

250A Deadbreak Straight Receptacle

Up to 24kV



The Elastimold® ESS25 Straight Receptacle is a fully-rated up to 24kV, 250A Class Deadbreak receptacle. It has a standard A interface for connecting up to 24kV, 250A Deadbreak bushing inserts, junctions and other accessories. The ESS25 is equipped with an integral voltage test point.

Features and benefits

- Up to 24kV, 250A Deadbreak Receptacle
- Fully shielded, fully submersible molded rubber housing
- 100% peroxide-cured construction includes insulation and conductive EPDM materials
- Provision for ground wire connection
- Wide cable range with minimum number of sizes

Applications

Medium voltage deadbreak applications up to 24kV and 250A using EN50180 & EN50181 Interface A.

Materials

100% peroxide-cured EPDM.

Ambient operating temperature range

- 40°C ~ 65°C

Ratings

Meets IEC 60502-4, CENELEC HD 629.1 S3

$U_0/U(U_m)$

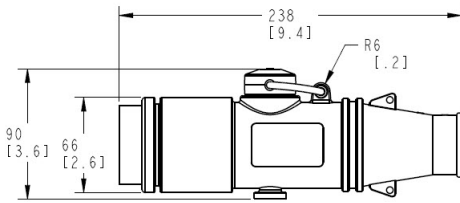
For 6.35/11(12)kV Voltage Class:

6.35kV Phase-to-Ground U_0 – Operating Voltage
 11kV Phase-to-Phase U
 95kV BIL – Impulse Withstand (1.2 x 50 microsecond wave)
 28.5kV AC – Five minute withstand
 Max 10pC at 12.5kV
 250A – Continuous

For 12/20(24)kV Voltage Class:

12kV Phase-to-Ground U_0 – Operating Voltage
 20kV Phase-to-Phase U
 125kV BIL – Impulse Withstand (1.2 x 50 microsecond wave)
 54kV AC – Five minute withstand
 Max 10pC at 24kV
 250A – Continuous

Interface A: EN50180 and EN50181



Voltage Class	Certified Cable Conductor Size MIN
12kV	16 mm ²
24kV	35 mm ²

Part Number Selection

1. Determine U_{max} needed.
2. Choose code relevant to cable size (mm²).
3. Choose code for armor type.
4. Choose the correct code for the cable adapter being used.
5. Choose Differentiator code if applicable.

Example:

The ordering number for an Elbow Connector with 24kV U_{max}, 150 mm², unarmored, with J cable adapter, and AA as differentiator is ESS25JAJ(AA through ZZ if applicable). Cable adapter selection is determined based on the insulation diameter of the cable.

U _{max}		Cable Conductor MAX mm ² Code		Cable Type Code	
Code	Type	Code	mm ²	Code	Type
5	Up to 24kV	J	150	A	Unarmored

Cable Adapter Code		Differentiator (if applicable)	
Code	Cable Adapter	Code	Phases
Letters A through Z		Letters AA through ZZ	

Cable Adapter	Cable Insulation Diameter mm		Cable Insulation Diameter Inches	
	MIN	MAX	MIN	MAX
E	13.46	17.27	0.53	0.68
F	16.26	20.83	0.64	0.82
G	19.30	24.13	0.76	0.95
H	21.59	26.67	0.85	1.05
J	24.89	29.97	0.98	1.18

ESS2	U _{max}	Cable Conductor MAX mm ² Code	Cable Type Code	Cable Adapter Code	Differentiator Code (if applicable)
------	------------------	--	-----------------	--------------------	-------------------------------------

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction - in whole or in part - is forbidden without prior written consent of ABB. © 2024 ABB Installation Products Inc. and/or its related companies. All Rights Reserved.

The 1 Phase kit contains the following

*: Last letter in part number corresponds to cable adapter size. Example of F size Cable Adapter: ESX6-MAAF

**:. Connector should be sized accordingly as shown in Cable Conductor MAX mm² Code table page 2

1 Phase kit		
Quantity	Description	Part #
1	250A Insulated Straight	ESS2-MIB1
1	VD Cap	ESX1-MTC1
1	Cleaning Cloth	ECX1-CCL1
1	Earthing Wire Assembly	ESX1-GKA1
2	Bailing Ring	ESS2-CBR1
2	Hook Bolt M4	ESX2-CBH1
2	Wing Nut M4	ESX2-CBN1
2	Compound Lube	82-08
1	Shear Bolt Contact 250A Straight	ESS2-CSBA**
1	Cable Adapter 250A Size	ESX2-MAAF*
2	Gloves	ECX1-GLO1
1	PVC Tape	ECX1-PTA1
1	Abrasive Paper	ECX1-APA1
1	Instruction Sheet 250A	ESX2-CUM1
1	Mastic Tape	ECX1-MTA1/2
1	Bleeder Line	ECX1-BLN1
1	Cold Shrink Tube 1/2	ECX1-CST1/2
1	Screen Wire Lug 13mm Hole	ECX1-GWL1
2	Washer M4 DIN125A A2	ESX1-CWA1