



[1]

TYPE EXAMINATION CERTIFICATE

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

[3] Number of Type examination certificate:

EUM1 12 ATEX 0109

[4] Equipment: Electrical Motors

Series: J3 – K3

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

[6] Address: **Via Mantova, 93 - 43122 PARMA (Italia)**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents reported in it.


[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 component have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of component intended for use in potentially explosive atmospheres given in Annex II of the Directive.
The examination and test results are recorded in the confidential report n. M1.12.REL.02/48070

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

EN 60079-0:2009; EN 60079-15:2010; EN 60079-31:2009

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

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the equipment specified, in accordance with the Directive 94/9/CE.

[12] The equipment shall include the sign  and at least one of the following strings:

II 3G Ex nA IIC T3 Gc	Tamb -20°C + 40°C
II 3G Ex nA IIC T4 Gc	Tamb -20°C + 40°C
II 3G Ex nAd IIC T3 Gc	Tamb -20°C + 40°C
II 3G Ex nAd IIC T4 Gc	Tamb -20°C + 40°C
II 3G Ex nAc IIC T3	Tamb -20°C + 40°C
II 3G Ex nAc IIC T4	Tamb -20°C + 40°C
II 3G Ex nAc db IIC T3	Tamb -20°C + 40°C
II 3G Ex nAc db IIC T4	Tamb -20°C + 40°C
II 3D Ex tc IIIB T125°C IP55	Tamb -20°C + 40°C

Turin, 14 May 2012



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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TYPE EXAMINATION CERTIFICATE N. EUM1 12 ATEX 0109**[15] Equipment description**

Three-phase and single-phases asynchronous squirrel cage rotors motors with "protection n" for non sparking apparatus "nA" for gas and "protection by enclosure t" for dust.

The features of the equipment are:

- a) Shaft height from 56mm up to 160 mm
- b) Totally closed with degree of protection IP 55
- c) Class F insulation
- d) 2, 4, 6, 8, 2/4, 4/8 poles
- e) Voltage supply: up to 850V
- f) Frequency 50/60 Hz
- g) Double speed motors with 1 winding Dahlander connection or two separate windings
- h) Max surface temperature:

GAS	temperature class T3 or T4
DUST	T125°C
- i) Use of thermal protectors applied on the heads of the windings with a number of 2 for three-phase motor and 1 for single-phase motor.
- j) In case of single phase motors the capacitors have to be placed in the appropriate enclosure Ex d or in terminal box.
- k) Possibility of use of anti condensation resistances powered only at stopped motor.
- l) Painting: The paint allow the transmission of the heat to the outside and it will have a maximum thickness of 0.3 mm.

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The code list is in the following table:

Motor Type		J3	063	A	4	H	230	5	F	Z	3
K3	Single-phase Ex motor category 3										
J3	Three-phase Ex motor category 3										
Motor Size (mm):											
56, 63, 71, 80, 90, 100, 112, 132, 160											
Stator dimensions:											
A, B	56, 63, 71, 80										
S, L	90										
K, M	100										
M	112										
S, K, M, L	132										
S M, L	160										
Poles:											
2,4	Single-phase motors										
2, 4, 6, 8	Three-phase motors 1 speed										
3, 5	Three-phase motors 2 speed 2/4 poles and 4/8 poles										
Mounting arrangements											
H	B3 box on the top	W	B3/B14								
B	B3 box on the right	X	B3/B5								
S	B3 box on the left	J	B3/B14 box on the left								
F	B5	M	B3/B14 box on the right								
G	V1 (B5 + rain-cover)	R	B3/B5 box on the left								
Q	B14	T	B3/B5 box on the right								
Supply Voltage											
3-ph 1 speed (examples)											
230	motors 230/400V										
400	motors 400/690V										
3-ph 2 speeds (example)											
230 o 400	-										
3-ph 2 speeds (example)											
230	-										
Frequency											
5	50Hz										
6	60Hz										
Protection (IP and Ex)											
L	IP55 – Non Sparking 'Ex nA' (Ex nAc)										
M	IP55 - Protection 'Ex tc IIIB (Non conductive dust)										
N	Non Sparking 'Ex nA' (Ex nAc) IP55 - Protection 'Ex tc IIIB (Non conductive dust)										
Painting											
Z	No painting	M	BRIGHT BLACK RAL9005								
B	BLUE RAL5010	N	OPAQUE BLACK								
E	BLUE BILBERRY RAL5014	V	GREEN 5018								
K	LIGHT BLUE RAL5015	W	WHITE RAL9001								
G	GREY RAL7031										
Thermal protection											
-	Motor without thermal protectors										
3	Thermal circuit protectors 150°C ± 5°C (class T3)										
4	Thermal circuit protectors 120°C ± 5°C (class T4)										

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Motors of category 3G, class of temperature T4 (can have marking T3); thermal protector 120°C ±5° for class T4 and 150°C ±5° per class T3 are optional.

Motors of category 3D with maximum surface temperature T=125°C; thermal protector is optional

Three-phase 1 speed motors 2 poles and 4 poles

Type	Poles	Power [kW]
J3 56A2	2	0,09
J3 56B2	2	0,12
J3 63A2	2	0,18
J3 63B2	2	0,25
J3 71A2	2	0,37
J3 71B2	2	0,55
J3 80A2	2	0,75
J3 80B2	2	1,1
J3 90S2	2	1,5
J3 90L2	2	2,2
J3 100L2	2	3
J3 112M2	2	4
J3 132K2	2	5,5
J3 132S2	2	7,5
J3 132L2	2	9,3
J3 160K2	2	11
J3 160M2	2	15
J3 160L2	2	18,5

Type	Poles	Power [kW]
J3 56A4	4	0,06
J3 56B4	4	0,09
J3 63A4	4	0,12
J3 63B4	4	0,18
J3 71A4	4	0,25
J3 71B4	4	0,37
J3 80A4	4	0,55
J3 80B4	4	0,75
J3 90S4	4	1,1
J3 90L4	4	1,5
J3 100K4	4	2,2
J3 100L4	4	3
J3 112M4	4	4
J3 132S4	4	5,5
J3 132M4	4	7,5
J3 132L4	4	9,3
J3 160M4	4	11
J3 160L4	4	15

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Three-phases 1 speed motors 6 poles and 8 poles

Type	Poles	Power [kW]
J3 63B6	6	0,12
J3 71A6	6	0,18
J3 71B6	6	0,25
J3 80A6	6	0,37
J3 80B6	6	0,55
J3 90S6	6	0,75
J3 90L6	6	1,1
J3 100L6	6	1,5
J3 112M6	6	2,2
J3 132S6	6	3
J3 132K6	6	4
J3 132M6	6	5,5
J3 160M6	6	7,5
J3 160L6	6	11

Type	Poles	Power [kW]
J3 80A8	8	0,18
J3 80B8	8	0,25
J3 90S8	8	0,37
J3 90L8	8	0,55
J3 100K8	8	0,75
J3 100L8	8	1,1
J3 112M8	8	1,5
J3 132S8	8	2,2
J3 132L8	8	3
J3 160S8	8	4
J3 160M8	8	5,5
J3 160L8	8	7,5
-	-	-
-	-	-

Motor of category 3G class of temperature T4 (with thermal protector 120°C ±5°C) or T3 (with thermal protector 150°C ±5°C optional)

Motor of category 3D with maximum surface temperature T=125°C; thermal protector is optional

Three-phase double speed motor 2/4 poles

Type	Poles	Power [kW]
J3 71A3	4	0,22
	2	0,33
J3 71B3	4	0,4
	2	0,5
J3 80A3	4	0,45
	2	0,6
J3 80B3	4	0,6
	2	0,8
J3 90S3	4	0,8
	2	1,1
J3 90L3	4	1,1
	2	1,5
J3 90L3	4	1,3
	2	1,7
J3 100K3	4	1,5
	2	2,2

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J3 100L3	4	2,2
	2	3
J3 112M3	4	3,3
	2	4
J3 132S3	4	4,5
	2	5,5
J3 132M3	4	6,5
	2	8,1
J3 132L3	4	8
	2	9,5
J3 160M3	4	9,3
	2	11
J3 160M3B	4	12
	2	14
J3 160L3	4	12,5
	2	0,22

Three-phase double speed motor 4/8 poles

Type	Poles	Power [kW]
J3 71A5	8	0,11
	4	0,18
J3 71B5	8	0,15
	4	0,3
J3 80A5	8	0,22
	4	0,45
J3 80B5	8	0,37
	4	0,55
J3 90S5	8	0,6
	4	1,1
J3 90L5	8	1,2
	4	1,6
J3 100K5	8	0,7
	4	1,1
J3 100L5	8	1,1
	4	1,8
J3 112M5	8	1,4
	4	2,6
J3 132S5	8	2,4
	4	4,5
J3 132M5	8	2,6
	4	4,1
J3 132L5	8	3
	4	5,5
J3 160M5	8	4,1
	4	6,4

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Single phase 1 speed motors 2 poles and 4 poles

Type	Poles	Power [kW]
K3 56A2	2	0,09
K3 56B2	2	0,12
K3 63A2	2	0,18
K3 63B2	2	0,25
K3 71A2	2	0,37
K3 71B2	2	0,55
K3 80A2	2	0,75
K3 80B2	2	1,1
K3 90S2	2	1,5
K3 90L2	2	1,5
K3 100L2	2	2,2
K3 100L2B	2	3
K3 112M2	2	4

Type	Poles	Power [kW]
K3 56A4	4	0,06
K3 56B4	4	0,09
K3 63A4	4	0,12
K3 63B4	4	0,18
K3 71A4	4	0,25
K3 71B4	4	0,37
K3 80A4	4	0,55
K3 80B4	4	0,75
K3 90S4	4	1,1
K3 90L4	4	1,5
K3 100K4	4	2,2
K3 112M4	4	3
-	-	-

 [16] **Assessment report n° M1.12.REL.02/48070**

This EC Type certificate is released after the positive result of the conformity assessment of the Council Directive 94/9/CE and to harmonized technical EN 60079-0:2009; EN 60079-15:2010, EN 60079-31:2009, performed by the notified body Eurofins-Modulo Uno SpA, and reported in the assessment report above cited.

Descriptive Documents

Name	Description	Date	Rev.	N. page	Listed
Cat.3 Nota Tecnica Motori Serie K3-J3	Technical note	18/04/2012	0	16	--
Cat.3 Disegni Componenti Motori Serie K3-J3	Component drawing	18/04/2012	0	8	--

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

None

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

Guaranteed by the conformity to the harmonized standards; Requirement 1.2.7 of the Directive 94/9/CE is not covered by this certificate

 [19] **Certificate History**

This Certificate is at its first issue.

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TYPE EXAMINATION CERTIFICATE N. EUM1 12 ATEX 0109**[20] Terms and conditions**

The product liability rests with the manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- Changes in the design or construction of the product;
- Changes or amendments to the Directive;
- Changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 94/9/EC directive.

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*End of the Certificate*

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