



# Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

<b>IA CERTIFICATE</b>	MASC MS/26-8146X	<b>Issue</b>	0
<b>Issue Date</b>	02 April 2026	<b>Expiry Date</b>	02 April 2029
<b>** Based on Certificate No</b>	IECEx BVS 18.0005X	<b>Issue / Variations / Amendment</b>	11
<b>Requested by</b>	<b>Beckhoff Automation (Pty) Ltd</b> 7 Ateljee Street, Randpark Ridge, Randburg		
<b>Manufacturer</b>	<b>BECKHOFF Automation GmbH &amp; Co. KG</b> Huelshorstweg 20, 33415 Verl, Germany		
<b>Description</b>	The I/O system terminals type ELX****_****_**** is a modular I/O system with contacts rated in the type of protection "ec" (supply contact / Ebus connector / spring-blade contact).  It consists of at least a power supply unit ELX9560, one of the signal terminals and a bus end cover ELX9012 resp. EtherCAT extension EK1110 to cover the power and E-bus contacts.  See Base Certificate** for further description, subject and type and parameters.		
<b>Equipment</b>	IO Terminal	<b>Type</b>	ELX****_****_****
<b>MARKING:</b> Original marking as per certificate ** remains applicable. <b>IA number must be added.</b>	<b>Type:</b>	I/O Terminal Series Type ELX****_****_****	
	<b>Ex Marking:</b>	for terminals type <u>ELX9560-****_****_****</u> , type <u>ELX9410-****_****_****</u> Ex ec IIC T4 Gc for all other terminals: Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC [Ex ia Ma] I	
	<b>IA Number:</b>	MASC MS/26-8146X (To be additionally marked on equipment)	
	<b>Warnings:</b>	See Base Certificate ** (original marking must be applied)	
<b>Quality Assurance report (QAR) / Notification (QAN):</b>	"It is a requirement under ATEX that all equipment for category 1 and 2 areas must have 3rd party quality assurance from a notified body. This is accepted to cover the equipment's quality requirements."		
<b>Compliance:</b> The equipment as described above has been allocated the rating <u>Explosion Protected 'as above'</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> <li>SANS (IEC) 60079-0: 2019 Equipment - General requirements</li> <li>SANS (IEC) 60079-7: 2019 Equipment protection by increased safety "e"</li> <li>SANS (IEC) 60079-11: 2012 Equipment protection by intrinsic safety "i"</li> </ul> <i>Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.</i>			
<b>Specific conditions of use "X":</b> <ul style="list-style-type: none"> <li>Refer to Annex A below for more details.</li> </ul>			
<b>Conditions of manufacture:</b> <ul style="list-style-type: none"> <li>Refer to Annex A below for more details.</li> </ul>			
 <b>S. JORDAAN</b> <b>TECHNICAL SPECIALIST</b>		 <b>N. VILOJEN</b> <b>TECHNICAL OFFICER</b>	
<small>This certificate covers all units sold as long as the QAR/QAN remains valid.</small>			
<small>According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).</small>			

Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:

- SANS 10086 requirements;
- Any conditions mentioned in the above certificate;
- Any relevant requirements of the MHS Act;

Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

This certificate may only be reproduced in full  
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# IA CERTIFICATE: MASC MS/26-8146X

**Equipment: I/O Terminal**  
**(Expiry date: 02 April 2029)**

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## ANNEX A

This document is based on and must be read in conjunction with certificate IECEx BVS 18.0005X.	
<b>Description (According to Base Certificate) **</b>	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."	
<b>Standard compliance</b>	See Base Certificate **
<b>Specific conditions of use ("X")</b>	•
<b>Conditions of manufacture</b>	• None.
<b>Conditions of Certification</b>	<ul style="list-style-type: none"><li>• This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate.</li><li>• As per ARP 0108: 2018 / NCoP 2398: 2022 (as applicable) a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date).</li><li>• The apparatus must be additionally marked with the MASC marking details above.</li><li>• This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date.</li><li>• The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate.</li><li>• The certification on which this IA Certificate is based must remain valid.</li><li>• The extent of the requirements in the ARP 0108:2018 / NCoP 2398: 2022 (as applicable), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged.</li><li>• The Ex-quality assurance notification/report for the equipment must remain valid.</li></ul>
<b>Conclusion:</b>	<ul style="list-style-type: none"><li>• From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done as per the Base Certificate **.</li><li>• The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).</li></ul>

This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.

While every endeavour is made to ensure that a test / assessment / inspection is representative and accurately performed, and that a report / certificate is accurate in the quoted results and conclusions drawn from the test / assessment / inspection, MASC or its directors/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report / certificate issued pursuant to a test / assessment / inspection.

MASC takes no responsibility for any non-conformances, exclusions, or any results / assessments / inspections not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer / applicant attests on his own responsibility that the equipment / installation has been designed and constructed in accordance with the applicable requirements of the relevant standards and documentation, that the routine verifications / routine tests have been correctly completed and the equipment / installation complies with the documentation and standard(s).

This document is only for use and application in South Africa. It is issued based on National interpretations and accepted practices.

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This certificate is not transferable and remains the property of the issuing body.

This document will not be supported by MASC for certification purposes outside the borders of South Africa.

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# 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](http://www.iecex.com)

Certificate No.: **IECEX BVS 18.0005X**

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Certificate history:

Status: **Current**

Issue No: 11

Issue 10 (2024-07-11)

Issue 9 (2023-01-23)

Issue 8 (2021-10-28)

Issue 7 (2021-06-09)

Issue 6 (2020-10-05)

Issue 5 (2020-07-14)

Issue 4 (2020-05-04)

Issue 3 (2018-10-26)

Issue 2 (2018-08-23)

Issue 1 (2018-05-29)

Date of Issue: 2025-07-31

Applicant: **BECKHOFF Automation GmbH & Co. KG**  
Huelshorstweg 20  
33415 Verl  
Germany

Equipment: **I/O Terminal Series Type ELX\*\*\*\*\_\*\*\*\*\_\*\*\*\***

Optional accessory:

Type of Protection: **Intrinsic Safety "i", Increased Safety "e"**

Marking: Ex ec IIC T4 Gc for terminals  
type ELX9560-\*\*\*\*\_\*\*\*\*,  
type ELX9410-\*\*\*\*\_\*\*\*\*  
  
Ex ec [ia Ga] IIC T4 Gc for all other terminals  
[Ex ia Da] IIIC  
[Ex ia Ma] I

Approved for issue on behalf of the IECEx  
Certification Body:

**Dr Michael Wittler**

Position:

**Deputy Head of 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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**DEKRA Testing and Certification GmbH**  
Certification Body  
Dinnendahlstrasse 9  
44809 Bochum  
Germany





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Certificate No.: **IECEX BVS 18.0005X**

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Date of issue: 2025-07-31

Issue No: 11

Manufacturer: **BECKHOFF Automation GmbH & Co. KG**  
Huelshorstweg 20  
33415 Verl  
**Germany**

Manufacturing locations: **BECKHOFF Automation GmbH & Co. KG**  
Huelshorstweg 20  
33415 Verl  
**Germany**

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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

[IEC TS 60079-47:2021](#) Explosive atmospheres – Part 47: Equipment protection by 2-wire intrinsically safe Ethernet concept (2-WISE)  
Edition:1.0

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:

[DE/BVS/ExTR18.0031/11](#)

Quality Assessment Report:

[DE/BVS/QAR16.0010/09](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX BVS 18.0005X**

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Date of issue: 2025-07-31

Issue No: 11

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

### Description

The I/O system terminals type ELX\*\*\*\*\_\*\*\*\*\_\*\*\*\* is a modular I/O system with contacts rated in the type of protection "ec" (supply contact / E-bus connector / spring-blade contact).

It consists of at least a power supply unit ELX9560, one of the signal terminals and a bus end cover ELX9012 resp. EtherCAT extension EK1110 to cover the power and E-bus contacts.

An integrated E-bus interface connects to ELX signal terminals right of the ELX9560 power supply unit and EK1110 right of the signal terminals. The signal terminals can be combined in any way. Their intrinsically safe output circuits (resp. switching circuits for ELX2792-\*\*\*\*-\*\*\*\*), type of protection Ex ia, can be led into areas which require EPL Ga, EPL Da or EPL Ma equipment. The ELX9410 power supply terminal for E-bus is used to refresh the non-intrinsically safe E-bus signal.

A fin at the front of the ELX9410 ensures the separation between the connection facilities of the signal terminal (intrinsically safe circuits) and the ELX9410 (non-intrinsically safe circuits).

There are 2 possible constellations to use the ELX9410:

- An additional ELX9560 power supply terminal followed by further ELX signal terminals can be connected to the right side of the ELX9410.
- Two ELX9410 terminals can be installed in direct succession for continuing the same terminal strand with standard Beckhoff EtherCAT Terminals.

The power supply unit ELX9560 and some signal terminals are available in 2 variants depending on the hardware version. These variants in different combinations are listed in the parameters. The Hardware version is marked on the power supply units as "HW:xx" where xx denotes the version number. The Hardware version is marked on the power supply units as "HW:xx" where xx denotes the version number.

### Listing of all separately certified equipment used

Subject and type	Certificate	Standards
EtherCAT extension EK1110	IECEX DEK 16.0078X	IEC 60079-0:2017 IEC 60079-7:2017

**Subject and Type**  
See Annex

**Parameters**  
See Annex

### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment shall only be used in an area of at pollution degree 1 or 2, as defined in IEC 60664-1.
2. The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.
3. Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.
4. The circuits shall be limited to overvoltage Category II as defined in IEC 60664-1.
5. The Terminal system is suitable for use in a temperature range of -25 °C to +60 °C.
6. Do not disconnect energized terminals.
7. The last terminal of each segment is to be covered by a bus end cover ELX9012 or EtherCAT extension EK1110, unless two ELX9410 terminals are installed in direct succession for continuing the same terminal segment with standard Beckhoff EtherCAT terminals (e.g. EL/ES/EK).
8. An additional ELX9560 power supply terminal, followed by further ELX signal terminals can be connected to the right side of the ELX9410.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

- Introduction of the new 2-channel communication interface, Ethernet-APL type ELX6233-\*\*\*\*-\*\*\*\* with 2-wise power supply ports according to IEC TS 60079-47
- Minor changes in ELX1058-\*\*\*\*-\*\*\*\*
- Update of documentation

**Annex:**

[BVS\\_18\\_0005X\\_Beckhoff\\_Annex\\_issue11.pdf](#)



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**Subject and Type**

I/O Terminal Series type ELX\*\*\*\*-\*\*\*\*-\*\*\*\*

Instead of the \*\*\* in the complete denomination letters and numerals will be inserted which characterize the different modifications:

Type ELX \* \* \* \* - \* \* \* \* - \* \* \* \*

- 9560 Power supply terminal, 24 V DC
- 9410 Power supply terminal for E-bus refresh
- 1052 2-channel digital input terminal NAMUR
- 1054 4-channel digital input terminal NAMUR
- 1058 8-channel digital input terminal NAMUR
- 2002 2-channel digital output terminal
- 2008 8-channel digital output terminal
- 2792 2-channel solid state relay output, potential-free
- 3152 2-channel analog input terminal 4...20 mA
- 3158 8-channel analog input terminal 4...20 mA
- 3181 1-channel analog input terminal 4...20 mA,  
HART
- 3184 4-channel analog input terminal 4...20 mA,  
HART
- 3202 2-channel analog input terminal RTD
- 3204 4-channel analog input terminal RTD
- 3252 2-channel analog input terminal potentiometer,  
16 bit
- 3312 2-channel analog input terminal thermocouple
- 3314 4-channel analog input terminal  
thermocouple
- 3351 1-channel analog input terminal strain gauge
- 4154 4-channel analog output terminal 4...20 mA
- 4181 1-channel analog output terminal 4...20 mA,  
HART
- 5151 1-channel incremental encoder interface NAMUR
- 6233 2-channel communication interface terminal,  
Ethernet-APL, 2-WISE with power source port

Software variant  
(Not Ex-relevant, for information purposes only)

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EtherCAT revision  
(Not Ex-relevant, for information purposes only)



# IECEX Certificate of Conformity



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## Parameters

1	Non-intrinsically safe circuits in level of protection ec				
1.1	Power supply terminal type <b>ELX9560-****-****</b>				
1.1.1	Power supply circuit Spring contacts red (24V), blue (0V)				
	Connection cross-section: solid conductor and flexible conductor: 0.08...2.5 mm <sup>2</sup> , ferrule: 0.14...1.0 mm <sup>2</sup>				
	Rated nominal voltage (-15 %, +20 %)	U <sub>n</sub>	DC	24	V
	Rated maximal current	I <sub>n</sub>		750	mA
	Maximum voltage	U <sub>m</sub>	AC	253	V
1.1.2	E-bus circuit E-bus connector				
	Rated nominal voltage	U <sub>n</sub>	DC	5	V
	Rated current	I <sub>n</sub>		40	mA
	Maximum voltage	U <sub>m</sub>	AC	253	V
1.2	Power supply terminal for E-bus type <b>ELX9410-****-****</b>				
1.2.1	Supply circuit Clamp contacts 5 (Input 24V), 6 (Input 0V)				
	Connection cross-section: solid conductor and flexible conductor: 0.08...2.5 mm <sup>2</sup> , ferrule : 0.14...1.5 mm <sup>2</sup>				
	Rated nominal voltage (-15 %, +20 %)	U <sub>n</sub>	DC	24	V
	Maximum voltage	U <sub>m</sub>	AC	253	V
1.2.2	E-bus circuit E-bus connector				
	Rated nominal voltage (-15 %, +20 %)	U <sub>n</sub>	DC	5	V
	Rated current	I <sub>n</sub>		40	mA
	Maximum voltage	U <sub>m</sub>	AC	253	V
1.3	EtherCAT extension type <b>EK1110-xxxx</b>				
1.3.1	Ethernet circuit Ethernet RJ45 connector X1				
	Rated nominal voltage (-15 %, +20 %)	U <sub>n</sub>	DC	3.3	V
	Rated power	P <sub>n</sub>		160	mW
	Maximum voltage	U <sub>m</sub>	AC	253	V
1.3.2	E-bus circuit E-bus connector				
	Rated nominal voltage (-15 %, +20 %)	U <sub>n</sub>	DC	5	V
	Rated current	I <sub>n</sub>		130	mA
	Maximum voltage	U <sub>m</sub>	AC	253	V
	The front terminal contacts are not fitted				
2	Intrinsically safe output circuits in level of protection "ia" for connection of intrinsically safe sensors or actuators				
2.1	Signal terminal type <b>ELX1052-****-****</b>				
	Channel 1: Clamp contacts 4 (Uv1), 1 (Input 1, I1)				
	Channel 2: Clamp contacts 8 (Uv2), 5 (Input 2, I2)				



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Each channel:

Maximum output voltage	$U_o$	10.75	V
Maximum output current	$I_o$	12	mA
Linear output characteristics			
Maximum output power	$P_o$	33	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	58	66	15	2.14
$L_o$ [mH]	100	100	100	100

## 2.2 Signal terminal type **ELX1054-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 2 (Uv1), 1 (Input 1, I1)  
 Channel 2: Clamp contacts 6 (Uv2), 5 (Input 2, I2)  
 Channel 3: Clamp contacts 3 (Uv3), 4 (Input 3, I3)  
 Channel 4: Clamp contacts 7 (Uv4), 8 (Input 4, I4)

Each channel:

Maximum output voltage	$U_o$	10.72	V
Maximum output current	$I_o$	10.4	mA
Linear output characteristics			
Maximum output power	$P_o$	28	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	58	66	15	2.14
$L_o$ [mH]	100	100	100	100

## 2.3 Signal terminal type **ELX1058-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 9 (Uv1), 1 (Input 1)  
 Channel 2: Clamp contacts 10 (Uv2), 2 (Input 2)  
 Channel 3: Clamp contacts 11 (Uv3), 3 (Input 3)  
 Channel 4: Clamp contacts 12 (Uv4), 4 (Input 4)  
 Channel 5: Clamp contacts 13 (Uv5), 5 (Input 5)  
 Channel 6: Clamp contacts 14 (Uv6), 6 (Input 6)  
 Channel 7: Clamp contacts 15 (Uv7), 7 (Input 7)  
 Channel 8: Clamp contacts 16 (Uv8), 8 (Input 8)

Each channel:

Maximum output voltage	$U_o$	10.72	V
Maximum output current	$I_o$	10.4	mA
Linear output characteristics			
Maximum output power	$P_o$	28	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	58	66	15	2.14
$L_o$ [mH]	100	100	100	100



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2.4 Signal terminal type **ELX2002-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+Output1, +O1), 3 (-Output1, -O1)

Channel 2: Clamp contacts 5 (+Output2, +O2), 7 (-Output2, -O2)

Each channel:

The output values depend on the connected power supply unit:

2.4.1 When connected to ELX9560-\*\*\*\*-\*\*\*\* **HW:xx** with  $xx < 05$   
(Variants with Hardware version below 05)

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	111	mA
Linear output characteristics			
Maximum output power	$P_o$	768	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	24	16	9.2	0.094

2.4.2 When connected to ELX9560-\*\*\*\*-\*\*\*\* **HW:xx** with  $xx \geq 05$   
(Variants with Hardware version 05 or above)

Maximum output voltage	$U_o$	27	V
Maximum output current	$I_o$	109	mA
Linear output characteristics			
Maximum output power	$P_o$	730	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	25	17	9.9	0.47

2.5 Signal terminal type **ELX2008-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+Output1, +O1), 2 (-Output1, -O1)

Channel 2: Clamp contacts 5 (+Output2, +O2), 6 (-Output2, -O2)

Channel 3: Clamp contacts 4 (+Output3, +O3), 3 (-Output3, -O3)

Channel 4: Clamp contacts 8 (+Output4, +O4), 7 (-Output4, -O4)

Channel 5: Clamp contacts 9 (+Output5, +O5), 10 (-Output5, -O5)

Channel 6: Clamp contacts 13 (+Output6, +O6), 14 (-Output6, -O6)

Channel 7: Clamp contacts 12 (+Output7, +O7), 11 (-Output7, -O7)

Channel 8: Clamp contacts 16 (+Output8, +O8), 15 (-Output8, -O8)

Each channel:

The output values depend on the hardware versions of connected power supply unit and signal terminal:

2.5.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX2008-****-****</b>
<b>HW:xx</b> with $xx$	$< 05$	$< 01$

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	111	mA
Linear output characteristics			
Maximum output power	$P_o$	773	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :



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	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	24	16	9.2	0.094

2.5.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX2008-****-****</b>
<b>HW:xx</b> with xx	≥ 05	< 01

Maximum output voltage U<sub>o</sub> 27 V  
 Maximum output current I<sub>o</sub> 109 mA  
 Linear output characteristics  
 Maximum output power P<sub>o</sub> 735 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	25	17	9.9	0.47

2.5.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX2008-****-****</b>
<b>HW:xx</b> with xx	< 05	≥ 01

Maximum output voltage U<sub>o</sub> 27.7 V  
 Maximum output current I<sub>o</sub> 109 mA  
 Linear output characteristics  
 Maximum output power P<sub>o</sub> 751 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	25	17	9.6	0.18

2.5.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX2008-****-****</b>
<b>HW:xx</b> with xx	≥ 05	≥ 01

Maximum output voltage U<sub>o</sub> 27 V  
 Maximum output current I<sub>o</sub> 106 mA  
 Linear output characteristics  
 Maximum output power P<sub>o</sub> 713 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	27	19	11	0.63

2.6 Signal terminal type **ELX3152-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (Uv1), 2 (GND, -I1), 3 (Input1, +I1)  
 Channel 2: Clamp contacts 5 (Uv2), 6 (GND, -I2), 7 (Input2, +I2)



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Each channel:

The output values depend on the hardware versions of connected power supply unit and signal terminal:

2.6.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3152-****_****</b>
<b>HW:xx</b> with xx	< 05	< 02

Maximum output voltage  $U_o$  27.7 V  
 Maximum output current  $I_o$  85 mA  
 Linear output characteristics  
 Maximum output power  $P_o$  565 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	43	30	18	2

2.6.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3152-****_****</b>
<b>HW:xx</b> with xx	$\geq$ 05	< 02

Maximum output voltage  $U_o$  27 V  
 Maximum output current  $I_o$  80 mA  
 Linear output characteristics  
 Maximum output power  $P_o$  540 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	49	35	21	2.8

2.6.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3152-****_****</b>
<b>HW:xx</b> with xx	< 05	$\geq$ 02

Maximum output voltage  $U_o$  27.7 V  
 Maximum output current  $I_o$  76 mA  
 Linear output characteristics  
 Maximum output power  $P_o$  522 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	55	39	23	3.1

2.6.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3152-****_****</b>
<b>HW:xx</b> with xx	$\geq$ 05	$\geq$ 02



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Maximum output voltage	U <sub>o</sub>	27	V
Maximum output current	I <sub>o</sub>	74	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	496	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	59	42	25	3.7

2.7 Signal terminal type **ELX3158-\*\*\*\*-\*\*\*\***

- Channel 1: Clamp contacts 1 (Input1, I1), 9 (Uv1)
- Channel 2: Clamp contacts 5 (Input2, I2), 13 (Uv2)
- Channel 3: Clamp contacts 2 (Input3, I3), 10 (Uv3)
- Channel 4: Clamp contacts 6 (Input4, I4), 14 (Uv4)
- Channel 5: Clamp contacts 3 (Input5, I5), 11 (Uv5)
- Channel 6: Clamp contacts 7 (Input6, I6), 15 (Uv6)
- Channel 7: Clamp contacts 4 (Input7, I7), 12 (Uv7)
- Channel 8: Clamp contacts 8 (Input8, I8), 16 (Uv8)

Each channel:

The output values depend on the hardware versions of connected power supply unit and signal terminal:

2.7.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3158-****-****</b>
<b>HW:xx</b> with xx	< 05	< 01

Maximum output voltage	U <sub>o</sub>	27.7	V
Maximum output current	I <sub>o</sub>	85	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	565	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	43	30	18	2

2.7.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3158-****-****</b>
<b>HW:xx</b> with xx	≥ 05	< 01

Maximum output voltage	U <sub>o</sub>	27	V
Maximum output current	I <sub>o</sub>	80	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	535	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	49	35	21	2.8

2.7.3 These parameters apply to the combination of hardware versions from the table:



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Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3158-****-****</b>
<b>HW:xx</b> with xx	< 05	≥ 01

Maximum output voltage	U <sub>o</sub>	27.7	V
Maximum output current	I <sub>o</sub>	76	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	522	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	55	39	23	3.1

2.7.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3158-****-****</b>
<b>HW:xx</b> with xx	≥ 05	≥ 01

Maximum output voltage	U <sub>o</sub>	27	V
Maximum output current	I <sub>o</sub>	74	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	496	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	59	42	25	3.7

2.8 Signal terminal type **ELX3181-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 8 (Uv1), 7(Input1, I1)

The output value depends on the hardware versions of connected power supply unit and signal terminal:

2.8.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3181-****-****</b>
<b>HW:xx</b> with xx	< 05	< 02

Maximum output voltage	U <sub>o</sub>	27.7	V
Maximum output current	I <sub>o</sub>	85	mA
Linear output characteristics			
Maximum output power	P <sub>o</sub>	565	mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	43	30	18	2

2.8.2 These parameters apply to the combination of hardware versions from the table:



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Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3181-****-****</b>
<b>HW:xx</b> with xx	≥ 05	< 02
Maximum output voltage	U <sub>o</sub>	27 V
Maximum output current	I <sub>o</sub>	80 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	535 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	49	35	21	2.8

2.8.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3181-****-****</b>
<b>HW:xx</b> with xx	< 05	≥ 02
Maximum output voltage	U <sub>o</sub>	27.7 V
Maximum output current	I <sub>o</sub>	76 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	522 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	55	39	23	3.1

2.8.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3181-****-****</b>
<b>HW:xx</b> with xx	≥ 05	≥ 02
Maximum output voltage	U <sub>o</sub>	27 V
Maximum output current	I <sub>o</sub>	74 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	496 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	59	42	25	3.7

2.9 Signal terminal type **ELX3184-\*\*\*\*-\*\*\*\***



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- Channel 1: Clamp contacts 4 (Uv1), 2 (I1)
- Channel 2: Clamp contacts 8 (Uv2), 6 (I2)
- Channel 3: Clamp contacts 12 (Uv3), 10 (I3)
- Channel 4: Clamp contacts 16 (Uv4), 14(I4)

The output values depend on the hardware versions of connected power supply unit and signal terminal:

2.9.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3184-****_****</b>
<b>HW:xx</b> with xx	< 05	< 01

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	81	mA
Linear output characteristics			
Maximum output power	$P_o$	561	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	43	34	20	2.4

2.9.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3184-****_****</b>
<b>HW:xx</b> with xx	$\geq$ 05	< 01

Maximum output voltage	$U_o$	27	V
Maximum output current	$I_o$	79	mA
Linear output characteristics			
Maximum output power	$P_o$	534	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	49	36	20	3

2.9.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX3184-****_****</b>
<b>HW:xx</b> with xx	< 05	$\geq$ 01

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	76	mA
Linear output characteristics			
Maximum output power	$P_o$	522	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	55	39	23	3.1



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2.9.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX3184-****-****</b>
<b>HW:xx</b> with xx	≥ 05	≥ 01

Maximum output voltage	$U_o$	27	V
Maximum output current	$I_o$	74	mA
Linear output characteristics			
Maximum output power	$P_o$	496	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	59	42	25	3.7

2.10 Signal terminal type **ELX3202-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+RL1), 2 (+R1), 5 (-RL1), 6 (-R1)  
Channel 2: Clamp contacts 3 (+RL2), 4 (+R2), 7 (-RL2), 8 (-R2)

Each channel:

Maximum output voltage	$U_o$	4.94	V
Maximum output current	$I_o$	12	mA
Linear output characteristics			
Maximum output power	$P_o$	15	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I, IIA, IIB, IIIC	IIC
$C_o$ [ $\mu$ F]	1000	100
$L_o$ [mH]	100	100

2.11 Signal terminal type **ELX3204-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+R1), 5 (-R1)  
Channel 2: Clamp contacts 2 (+R2), 6 (-R2)  
Channel 3: Clamp contacts 3 (+R3), 7 (-R3)  
Channel 4: Clamp contacts 4 (+R4), 8 (-R4)

Each channel:

Maximum output voltage	$U_o$	4.94	V
Maximum output current	$I_o$	12	mA
Linear output characteristics			
Maximum output power	$P_o$	15	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I, IIA, IIB, IIIC	IIC
$C_o$ [ $\mu$ F]	1000	100
$L_o$ [mH]	100	100

2.12 Signal terminal type **ELX3252-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (-R1), 5 (+R1), 2 (RL1)  
Channel 2: Clamp contacts 4 (-R2), 8 (+R2), 3 (RL2)

Each channel:

Maximum output voltage	$U_o$	4.94	V
Maximum output current	$I_o$	12	mA



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Linear output characteristics

Maximum output power  $P_o$  16 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I, IIA, IIB, IIIC	IIC
$C_o$ [ $\mu$ F]	1000	100
$L_o$ [mH]	100	100

2.13 Signal terminal type **ELX3312-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+TC1), 5 (-TC1)

Channel 2: Clamp contacts 2 (+TC2), 6 (-TC2)

Each channel:

Maximum output voltage  $U_o$  4.94 V

Maximum output current  $I_o$  0.5 mA

Linear output characteristics

Maximum output power  $P_o$  0.5 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I, IIA, IIB, IIIC	IIC
$C_o$ [ $\mu$ F]	1000	100
$L_o$ [mH]	100	100

2.14 Signal terminal type **ELX3314-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 1 (+TC1), 5 (-TC1)

Channel 2: Clamp contacts 2 (+TC2), 6 (-TC2)

Channel 3: Clamp contacts 3 (+TC3), 7 (-TC3)

Channel 4: Clamp contacts 4 (+TC4), 8 (-TC4)

Each channel:

Maximum output voltage  $U_o$  4.94 V

Maximum output current  $I_o$  0.5 mA

Linear output characteristics

Maximum output power  $P_o$  0.5 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I, IIA, IIB, IIIC	IIC
$C_o$ [ $\mu$ F]	1000	100
$L_o$ [mH]	100	100

2.15 Signal terminal type **ELX3351-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 2 (+UD), 6 (-UD), 3 (+UR), 7 (-UR), 4 (+UV), 8 (-UV)

Maximum output voltage  $U_o$  voltage difference between 2 clamps 11.76 V

Maximum output current  $I_o$  146 mA

Maximum output power  $P_o$  214 mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	40	39	9.9	1.5
$L_o$ [mH]	20	13.3	6.6	1.7

2.16 Signal terminal type **ELX4154-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 9 (Output 1, 01), 5 (GND)

Channel 2: Clamp contacts 10 (Output 2, 02), 6 (GND)

Channel 3: Clamp contacts 11 (Output 3, 03), 7 (GND)

Channel 4: Clamp contacts 12 (Output 4, 04), 8 (GND)



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Each channel:

The output values depend on the hardware versions of connected power supply unit and signal terminal:

2.16.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX4154-****_****</b>
<b>HW:xx</b> with xx	< 05	< 02

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	85	mA
Linear output characteristics			
Maximum output power	$P_o$	565	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	43	30	18	2

2.16.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX4154-****_****</b>
<b>HW:xx</b> with xx	$\geq$ 05	< 02

Maximum output voltage	$U_o$	27	V
Maximum output current	$I_o$	80	mA
Linear output characteristics			
Maximum output power	$P_o$	535	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	49	35	21	2.8

2.16.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****_****</b>	Signal terminal type <b>ELX4154-****_****</b>
<b>HW:xx</b> with xx	< 05	$\geq$ 02

Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	76	mA
Linear output characteristics			
Maximum output power	$P_o$	522	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	55	39	23	3.1



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2.16.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX4154-****-****</b>
<b>HW:xx with xx</b>	≥ 05	≥ 02
Maximum output voltage	U <sub>o</sub>	27 V
Maximum output current	I <sub>o</sub>	74 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	496 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	59	42	25	3.7

2.17 Signal terminal type **ELX4181-\*\*\*\*-\*\*\*\***  
 Channel 1: Clamp contacts 8 (Output 1, O1), 6 (GND)

The output value depends on the hardware versions of connected power supply unit and signal terminal:

2.17.1 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX4181-****-****</b>
<b>HW:xx with xx</b>	< 05	< 03
Maximum output voltage	U <sub>o</sub>	27.7 V
Maximum output current	I <sub>o</sub>	85 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	565 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.45	2.2	0.663	0.085
L <sub>o</sub> [mH]	43	30	18	2

2.17.2 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX4181-****-****</b>
<b>HW:xx with xx</b>	≥ 05	< 03
Maximum output voltage	U <sub>o</sub>	27 V
Maximum output current	I <sub>o</sub>	80 mA
Linear output characteristics		
Maximum output power	P <sub>o</sub>	535 mW

Maximum external capacitance C<sub>o</sub> or maximum external inductance L<sub>o</sub>:

	I	IIA	IIB / IIIC	IIC
C <sub>o</sub> [μF]	3.75	2.33	0.705	0.09
L <sub>o</sub> [mH]	49	35	21	2.8

2.17.3 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX4181-****-****</b>
<b>HW:xx with xx</b>	< 05	≥ 03



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Maximum output voltage	$U_o$	27.7	V
Maximum output current	$I_o$	76	mA
Linear output characteristics			
Maximum output power	$P_o$	522	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.45	2.2	0.663	0.085
$L_o$ [mH]	55	39	23	3.1

2.17.4 These parameters apply to the combination of hardware versions from the table:

Hardware Version	Power supply type <b>ELX9560-****-****</b>	Signal terminal type <b>ELX4181-****-****</b>
<b>HW:xx</b> with xx	$\geq 05$	$\geq 03$

Maximum output voltage	$U_o$	27	V
Maximum output current	$I_o$	74	mA
Linear output characteristics			
Maximum output power	$P_o$	496	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	3.75	2.33	0.705	0.09
$L_o$ [mH]	59	42	25	3.7

2.18 Signal terminal type **ELX5151-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 4 (Uv1), 1 (A)

Channel 2: Clamp contacts 8 (Uv2), 5 (B)

Each channel:

Maximum output voltage	$U_o$	10.72	V
Maximum output current	$I_o$	12.4	mA
Linear output characteristics			
Maximum output power	$P_o$	33	mW

Maximum external capacitance  $C_o$  or maximum external inductance  $L_o$ :

	I	IIA	IIB / IIIC	IIC
$C_o$ [ $\mu$ F]	58	66	15	2.14
$L_o$ [mH]	100	100	100	100

2.19 Signal terminal type **ELX6233-\*\*\*\*-\*\*\*\***  
with 2-wise power source ports according to IEC TS 60079-47

Channel 1: Clamp contacts KL9 (APL+01), KL13 (APL-01), KL10 (S1)

Channel 2: Clamp contacts KL12 (APL+02), KL16 (APL-02), KL11 (S2)

*Note: The intrinsic safety parameters need not be included in the certificate for the 2-WISE ports*

3 Intrinsically safe switching circuits in level of protection ia

Signal terminal type **ELX2792-\*\*\*\*-\*\*\*\***

Channel 1: Clamp contacts 14 (NO\_1), 11 (COM\_1), 12 (NC\_1)

Channel 2: Clamp contacts 24 (NO\_2), 21 (COM\_2), 22 (NC\_2)



# IECEX Certificate of Conformity



**Certificate No.:**            **IECEX BVS 18.0005X issue No: 11**  
**Annex**  
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Each channel:

Nominal switching voltage		AC/DC	≤ 30	V
Nominal switching current		AC	≤ 0.5	A
		DC	≤ 1	A

Maximum input voltage	U <sub>i</sub>	AC/DC	30	V
Maximum input current	I <sub>i</sub>	internally limited		
Maximum input power	P <sub>i</sub>	internally limited		

Effective internal capacitance	C <sub>i</sub>		0.9	nF
Effective internal inductance	L <sub>i</sub>		negligible	

4	Ambient temperature range	T <sub>a</sub>		-25 °C ... 60 °C
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