# **Technical Data**

## Foot-switch

# **BERNSTEIN**

#### Series F2

F2-U1Z/ZSD 6062500561 Description Article number 190 right pedal 118 164 Switching symbol right pedal left pedal 2. position 1. position 3. position Off-position Off-position On-position Operating diagramme left pedal right pedal On Off 1.position 2.position Pressure point (right) 3.position

This document will not become the contractual basis; the details included herein do not constitute any descriptions of expected conditions, so that warranties/claims for defects on account of possible variations of the actual qualities from the qualities described herein are explicitly excluded. All rights reserved. Specifications subject to change without notice!

Date of issue: 20.07.2012 / Page 1 of 3 Document: 6062500561\_en / Status: 1 / 2034-12

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Electrical data		
Rated insulation voltage	Ui	250 V
Conv. thermal current	I <sub>the</sub>	5 A
Rated impulse withstand voltage	Uimp	2,5 KV
Rated operational voltage	$U_e$	240 V AC and 24 V DC
Utilization category		AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V AC / 1,5 A 50-60 Hz DC-13, U <sub>e</sub> /I <sub>e</sub> 24 V DC/ 1,0 A
Direct opening action	$\Theta$	acc. to IEC/EN 60947-5-1, Annex K
Short-circuit protective device		D-Fuse 4 A gG
Protection class		

Mechanical data	
Enclosure	AL, die-cast
Cover	AL, die-cast
Actuator	Foot lever (PA)
Ambient air temperature	Operating temperature range: -10 °C to +50 °C Storage temperature range: -25 °C to +70 °C
Contact type (left pedal)	1 NC, 1 NO. (Zb)
(right pedal)	1 NC, 2 NO. (Zb)
Operating force (pedal centre) (left pedal)	10 N
(right pedal) 1. position	10 N
2. position	25 N
Pressure point (right pedal)	≈ 200 N
Mechanical life (left pedal)	10 x 10 <sup>6</sup> operating cycles
Sequence of the switching position(right Pedal): $1-2$	
or: $1-2-3-1$	
Switching frequency (left pedal)	max. 50/min
(right pedal)	max. 30/min
Assembly	2 x M8
Connection	screw connections (M3,5)
	10
Protection ground	2 x M4
Conductor cross-sections	Solid: 0.5 1.5 mm <sup>2</sup>
	Litz wire with ferrules: 0.5 1.5 mm <sup>2</sup>
Cable entrance	1 x M20 x 1,5
Weight	Approx. 2,3 kg
Protection type	IP67 in accordance with IEC/EN 60529

ID for safety engineering	
ib for safety engineering	
B10d - value	1 x 10 <sup>5</sup>
Regulations	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	DIN EN 61326-3-1
	EN 13849
EU Conformity	acc. to directive 2006/95/EG
Approvals	DGUV
	$_{ m c}$ UL $_{ m us}$

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Date of issue: 20.07.2012 / Page 2 of 3 Document: 6062500561\_en / Status: 1 / 2034-12

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### Function (right pedal)

Normally open contacts: 23 – 24, 33 – 44; Signalling contact: 11 – 12

- Position 1: OFF position of the operating contacts (the pedal is not actuated)
- Position 2: ON position of the operating contacts (the pedal is actuated to as far as the pressure point)
- Position 3: OFF position of the operating contacts (the pedal is fully actuated)

If the three-stage enable switch is actuated in position 2, it returns to position 1 when it is released. The three-stage enable switch changes from position 2 to position 3, if it gets further pressed under after the resistance of the pressure point.

The actuation of the operating contacts is made by a positive opening.

Once the pedal is not pressed, the three-stage enable switch returns to position 1.

The operating contacts are opened in the return stroke.

#### **Notes**

The specified protection classification (IP code) applies only when the cover is closed and the appropriate cable is used, in accordance with the clamping range of the above mentioned cable gland.

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Date of issue: 20.07.2012 / Page 3 of 3 Document: 6062500561\_en / Status: 1 / 2034-12