



EMPOWERED PERFORMANCE

ELECTRIC ACTUATORS IP68



www.omal.com



EMPOWERED PERFORMANCE

Il giusto equilibrio tra uomo e ambiente migliora la qualità della vita, garantendo un mondo migliore alle generazioni future.

The right balance between human and environment improves the quality of life, ensuring a better world to future generations.



VISION & MISSION

PASSIONE
PASSION

SENSO DEL DOVERE
SENSE OF DUTY

RISPETTO
RESPECT

Garantiamo un mondo migliore ai nostri figli.
Grazie ai nostri prodotti proteggiamo
l'ambiente che ci circonda e miglioriamo
concretamente la qualità della vita rendendo
più sicuri ed affidabili gli impianti.

*We ensure a better world to our children.
Thanks to our products we take care of
the environment and we improve the
quality of life making safer and
more reliable plants.*



CERTIFICAZIONI AZIENDALI COMPANY CERTIFICATES

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 109786-2012-AE-ITA-ACCREDIA Initial certification date: 23 January 2012 Valid: 24 January 2024 - 23 January 2027

This is to certify that the management system of **OMAL S.p.A.**
Via Ponte Nuovo, 11/1 - 25050 Rodengo Saiano (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard:
ISO 14001:2015

This certificate is valid for the following scope:
Design and manufacturing of pneumatic actuators, electric actuators, pneumatic coaxial and angle seat valves, manual and automatized ball and butterfly valves by machining, plastic moulding, assembly, testing, packaging and shipping (IAF: 18)

Evaluated according to the requirements of Technical Regulations RT-09

Place and date:
Vimercate (MB), 19 January 2024

ACCREDIA
CONFERMAZIONE ACCREDITAMENTO

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Baroncini
Claudia Baroncini
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 88 99 905 - www.dnv.it

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 236889-2017-AQ-ITA-ACCREDIA Initial certification date: 14 July 1992 Valid: 10 June 2023 - 09 June 2026

This is to certify that the management system of **OMAL S.p.A.**
Via Ponte Nuovo, 11/1 - 25050 Rodengo Saiano (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
Design and e production of pneumatic actuators, electric actuators, ball valves 2-way and 3-way, butterfly valves, Angle seat valves, pneumatic valves coaxial through assembly. (IAF: 18)

Place and date:
Vimercate (MB), 11 April 2023

ACCREDIA
CONFERMAZIONE ACCREDITAMENTO

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Baroncini
Claudia Baroncini
Management Representative

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ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 88 99 905 - www.dnv.it

RINA

PARERE DI VERIFICA VERIFICATION OPINION

N°. VEB-169

RINA SERVICES S.p.A., sulla base della verifica di terza parte condotta, attesta che **RINA SERVICES S.p.A.**, on the basis of the third-party verification conducted, declares that

Rapporto GHG - Rev. 01 del 11/07/22
per il periodo di riferimento 01/01/2021 - 31/12/2021
GHG Report Rev. 01 dated 11/07/22
for the reference period 01/01/2021 - 31/12/2021

Predisposto dall'organizzazione
Prepared by the organization

OMAL S.p.A.
Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS)
Via Brognolo, 12 - 25050 Passirano (BS)

è conforme ai requisiti del seguente documento di riferimento
complies with the requirements of the following reference document

ISO 14064-1:2018 "Parte 1: Specifiche e guida, al livello dell'organizzazione, per la quantificazione e la rendicontazione delle emissioni di gas ad effetto serra e della loro rimozione"
ISO 14064-1:2018 "Part 1: Specification with guidance, at the organization level, for quantification and reporting of greenhouse gas emissions and removals"

In allegato sono riportate le emissioni di GHG rendicontate
The GHG emission reported can be found in the annex

La verifica è stata compiuta ai sensi della UNI EN ISO 14064-3, UNI EN ISO 14065 e UNI EN ISO 17029
The verification was carried out in accordance with UNI EN ISO 14064-3, UNI EN ISO 14065 and UNI EN ISO 17029

Data di rilascio: 22/07/2022
Date of issue: 22/07/2022

Jacopo Ferrando
RINA SERVICES S.p.A.
Jacopo FERRANDO
Genoa & Milan Management System Certification Head

DNV

CERTIFICATO DI SISTEMA DI GESTIONE

Certificato n.: C064742 Data Prima Emissione: 30 gennaio 2023 Validità: 30 gennaio 2023 - 29 gennaio 2026

Si certifica che il sistema di gestione di **OMAL S.p.A.**
Via Ponte Nuovo, 11/1 - 25050 Rodengo Saiano (BS) - Italia
e i siti come elencati nell'Appendix che accompagna questo certificato

È conforme allo Standard:
ISO 45001:2018

Questa certificazione è valida per il seguente campo applicativo:
Progettazione e produzione di attuatori pneumatici, elettrici, valvole pneumatiche coassiali ed a flusso avviato, valvole a sfera ed a farfalla manuali ed automatizzate attraverso processi di lavorazioni meccaniche, stampaggio plastica, assemblaggio, collaudo, imballaggio e spedizione (IAF: 18)

Luogo e Data:
Vimercate (MB), 30 gennaio 2023

ACCREDIA
CONFERMAZIONE ACCREDITAMENTO

Per l'Organismo di Certificazione:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Baroncini
Claudia Baroncini
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 88 99 905 - www.dnv.it



RESPONSABILITÀ SOCIALE SOCIAL RESPONSIBILITY



Certified



Corporation



WE SUPPORT



Sustainable & Ethical Procurement Category



Cross-Function & Team Procurement Category



 **OMAL**
AUTOMATION

OMAL S.p.A.
Via Ponte Nuovo 11
25060 RODENGO-SAIANO (BS)
ITALY

EA0240A500B0 CE

Power Supply 230V AC $\pm 10\%$ 50/60Hz 0.6A	Ambient T: -25° + 60° C
Duty ED 50%	Enc. Prot IP 68
Torque 240 Nm (max 280 Nm)	Date 22 L
Stroke 90° (Max 100°)	



230 Vac



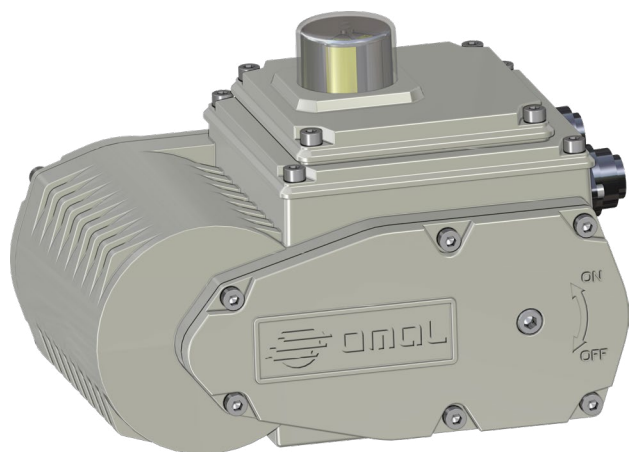
ATTUATORI ELETTRICI IP68

IP68 ELECTRIC ACTUATORS

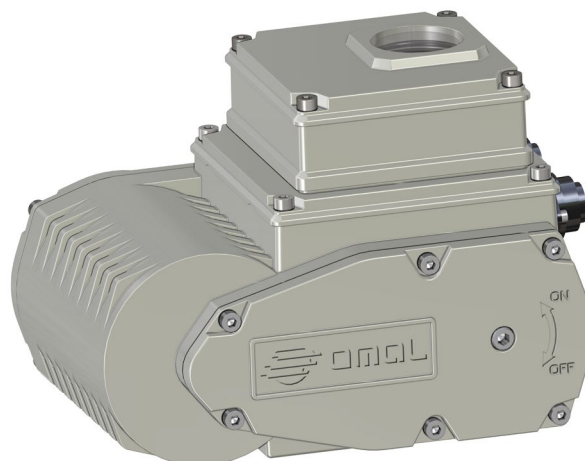




ATTUATORE ELETTRICO TIPO ROTATIVO "EA" ON-OFF ELECTRIC ACTUATOR "EA" ON-OFF ROTARY TYPE



Versione IP67



Versione IP68

DATI TECNICI

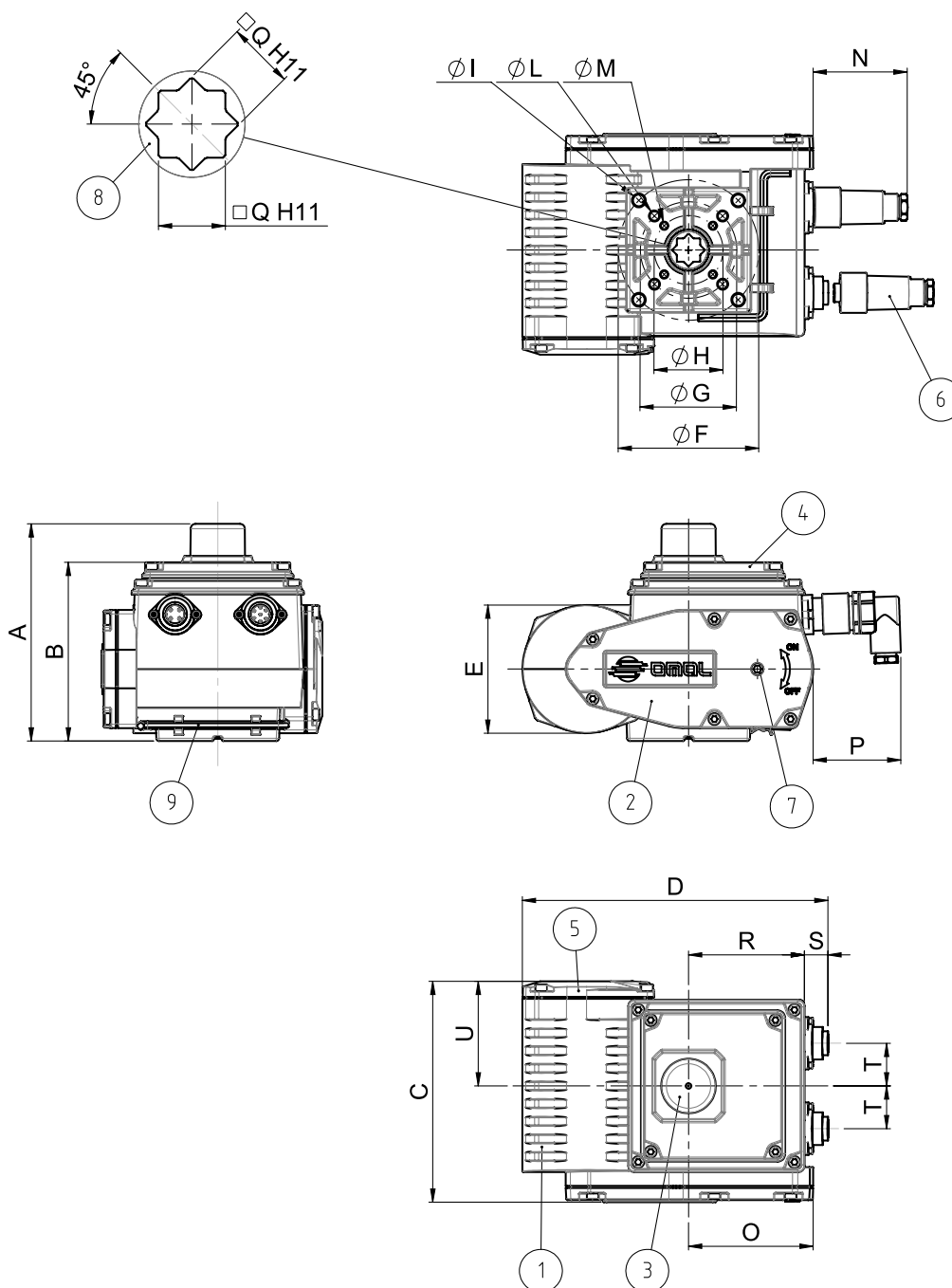
- Angolo di lavoro nominale: 90° regolabile tra 20° e 95°.
- Tipo di regolazione: continua mediante camme autofrenate e finecorsa elettromeccanici.
- Coppia di lavoro nominale: da 35 a 240 Nm.
- Tempo di manovra (0° - 90°): vedi diagramma.
- Servizio: S3 ED 50% secondo CEI 60034.
- Rispondenza alle norme: Direttiva bassa tensione 2014/35/UE; Direttiva compatibilità elettromagnetica 2014/30/UE.
- Grado di protezione: IP68 secondo EN60529.
- Temperatura ambiente di lavoro: -25° +60° C.
- Temperatura limite di stoccaggio: -40° +90° C.
- Protezione termostatica autoreset interna al motore.
- Avvolgimento motore con isolamento in classe F (155°C).
- Rotore supportato su cuscinetti a sfera.
- Attacco per azionamento manuale di emergenza (chiave esagonale in dotazione).
- Indicatore visivo esterno a semaforo con zona superiore graduata.
- Resistenza anticondensa di serie.
- 2 finecorsa elettromeccanici SPDT per indicazione ausiliaria con camme regolabili su tutta la corsa.
- Rumorosità massima durante il funzionamento <70 dB (A).
- Tensione di alimentazione: 230 Vac ±10 %, 50/60 Hz monofase;
115 Vac ±10 %, 50/60 Hz monofase;
24 V ac/dc ±10%; 24 V dc ±5%.

TECHNICAL DATA

- Nominal working angle: 90°, adjustable between 20° and 95°.
- Type of setting: continuous by means of self-locking cams and electromechanical limit-switches.
- Nominal working torque: from 35 to 240 Nm.
- Operation time (0° - 90°): see diagram.
- Service: S3 ED 50% in compliance with CEI 60043.
- Applicable regulations: Low Voltage Directive 2014/35/EU; Electromagnetic Compatibility Directive 2014/30/EU.
- Enclosure: IP68 in compliance with EN60529.
- Working temperature: -25° +60°C.
- Storage temperature: -40° +90°C.
- Motor built-in auto-reset thermostatic protection.
- Motor with Class F insulation (155°C).
- Rotor supported by ball bearings.
- Connection for emergency manual lever (hexagonal wrench in equipment).
- External visual position indicator with graduated top.
- Space heater (standard).
- No. 2 SPDT auxiliary electromechanical limit switches with cams adjustable all along the stroke.
- Maximum working noise: <70 dB (A).
- Supply voltage: 230 Vac ±10%, 50/60 Hz monophasic;
115 Vac ±10%, 50/60 Hz monophasic;
24 V ac/dc ±10%; 24 V dc ±5%.

		COPPIE TORQUE			
MODELLO MODEL		EA0035	EA0070	EA0130	EA0240
Coppia nominale di lavoro <i>Nominal working torque</i>	Nm	35	70	130	240
Coppia max. per transitori <i>Maximum peak torque</i>	Nm	45	85	160	280

Codici attuatore elettrico "EA" on-off		Codes electrical actuator "EA" on-off			
Vtaggio Voltage		Taglie di attuatori e relativi codici Sizes and actuator codes			
MODELLO IP67 IP67 MODEL		EA0035 F03-F05-F07	EA0070 F05-F07	EA0130 F05-F07-F10	EA0240 F07-F10
230V 50/60 Hz		EA0035A5C000	EA0070A5C000	EA0130A5C000	EA0240A5C000
115V 50/60 Hz		EA0035A4C000	EA0070A4C000	EA0130A4C000	EA0240A4C000
24Vac/dc universale <i>universal</i>		EA0035U2C000	EA0070U2C000	EA0130U2C000	EA0240U2C000
24V dc		EA0035C2C000	EA0070C2C000	EA0130C2C000	EA0240C2C000
MODELLO IP68 IP68 MODEL		EA0035 F03-F05-F07	EA0070 F05-F07	EA0130 F05-F07-F10	EA0240 F07-F10
230V 50/60 Hz		EA0035A500B0	EA0070A500B0	EA0130A500B0	EA0240A500B0
115V 50/60 Hz		EA0035A400B0	EA0070A400B0	EA0130A400B0	EA0240A400B0
24Vac/dc universale <i>universal</i>		EA0035U200B0	EA0070U200B0	EA0130U200B0	EA0240U200B0
24V dc		EA0035C200B0	EA0070C200B0	EA0130C200B0	EA0240C200B0


VERSIONE IP67 IP67 VERSION

MATERIALI MATERIALS

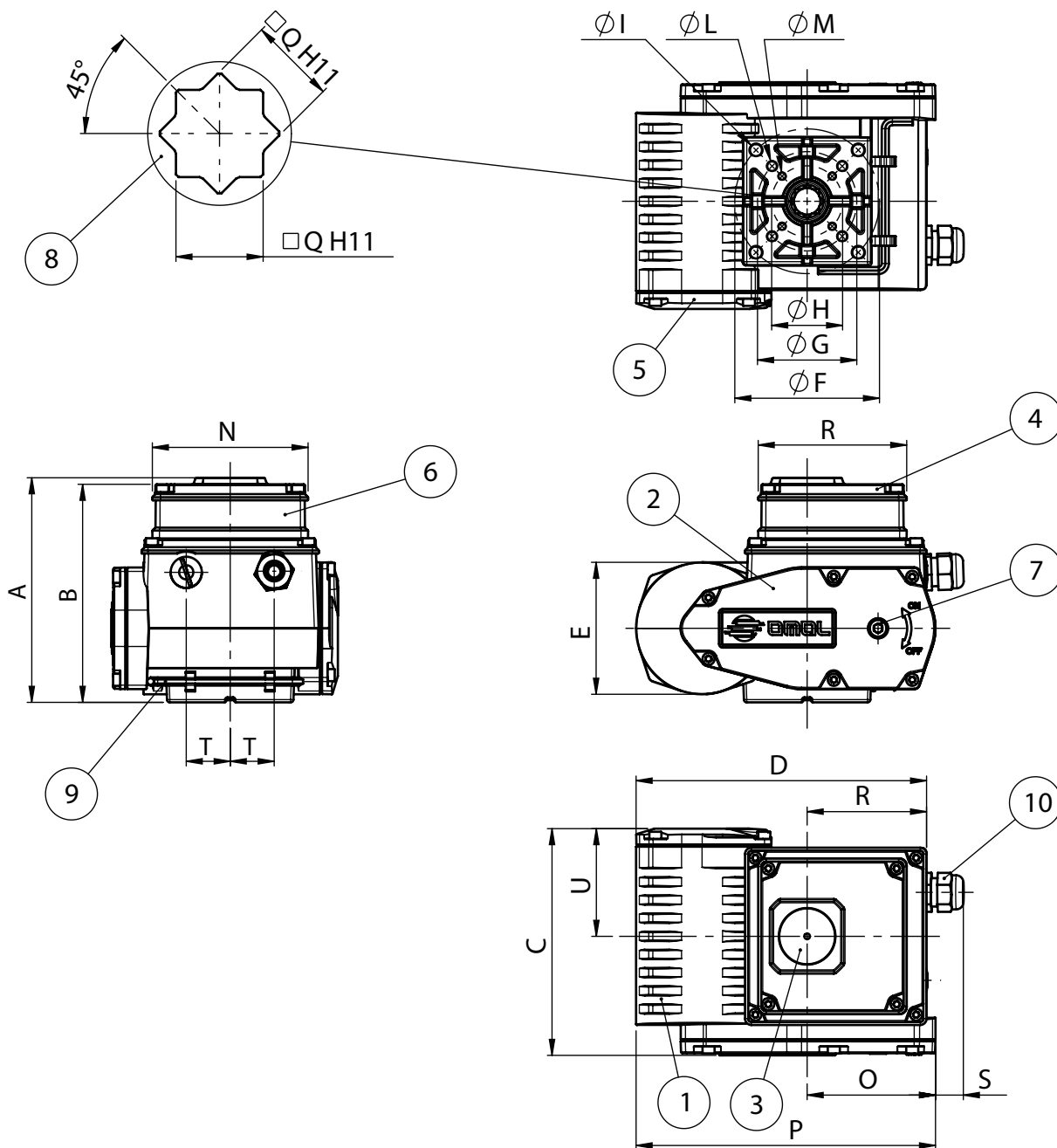
1	Corpo - Body	Alluminio - Aluminium
2	Coperchio del riduttore - Gear box cap	Alluminio - Aluminium
3	Indicatore di posizione - Position indicator	PMMA
4	Coperchio gruppo elettrico - Electric-set cap	Alluminio - Aluminium
5	Coperchio morsettiera - Terminal-box cap	Alluminio - Aluminium
6	Connettore - Connector	PA6 / PBT
7	Attacco per leva - Lever connection	Acciaio - Steel
8	Albero femmina - Female shaft	Acciaio inox - Stainless steel
9	Leva - Lever	Acciaio inox - Stainless steel

DIMENSIONI DIMENSIONS

	A	B	C	D	E	ØF	ØG	ØH	ØI	ØL	ØM	N	O	P	Q	R	S	T	U	Kg
EA0035	137	109	132	190	84	70	50	36	M8x14	M6x11	M5x9	70	74	59	14	69	18	26	67,5	3,6
EA0070	137	109	136	190	84	70	50	--	M8x14	M6x11	--	70	74	59	14	69	18	26	67,5	3,8
EA0130	157,5	129,5	160	221,5	93	102	70	50	M10x17	M8x15	M6x11	67,5	90,5	57	17	84	17	31	76	7,2
EA0240	157,5	129,5	163,5	221,5	93	102	70	--	M10x17	M8x15	--	67,5	90,5	57	22	84	17	31	76	7,5



VERSIONE IP68 IP68 VERSION

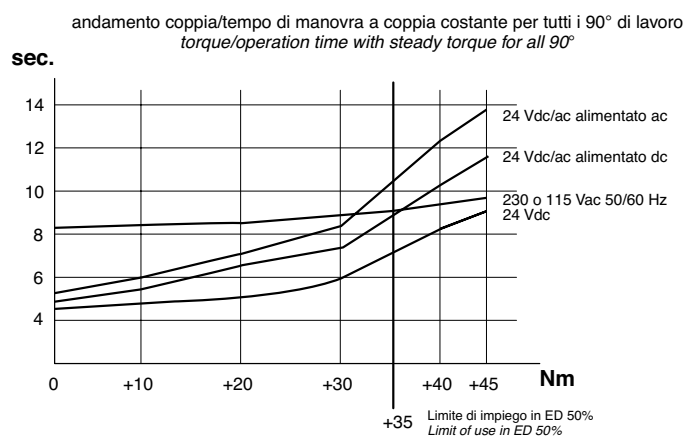
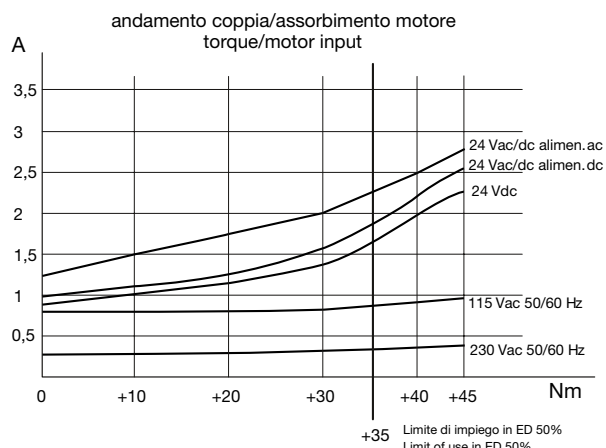


MATERIALI		MATERIALS	
1	Corpo <i>Body</i>	Alluminio	<i>Aluminium</i>
2	Coperchio del riduttore <i>Gear box cap</i>	Alluminio	<i>Aluminium</i>
3	Indicatore di posizione <i>Position indicator</i>	PMMA	
4	Coperchio gruppo elettrico <i>Electric-set cap</i>	Alluminio	<i>Aluminium</i>
5	Coperchio morsettiera <i>Terminal-box cap</i>	Alluminio	<i>Aluminium</i>
6	Box H27	Alluminio	<i>Aluminium</i>
7	Attacco per leva <i>Lever connection</i>	Acciaio	<i>Steel</i>
8	Albero femmina <i>Female shaft</i>	Acciaio inox	<i>Stainless steel</i>
9	Leva <i>Lever</i>	Acciaio inox	<i>Stainless steel</i>
10	Pressacavo <i>Cable gland</i>	Ottone	<i>Brass</i>

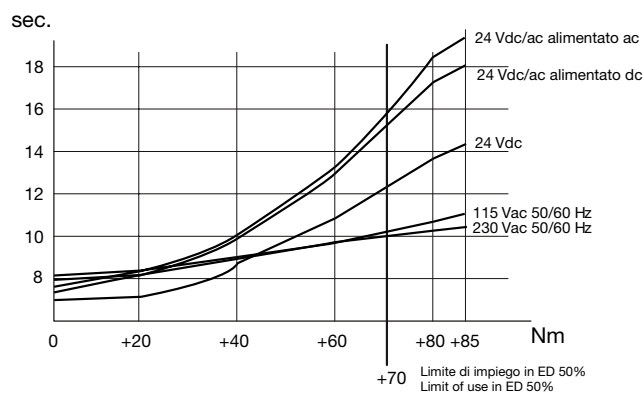
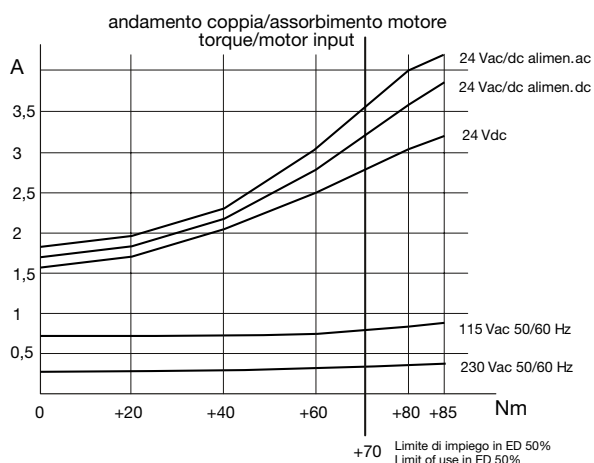
DIMENSIONI		DIMENSIONS																		
	A	B	C	D	E	øF	øG	øH	øI	øL	øM	N	O	P	□Q	R	S	T	U	Kg
EA0035	142,1	137,5	132	172	84	70	50	36	M8x14	M6x11	M5x9	109,8	74	177,1	14	69	14	26	67,5	3,8
EA0070	142,1	137,5	136	172	84	70	50	--	M8x14	M6x11	--	109,8	74	177,1	14	69	14	26	67,5	4
EA0130	162,8	158,2	160	204,6	93	102	70	50	M10x17	M8x15	M6x11	109,8	90,5	211,1	17	84	12	31	76	7,4
EA0240	162,8	158,2	163,5	204,6	93	102	70	--	M10x17	M8x15	--	109,8	90,5	211,1	22	84	12	31	76	7,7



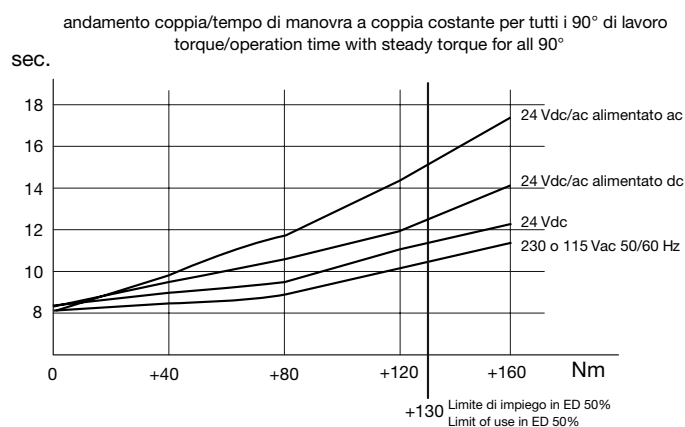
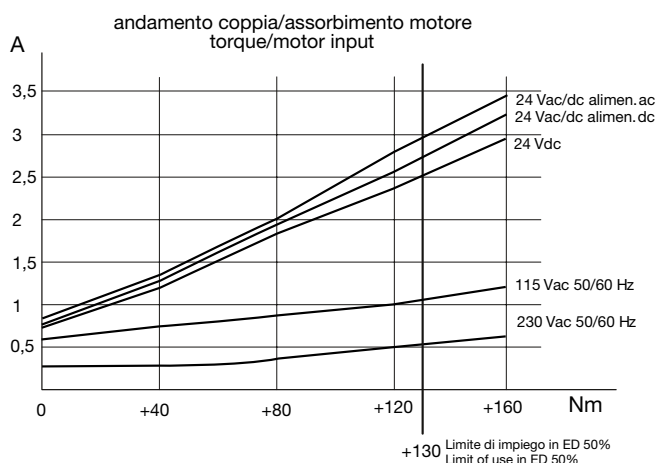
DIAGRAMMI DI FUNZIONAMENTO EA0035 EA0035 WORKING DIAGRAMS



DIAGRAMMI DI FUNZIONAMENTO EA0070 EA0070 WORKING DIAGRAMS

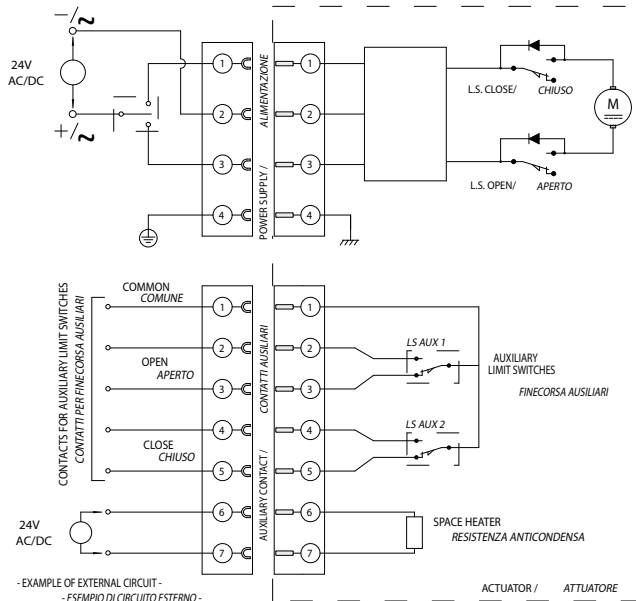
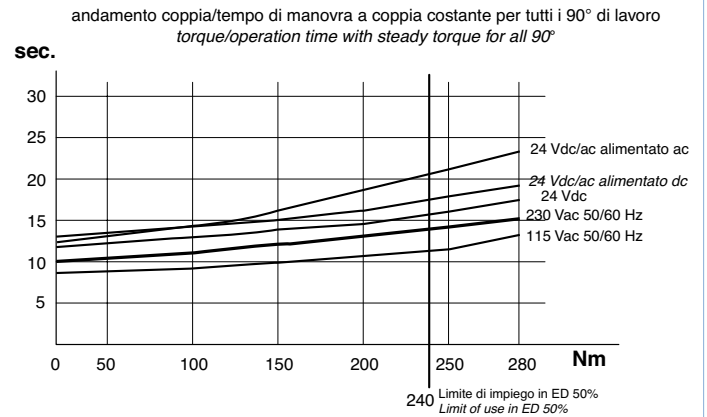
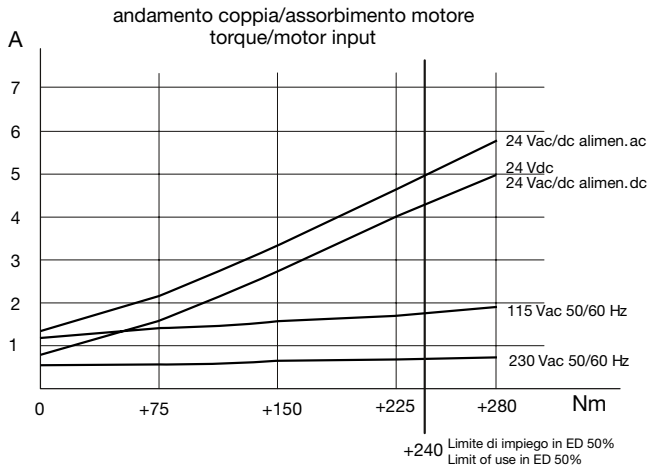


DIAGRAMMI DI FUNZIONAMENTO EA0130 EA0130 WORKING DIAGRAMS



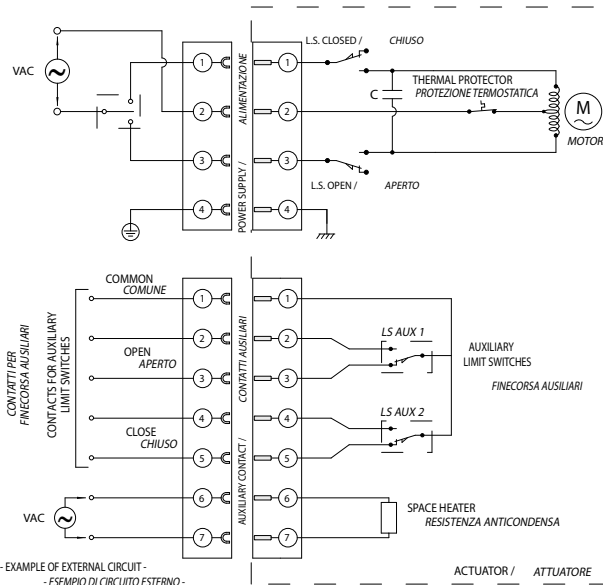
DIAGRAMMI DI FUNZIONAMENTO EA0240

EA0240 WORKING DIAGRAMS



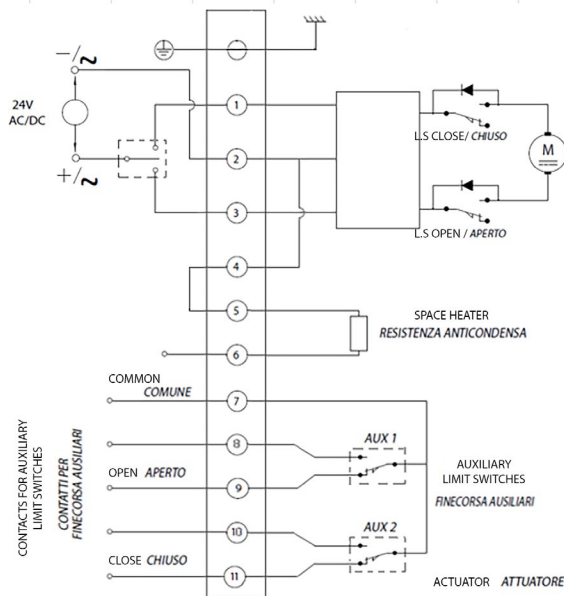
SCHEMA ELETTRICO IP67 DI COLLEGAMENTO PER ALIMENTAZIONE 24 Vac/dc - 24 Vdc

ELECTRIC WIRING FOR 24 Vac/dc - 24 Vdc SUPPLY



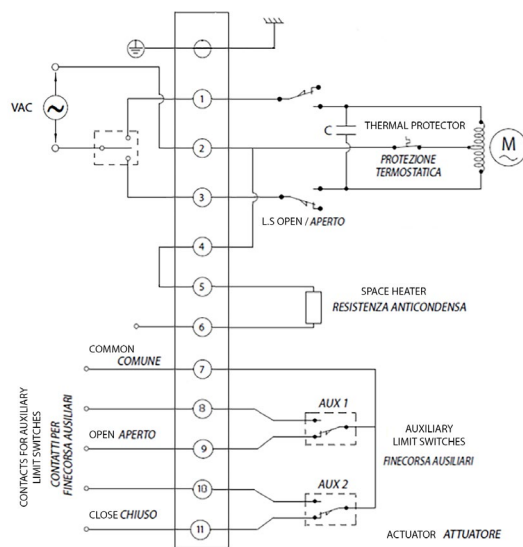
SCHEMA ELETTRICO IP67 DI COLLEGAMENTO PER ALIMENTAZIONE 115 - 230 Vac

ELECTRIC WIRING FOR 115 - 230 Vac SUPPLY



**SCHEMA ELETTRICO IP68
DI COLLEGAMENTO PER
ALIMENTAZIONE 24 Vac/dc - 24 Vdc**

**ELECTRIC WIRING
FOR 24 Vac/dc - 24 Vdc SUPPLY**



**SCHEMA ELETTRICO IP68
DI COLLEGAMENTO PER
ALIMENTAZIONE 115 - 230 Vac**

**ELECTRIC WIRING
FOR 115 - 230 Vac SUPPLY**



S.p.A.

**TEST REPORT
TR 2022-0014**

TEST AND MEASUREMENT DIVISION

LAB N° 1180 L

Page 1 of 26

Environmental and material tests (ENV) SECTOR

Product description:	Electric actuator
Tested Models:	EA0240A400B0
Manufacturer:	OMAL S.p.A. Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS) - Italy

Reference documents:	EN 60529:1991 + EC:1993 + A1:2000 + A2:2013 + EC:2016 + A2/EC:2019
Application:	Verification of degree of protection IP68
Remarks:	None.

Customer:	OMAL S.p.A. Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS) - Italy		
Purchase Order:	2022 - LE 000002	dated:	2022-01-13
Order Confirmation:	CO 2022-0010/00	dated:	2022-01-14

Samples receiving date:	2022-01-28		
Tests date:	from:	2022-02-10	to: 2022-02-15

Test Laboratory INTEK S.p.A. - Test and Measurement Division Via Mazzini, 75 - 25086 Rezzato (BS) - Italy Tel. +39 030 2591857 Fax +39 030 2594351 url: http://www.intek.it e-mail: info@intek.it	Test site INTEK S.p.A. - Test and Measurement Division Via Breve - 25086 Rezzato (BS) - Italy
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Compiled by
Michele Monteverde
Test Engineer

Verified by
Marco Camodeca
ENV Operative Sector Manager

Approved by
Flavio Floriani
Chief Technical Officer

This document does not include any attachments.

00	2022-02-18	Formal issue
Rev.	Date	Description

*Results of tests and controls reported in this document refer only to samples as tested and described.
It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.
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Cap. Soc. € 1.050.000,00 i.v. - Registry of companies of Brescia, VAT and FC N. IT03268280173 - R.E.A. BS N. 350460*

07 08 TR 750 PRE rev.01

INTEK S.p.A., via Mazzini 75, 25086 Rezzato (BS) - I

Note: the sealing system of electric actuators "EA" IP 68 series is the same, therefore the results of protection degree IP6X-X8 (IPX8 Test Parameters: Immersion deep /Required pressure 10 m / 1 bar - Test duration 30 min), performed on samples EA0240 can be extended to the "EA" IP 68 series.





OMAL S.p.A.



Ph. +39 030 8900145 - Fax +39 030 8900423 - info@omal.it - www.omal.com

HEADQUARTERS

Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS) ITALY

Coordinates:

Lat: 45° 35' 53" North; Lon: 10° 05' 21" East

PRODUCTION SITE

Via Brognolo, 12 - 25050 Passirano (BS) ITALY

Coordinates:

Lat: 45° 35' 51" North; Lon: 10° 05' 18" East