against dust combustion |
| ⑥ | Explosion protection: International |
| ⑦ | Enclosure protection |
| ⑧ | For conductive dust |
| ⑨ | Maximum surface temperature of 135°C |
| ⑩ | Extended level of protection in flammable dust atmospheres |

**Motive** s.r.l.
Via Le Ghiselle, 20
25014 Castenedolo (BS)
Tel.: +39 030 2677087
Fax: +39 030 2677125
motive@motive.it
www.motive.it

# Declaration of EU Conformity

Motive srl based in Castenedolo (BS) - Italy

declares as manufacturer, under its own exclusive responsibility, that its range of

**asynchronous electric motors of the series "DELPHI"**

complies with the following directives and standards:

- EC Directive **2014/34/EU**: concerning "*equipment and Protective systems intended for use in Potentially Explosive Atmospheres*"

Marking: **II 2G Ex eb IIC T4 Gb**
**II 2D Ex tb IIIC T135°C Db**
**Tamb=-20 +40 °C**

Marking*: **II 2G Ex eb IIC T3 Gb**
**II 2D Ex tb IIIC T135°C Db**
**Tamb=-20 +50 °C**

** Marking applicable only on DELPHI Ex IE3 motors*

**Certificate Number (edit by TÜV Italia, Notified Body Number 0948): TÜV IT 20 ATEX 048 X**
**System Certificate Number (edit by TÜV Italia, Notified Body Number 0948): TÜV IT 21 ATEX 021 Q**

as in accordance to the European Standards:

- **IEC 60034-5:2020** Rotating electrical machines – Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) – Classification Internal methods Tests not related to standards, developed by laboratory or under client's specification
- **EN IEC 60079-0:2018** Explosive atmospheres – Part 0: Equipment – General requirements
- **EN IEC 60079-7:2015/A1:2018** Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
- **EN 60079-31:2014** Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
- **IEC 60204-1:2018** Safety of machinery – Electrical equipment of machines – Part 1: General requirements

The machines are supplied without electrical connections to the control panels or any pneumatic and hydraulic supply connections.
It is therefore forbidden to use them until the plant into which they are incorporated has been declared as compliant with the provisions of the Machinery Directive **2006/42/EC** and Directive **2014/34/EU** and plant's analysis was not done as compliant with Directive **99/92/EC**.

Castenedolo, 19th March 2021
The legal Representative

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

# CERTIFICATE

Italia

## [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 20 ATEX 048 X**

[4] Equipment: Three-phase asynchronous electric motors DELPHI series

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

[6] Address: Via Le Ghiselle 20
25014 CASTENEDOLO (BS) Italia

[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 20 EX 046

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

**EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 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 2G Ex eb IIC T4 Gb**
**II 2D Ex tb IIIC T135°C Db**

Tamb: -20° +40 °C

**Alternative marking for IE3 series**
**II 2G Ex eb IIC T3 Gb**
**II 2D Ex tb IIIC T135°C Db**

Tamb -20 +50 °C

This certificate may only be reproduced in its entirety and without any change, schedule included.

Issue date: 17th February 2021

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO
PRD N° 081B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

TÜV Italia Srl Industrie Service 09 48 Notified Body

**TÜV Italia S.r.l.**
**Notified body N° 0948**
**Alberto Carelli**
**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 722228711.

page 1 of 6

PEX-01-M002_r07 del 29/03/2018

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

# NOTIFICATION

Italia

## [1] PRODUCT QUALITY ASSURANCE NOTIFICATION

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

[3] Notification number:

**TÜV IT 21 ATEX 021 Q**

[4] Equipment or Component as listed: Electric Motor, Frequency Converter

Protection concepts: "e" and "t"

[5] Manufacturer: MOTIVE S.r.l.
Via Le Ghiselle, 20
I-25014 Castenedolo (BS) - ITALIA

[6] Sites audited: identical

[7] TÜV Italia, notified body no. 0948 in accordance with the Council Directive 2014/34/EU of 26 February 2014, notifies that the manufacturer has a product quality assurance system which complies to Annex VII of the Directive.

[8] This notification is based on audit report no. R 21 EX 015 issued on 02.03.2021

This notification can be withdrawn if the manufacturer no longer satisfies the requirement of Annex VII.

Results of periodical re-assessment of the quality system are a part of this notification.

[9] This notification is valid until <01.03.2024> and can be withdrawn if the Manufacturer does not satisfy the production quality assurance re-assessment.

[10] According to Article 16 paragraph 3 of the Directive 2014/34/EU the CE marking shall be followed by the identification no. 0948 identifying the notified body involved in the production control stage.

This notification may only be reproduced in its entirety and without any change.

First issue date: 26.03.2021
Issue date: 26.03.2021

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO
PRD N° 081B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

TÜV Italia Srl Industrie Service 09 48 Notified Body

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

**Alberto Carelli**
**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 722223318



PEX-01-M011_r10 del 07/08/2018

TÜV Italia • Gruppo TÜV SÜD • Via Carducci 125, Pal. 23 • 20099 Sesto San Giovanni (MI) • Italia • www.tuvsud.com/it

**Motive** s.r.l.
Via Le Ghiselle, 20
25014 Castenedolo (BS)
Tel.: +39 030 2677087
Fax: +39 030 2677125
motive@motive.it
www.motive.it

# Декларация соответствия UA

Motive srl с главным офисом в Castenedolo (BS) – Italy (Италия)

заявляет как производитель под свою исключительную ответственность, что его продкция

**асинхронные электродвигатели серии «DELPHI»**

соответствует следующим директивам и стандартам:

- Директива ЕС **2014/34/UE**: относительно «*оборудования и защитных систем, предназначенных для использования в потенциально взрывоопасных средах*»

Маркировка: **II 2G Ex eb IIC T4 Gb**
**II 2D Ex tb IIIC T135°C Db**
**Tamb=-20 +40 °C**

Маркировка*: **II 2G Ex eb IIC T3 Gb**
**II 2D Ex tb IIIC T135°C Db**
**Tamb=-20 +50 °C**

** Маркировка применима только к двигателям DELPHI Ex IE3*

**Номер сертификата**
**(отредактировал СЕРТІС-ЦЕНТР, номер нотифицированного органа UA.TR.115): СЦ 21.A.0648 X**

как по украинским стандартам:

- **ДСТУ EN 60079-0:2017 (ЗІ ЗМІНОІО 11:2017)** Взрывоопасные среды. Часть 0. Оборудование. общие требования
- **ДСТУ EN 60079-7:2017** Взрывоопасные среды. Часть 7. Электрическое оборудование. Вид взрывозащиты: повышенная безопасность «e»
- **ДСТУ EN 60079-31:2017** Взрывоопасные среды. Часть 31. Электрическое оборудование. Вид защиты от воспламенения пыли: оболочка «t»

Машины поставляются без электрических подключений к панелям управления или без каких-либо пневматических и гидравлических подключений.
Поэтому запрещено использовать их до тех пор, пока завод, в который они включены, не будет объявлен соответствующим положениям Директивы по машинному оборудованию **2006/42/EC** и Директивы **2014/34/UE**, а анализ предприятия не был проведен как соответствующий Директиве **99/92/EC**.

Castenedolo, 11 мая 2021 г.
Юридический представитель

**ТОВ «СЕРТІС-ЦЕНТР»**
ОРГАН З ОЦІНКИ ВІДПОВІДНОСТІ ПРОДУКЦІЇ
09113, Україна, Київська область, м. Біла Церква, вул. Фастівська 23
Тел.: +38 (0456) 381-700, E-mail: info@sertis.com.ua, Web: www.sertis.com.ua
1О296
ДСТУ EN ISO/IEC 17065

# (1) СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ

(2) **Технічний регламент обладнання та захисних систем, призначених для використання в потенційно вибухонебезпечних середовищах (постанова КМУ від 28 грудня 2016 р. № 1055)**

(3) Номер сертифіката: **СЦ 21.0648 X** Номер видання: **0**

(4) Обладнання: **3-фазні асинхронні електродвигуни серії DELPHI**

(5) Заявник: **Motive srl, Via Le Ghiselle, 20 - 25014 Castenedolo (BS), Italy - Італія**

(6) Виробник: **Motive srl, Via Le Ghiselle, 20 - 25014 Castenedolo (BS), Italy - Італія**

(7) Опис обладнання та його припустимих варіацій, а також документація, на яку даються посилання, наведені у додатку до сертифіката.

(8) ТОВ «СЕРТІС-ЦЕНТР», орган з оцінки відповідності за реєстраційним номером UA.TR.115, призначений виконувати роботи з оцінки відповідності продукції вимогам Технічного регламенту, затвердженого постановою КМУ від 28 грудня 2016 р. № 1055, посвідчує, що була встановлена відповідність вказаного обладнання суттєвим вимогам стосовно захисту здоров'я та безпеки відносно технічного проекту та конструкції обладнання, призначеного для використання в потенційно вибухонебезпечних середовищах, які наведені в Технічному регламенті.

Результати досліджень та випробувань наведені в протоколі оцінки № 743/ОВ-21 від 07.05.2021 р.

(9) Відповідність обладнання суттєвим вимогам стосовно захисту здоров'я та безпеки була забезпечена виконанням вимог наступних стандартів:

**ДСТУ EN 60079-0:2017 (зі зміною 11:2017), ДСТУ EN 60079-7:2017, ДСТУ EN 60079-31:2017**

(10) Якщо в кінці номера сертифіката присутній знак «X», то це посвідчує, що до обладнання застосовуються особливі умови використання, які наведені у додатку до цього сертифіката.

(11) Цей сертифікат виданий внаслідок проведення оцінки відповідності за Модулем B (експертиза типу) згідно з Технічним регламентом та стосується лише технічного проекту та конструкції зазначеного обладнання згідно з узгодженою технічною документацією. Введення в обіг зазначеного обладнання згідно з Технічним регламентом можливо лише за умови застосування додаткових модулів оцінки відповідності.

(12) Маркування обладнання повинно містити наступне:

**II 2G Ex eb IIC T4 Gb, II 2D Ex tb IIIC T135 °C Db**

**II 2G Ex eb IIC T3 Gb,II 2D Ex tb IIIC T135 °C Db, -20 °C≤Ta≤+50 °C - для виконання IE3**

Керівник органу з оцінки відповідності К.В. Меженков

МП

м. Біла Церква, 11.05.2021 р. Аркуш 1 з 3

Цей сертифікат з додатком може бути відтворений лише повністю та без змін.

ФСУ 7.7-09 (редакція 3) 09.12.2019

# IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx INE 11.0037X
Issue No: 1
Certificate history:
Issue No. 1 (2018-03-14)
Issue No. 0 (2012-02-24)

Status: **Current**

Page 1 of 4

Date of Issue: **2018-03-14**

Applicant: **COEL MOTORI S.r.l**
Via campania, 40
I - 20090 Fizzonasco di Pieve Emanuele (MI)
**Italy**

Equipment: **Electromagnetic Brakes type VIS II ...**
*Optional accessory:*

Type of Protection: **db and tb**

Marking:
Ex db IIB or IIC T5, T4 or T3 Gb
Ex db I Mb
Ex tb IIIC T100°C, T135°C or T200°C Db
IP66

*Approved for issue on behalf of the IECEx Certification Body:* Thierry HOUEIX

*Position:* Ex Certification Officer

*Signature: (for printed version)*

*Date:* 2018-03-14

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 the Official IECEx Website.

Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques, BP n2
Parc Technologique ALATA
France

# IECEx Certificate of Conformity

Certificate No.: IECEx INE 11.0037X

Issue No.: 01

Page 2 of 4

Annex: IECEx INE 11.0037X-01_Annex.pdf

**MARKING**

Marking has to be readable and indelible; it has to include the following indications:

A- Electromagnetic brake for group II:

- COEL MOTORI S.r.l
- I - 20090 Fizzonasco di Pieve Emanuele
- VIS II...(*)
- IECEx INE 11.0037X
- (Serial number)
- Ex db IIB or IIC T(**) Gb
- $T_{amb}$ : (**)
- T.cable : 80°C
- IP66
- **WARNING:** DO NOT OPEN WHEN ENERGIZED IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

(*) One of the following types : VIS II 63/71, VIS II 80/90, VIS II 100/112, VIS II 132/160, VIS II 180/200, VIS II 250/280, VIS II P25, VIS II P150, VIS II 315, VIS II P350 or VIS II P750.

(**) See table below.

B- Electromagnetic brake for group III:

- COEL MOTORI S.r.l
- I - 20090 Fizzonasco di Pieve Emanuele
- VIS II...(*)
- IECEx INE 11.0037X
- (Serial number)
- Ex tb IIIC T(**) Db
- $T_{amb}$ : (**)
- T.cable : 80°C
- IP66
- **WARNING: DO NOT OPEN WHEN ENERGIZED IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.**

(*) One of the following types : VIS II 63/71, VIS II 80/90, VIS II 100/112, VIS II 132/160, VIS II 180/200, VIS II 250/280, VIS II P25, VIS II P150, VIS II 315, VIS II P350 or VIS II P750.

(**) See table below.