

EG / EU – Konformitätserklärung / EC / EU declaration of conformity

Hiermit erklärt der Hersteller:

Herewith the manufacturer:

KNF Neuberger GmbH, Alter Weg 3, D-79112 Freiburg

dass folgende Membranpumpen,

declares that the following diaphragm pumps:

(Seriennummer siehe Typenschild / Serial number see type label)

N87TT.9E EX

allen einschlägigen Bestimmungen folgender Richtlinien entspricht:

is in conformity with the following Directives:

Richtlinie 2006/42/EG Maschinen

Directive 2006/42/EC machinery

Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten (Anhang II geändert durch die Delegierte Richtlinie (EU) 2015/863 der Kommission)

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (Annex II amended by Commission Delegated Directive (EU) 2015/863)

Richtlinie 2014/30/EU über elektromagnetische Verträglichkeit

Directive 2014/30/EU about the electromagnetic compatibility

Folgende harmonisierte Normen wurden angewandt:

The following harmonized standards have been used:

EN 1012-2: 1996 + A1:2009

EN IEC 63000: 2018

Bevollmächtigter für die Zusammenstellung der technischen Unterlagen:

Authorised person to compile the relevant technical documentation:

R. Köpfer, Product Qualification, KNF Neuberger GmbH, Alter Weg 3, D-79112 Freiburg

Die Membranpumpen, fallen ebenso in den Anwendungsbereich der folgenden Richtlinie:

The diaphragm pumps falling in the scope of the following Directive as well:

Richtlinie 2014/34/EU für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

Directive 2014/34/EC relating to equipment and protective systems intended for use in potentially explosive atmospheres.

Die zugehörigen Konformitätserklärungen für den:

The corresponding conformity declaration for:

nichtelektrischen Pumpenteil: siehe Seite 2/3 dieser Erklärung

non-electrical part of the pump: see page 2/3 of this declaration

elektrischer Teil - Motor: siehe Seite 3/3 beiliegendes Dokument des Motorenherstellers

electrical part – motor: see page 3/3 enclosed document of motor supplier

EU – Konformitätserklärung / EU declaration of conformity

Hiermit erklärt der Hersteller:

Herewith the manufacturer:

KNF Neuberger GmbH, Alter Weg 3, D-79112 Freiburg
dass folgende Membranpumpen – nichtelektrischer Pumpenteil,
declares that the following diaphragm pumps – non-electrical part:
(Seriennummer siehe Typenschild / Serial number see type label)

N87TT.9E EX

Kennzeichnung:
Marking:



II 2/2G Ex h IIB+H2 T4 Gb

allen einschlägigen Bestimmungen folgenden Richtlinie entspricht:
is in conformity with the following Directive:

Richtlinie 2014/34/EU für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

Directive 2014/34/EC relating to equipment and protective systems intended for use in potentially explosive atmospheres.

Entsprechend Artikel 13 (1) b) ii) der RL2014/34/EU ist die technische Dokumentation bei der notifizierten Stelle Physikalisch-Technische Bundesanstalt PTB, Nr. 0102 hinterlegt.

According to article 13 (1) b) ii) of the directive 2014/34/EU, the technical documentation is deposited at the Physikalisch-Technische Bundesanstalt PTB, notified body no. 0102.

Folgende harmonisierte Normen wurden angewandt:

The following harmonized standards have been used:

EN ISO 80079-36:	2016
EN ISO 80079-37:	2016
EN 1127-1:	2019

Freiburg, 10.08.2021

Ort, Datum (TT.MM.JJJJ)
place, date (dd.mm.yyyy)

CO R&D



ppa. S. Schreiber



ORANGE 1 ELECTRIC MOTORS S.P.A.
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www.orange1.eu

**Dichiarazione UE di Conformità / UE Declaration of Conformity / Déclaration UE de Conformité
UE Konformitätserklärung / Declaration UE de Conformidad**

*I motori elettrici asincroni / Electric asynchronous motors / Les moteurs électriques asynchrone
Elektrische asynchron motoren typ / Los motores electricos asincronos del tipo*

Serie O-M

Che riportano una delle marcalure

Bearing one of the marks / Marques / Kennzeichnung / Que llevan una de los marcados

EU Type Examination certificate (according to Annex III of the ATEX Directive 2014/34/EU)		EPT 17 ATEX 2588 X
CE	0477	II 2G Ex db IIC T5... T3 Gb
CE	0477	II 2GD Ex db IIC T5... T3 Gb Ex tb IIIC T125°C Db
CE	0477	II 2G Ex db eb IIC T5... T3 Gb
CE	0477	II 2GD Ex db eb IIC T5... T3 Gb Ex tb IIIC T125°C Db

Sono dichiarati conformi sotto l'esclusiva responsabilità del costruttore/ They are declared compliant under the sole responsibility of the manufacturer / Ils sont déclarés conformes sous la seule responsabilité du fabricant / Sie werden unter der alleinigen Verantwortung des Herstellers als konform erklärt./Se declaran conformes bajo la exclusiva responsabilidad del fabricante.

ORANGE 1 ELECTRIC MOTORS S.P.A.

*in accordo alle seguenti Directive CE/in compliance with the EC Directives/ selon les Directives CE suivantes
in übereinstimmung mit den folgenden EG-Richtlinien/de acuerdo con las siguientes Directivas EC*

2014/34/UE	(ATEX)
2014/30/UE	(EMC)
2006/42/EC	(Machinery)
2015/863 / EU	(RoHS III)
(EU) 2019/1781	(Ecodesign Requirements)

*in conformità alla seguenti Norme/ and comply with the following Standards / et enconformité avec les Normes
und entsprechen den folgenden Standard / y conform a las siguientes Normas*

EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014, EN 60079-7:2015+A1:2018
EN 60034-1,2,5,6,7,9,12,14, IEC60072-1.

NOTA/ NOTE/ BEMERKUNG/ NOTAS

(Directive 2006/42/EC Direttiva Macchine, Machinery Directive, Directive Machine, Maschinen-Richtlinie, Directiva Maquinaria)

*I motori in oggetto sono considerati componenti, in accordo con la direttiva macchine. Il motore non deve essere messo in servizio
finché la macchina stessa su cui è montato non venga dichiarata conforme alla direttiva macchine.*

*Above motors considered as components, comply with the directive machine. The motor must not be incorporated in service until the machine
itself has not been declared in conformity with the machinery directive.*

*Les moteurs ci-dessus considérés comme composants sont conformes à la directive machine. Le moteur ne peut être incorporé
et mis en service avant que la machine dans laquelle il est incorporé ne soit déclarée conforme à la directive machine.*

*Für die korrekte installation der oben genannten Motore sowie der entsprechenden komponenten, die in ihrer Bauart mit den zu dieser
Bescheinigung aufgeführten Vorschriften übereinstimmen, ist der Maschinenhersteller/Maschinenbetreiber verantwortlich. Die Motoren
entsprechen den Vorschriften nur, solange die Anlage, in der sie eingebaut wurden, in übereinstimmung mit den geltenden Maschinen-
richtlinien und Vorschriften errichtet wurde.*

*Los motores en objeto, por tratarse de componentes, cumplen las normas de la directiva si la instalacion está correctamente controlada por el
constructor de la máquina. El motor no debe entrar en servicio hasta que la máquina en que ha sido incorporado disponga de la declaration de
la directive maquinaria*

Product Quality Assurance Notification Number (according to Annex IV of the ATEX Directive 2014/34/EU): EPT 21 ATEX 4234 Q
Notified by Eurofins Product Testing Italy S.r.l. - Notified Body n.0477 - Via Courgne 21 - 10156 Torino Italy

28/06/2021

Armando Donazzan
Legale Rappresentante





Dichiarazione UE di Conformità / UE Declaration of Conformity / Déclaration UE de Conformité UE Konformitätserklärung / Declaration UE de Conformidad

*I motori elettrici asincroni / Electric asynchronous motors / Les moteurs électriques asynchrone
Elektrische asynchron motoren typ / Los motores electricos asincronos del tipo*

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Sono dichiarati conformi sotto l'esclusiva responsabilità del costruttore/ They are declared compliant under the sole responsibility of the manufacturer / Ils sont déclarés conformes sous la seule responsabilité du fabricant / Sie werden unter der alleinigen Verantwortung des Herstellers als konform erklärt./Se declaran conformes bajo la exclusiva responsabilidad del fabricante.

ORANGE 1 ELECTRIC MOTORS S.P.A.

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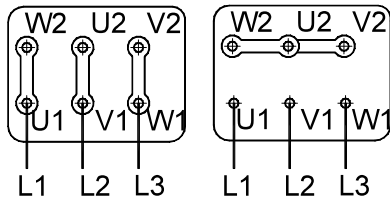


28/06/2021

Armando Donazzan
Legale Rappresentante

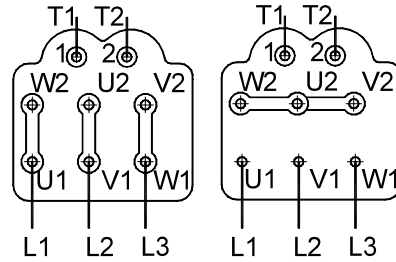
Schemi di collegamento / Wiring diagrams

Trifase 1 Velocità 2-4-6-8 poli (6 fili) – Three-phase 1 speed 2-4-6-8 poles (6 wires)



(Δ) Collegamento delta
Tensione inferiore
Delta connection
lower voltage

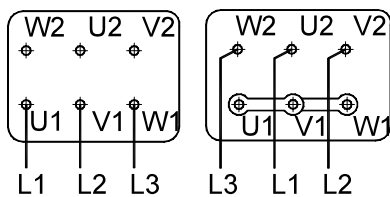
(Y) Collegamento stella
Tensione superiore
Star connection
higher voltage



(Δ) Collegamento delta
Tensione inferiore
Delta connection
lower voltage

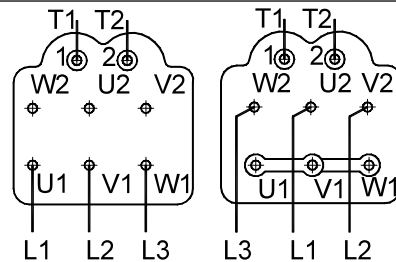
(Y) Collegamento stella
Tensione superiore
Star connection
higher voltage

Trifase doppia velocità 1 avvolgimento – Three-phase double speed 1 winding



Bassa velocità – Low speed

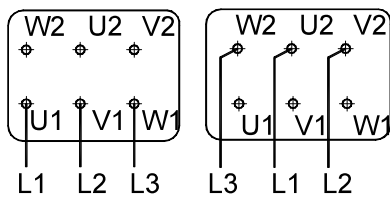
Alta velocità – high speed



Bassa velocità – Low speed

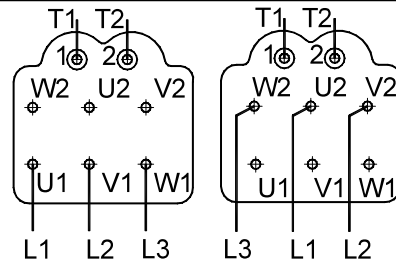
Alta velocità – high speed

Trifase doppia velocità 2 avvolgimenti separati – Three-phase double speed 2 separate windings



Bassa velocità – Low speed

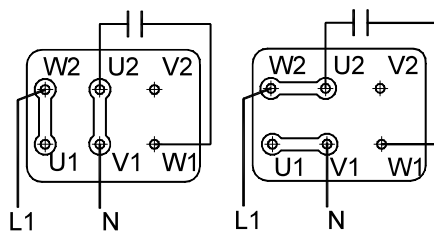
Alta velocità – high speed



Bassa velocità – Low speed

Alta velocità – high speed

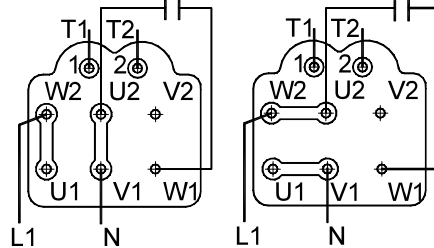
Monofase 4 fili – Single-phase 4 wires



Rotazione oraria
Clockwise rotation

Rotazione antioraria
Counter clockwise rotation

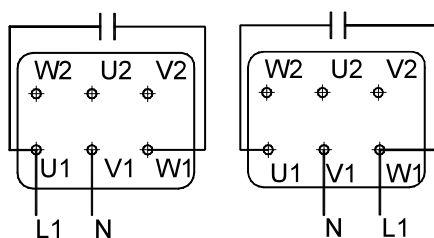
Monofase 4 fili con protezione termica Single-phase 4 wires with thermal protection



Rotazione oraria
Clockwise rotation

Rotazione antioraria
Counter clockwise rotation

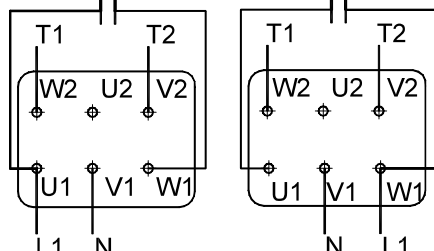
Monofase 3 fili – Single-phase 3 wires



Rotazione oraria
Clockwise rotation

Rotazione antioraria
Counter clockwise rotation

Monofase 3 fili con protezione termica Single-phase 3 wires with thermal protection



Rotazione oraria
Clockwise rotation

Rotazione antioraria
Counter clockwise rotation



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX EUT 14.0001X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 3 [Issue 2 \(2019-02-08\)](#)
Date of Issue: 2021-06-29 [Issue 1 \(2017-03-10\)](#)
[Issue 0 \(2014-03-07\)](#)
Applicant: **ORANGE1 ELECTRIC MOTORS S.p.A.**
Via Mantova, 93
43122 Parma
Italy
Equipment: **Series O-M three-phase and single-phase asynchronous squirrel cage rotor motors, supplied by mains or inverter**
Optional accessory: Terminal box and Capacitor box
Type of Protection: **Flameproof enclosures "d"; Equipment dust ignition protection by enclosure "t", Increased safety "e"**
Marking: Ex db IIC T5 ... T3 Gb
or
Ex db IIC T5 ... T3 Gb
Ex tb IIIC T125°C Db
or
Ex db eb IIC T5 ... T3 Gb
or
Ex db eb IIC T5 ... T3 Gb
Ex tb IIIC T125°C Db

-40°C ≤ Tamb ≤ +60°C
(Relationships between ambient temperature range and temperature limits are reported in the equipment description)

Approved for issue on behalf of the IECEx
Certification Body:

Dionisio Bucchieri

Position:

Head of IECEx CB

Signature:
(for printed version)

Date:

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins Product Testing Italy S.r.l.
Via Cuorgnè
n.21 - 10156 Torino
Italy

 **eurofins** | Product Testing



IECEX Certificate of Conformity

Certificate No.: **IECEX EUT 14.0001X**

Page 2 of 4

Date of issue: 2021-06-29

Issue No: 3

Manufacturer: **ORANGE1 ELECTRIC MOTORS S.p.A.**
Via Mantova, 93
43122 Parma
Italy

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[IT/EUT/ExTR14.0001/03](#)

Quality Assessment Report:

[IT/EUT/QAR14.0001/09](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX EUT 14.0001X**

Page 3 of 4

Date of issue: 2021-06-29

Issue No: 3

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The motors are made of aluminium and have separate parts: motor enclosure, terminal box for supply and capacitor enclosure (optional). The motors are suitable for group IIC and group IIIC.

The motor enclosure has types of protection "Ex d" and "Ex t";

The terminal box can have types of protection "Ex d" and "Ex t" or "Ex e" and "Ex t";

The capacitor enclosure has types of protection "Ex d" and "Ex t";

See the detailed description in the annexed document to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

•Supply voltage must be within:

- $\pm 5\%$ of the nominal value for temperature class T5;

- $\pm 10\%$ of the nominal value for temperature class T3 or T4.

•Flameproof joints are not intended to be repaired.

•The anti-condensation heater can be activated only when the motor is not powered.



IECEX Certificate of Conformity

Certificate No.: **IECEX EUT 14.0001X**

Page 4 of 4

Date of issue: 2021-06-29

Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

See the document annexed to this certificate.

Annex:

[EPT 21 REL 01 2013111.pdf](#)