Document No.	TD-92180352-03
Customer	Siemens AG
Project	HVDC Modularisation
Trench Austria Ref.	92180352

TA Item	Designation	Type	Sub-type / Basic Type	Qty.	Equipment No.
03	DC HSS COMMUTATION REACTOR	ORR 250/0/0,1	CB115.YY120 / TA003	-	-

Design

- for outdoor installation
- dry insulated, air-cored and air-self cooled reactor
- with coil axis vertical
- cylindrical coil, impregnated with epoxy resin
- with flat aluminium terminal pads
- with support insulator and foundation fittings
- terminal connectors are not included
- bolts and nuts for terminals as well as foundation bolts are not included
- for side by side mounting
- surface finish with high performance, high solid 2 component polyurethane insulation paint – colour light grey (RAL 7035)
- standard IEC 60076-06

Technical data

Main Data			
Inductance		µH	100,00
Tolerance of nominal inductance		%	+-5%
Thermal class		-	B
Maximum and average temperatures considered of the design	maximum daily	℃	50
	average monthly	℃	40
	average yearly	℃	30
Quality factors and losses			
Q-factor quoted at fundamental frequency, at 75℃ a verage winding temp.		-	6
Q-factor quoted at resonance frequency, at 75℃ ave rage winding temp.		-	min. 100
Tolerance on Q-factor		%	+-20%
Insulation			
Minimum creepage distance	Terminal to terminal	mm	acc. to internal guidelines
	bottom-terminal to ground	mm	3650
LIWL/SIWL	Terminal to terminal	kVpk	250 / 150
	top-terminal to ground	kVpk	250 / 150
	bottom-terminal to ground	kVpk	250 / 150
Support insulator			
Type of insulator		-	C6-650
Manufacturer		-	SINOMA
Country of manufacture		-	China
Material of insulator	(composite / porcelain)	-	porcelain
Number of insulators per coil		pcs	1

Diameter D_a	mm	< 250
Min. mechanical bending load	kN	6
Glaze colour	-	Brown
Shed profile	-	alternate
Shed extension (long / short)	mm	45/30
Shed spacing between long sheds	mm	64
RTV coating	yes / no	no
Creepage factor (C.F.)	-	≤ 3,5
Dimensional data		
See drawing		92180352-03-AAA01E1
Mechanical data		
Terminal forces, static / dynamic	kN	1/2