☰ ORDER FORM

To order the e²TANGO-2000 protections, please fill in this part of the form according to the INSTRUCTIONS FOR FILLING IN THE FORM on the next page.

STEP 1

№								
①	panel version	☐ 2000-TRR[1]						
②	central unit version	☐ J10	☐ J14	☐ J10H[2]	☐ J14H[1]			
③	TR measuring card version	☐ TR (standard, 5I+4U)						
④	measuring card parameters	☐ 5 A	☐ 1 A					
⑤	power supply voltage	☐ UNI (110/230 V AC/DC)	☐ 24V (24/48 V AC/DC)	☐ others				

Ethernet communication port (standard on each central unit)

№								
⑥	COM1	☐ x-none	☐ RS485	☐ CANx2	☐ OPTOMM	☐ OPTOP	☐ Profibus	☐ others
⑦	COM2	☐ x-none	☐ RS485	☐ CANx2	☐ OPTOMM	☐ OPTOSM	☐ OPTOP	☐ Profibus	☐ others
⑧	installation method	☐ Z-flush	☐ N1 - surface ver. 1	☐ N3 - surface ver. 3	☐ M - Mixed	☐ ZR - flush in rack cabinet		
⑨	panel-unit cable length	☐ S-1 m	☐ L-2 m	☐ other				
⑩	IP protection class	☐ IP 4X	☐ IP 54[2]					

№					
⑪	communication IEC 61850	☐ EX-none	☐ O-ETH ibre optic	☐ O2-ETH fibre optic with PRP	☐ O2G-O2+GOOSE	☐ E2-electric
		☐ E-ETH electric	☐ EG-ETH electric+GOOSE	☐ OG-ETH fibre optic +GOOSE	☐ E2G-electric +GOOSE	
⑫	language version	☐ PL	☐ EN	☐ other (in agreement with manufacturer)		

1) e²TANGO 2000-TRR requires using TRR expansion card. The TRR card is available for J10 and J14 units, the card simultaneously occupies two slots:
C and E (in case of two-winding transformer), the card simultaneously occupies four slots: C, E, D and F (in case of three-winding transformers)
2) reinforced W1, W2, W3 outputs
3) universal card for voltages between 24-48 V AC/DC
4) protection class IP 54 only available in version with flush and mixed installation
5) IEC 61850 communication is handled through additional communication connectors in the operator panel

STEP 2

Card name	Kod	A	B	C	D	E	F	G	H	I	J	K	L	M	N
CPU processor card	-	standard in every device													
PSU power supply card - 7 relay outputs	-	standard in every device													
Ethernet communication port	-														
current measurement for differential protection**	TRR					X	□								
8 binary inputs	8IN	▢	□	□		□		□	□	□	□	□	□	□	□
12 binary inputs	12IN	standard in every device			□	□		□	□	□	□	□	□	□	□
8 binary inputs 24-48 V*	8IN24	□	□	□		□		□	□	□	□	□	□	□	□
12 binary inputs 24-48 V*	12IN24	□	□	□		□		□	□	□	□	□	□	□	□
8 relay outputs	8OUT	□	▢	□		□		□	□	□	□	□	□	□	□
4 relay outputs, reinforced	4OUTHI	□	□	□		□		□	□	□	□	□	□	□	□
4 analogue inputs 0-10 V	AI10	□	□	□		□		□	□	□	□	□	□	□	□
4 analogue inputs 4-20 mA	AI20	□	□	□		□		□	□	□	□	□	□	□	□
4 analogue outputs 0-10 V	AO10	□	□	□		□		□	□	□	□	□	□	□	□
4 analogue outputs 4-20 mA	AO20	□	□	□		□		□	□	□	□	□	□	□	□
6 temperature inputs PT100	PT1	□	□	□		□		□	□	□	□	□	□	□	□
6 temperature inputs PT1000	PT10	□	□	□		□		□	□	□	□	□	□	□	□

J10

J14

* universal card for voltages between 24-48 V AC/DC
** the card placed in slots C and E (SN1) and D and F (SN2)

additional requirements:

STEP 3

Your code:

e²TANGO
① - ② - ③ - ④ - ⑤ - ⑥ - ⑦ - ⑧ - ⑨ - ⑩ - ⑪ - ⑫

A - B - C - D - E - F - G - H - I - J - K - L - M - N

⚡ INSTRUCTIONS FOR FILLING IN THE FORM

STEP 1

The presented table includes basic technical parameters of the e²TANGO-2000 protections. Only 1 item should be selected from each item numbered from 1 to 10. If "other" is selected, enter the ordered value in the corresponding field in STEP 3.

Explanation for step 1.

- ▨ - recommended basic configuration
- OPTOMM - multi-mode fibre op
- N1 - surface installation ver. 1
- N2 - surface installation ver. 2
- N3 - surface installation ver. 3

STEP 2

The presented table includes a list of available expansion cards and possible places for their installation in the e²TANGO-2000 HV protection central unit. No tick box ☐ means that the given card cannot be installed in a given place. Select the cards to be ordered from the list and mark with the "X" slot in which they are to be installed. The cards' distribution should start with the A slot. The unit capacities are marked with a background colour in the table, respectively.

Describe additional requirements in the designated area.

Explanation for step 2.

- ▨ - recommended basic configuration
- maximum 4 cards 8OUT
- maximum 1 AI10 card or 1 AI20 card
- maximum 1 AO10 card or 1 AO20 card
- maximum 1 PT1 card or 1 PT10 card
- the TRR card can be installed only is slot C and E (SN1) or D and F (SN2) in J10 and J14 units

View of the central unit with a selection of the slot arrangement for expansion cards
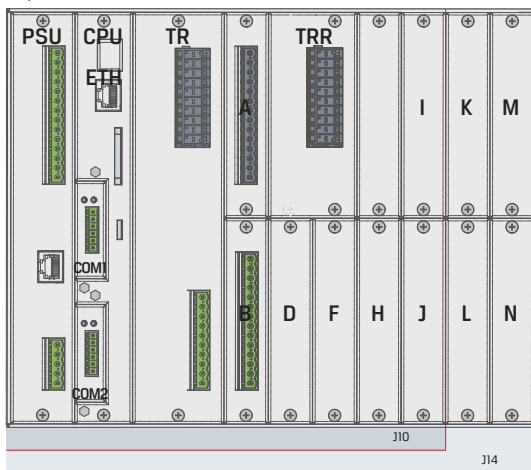
STEP 3

The above-selected parameters of the e2TANGO bay controller should be completed in appropriate fields. The e²TANGO-2000 code created in such a way together with other requirements or a scanned page of the form should be sent with the order to: eaz@elektrometal-energetyka.pl

Example of the e²TANGO-2000 HV protection configuration:

① e²TANGO-2000-TRR	⑩ protection class IP 4X IEC 61850
② J10 central unit	⑪ communication (electric)
③ TR measuring card	⑫ EN
④ rated current of the measuring card 5 A	Ⓐ slot A: card 8IN
⑤ universal binary inputs voltage	Ⓑ slot B: card 8OUT
⑥ OPTOMM	Ⓒ slot C: X
⑦ RS485	Ⓓ slot D: X
⑧ mixed installation	Ⓔ slot C+E: TRR card
⑨ 8 m cable	Ⓕ slot D+F: TRR card

Example of correct code completion:

e²TANGO	2000-TRR	J10	TR	5A	UNI	OPTOMM	RS485	M	8	IP4X	E	EN

8IN	8OUT	X	X	TRR	TRR							

Compatible with Product Data Sheet K-36.1.6