




Hornsea 01 220kV Offshore GIS
HOW01Z11

Surge Arrester, Technical Datasheet, Data

Z11AAD&EDA002



20.04.2016	As Built		
Revision	Status		
		Surge Arrester, Technical Datasheet, Data Z11AAD&EDA002 <small>Cover sheet for doc.: Technical_Datasheet_0027118159_001</small>	
		Project. no. 54PO-01747	No. of pages 2

Siemens H-Pos: 100; 3ES6 198-4PE41-6EA1 X50 U06

System Information		
Highest Voltage of Equipment (Um)	245	kV
Basic Insulation Level (BIL)	1 050	kV
Maximum altitude of installation (a.s.l.)	1000	m
Neutral system earthing	solid	
Power Frequency	48 ... 62	Hz
Electrical data		
Applied Standard	IEC 60099-4	
Rated voltage (Ur)	198	kV
Maximum continuous operating voltage (Uc / MCOV)	158	kV
Nominal discharge current (In, 8/20 µs)	20	kA
Line discharge class	4	
Long duration impulse current withstand (2 ms)	1 200	A
High current impulse withstand (4/10 µs)	100	kA
Rated short circuit current (0,2 s)	50,0	kA
Maximum residual voltage at :		
20 kA 1/2 µs	547	kV
5 kA 8/20 µs	451	kV
10 kA 8/20 µs	475	kV
20 kA 8/20 µs	518	kV
40 kA 8/20 µs	566	kV
500 A 30/60 µs	390	kV
1 kA 30/60 µs	404	kV
2 kA 30/60 µs	418	kV
Temporary overvoltage for 1 s	228	kV
Temporary overvoltage for 10 s	213	kV
Energy discharge capability - thermal	10,0	kJ/kV _r
Energy discharge capability - impulse	5,60	kJ/kV _r
Power Frequency withstand voltage (1min)	460	kV
Switching Impulse withstand voltage (250/2500 µs)	750	kV
Lightning Impulse withstand voltage (1,2/50 µs)	1 050	kV
Mechanical data		
Height (H)	1 305	mm
Diameter (D)	355	mm
Weight (G)	64,5	kg
Color	RAL 1013 indoor special	
Number of phases	1	
Bushing	SF6/SF6	
SF6-design overpressure	610	kPa
SF6 pressure, min.	550	kPa
SF6 mass	3,20	kg
Accessories		
Accessory 1	3EX5 050-0 SURGE COUNTER WITH LEAKAGE CURRENT METER (0-30MA) 6 DIGIT CYCLOMETER AT LEAST 5 COUNTS/ SECOND NOM. RES. VOLTAGE AT 100KA / 4/10 #S : 5KV PEAK MIN. COUNT CURRENT 200 AMPS 8/20 #S DRAWING: 3HH 802 58238 PLEASE CONSIDER A MAXIMUM EARTH LEAD OF 2M FOR ARRESTER-COUNTER CONNECTION! RECOMMENDED CROSS SECTION OF EARTH LEAD: 35MM ²	
Accessory 2	Accessory for surge counter (refer to drawing 802 65059)	

AL: N
ECCN: N