

[1] SUPPLEMENT N.2 AT EC TYPE EXAMINATION CERTIFICATE

[2] Equipments or protective systems or components intended for use in potentially explosive atmospheres
Directive 94/9/EC

[3] Number of EC Type examination certificate:

EUM1 10 ATEX 0350

[4] Equipment: **Electrical Motor Gas Group IIC e Dust Group IIIC**
Series: **O-M**

[5] Manufacturer: **ELPROMTECH S.r.l.**

[6] Address: **Via Mantova 93 – Parma 43122 (Italy)**

[7] This equipment and any acceptable variation thereto is specified in the annex to this supplement and the documents listed in the Assessment report n. M1.12.REL.03/48070.

[8] EUROFINS-MODULO UNO S.p.A., notified body n. 2049 in accordance with Article 9 of the Council Directive 94/9/CE of 23th March 1994, certifies that this equipment have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential report n. M1.12.REL.03/48070

[9] Compliance with the essential health and safety is assured by compliance with:

EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009

[10] No changes

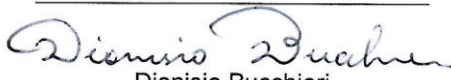
[11] No changes

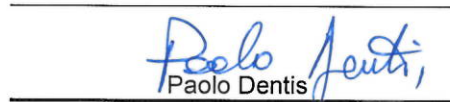
[12] As alternative to the sign present in the EC examination certificate n. EUM1 10 ATEX 0350, the equipment shall include the sign  and at least one of the following strings:

II 2G Ex d IIC T3 Gb	or	II 2G Ex db IIC T3	Tamb -40°C + 60°C
II 2G Ex de IIC T3 Gb	or	II 2G Ex db eb IIC T3	Tamb -40°C + 60°C
II 2G Ex d IIC T4 Gb	or	II 2G Ex db IIC T4	Tamb -40°C + 60°C
II 2G Ex de IIC T4 Gb	or	II 2G Ex db eb IIC T4	Tamb -40°C + 60°C
II 2G Ex d IIC T5 Gb	or	II 2G Ex db IIC T5	Tamb -40°C + 40°C
II 2G Ex de IIC T5 Gb	or	II 2G Ex db eb IIC T5	Tamb -40°C + 40°C
II 2D Ex tb IIIC T125°C			Tamb -40°C + 60°C

Turin, 14 May 2012

CE
2049


Dionisio Bucchieri
Directive Responsible


Paolo Dentis
Notified Body Manager

This certificate do not replace anyway the declaration of conformity nor exonerate the Manufacturer from product liability..

Any change in the design or realization may be not valid this certificate and requires a communication to the body. The technical documentation do not refers to others directives applicable to the equipment.. The change of the reference standards cause the decay of the certificate. This certificate has one page and is reproducible only in its entirety.

This document is the English translation (made by the notified body) of the original document drawn in Italian; only the Italian text is legally valid

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ANNEX

[14] **SUPPLEMENT N.2 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

[15] **Description of Equipment**

No changes

[16] **Warning Label**

No changes

[17] **Assessment report n° M1.12.REL.03/44586**

This supplement to EC Type certificate is released after the positive result of the conformity assessment of the Council Directive 94/9/CE and to technical standard EN 60079-0:2009; EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009, performed by the notified body EUROFINS-MODULO UNO S.p.A., and quoted in the above assessment report.

[18] **Descriptive Documents**

The documents listed in the EC Type examination certificate n. EUM1 10 ATEX 0350 are integrated/replaced by the following documents:

Name	Description	Date	Rev.	Listed
Istruzioni serie O-M	Manual for use, maintenance and installation	19/04/2012	0	
Motori asincroni serie O-M	Technical note O-M series motor	19/04/2012	0	
Servoventilazione	Technical note O-M series motor	19/04/2012	0	
Assieme motore Ex de IIC - A	Ex de motor design with joint description	20/04/2012	0	√
Assieme motore Ex d IIC - A	Ex d motor design with joint description	20/04/2012	0	√
Assieme motore Ex d IIC – senza scatola	Ex d motor design with joint description	20/04/2012	0	√
Assieme motore Ex de IIC - B	Ex de motor design with joint description	20/04/2012	0	√
Assieme motore Ex d IIC - B	Ex d motor design with joint description	20/04/2012	0	√

[19] **Special condition for a safe use**

No changes

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

No changes

Paolo Dentis

Notified Body Manager



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Rev. 0 of 14 May 2012



EUROFINS – MODULO UNO S.P.A. - VIA CUORGNE', 21 – 10156 TORINO - ITALY
NOTIFIED BODY N. 2049

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[14] **SUPPLEMENT N.2 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

[21] **Certificate History**

This supplement is at its first issue.

This supplement is issued as a consequence of the change of manufacturer's name

[22] **Terms and conditions**

No changes

[1] **SUPPLEMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE**

[2] Equipments or protective systems or components intended for use in potentially explosive atmospheres
Directive 94/9/EC

[3] Number of EC Type examination certificate:

EUM1 10 ATEX 0350

[4] Items: **Electrical Motor Gas Group IIC e Dust Group IIIC**

Series: **O-M**

[5] Manufacturer: **ELPROM S.r.l.**

[6] Address: **Via Mantova 93 – Parma 43122 (Italy)**

[7] This equipment and any acceptable variation thereto is specified in the annex to this supplement and the documents listed in the Assessment report n. M1.11.REL.01/44586.

[8] EUROFINS-MODULO UNO S.p.A., notified body n. 2049 in accordance with Article 9 of the Council Directive 94/9/CE of 23th March 1994, certifies that this equipment have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential report n. M1.11.REL.01/44586

[9] Compliance with the essential health and safety is assured by compliance with:

EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009

[10] No changes

[11] No changes

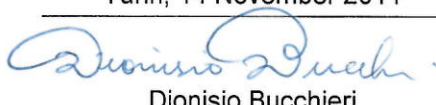
[12] As alternative to the sign present in the EC examination certificate n. EUM1 10 ATEX 0350 , the equipment shall include the sign  and at least one of the following strings:

Ex db IIC T3	Tamb -40°C + 60°C
Ex db eb IIC T3	Tamb -40°C + 60°C
Ex db IIC T4	Tamb -40°C + 60°C
Ex db eb IIC T4	Tamb -40°C + 60°C
Ex db IIC T5	Tamb -40°C + 40°C
Ex db eb IIC T5	Tamb -40°C + 40°C
Ex tb IIIC T125°C	Tamb -40°C + 60°C
Ex tb IIIB T125°C	Tamb -40°C + 60°C

Turin, 14 November 2011



2049



Dionisio Bucchieri
Directive Responsabile



Paolo Dentis
Notified Body Manager

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ANNEX

[14] **SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

[15] **Description of Equipment**

This replace the description made in the EC examination certificate n. EUM1 10 ATEX 0350.

2 GD category motors appropriate for use in Zone 1, 2, 21, 22 manufactured in accordance with the standards EN 60079-0 e EN 60079-1 EN60079-7, EN 60079-31; the symbol "eb" on the marking string, where present, refers to the terminals enclosure type of protection; the certification includes the IIB and IIC group capacitor enclosure described in the manufacturer documentation; if the manufacturer uses an IIB capacitor enclosure, the whole equipment belong to IIB group. The principal characteristics of the apparatus are:

- a) Three-phase and single-phases asynchronous squirrel cage rotors motors with shaft height from 56 to 132 mm.
- b) Totally closed with protection degree up to IP66 ventilated and not ventilated (with half power in respect to the ventilated corresponding motors so to maintain a T3 temperature class).
- c) Insulation class F, H
- d) 2, 4, 6, 8, 2/4, 4/8, 4/6, 6/8 poles
- e) Voltage supply up to 850 V
- f) Frequency 50/60 Hz
- g) Double speed motors with one Dahlander winding or with two separate windings

h) Max surface temperature:

GAS	temperature class T3, T4, T5
DUST	T125°C

- i) Possibility of supply through inverter exclusively with the use of thermal protectors applied on the windings. Such protectors may be either PTO and PTC and they shall be connected to an appropriate protection device conforming to EN 50495.

Activation temperature related to the temperature class: 90°C for temperature class T5, 130°C for temperature class T4, 150°C for temperature class T3..

- j) In case of single phase motors the capacitors have to be placed in the appropriate enclosure or in safe zone.
- k) Possibility of use of anticondensation resistences powered only at stopped motor.
- l) Painting: the paint used has a maximum thickness of 0,2 mm

Ventilation can be made by fan, who is fitted directly on the shaft, or by using a special motor. This motor belong to O-M series. It will be 63 to save space inside the fan cover .
Supply voltage must be within $\pm 5\%$ of the nominal value

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[14] **SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

The code list is in the following table

Motor Type				OD	063	A	4	H	230	5	P	4	U
MD	Single Phase Ex db	ME	Single Phase Ex db Ex eb										
OD	Three Phase Ex db	OE	Three Phase Ex db EX eb										
Shaft height													
56, 63, 71, 80, 90, 100, 112,132													
Stator Dimensions													
A, B	56, 63, 71, 80												
S, L	90 - 132												
K, M	100 - 112 - 132												
Poles													
2, 4, 6	Single phasse motor												
2, 4, 6 , 8	Three phase motor 1 speed												
3, 5, 7, 9	Three phase motor 2 speed 2/4, 4/8, 4/6, 6/8 poli												
Mounting System													
H	B3	W	B3/B14										
B	B3 box dx	X	B3/B5										
S	B3 box sx	J	B3/B14 box sx										
F	B5	M	B3/B14 box dx										
G	V1 (B5 + roof)	R	B3/B5 box sx										
Q	B14	T	B3/B5 box dx										
Supply Voltage													
For two voltage motors is indicated the lower (ex. 230 for 230/400)													
Frequency													
5	50Hz												
6	60Hz												
7	50/60Hz												
Protection (IP and Ex)													
P	Motor 2G												
Q	Motor 2GD												
Temperature class													
3	Temperature class T3 (200°C)												
4	Temperature class a T4 (135°C)												
5	Temperature class T5 (100°C)												
Thermal protectors													
-	Without protectors												
3	Protector (PTO) – temperature class T3												
4	Protector (PTO) – temperature class T4												
5	Protector (PTO) – temperature class T5												
P	PTC – temperature class T3												
U	PTC – temperature class T4												
V	PTC – temperature class T5												

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[14] **SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

Motor list inside the certificate with relative powers

Three Phase Motors one speed							
3000 rpm		1500rpm		1000 rpm		750 rpm	
Type	Power [kW]	Type	Power [kW]	Type	Power [kW]	Type	Power [kW]
56A2	0,09	56A4	0,06				
56B2	0,12	56B4	0,09				
63A2	0,18	63A4	0,12				
63B2	0,25	63B4	0,18	63B6	0,12		
71A2	0,37	71A4	0,25	71A6	0,18		
71B2	0,55	71B4	0,37	71B6	0,25	71B8	0,12
80A2	0,75	80A4	0,55	80A6	0,37	80A8	0,18
80B2	1,1	80B4	0,75	80B6	0,55	80B8	0,25
90S2	1,5	90S4	1,1	90S6	0,75	90S8	0,37
90L2	2,2	90L4	1,5	90L6	1,1	90L8	0,55
		100K4	2,2			100K8	0,75
100L2	3	100L4	3	100L6	1,5	100L8	1,1
112M2	4	112M4	4	112M6	2,2	112M8	1,5
132K2	5,5	132S4	5,5	132S6	3	132S8	2,2
132S2	7,5	132M4	7,5	132K6	4	132L8	3
132M2	9	132L4	9				
132L2	11						

Single Phase Motor one speed					
3000 rpm		1500rpm		1000 rpm	
Type	Power [kW]	Type	Power [kW]	Type	Power [kW]
56A2	0,09	56A4	0,06		
56B2	0,12	56B4	0,09		
63A2	0,18	63A4	0,12		
63B2	0,25	63B4	0,18	63B6	0,09
71A2	0,37	71A4	0,25	71A6	0,12
71B2	0,55	71B4	0,37	71B6	0,18
80A2	0,75	80A4	0,55	80A6	0,25
80B2	1,1	80B4	0,75	80B6	0,37
90S2	1,5	90S4	1,1	90S6	0,55
90L2	1,5	90L4	1,5	90L6	0,75
100M2	2,2			100M6	1,10
100L2	3	100M4	2,2		
112M2	4	112M4	3		

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[14] SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350

Three Phase Motor two speeds constant torque							
1500/3000 rpm		750/1500rpm		1000/1500 rpm		750/1000 rpm	
Type	Power [kW]	Type	Power [kW]	Type	Power [kW]	Type	Power [kW]
71A3	0,22 0,33	71A5	0,11 0,18				
71B3	0,4 0,5	71B5	0,15 0,3	71BL	0,10 0,20	71B9	0,08 0,12
80A3	0,45 0,6	80A5	0,22 0,45	80AL	0,20 0,40	80B9	0,13 0,15
80B3	0,6 0,8	80B5	0,37 0,55	80BL	0,30 0,50	80B9	0,15 0,25
90S3	0,8 1,1	90S5	0,37 0,75	90SL	0,45 0,65	90S9	0,25 0,35
90L3	1,2 1,6	90L5	0,6 1,1	90LL	0,60 0,95	90L9	0,30 0,60
100M3	1,5 2,2	100M5	0,7 1,1	100ML	0,90 1,40	100M9	0,55 0,80
100L3	2,2 3	100L5	1,1 1,8	100LL	1,10 1,85	100L9	0,65 1,00
112M3	3,3 4	112M5	1,4 2,6	112ML	1,60 2,40	112M9	1,00 1,50
132S	5,9 4,8	132S	3,3 1,85	132S	3 2	132S	1,85 1,30
132M	7,5 5,5	132M	4,8 2,4	132K	4 2,6	132M	2,55 1,85
132L	8 6	132L	5,5 3	132M	4,4 3	132L	3 2
				132L	5,2 3,3		

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[14] **SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

Three Phase Motor two speeds quadratic torque							
1500/3000 rpm		750/1500rpm		1000/1500 rpm		750/1000 rpm	
Type	Power [kW]	Type	Power [kW]	Type	Power [kW]	Type	Power [kW]
71A3	0,09	71A5	0,05				
	0,37		0,25				
71B3	0,14	71B5	0,07	71BL	0,10		
	0,50		0,37		0,30		
80A3	0,18	80A5	0,10	80AL	0,13	80B9	0,09
	0,75		0,55		0,44		0,33
80B3	0,25	80B5	0,15	80BL	0,18	80B9	0,12
	1,10		0,75		0,59		0,40
90S3	0,37	90S5	0,25	90SL	0,30	90S9	0,19
	1,50		0,90		0,90		0,48
90L3	0,55	90L5	0,30	90LL	0,40	90L9	0,25
	2,20		1,20		1,15		0,66
100M3	0,62	100M5	0,45	100ML	0,60	100M9	0,37
	2,60		1,90		1,80		0,90
100L3	0,75	100L5	0,55	100LL	0,70	100L9	0,45
	3,30		2,20		2,20		1,10
112M3	4,40	112M5	0,75	112ML	0,90	112M9	0,75
	1,10		3,00		3,00		1,50
132S	6,5	132S	4,4	132S	4	132S	2,2
	2		1,1		1,2		0,9
132M	8,5	132M	5,9	132K	4,8	132M	2
	2,5		1,5		1,4		1,2
132L	9,2	132L	7,5	132M	5,5	132L	3,7
	2,8		1,85		1,7		1,5
				132L	6,6		
					2		

[16] **Warning Label**
No changes

[17] **Assessment report n° M1.11.REL.01/44586**

This supplement to EC Type certificate is released after the positive result of the conformità assessment of the Council Directive 94/9/CE and to technical standard EN 60079-0:2009; EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009, performed by the notified body EUROFINS-MODULO UNO S.p.A., and quoted in the above assessment report.

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ANNEX

[14] **SUPPLMENT N.1 AT EC TYPE EXAMINATION CERTIFICATE N. EUM1 10 ATEX 0350**

[18] **Descriptive Documents**

The documents listed in the EC Type examination certificate n. EUM1 10 ATEX 0350 are integrated/replaced by the following documents:

Name	Description	Date	Rev.	N. pages	Listed
Istruzioni sere O-M	Manual for use, maintenance and installation	03/11/2011	1	4	
Motori asincroni serie O-M	Technical note O-M series motor	24/10/2011	2	12	√
Servoventilazione	Technical note O-M series motor	25/10/2010	1	7	√
Assieme motore Ex de IIC rev 01	Ex de motor with joint description (type 56-132)	10/11/2011	1	1	√
Assieme motore Ex d IIC rev 01	Ex d motor design with joint description	10/11/2011	1	1	√
Assieme motore Ex d IIC – senza scatola rev 01	Ex d motor design with joint description	10/11/2011	1	1	√
Assieme motore Ex d IIC – rev0	Ex d motor design with joint description (type 56-132)	03/11/2011	0	1	√
Assieme motore Ex de IIC – rev0	Ex de motor design with joint description (type 56-132)	03/11/2011	0	1	√
Rapporto di prova 2011-0001	Results of thermal tests on motor	23/09/2011	0	15	

[19] **Special condition for a safe use**

No changes

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

No changes

[21] **Certificate History**

This supplement is at its first issue.

This supplement is issued as a result of the Assessment Report n. M1.11.REL.01/44586 of 17-10-2011

[22] **Terms and conditions**

No changes