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 24.0002X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2024-11-28) Issue 0 (2024-02-21)
Date of Issue:	2026-03-30		
Applicant:	**PALAZZOLI S.p.A.** Via F. Palazzoli, 31 25128 Brescia (BS) **Italy**		
Equipment:	**Industrial switch-disconnectors CAMTAIS-EX & CAMALUPRES-EX**		
Optional accessory:			
Type of Protection:	**Increased safety "e", Sealed device "nC" and protection by enclosure 'tb'**		
Marking:	Ex ec nC IIC T6…T4 Gc Ex tb IIIC T65°C...T100°C Db *The relationships between rated current values, ambient temperature ranges 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 Certification Body**

Signature:
(for printed version)

Date:
(for printed version)

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

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Manufacturer: **PALAZZOLI S.p.A.**
Via F. Palazzoli, 31
25128 Brescia (BS)
Italy

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 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/ExTR24.0002/02

Quality Assessment Report:

IT/IMQ/QAR14.0001/14

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Refer to the Annex file of this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The CAMTAIS-EX series is intended for installation in areas of low mechanical risk, see manual for further details.
- Potential electrostatic charging hazard, see instructions.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Standard IEC 60079-31 update

Annex:

Annex to CoC IECEx EUT 24.0002X Issue N. 2.pdf

Annex to certificate: **IECEx EUT 24.0002X Issue N. 2**

Equipment description

The industrial switch-disconnector of the CAMTAIS-EX and CAMALUPRES-EX series are designed to be used in presence of potentially explosive atmospheres requiring equipment with EPL Gc and/or Db.
The CAMTAIS-EX series features a main enclosure made of thermosetting material and the CAMALUPRES-EX series consists of a painted die-cast aluminium enclosure; the other parts defining the enclosure boundary (i.e. switch-disconnector operating handle and front plate) are made of dissipative polyamide material. Flat gaskets and O-rings are involved to maintain the IP degree of protection between the mating parts and to ensure the dust-tight properties according to the Ex tb type of protection.
The cover is kept closed by means of screws and an undercut mechanism additionally prevents the housing cover from opening when the industrial switch-disconnector is in “I” position. Both the CAMTAIS-EX and CAMALUPRES-EX are provided with two plain holes (one on each upper and lower short wall) suitable to accommodate cable entry devices having size M25 x 1.5 or M32 x 1.5 to be tightened with locknut. The field wiring of the equipment is provided by the termination facilities of the switch-disconnector installed inside the main enclosure; this part consists of an Ex component and meets the requirements of the types of protection “ec” and “nC”. The industrial switch-disconnector can have a total number of poles ranging from 2 to 4, a maximum rated voltage of 690 V and a current rating up to 40 A when provided with the switch-disconnector model A32-EX and up to 100 A when provided with the switch-disconnector model A63-EX; details related to the utilization categories are detailed in the electrical parameters section. The internal earth connection is provided on all the versions and an external connection for the earth bonding is also available on the CAMALUPRES-EX series.
The equipment has an extended ambient temperature range of -40 °C ÷ +60 °C and a degree of protection IP66 according to the standards IEC 60529 and IEC 60079-0.

Code designation:

Each industrial switch-disconnector is identified on the label by an article code as explained by the coding scheme visible below:

SaaabbcEXddd-eee			
Coding legend			
S	Prefix for non-standard products	Void =	Standard configuration
		S =	Non-standard configuration
aaa	Product family	270 =	CAMALUPRES-EX series
		290 =	CAMTAIS-EX series
bb	Rated maximum current	16 =	16 A
		25 =	25 A
		32 =	32 A
		40 =	40 A
		63 =	63 A
		10 =	100 A
c	Number of poles	2 =	2
		3 =	3
		4 =	4
EX	Version	EX=	ATEX execution
ddd(*)	Type of cable glands	MNS =	Metallic for non-armoured cables - Small size
		MNL =	Metallic for non-armoured cables - Large size
		MAS =	Metallic for armoured cables - Small size
		MAL =	Metallic for armoured cables - Large size
		Void =	Plastic for non-armoured cables (Standard version)
eee(**)	Custom characteristics	eee =	Unique identification number, see note (**)
		Void =	Standard version

Examples:
270634EX →
Switch-disconnector **CAMALUPRES-EX** series, 63 A, 4 Poles, Plastic cable glands.
S290323EX-MAL →
Switch-disconnector **CAMTAIS-EX** series, 32 A, 3 Poles, Metallic cable glands for armoured cables - Large size.

(*): Cable glands are not included in the scope of this document and are covered by separate type certificates.
(**): If the "eee" field is used, the article code is associated with a specific drawing deposited in Palazzoli which exactly describes the non-standard configuration, for example for different cable glands (number, position, type and dimensions) or use of internal earth continuity plate, in accordance with the technical file. A copy of the specific drawing is supplied with each product.

Electrical ratings

Maximum rated currents								
Rated current of the switch			**16 A**	**25 A**	**32 A**	**40 A**	**63 A**	**100 A**
Maximum conventional enclosed thermal current (I_{the})			16 A	25 A	32 A	40 A	63 A	100 A
Maximum conventional free air thermal current (I_{th})			16 A	25 A	32 A	40 A	63 A	100 A
Maximum rated current (I_e)	AC-21A	max 690 V	16 A	25 A	32 A	40 A	63 A	100 A
	AC-22A	max 690 V	16 A	25 A	32 A	40 A	63 A	100 A
	AC-23A	max 690 V	16 A	25 A	32 A	32 A	63 A	63 A
	DC-21A	max 300 V	16 A	25 A	32 A	32 A	63 A	63 A
Rated conditional short-circuit current with protection by fuses type gG (I_{cc})			10 kA (16 A fuses)	10 kA (25 A fuses)	10 kA (32 A fuses)	10 kA (32 A fuses) 5 kA (40 A fuses)	10 kA (63 A fuses)	10 kA (63 A fuses) 5 kA (100 A fuses)

Temperature limitation chart and rated nominal current:

The relationships between rated current values, ambient temperature ranges and temperature limits are reported in the table below:

Temperature classifications				
CAMTAIS-EX				
In	**t_{amb} range**	**T_{class} (Gas)**	**T_{surf} (Dust)**	**Delay time for enclosures opening**
16 A	-40 °C … +55 °C	T6	T70°C	10 min
	-40 °C … +60 °C	T5	T75°C	
25 A	-40 °C … +50 °C	T5	T75°C	10 min
	-40 °C … +60 °C	T4	T85°C	
32 A	-40 °C … +45 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T85°C	
40 A	-40 °C … +45 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T85°C	
63 A	-40 °C … +30 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T100°C	
100 A	-40 °C … +45 °C	T4	T85°C	10 min
	-40 °C … +55 °C	T4	T95°C	
CAMALUPRES-EX				
In	**t_{amb} range**	**T_{class} (Gas)**	**T_{surf} (Dust)**	**Delay time for enclosures opening**
16 A	-40 °C … +55 °C	T6	T70°C	10 min
	-40 °C … +60 °C	T5	T75°C	

25 A	-40 °C … +50 °C	T5	T75°C	10 min
	-40 °C … +60 °C	T4	T85°C	
32 A	-40 °C … +45 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T85°C	
40 A	-40 °C … +45 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T85°C	
63 A	-40 °C … +35 °C	T5	T70°C	10 min
	-40 °C … +60 °C	T4	T95°C	
100 A	-40 °C … +30 °C	T5	T65°C	10 min
	-40 °C … +60 °C	T4	T95°C	

Warning label

- Do not open when energized.
- Refer to instructions for cables characteristics.
- After de-energizing, delay 10 min. before opening.
- Potential electrostatic charging hazard - see instructions.

Specific Conditions of Use

Refer to the conditions reported in the IECEx CoC.