CERTIFICATE OF CONFORMITY

Member of the FM Global Group

1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** **FM19US0075X**
3. **Equipment:** **I/O Terminal Series type ELX****-****-****
   (Type Reference and Name)
4. **Name of Listing Company:** **Beckhoff Automation GmbH & Co KG**
5. **Address of Listing Company:** **Huelshorstweg 20, Verl 33415, Germany**
6. The examination and test results are recorded in confidential report number:

   PR452333 dated 11th September 2019

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

   FM 3600:2022, FM 3610:2021, FM 3611:2021, FM 3810:2021, ANSI/UL 121201:2019, ANSI/UL 60079-0:2020, ANSI/UL 60079-11:2018, ANSI/UL 60079-7:2021, ANSI/UL 61010-1:2018

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. Equipment Ratings:

    ELX Series Power Supply Terminals
    Nonincendive for Class I, Division 2, Groups A, B, C, D hazardous (classified) locations;
    Increased safety protection for Class I, Zone 2, Group IIC

    See Annex for individual models

    ELX Series I/O Terminals
    Associated Intrinsically Safe for Class I, II, III, Division 1, Groups A, B, C, D, E, F and G in accordance with drawing ControlDrawing_ELX_en_Ver2.2.0;

Certificate issued by:

J.E. Marquedant

4 June 2023

J.E. Marquedant
VP, Manager - Electrical Systems

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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Nonincendive for Class I, Division 2, Groups A, B, C, D hazardous (classified) locations;
Increased safety protection for Class I, Zone 2, Group IIC with intrinsically safe connections to Class I, Zone 0, Group IIC in accordance with drawing ControlDrawing_ELX_en_Ver2.2.0
Associated Intrinsically Safe for connections to Zone 20, Group IIIC in accordance with drawing ControlDrawing_ELX_en_Ver2.2.0

See Annex for individual models

11. The marking of the equipment shall include:

ELX Series Power Supply Terminals
Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, AEx ec IIC T4 Gc
T4 Ta = -25°C to +60°C

ELX Series I/O Terminals
AIS Class I, II, III, Division 1, Groups A thru G
Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, AEx ec [ia Ga] IIC T4 Gc
[AEx ia Da] IIIC T4
T4 Ta = -25°C to +60°C

12. **Description of Equipment:**

General - 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 to cover the power and E-bus contacts.

An integrated E-bus interface (ELX9410) connects to ELX signal terminals to the right of the ELX9560 power supply unit. The ELX9560 and ELX9410 contain components which provide galvanic isolation to the terminals which in turn provide the Intrinsically Safe outputs, type of protection [Ex ia], that can connect to areas which require EPL Ga or EPL Da. 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.

There are 2 variants of power supply units ELX9560 available:
Variants with Hardware version < 05 have a maximum output voltage of 27.7 V.
Variants with Hardware version ≥ 05 have a maximum output voltage of 27 V.
The Hardware version is marked on the power supply units as “HW:xx” where xx denotes the version number.

Ratings – All terminals operate within the ambient temperature range of T_a = -25°C to +60°C.

See Annex for ratings of individual terminals.

13. **Specific Conditions of Use:**

    1. The equipment shall be installed within an enclosure that provides a minimum ingress protection of IP54 in accordance with ANSI/UL 60079-0
    2. The last terminal of each segment is to be covered by a bus end cover ELX9012, 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)
    3. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1
    4. 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
    5. The circuits shall be limited to overvoltage Category II as defined in IEC 60664-1
    6. The terminal system is suitable for use in temperature range of -25°C to +60°C
    7. Do not disconnect energized terminals

14. **Test and Assessment Procedure and Conditions:**

    This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

    A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

    Details of the supplements to this certificate are described below:

Date	Description
11 September 2019	Original Issue.
17 December 2020	Supplement 1: Report Reference: – PR458554 dated 17th December 2020. Changes listed below: 1. Five terminals added to certificate: - ELX1058 | 8-Channel digital input terminal NAMUR - ELX2008 | 8-Channel digital output terminal - ELX3158 | 8-Channel analog input terminal 4…20 mA - ELX3252 | 2-Channel analog input terminal potentiometer - ELX4154 | 4-Channel analog output terminal 0/4…20 mA 1. ANSI/ISA 60079-0:2013 updated to ANSI/UL 60079-0:2020 2. ANSI/ISA 121201:2017 updated to ANSI/UL 121201:2019 3. 'nA', Zone 2 marking removed from Section 11 Equipment Marking Section

Date	Description
2 August 2021	Supplement 2: Report Reference: – PR460669 dated 2nd August 2021. Changes listed below: 1. Hardware updates to existing terminals 2. Updates to ratings (Section 12)
4 June 2023	Supplement 3: Report Reference: PR465734 dated 4 June 2023. Description of the Change(s): 1) Two terminals added to certificate: - ELX3184 | 4-channel analog input terminal 4…20 mA HART - ELX2792 | 2-channel solid state relay output terminal 2) Minor modifications to existing terminals ELX3351 and ELX9560 3) FM3600 updated to latest edition (2022) 4) FM3610, FM3611 and FM3810 updated to latest edition (2021) 5) ANSI/UL 60079-7:2017 updated to ANSI/UL 60079-7:2021 6) ANSI/ISA 60079-11:2014 updated to ANSI/UL 60079-11:2018 7) ANSI/ISA 61010-1:2012 updated to ANSI/UL 61010-1:2018

ANNEX

ELX1052-b-c 2-Channel digital input terminal NAMUR

Description of Equipment

Signal terminal type ELX1052-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 4 (Uv1), 1 (Input 1, I1)
Channel 2: Clamp contacts 8 (Uv2), 5 (Input 2, I2)
Each channel

Maximum output voltage	Uo	10.75V
Maximum output current	Io	12mA

Linear output characteristics

Maximum output power	Po	33mW

Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	58	66	15	2.14
L_o [mH]	100	100	100	100

ELX1054-b-c 4-Channel digital input terminal NAMUR

Description of Equipment

Signal terminal type ELX1054-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 2 (Uv1), 1 (I1)
Channel 2: Clamp contacts 6 (Uv2), 5 (I2)
Channel 3: Clamp contacts 3 (Uv3), 4 (I3)
Channel 4: Clamp contacts 7 (Uv4), 8 (I4)
Each channel
Maximum output voltage Uo 10.72 V
Maximum output current Io 10.4mA

Linear output characteristics
Maximum output power Po 28mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	58	66	15	2.14
L_o [mH]	100	100	100	100

ELX1058-b-c 8-Channel digital input terminal NAMUR

Description of Equipment

Signal terminal type ELX1058-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 Uo 10.72 V
Maximum output current Io 10.4 mA
Linear output characteristics
Maximum output power Po 28 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	58	66	15	2.14
L_o [mH]	100	100	100	100

ELX2002-b-c 2-Channel digital output terminal

Description of Equipment

Signal terminal type ELX2002-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 1 (+Output1, +O1), 3 (-Output1, -O1)
Channel 2: Clamp contacts 5 (+Output2, +O2), 7(-Output2, -O2)
Each channel:
The output depends on the connected power supply unit:
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7V
Maximum output current Io 111mA
Linear output characteristics
Maximum output power Po 768mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	24	16	9.2	0.094

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 109mA
Linear output characteristics
Maximum output power Po 730mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	25	17	9.9	0.47

ELX2008-b-c 8-Channel digital output terminal

Description of Equipment

Signal terminal type ELX2008-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 connected power supply unit
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7 V
Maximum output current Io 111 mA
Linear output characteristics
Maximum output power Po 773 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	24	16	9.2	0.094

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 109 mA
Linear output characteristics
Maximum output power Po 735 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	25	17	9.9	0.47

ELX2792-b-c 2-channel solid state relay output terminal

Description of Equipment

Signal terminal type ELX2792-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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)
Each channel:
Nominal switching voltage AC/DC ≤ 30V
Nominal switching current AC ≤ 0.5A
DC ≤ 1A
Maximum input voltage Ui AC/DC 30V
Maximum input current Ii internally limited
Maximum input power Pi internally limited

Effective internal capacitance 0.9 nF
Effective internal inductance negligible

ELX3152-b-c 2-Channel analog input terminal, 0/4…20mA

Description of Equipment

Signal terminal type ELX3152-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 1 (Uv1), 2 (GND, -I1), 3 (Input1, +I1)
Channel 2: Clamp contacts 5 (Uv2), 6 (GND, -I2), 7 (Input2, +I2)
Each channel:
The output values depend on the connected power supply unit
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7V
Maximum output current Io 85mA
Linear output characteristics
Maximum output power Po 565mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	30	18	2

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 80 mA
Linear output characteristics
Maximum output power Po 540 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

ELX3158-b-c 8-Channel analog input terminal 4…20 mA

Description of Equipment

Signal terminal type ELX3158-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 connected power supply unit
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7 V
Maximum output current Io 85 mA

Linear output characteristics
Maximum output power Po 565 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	30	18	2

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 80 mA
Linear output characteristics
Maximum output power Po 535 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

ELX3181-b-c 1-Channel analog input terminal, 4…20mA, HART

Description of Equipment

Signal terminal type ELX3181-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 8 (Uv1), 7(Input1, I1)
The output values depend on the connected power supply unit:
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7V
Maximum output current Io 85mA
Linear output characteristics
Maximum output power Po 565mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	30	18	2

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 80 mA
Linear output characteristics
Maximum output power Po 535 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

ELX3184-b-c 4-channel analog input terminal 4…20 mA HART

Description of Equipment

Signal terminal type ELX3184-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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)

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27.7 V
Maximum output current Io 81 mA
Linear output characteristics
Maximum output power Po 561 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	34	20	2.4

ELX3202-b-c 2-Channel analog input terminal RTD

Description of Equipment

Signal terminal type ELX3202-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 Uo 4.94V
Maximum output current Io 12mA
Linear output characteristics
Maximum output power Po 15mW
Maximum external capacitance Co or maximum external inductance Lo:

	I, IIA, IIB, IIIC	IIC
C_o [µF]	1000	100
L_o [mH]	100	100

ELX3204-b-c 4-Channel analog input terminal RTD

Description of Equipment

Signal terminal type ELX3204-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 Uo 4.94V
Maximum output current Io 12mA
Linear output characteristics
Maximum output power Po 15mW
Maximum external capacitance Co or maximum external inductance Lo:

	I, IIA, IIB, IIIC	IIC
C_o [µF]	1000	100
L_o [mH]	100	100

ELX3252-b-c 2-Channel analog input terminal potentiometer

Description of Equipment

Signal terminal type ELX3252-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 Uo 4.94 V
Maximum output current Io 12 mA
Linear output characteristics
Maximum output power Po 16 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I, IIA, IIB, IIIC	IIC
C_o [µF]	1000	100
L_o [mH]	100	100

ELX3312-b-c 2-Channel analog input terminal thermocouple

Description of Equipment

Signal terminal type ELX3312-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 1 (+TC1), 5 (-TC1)
Channel 2: Clamp contacts 2 (+TC2), 6 (-TC2)
Each channel
Maximum output voltage Uo 4.94V
Maximum output current Io 0.5mA
Linear output characteristics
Maximum output power Po 0.5mW
Maximum external capacitance Co or maximum external inductance Lo:

	I, IIA, IIB, IIIC	IIC
C_o [µF]	1000	100
L_o [mH]	100	100

ELX3314-b-c 4-Channel analog input terminal thermocouple

Description of Equipment

Signal terminal type ELX3314-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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 Uo 4.94V
Maximum output current Io 0.5mA
Linear output characteristics
Maximum output power Po 0.5mW
Maximum external capacitance Co or maximum external inductance Lo:

	I, IIA, IIB, IIIC	IIC
C_o [µF]	1000	100
L_o [mH]	100	100

ELX3351-b-c 1-Channel analog input terminal strain gauge

Description of Equipment

Signal terminal type ELX3351-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 2 (+UD), 6 (-UD), 3 (+UR), 7 (-UR), 4 (+UV), 8 (-UV)
Maximum output voltage Uo 11.76V
voltage difference between 2 clamps
Maximum output current Io 146mA
Linear output characteristics
Maximum output power Po 214mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	40	39	9.9	1.5
L_o [mH]	20	13	6.6	1.7

ELX4154-b-c 4-Channel analog output terminal 0/4…20 mA

Description of Equipment

Signal terminal type ELX4154-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

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)
Each channel:
The output values depend on the connected power supply unit:
When connected to ELX9560-****-**** HW:xx with xx < 05
Maximum output voltage Uo 27.7 V
Maximum output current Io 85 mA
Linear output characteristics
Maximum output power Po 565 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	30	18	2

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 80 mA
Linear output characteristics
Maximum output power Po 535 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

ELX4181-b-c 1-Channel analog output terminal, 0/4…20mA, HART

Description of Equipment

Signal terminal type ELX4181-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 8 (Output 1, O1), 6 (GND)
The output values depend on the connected power supply unit:
When connected to ELX9560-****-**** HW:xx with xx < 05

Maximum output voltage Uo 27.7 V
Maximum output current Io 85 mA
Linear output characteristics
Maximum output power Po 565 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.45	2.2	0.663	0.085
L_o [mH]	43	30	18	2

When connected to ELX9560-****-**** HW:xx with xx ≥ 05
Maximum output voltage Uo 27 V
Maximum output current Io 80 mA
Linear output characteristics
Maximum output power Po 535 mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

ELX5151-b-c 1-Channel incremental encoder interface NAMUR

Description of Equipment

Signal terminal type ELX5151-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Channel 1: Clamp contacts 4 (Uv1), 1 (A)
Channel 2: Clamp contacts 8 (Uv2), 5 (B)
Each channel
Maximum output voltage Uo 10.72 V
Maximum output current Io 12.4mA
Linear output characteristics
Maximum output power Po 33mW
Maximum external capacitance Co or maximum external inductance Lo:

	I	IIA	IIB/IIIC	IIC
C_o [µF]	58	66	15	2.14
L_o [mH]	100	100	100	100

ELX9410-b-c Power supply terminal for E-bus

Description of Equipment

Power supply terminal for E-bus type ELX9410-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Supply circuit
Clamp contacts 5 (Input 24V), 6 (Input 0V)
Rated nominal input voltage (-15 %, +20 %) DC 24 V
Maximum voltage Um AC 253 V
E-bus circuit
E-bus connector
Rated nominal voltage DC 5 V
Rated current 40 mA
Maximum voltage Um AC 253 V

ELX9560-b-c Power supply terminal

Description of Equipment

Power supply terminal type ELX9560-b-c
b = Software Variant (Not Ex-relevant, for information purposes only)
c = EtherCAT revision (Not Ex-relevant, for information purposes only)

Power supply circuit
Clamp connectors
red (24V), blue (0V)
Rated nominal input voltage (-15 %, +20 %) DC 24 V
Maximum voltage Um AC 253 V
E-bus circuit
E-bus connector
Rated nominal voltage DC 5 V

Rated current 40 mA
Maximum voltage Um AC 253 V