ZK7A33-3100-0xxx www.beckhoff.com/ZK7A33-3100-0xxx

# ZK7A33-3100-0xxx | B23, power cable, halogenfree special mixture, 5 G 4 mm<sup>2</sup>, fixed installation, key 3 (user-defined voltage)



B23, plug, straight, female+blanking plug, pins 4+PE, Power - open end



### **Plugs**

Electrical data	Head A	Head B
Rated voltage (power)	630 V AC / 850 V DC, 600V AC / DC (UL)	-
Rated current (power)	28 A at 40 °C	-
Rated impulse voltage (power)	6.0 kV	-
Contact resistance	< 5 mΩ	-
Insulation resistance	≥ 100 M $\Omega$ (according to IEC 60512)	-
Mechanical data		
Accessories type	Connectors	-
Installation size	B23	open end
Connector type	plug	-
Configuration	straight	-
Contact type	female+blanking plug	-
Number of positions (face)	pins 4+PE	-
Coding	Power	-



Mechanical coding	key 3 (user-defined voltage)	-
Wire termination	crimp connection	-
Mating cycles	≥ 100	-
Way of locking	bayonet	-
Weight per piece	0.100 kg (0.220 lb)	-
Body color	metal	-
Body material	CuZn, Ni	-
Coupling nut material	GD-Zn, Ni	-
Seal	NBR	-
Contact carrier material	PA, UL 94	-
Contact carrier color (power)	red	-
Contact plating	Ni, Au gal.	-
Contact material	copper alloy	-
Max. wire cross-section (power)	AWG12/4.0 mm <sup>2</sup>	-
Max. cable outer diameter	13.015.0 mm, 15.016.0 mm	-
Environmental data		
Shock redictance	50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes	-
Vibration resistance	5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration	-
RoHS compliant	yes	-
Ambient temperature (operation)	-20+90 °C, -4+194 °F	-
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	

## Cable

Electrical data	
Rated voltage	600 V / 1000 V
Operating voltage	max. 1000 V AC (UL)
Test voltage	4000 V
Mechanical data	
Conductor construction	fine stranded according to VDE 0295
Cross-section	5 G 4 mm <sup>2</sup> (AWG12)
Outer cable diameter	14.9 mm ± 0.20 mm (0.587" ± 0.00787")
Min. bending radius, moved	15 x outer cable diameter
Min. bending radius, fixed installation	4 x outer cable diameter



Conductor material (power)	copper bare
Use	fixed installation
Jacket color	black
Wire color code	green/yellow, blue, brown, black, grey
Printing color	white
Environmental data	
Operation temperature range, moved	-25+70 °C, -13+158 °F
Operation temperature range, fixed installation	-40+80 °C, -40+176 °F
UV resistance	yes
Special features	NFPA79
Flame-retardant	according to IEC 60332-1-2
Halogen-free	according to IEC 60754-1
CE	yes
UL	Yes

Contact assembly		
	grün-gelb/green-yellow  braun/brown  schwarz/black  grau/grey  blau/blue	
	8   blau/blue	

## Dimensions

A1	approx. 80.0 mm
A2	29.0 mm

#### **Notes**

- Depending on the cable length (L), the following length tolerances apply: 0 m...3.0 m: + 100 mm | 3.0...10.0 m:  $\pm$  100 mm |  $\geq$  10.0 m:  $\pm$  2 %
- Illustrations similar
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xxxx-xx020 = cable length 2.00 m



ZK7A33-3100-0xxx www.beckhoff.com/ZK7A33-3100-0xxx

CE, UL	
CE	yes

Ordering information	Length
ZK7A33-3100-0030	3.00 m
ZK7A33-3100-0050	5.00 m
ZK7A33-3100-0075	7.50 m
ZK7A33-3100-0100	10.00 m
ZK7A33-3100-0250	25.00 m
ZK7A33-3100-0300	30.00 m
ZK7A33-3100-0350	35.00 m
ZK7A33-3100-0400	40.00 m
ZK7A33-3100-0450	45.00 m
ZK7A33-3100-0500	50.00 m
ZK7A33-3100-0550	55.00 m
ZK7A33-3100-0600	60.00 m

Accessories	
ZS7300-B003	B23 protection cap, plug, plastic, IP67, packaging unit = 10 pieces
ZS7300-B004	B23 protection cap, plug, metal, IP67, packaging unit = 5 pieces
ZS7300-B005	B23 color coding connector/square flange, red, packaging unit = 10 pieces
ZS7300-B006	B23 color coding connector/square flange, yellow, packaging unit = 10 pieces
ZS7300-B007	B23 color coding connector/square flange, blue, packaging unit = 10 pieces
ZS7300-B008	B23 color coding connector/square flange, green, packaging unit = 10 pieces
ZS7300-B015	B23 color coding connector/square flange, orange, packaging unit = 10 pieces
ZS7300-B016	B23 color coding connector/square flange, gray, packaging unit = 10 pieces
ZB8802-0003	assembly tool for B23 connector, AF27



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

Beckhoff®, TwinCAT®, TwinCAT/BSD®, TC/BSD®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

#### © Beckhoff Automation GmbH & Co. KG 01/2024

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressively agreed in the terms of contract.

