

BEZBEDNOŠNA TEHNOLOGIJA  
ZA ZAŠTITU ŽIVOTNE SREDINE

SAFETY AND  
ENVIRONMENTAL  
TECHNOLOGY

**E.L.B.**  
FÜLLSTANDSGERÄTE

10-02-02E

## Elektrodni relej ER-217/B/... Dvokanalni

Sa opštim odobrenjem za  
konstruisanje Z-65.13-405

## Electrode Relay ER-217/B/... 2-channel

with general approval for  
constructions Z-65.13-405

### Tehnicki podaci

<b>Sistem zaštite</b> EN 60529	Spone: IP20 Kucište: IP 40
<b>CE oznake</b>	Prema uputstvima za niske voltaže (73/23/EWG), regulativama EMV(89/336/EWG)
<b>Operativna temp.</b>	-20... +60°C
<b>Temp.skladištenja</b>	-30... +80°C
<b>Glavno napajanje:</b>	
<b>Procenjena voltaža</b>	Vidite ključ tipa
<b>AC procenjena</b> <b>frekvencija</b>	48... 62 Hz
<b>Utrošnja struje</b>	Max. 1W/VA

<b>Ulaz:</b>	
<b>Voltaža otvorenog kola</b>	≤ 10 V AC
<b>Struja kratkog spoja</b>	≤ 5 mA
<b>Odlaganje pri uključivanju</b>	Vidite ključ tipa
<b>Obim osetljivosti</b>	Vidite ključ tipa
<b>Izlaz:</b>	
<b>Veza</b>	1 promenljiva veza slobodnog potencijala po kanalu
<b>Voltaža uključivanja</b>	Max. 250 V AC
<b>Struja uključivanja</b>	Max. 150 V DC Max. Cosφ=1 3A Cosφ=0,7 1A/AC
<b>Kapacitet uključivanja</b>	Max. Cosφ=1 750 VA 150 W (30 V DC/ 5A) 18W (150 V DC/ 0,12A)
<b>Težina</b>	Pribl. 150g

### Ključ tipa

Osnovne oznake	
Kanali	2= 2 kanala
Tip	
Kucište	<b>B = uključene spone (snaga opruge)</b> <b>C = uključene spone (za zavrtnaj)</b>
Odlaganje uključivanja	0= fiksno oko 0,5 s
Obim osetljivosti	1 = 1...30 kΩ 2 = 6...90 kΩ
Voltaža napajanja	0 = 24 V DC 1 = 24 V AC 2 = 42 V AC 3 = 48 V AC 5 = 127 V AC 6 = 230 V AC 7 = 240 V AC 8 = 115 V AC
Forma konstrukcije	O = 22,5 mm sine za ugradnju K = 19" verzija ploce

### Technical Data

<b>System of protection</b> EN 60529	clamps: IP 20 housing: IP 40
<b>CE marking</b>	according to low-voltage guideline (73/23/EWG), EMV guideline (89/336/EWG)
<b>Operating tempera- ture</b>	-20...+60 °C
<b>Storing temperature</b>	-30...+80 °C
<b>Mains supply:</b>	
<b>Rated voltage</b>	see type key
<b>AC rated frequency</b>	48...62 Hz
<b>Power consumption</b>	max. 1 W / VA

<b>Input:</b>	
<b>Open circuit voltage</b>	≤ 10 V AC
<b>Short circuit current</b>	≤ 5 mA
<b>Switching delay</b>	see type key
<b>Sensitivity range</b>	see type key
<b>Output:</b>	
<b>Contact</b>	1 potential free change- over contact per channel
<b>Switching voltage</b>	max. 250 V AC max. 150 V DC
<b>Switching current</b>	max. cosφ=1 3A cosφ=0,7 1A/AC
<b>Switching capacity</b>	max. cosφ=1 750 VA 150 W (30 V DC / 5A) 18 W (150 V DC / 0,12A)
<b>Weight</b>	app. 150 g

### Type Key

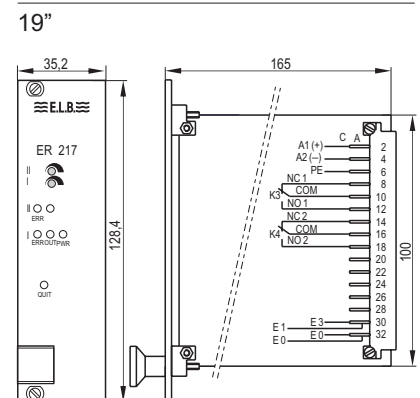
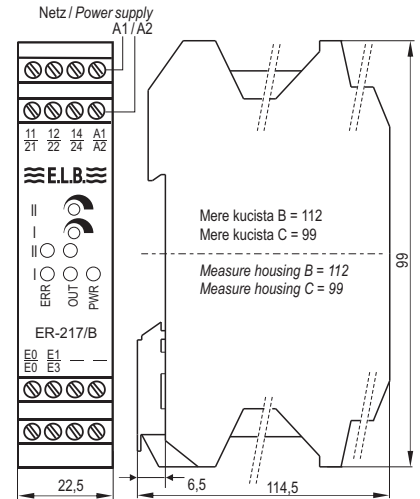
<b>Basic designation</b>	
Channels	2= 2 channels
Type	
Housing	B = plugged clamps (spring force) C = plugged clamps (for screwing)
Switching delay	O= fixed about 0,5 s
Sensitivity range	1 = 1...30 kΩ 2 = 6...90 kΩ
Supply voltage	0 = 24 V DC 1 = 24 V AC 2 = 42 V AC 3 = 48 V AC 5 = 127 V AC 6 = 230 V AC 7 = 240 V AC 8 = 115 V AC
Construction form	O = 22,5 mm mounting rail K = 19" board version

Z-65.13-405



ER-217/B

### Dimenzioni crtez Dimensional Drawings



Dimenzije u mm / Dimensioning in mm

SCHALTVERSTÄRKER / MEASURING TRANSDUCERS



**[Ex]i Elektrodni relej  
ER-145/A  
EC Sertifikat za  
Ispitivanje tipa  
TÜV 00 ATEX 1604  
Sa opštim odobrenjem za  
konstruisanje Z-65.13-405,  
Z-65.13-100, Z-65.40-191**

## Tehnicki podaci

Sistem zaštite EN 60529	Spone: Ip20 Kucište: IP 40
EN 61 010-1 EN 61 010-1/A2	Klasa zaštite (uredjaja) II Voltaža iznad granica kategorija III
EN 50 01402.2000 EN 50 02004.96	Stepen zagadjenosti 2 El. Oprema za Ex zone Zaštita od sagorevanja tip/kategorija ia/1, ib/2, grupa IIC
EN 50 082-2:02.96 EN 50 081-1:03.93 EN 55011: 07.92 EN 61 326-1:01.98	Limitna vrednost tipa B
CE oznake	Prema uputstvima za niske voltaže (73/23/EWG), regulativama EMV(89/336/EWG)
Operativna temperatura	-20...+60°C
Temperatura skladištenja	-30...+80°C
Glavno napajanje: Procenjena voltaža	Vidite ključ tipa
AC procenjena frekvencija	48...62 Hz
Utorna struja	≤ 1 VA
Ulaz:bezb.max.vrednosti	Linearne odlike
Voltaža otvorenog kola U <sub>0</sub>	≤ 13,1 V
Struja kratkog spoja I <sub>0</sub>	≤ 5,0 mA
Odlaganje pri uključivanju	Vidite ključ tipa
Obim osetljivosti	Vidite ključ tipa
Otpor linije nadzora	100 kΩ
Snaga P <sub>0</sub>	≤ 65 mW
EEX ia/ib:	ia/1 ib/2
Max.dozv.spolj.kapacitivnost	≤ 0,97 μF ≤ 6 μF
Max.dozv.spolj.induktivnost	≤ 0,9H ≤ 1H
Izlaz:	
Veze	2 promenljive veze bez potencijala
Voltaža uključivanja	Max. 250 V AC / 150 V DC
Struja uključivanja	Max. 5 AAC / 5 ADC
Kapacitet uključivanja	Max. 50W, 100 VA
Težina	Pribl. 150g

## Ključ tipa

Osnovne oznake	Tip	Kucište (spone povezane)
		Odlaganje uključivanja 0 = fiksno oko 0,5 s
		Obim osetljivosti 1 = 25...100 kΩ
		Voltaža napajanja 1 = 24 V AC 2 = 42 V AC 3 = 48 V AC 5 = 127 V AC 6 = 230 V AC 7 = 240 V AC 8 = 115 V AC
		Dugme za uključivanje bez indikacije = nema T = sa dugmetom za uključivanje

ER-145-A-□□□□

Moguće izmene bez prethodne najave.

**[Ex]i-Electrode Relay  
ER-145/A...  
EC Type Examination  
TÜV 00 ATEX 1604**

with general approval for constructions Z-65.13-405, Z-65.13-100, Z-65.40-191

## Technical Data

System of protection EN 60529	clamps IP 20 housing IP 40
EN 61 010-1 EN 61 010-1/A2	protection class (device) II overvoltage category III soiling degree 2
EN 50 014 02.2000 EN 50 020 04.96	el. equipment for Ex zones combustion protection type / category ia/1, ib/2 group IIC
EN 50 082-2:02.96 EN 50 081-1:03.93 EN 55 011:07.92 EN 61 326-1:01.98	limit value class B
CE marking	according to low-voltage guideline (73/23/EWG), EMV guideline (89/336/EWG)
Operating temperature	-20...+60 °C
Storage temperature	-30...+80 °C
Mains supply: Rated voltage	see type key
AC rated frequency	48...62 Hz
Power consumption	≤ 1 VA
Input: safety max. values	linear characteristic
Open circuit voltage U <sub>0</sub>	≤ 13,1 V
Short circuit current I <sub>0</sub>	≤ 5,0 mA
Switching delay	see type key
Sensitivity range	see type key
Resistance of the line monitoring	100 kΩ
Power P <sub>0</sub>	≤ 65 mW
EEX ia/ib:	ia/1 ib/2
Max. perm. outer capacitance	≤ 0,97 μF 6 μF
Max. perm. outer inductivity	≤ 0,9H 1H
Output: Contacts	2 potential free change-over contacts
Switching voltage	max. 250 V AC / 150 V DC
Switching current	max. 5 AAC / 5 ADC
Switching capacity	max. 50 W, 100 VA
Weight	approx. 150 g

## Type Key

Basic designation	Type	Housing (clamps wired)
		Switching delay 0 = fixed about 0,5 s
		Sensitivity range 1 = 25...100 kΩ
		Supply voltage 1 = 24 V AC 2 = 42 V AC 3 = 48 V AC 5 = 127 V AC 6 = 230 V AC 7 = 240 V AC 8 = 115 V AC
		Push button switch without indication = none T = with push button switch

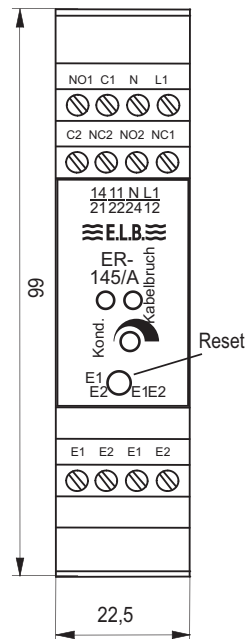
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Subject to change without prior notice, errors excepted.

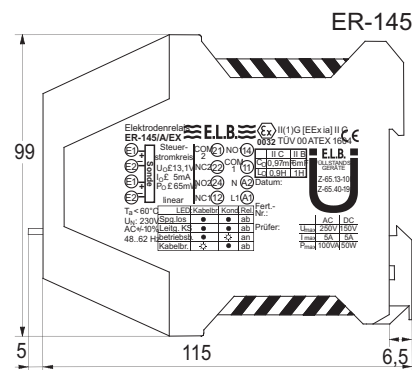


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## Dimenzioni crtez Dimensional Drawing



ER-145



Dimenzije u mm / Dimensioning in mm