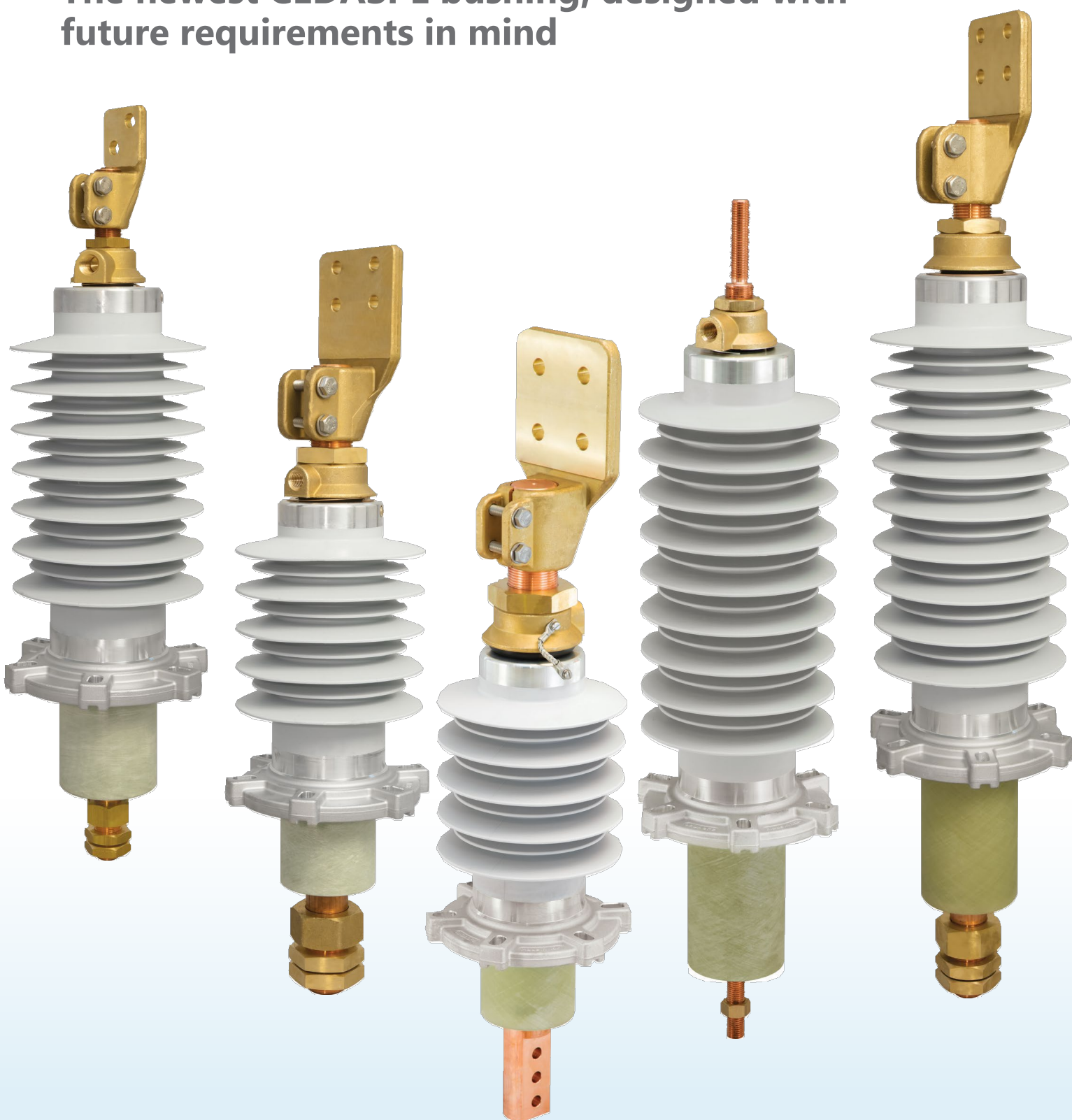


Silicone composite bushings SBC Series

12÷52kV and 250÷4500A



The newest CEDASPE bushing, designed with future requirements in mind





CEDASPE® SBC Bushings

Cedaspe introduced a new family of bushings for Power Transformer with rated voltage up to 52 kV and current rating up to 4500 A with a composite silicone insulation body.

The insulation body is made from a fibreglass tube with an aluminum flange; the silicone insulator is moulded directly onto the fibreglass tube with a modern injection system based on the liquid silicone technology (LSR). The silicone used is a first quality material with all type tests performed. MR has more than 30 years experience with polymeric insulators.

The result is that our SBC bushings family have a very strong construction and a very efficient design which also makes possible the replacement on site of the old bushings with these new composite insulators. The design of our SBC bushings keeps the same overall dimension of the corresponding porcelain type bushing either acc to DIN 42532/42533 & 42534 or to EN 50180; very long creepage distances and alternated shed profile guarantees an excellent insulation performance.

Tests conducted on these bushings show very good results with values of p.f. withstand voltage and impulse voltage much higher than the minimum values required by IEC 60137.

Regarding Partial Discharge, these bushings can be considered PD free, as the performance is extremely good with test results below 2 pC and all bushings tested remain free of PD by 10% above the rated voltage. This means 1.9 times above line to ground $U_r/srt3$: all show a very good result!!

General information

Advantages of using silicone bushings:

Silicone has been used in bushing insulators for more than 50 years on account of their high weather resistance, good tracking and erosion resistance.

Further advantages include:

+ **Long service life**

Silicone rubbers have excellent hydrophobic proprieties and outstanding resistance to temperature, UV radiation and ozone.

+ **Low weight**

Hollow-core insulators are up to 80% lighter than conventional porcelain insulators. This facilitates installation in challenging locations and reduces cost of transportation.

+ **Good impact and shock resistance**

The flexibility of silicone insulating materials reduces the risk of breakage during transport and installation and earthquakes.

Failure as the result of vandalism is rare.

+ **Superior mechanical strength vs porcelain bushings**

Cantilever operational and test loads exceed the requirements of IEC60137 and historic porcelain solutions.



+ **High flashover resistance against pollution**

The surface hydrophobicity (see picture) of silicone provides long-lasting protection against leakage currents and flashovers, even if the surface is very dirty.

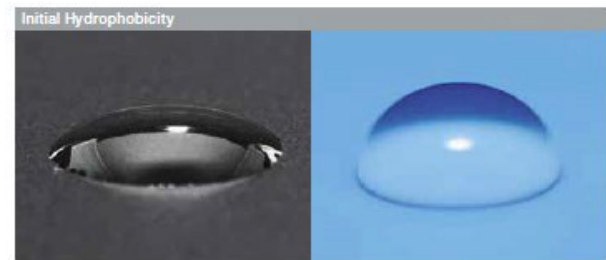
In such situations, this increases the reliability of the power supply, for example in industrial, coastal and desert regions.

+ **Low maintenance cost**

Due to transfer of hydrophobic properties, the water-repelling effect is maintained even if the surface is dirty, which means that the insulators do not need regular cleaning.

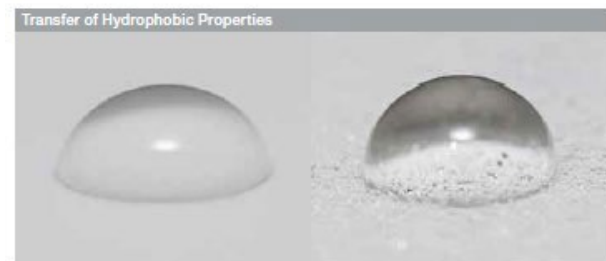
+ **Reliable production process**

The low-pressure moulding process produces silicone hollow-core insulators with considerable reliability and flexibility, making products available on demand.



Water droplet on a porcelain surface.

Water droplet on a silicone-coated surface.



Water droplet on a clean silicone surface.

Water droplet on a dirty silicone surface.

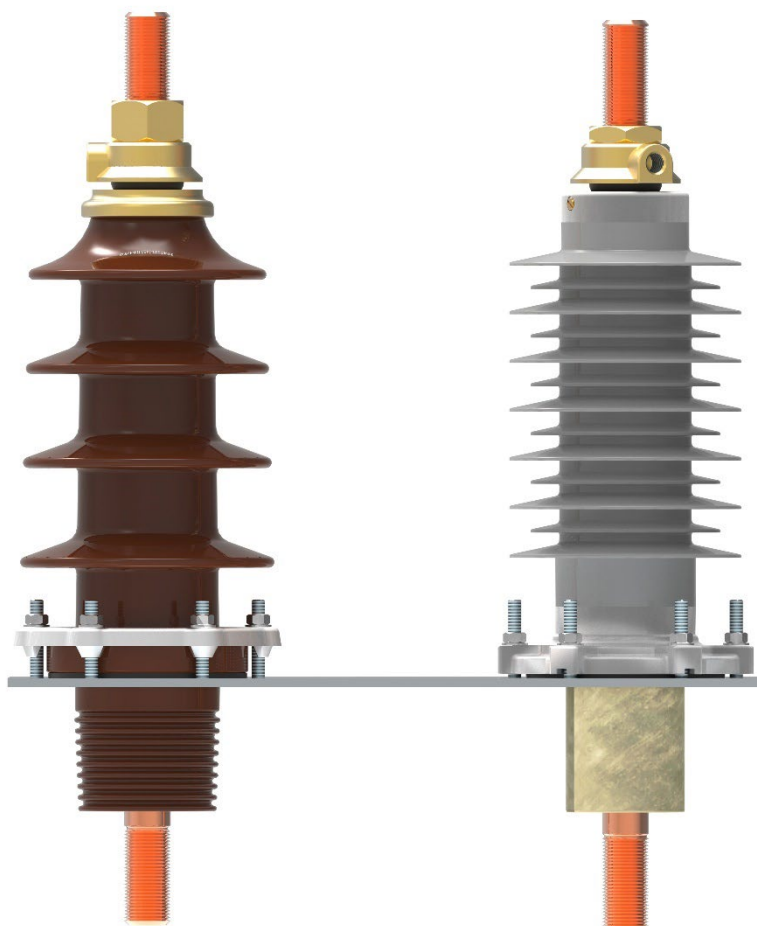


Water droplet on a dirty silicone coating.

Water droplet on a cleaned silicone coating.



Interchangeability with old DIN bushings





Bushings range

Type	Rated Voltage [kV]	Rated Current [A]	PF [kV]	BIL [kV]	CD [mm]	Arcing distance [mm]	Flange type	Weight [kg]	Pollution level	Drawing nr.	
SBC	12	630	30	75	500	210	B	8	P4	e	4744
SBC	12	1250	30	75	500	210	C	12	P4	e	5087
SBC	12	2000	30	75	505	210	D	20	P4	e	4982
SBC	12	3150	30	75	505	210	D	24	P4	e	4983
SBC	12	4500	30	75	505	210	D	33	P4	e	4501
SBC	24	630	55	125 (150)	830	295	B	9	P4	e	4744
SBC	24	1250	55	125 (150)	830	295	C	13	P4	e	5087
SBC	24	2000	55	125	828	295	D	22	P4	e	4982
SBC	24	3150	55	125	828	295	D	26	P4	e	4983
SBC	24	4500	55	125	828	295	D	40	P4	e	4501
SBC	36	630	77	170(200)	1180	385	B	10	P4	e	4744
SBC	36	1250	77	170(200)	1180	385	C	15	P4	e	5087
SBC	36	2000	77	170	1180	385	D	25	P4	e	4982
SBC	36	3150	77	170	1180	385	D	30	P4	e	4983
SBC	36	4500	77	170	1180	385	D	50	P4	e	4501
SBC	52	250	105	250	1520	472	D	18	P3	d	4496
SBC	52	630	105	250	1520	472	D	19	P3	d	4497
SBC	52	1250	105	250	1520	475	D	20	P3	d	4981
SBC	52	2000	105	250	1520	472	D	28	P3	d	4982
SBC	52	3150	105	250	1520	475	D	33	P3	d	4983
SBC	52	250	105	250	1689	516	D	19	P4	e	4496
SBC	52	630	105	250	1689	516	D	20	P4	e	4497
SBC	52	1250	105	250	1689	519	D	21	P4	e	4981
SBC	52	2000	105	250	1689	516	D	29	P4	e	4982
SBC	52	3150	105	250	1689	516	D	35	P4	e	4983

	DATE	NAME	DOCUMENT NO.	
DFTR.	23/11/23	Castellini S.	4744	
CHKD.	23/11/23	Tripepi R.	CHANGE NO.	SCALE
STAND.	23/11/23	Giorgi A.	09	15

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DIMENSION IN mm EXCEPT AS NOTED

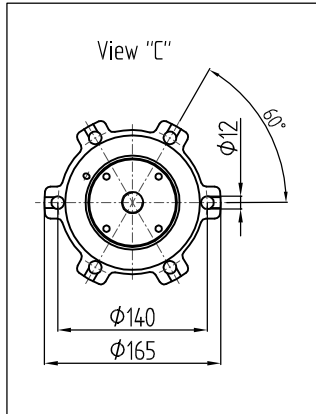
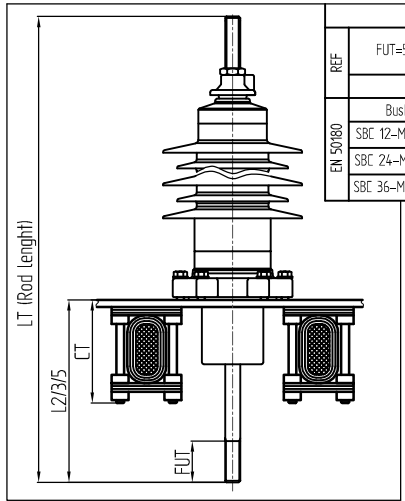


SILICONE COMPOSITE BUSHING CEDASPE RATED VOLTAGE 12/24/36kV RATED CURRENT 630A M20

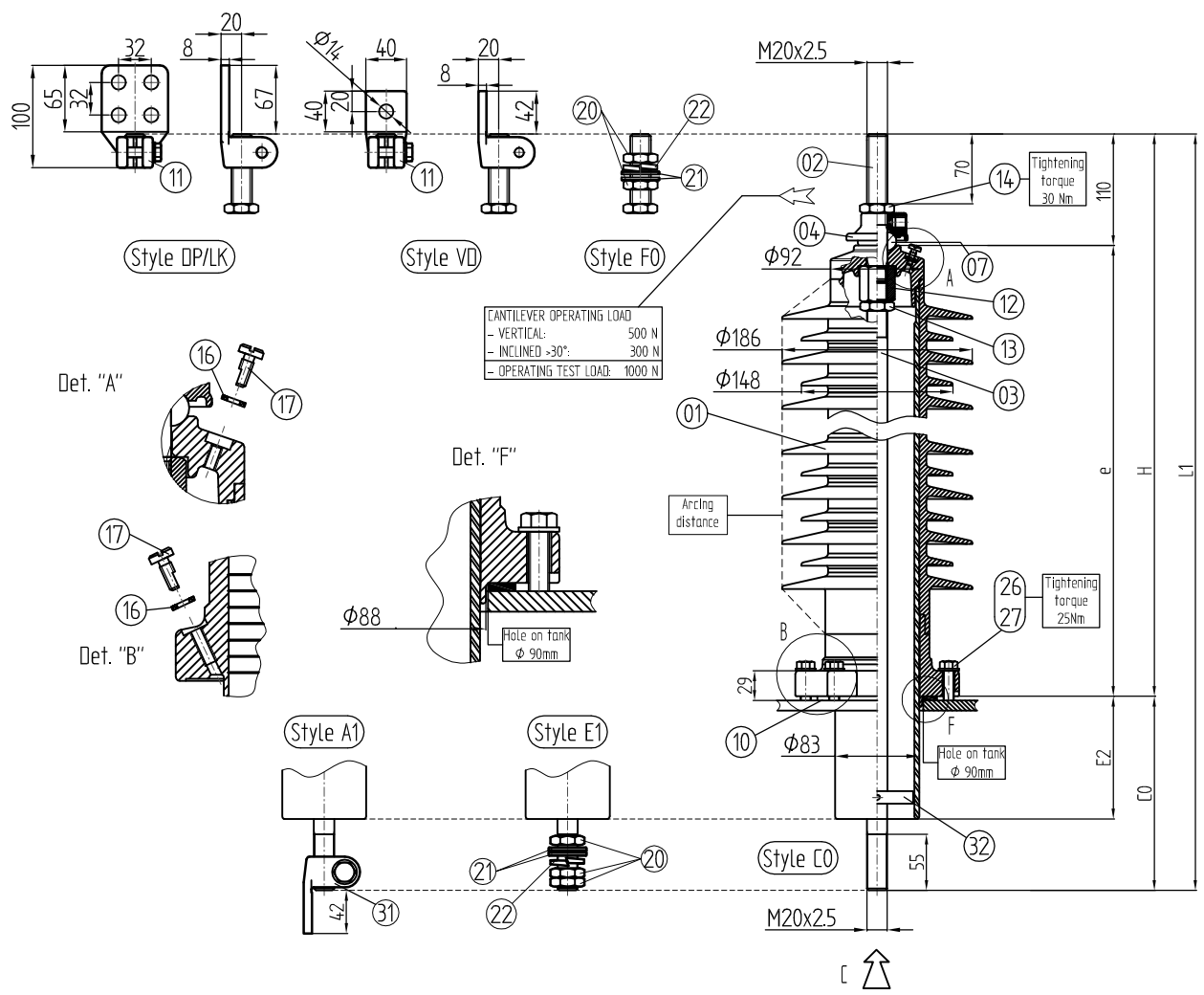
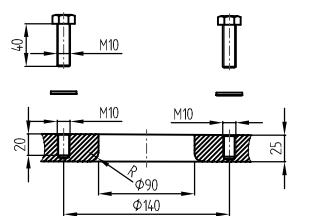
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Top bolt	Copper
3	Internal Rod	Copper
4	Top cap HV630	Brass
7	Ring gasket ED06	NBR
10	Flange gasket "N"	NBR
11	Brass Flag	Brass
12	Antifouling device	Brass
13	Lock nut M20	Brass
14	Nut M20 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
20	Locknut M20 DIN 936	Brass
21	Washer $\phi 21$	Steel AISI304
22	Spring washer $\phi 21$	Steel AISI304
26	Screws M10 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
31	Brass flag	Brass
32	Center ring	

NOTE: THESE NEW DRAWING RELEASE REPLACES OLD DRAWING CEDASPE 4744 RO120191 MODIFIED DENOMINATION OF THE BUSHINGS

OPTION: CT ACCOMMODATION				
REF	FUT=55	ET 150	ET 300	ET 500
		L2=250	L3=400	L5=600
Rod Length				
EN 50180	Bushing	L12	L13	L15
	SBC 12-M20/d IP4)	625	775	975
	SBC 24-M20/d IP4)	702	852	1052
	SBC 36-M20/d IP4)	800	950	1150



Note:
Mounting hole : $\phi 90^{+2}_{-0}$
Fixation bolt circle :
- ϕ Fix: $\phi 140$ mm
Suggested round edges design (R)



Bushing type	Pollution level IEC60815 (2008)	Rated voltage (kV)	Rated current (A)	P.F. \uparrow (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	e	E2	L0	H	L1	G.W. Kg
SBC 12 B-630 (P4)	e (ex P4)	12	630	30	75	500	210	3+2	265	90	155	375	530	8
SBC 24 B-630 (P4)		24		55	125 (150*)	830	295	5+4	342	100	165	452	617	9
SBC 36 B-630 (P4)		36		77	170 (200*)	1180	385	7+6	440	120	190	550	740	10

(*) Bushings tested acc. to IEC60137 and higher BIL level too

MATERIAL NUMBER SERIAL NUMBER SHEET 1/1

	DATE	NAME	DOCUMENT NO.	
DFTR.	16/09/22	Gandini.T	5087	
CHKD.			CHANGE NO.	SCALE
STAND.			06	1:5

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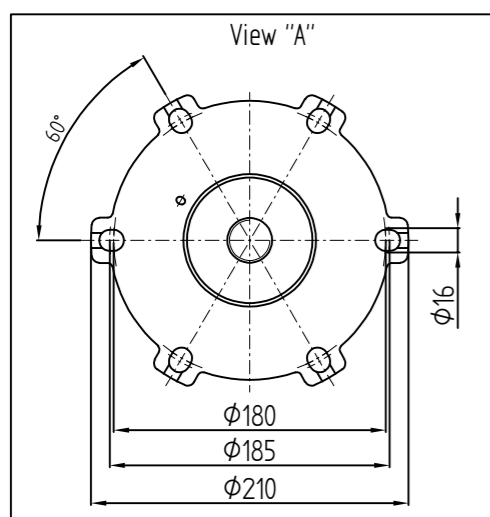
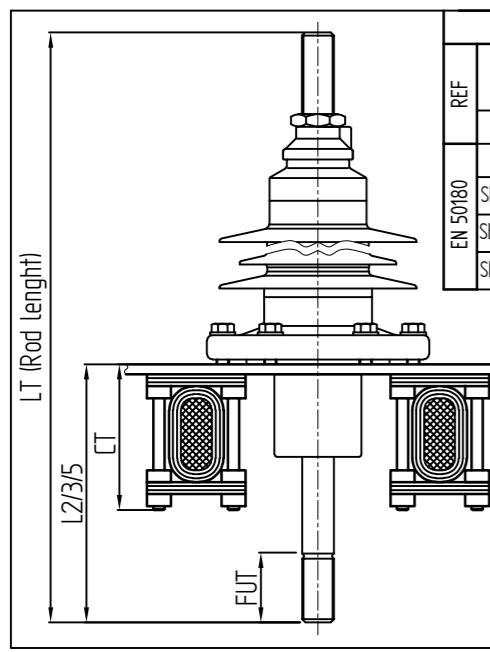
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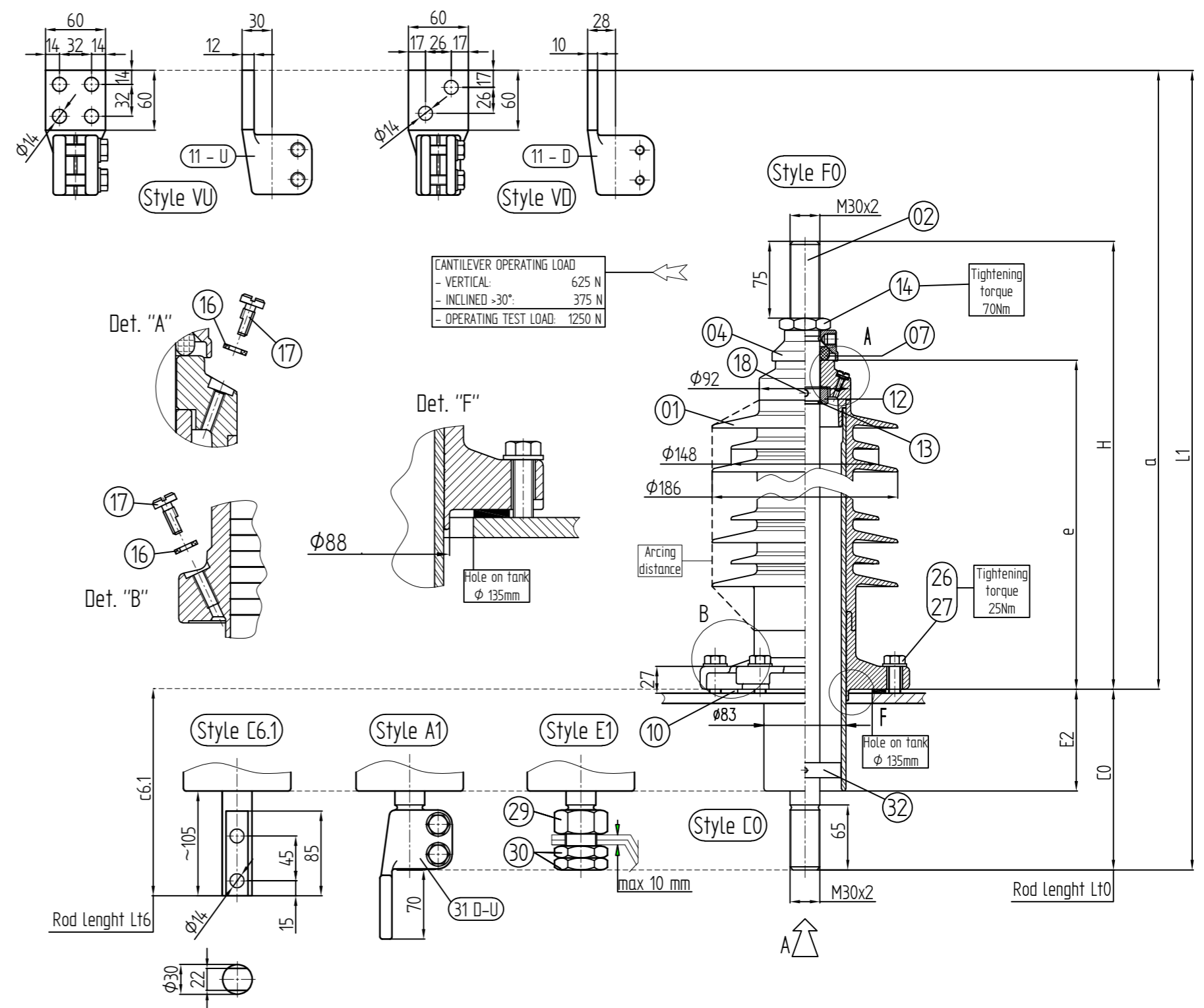
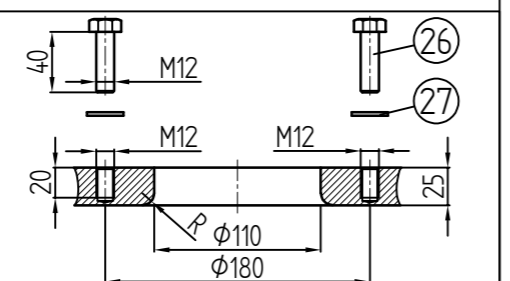
SILICONE COMPOSITE BUSHING CEDASPE
RATED VOLTAGE 12/24/36kV RATED CURRENT 1250A M30

Pos.	Description	Material
1	SBC hollow body	Silicon
2	Rod	Copper
4	Top washer SBC 1250A	Brass
7	Ring gasket ED12	NBR
10	Flange gasket "N"	NBR
11D	Flag DIN EP 1000	Brass
11U	Flag esec. 1000 UNEL	Brass
12	Antirotaion ring SBC 1250	Brass
13	Ring "S"	Copper
14	Nut M30 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Locking screw	Steel
26	Screws M12 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
29	Nut M30 DIN 934	Brass
30	Locknut M30 DIN 936	Brass
31D-U	Brass flag esec. DIN or UNEL	Brass
32	Center ring	

OPTION: CT ACCOMODATION				
REF	FUT=65	CT 150	CT 300	CT 500
		L2=300	L3=450	L5=650
Rod length				
EN 50180	Bushing	Lt2	Lt3	Lt5
	SBC12-M30/dIP4)	689	839	1039
	SBC24-M30/dIP4)	766	916	1116
	SBC36-M30/dIP4)	865	1015	1215



SUGGESTED FIXATION MOUNTING:
Type "C" DIN42538
Mounting hole on tank $\phi 110^{+2}$ mm
Bolt circle $\phi 180$ (Min) or 185 mm (max)
Flange hole with round edges design (R)



CANTILEVER OPERATING LOAD
- VERTICAL: 625 N
- INCLINED >30°: 375 N
- OPERATING TEST LOAD: 1250 N

Tightening torque 70Nm

Tightening torque 25Nm

Rod length Lt6

Rod length Lt0

Bushing type	Pollution level IEC60815 (2008)	Rated voltage (kV)	Rated current (A)	P.F. 1' (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	e	E2	C0	H	a	L1	Lt0	c6.1	Lt6	G.W. Kg
SBC 12 C-1250 (P4)	e (ex P4)	12	1250	30	75	500	210	3+2	270	90	171	389	454	625	560	195	584	12
SBC 24 C-1250 (P4)		24		55	125 (150')	830	295	5+4	347	100	181	466	531	712	647	205	671	13
SBC 36 C-1250 (P4)		36		77	170 (200')	1180	385	7+6	446	120	200	565	630	830	765	225	790	15

(* Bushings tested acc. to IEC60137 and higher BIL level too

MATERIAL NUMBER
SERIAL NUMBER
SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 01/12/21	Curti M.	4982	
CHKO:		CHANGE NO.	SCALE
STAND:		11	15

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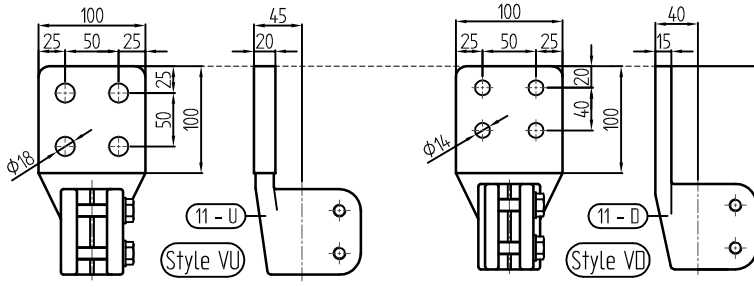
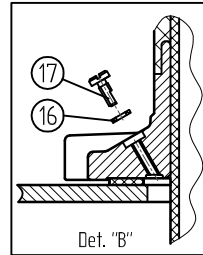
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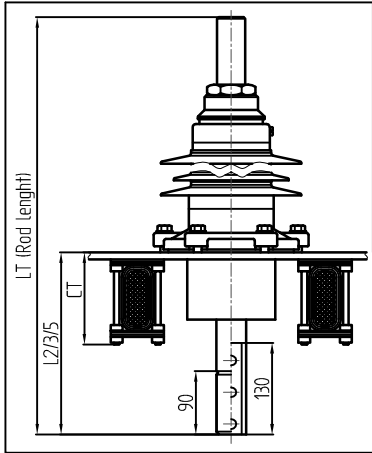
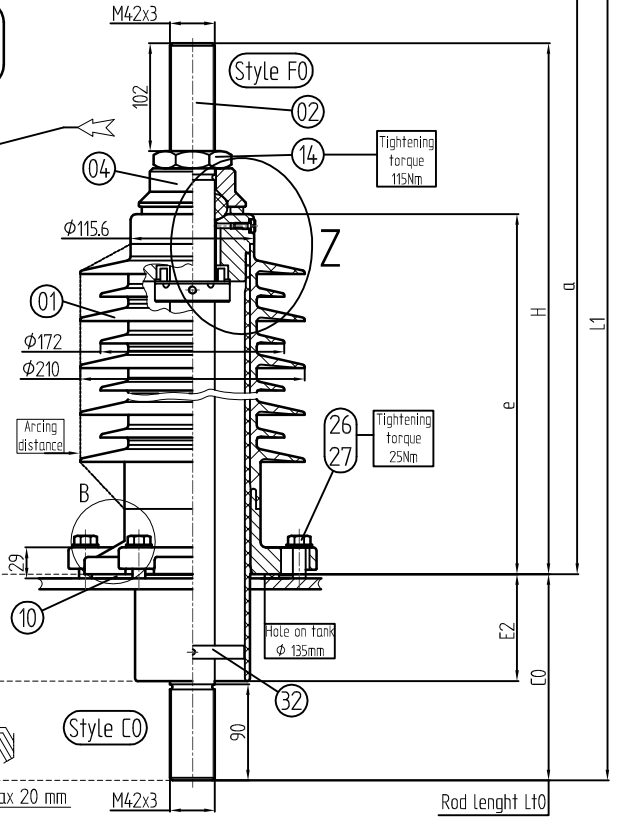
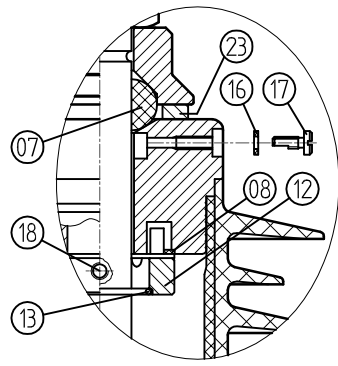


SILICONE COMPOSITE BUSHING CEDASPE
RATED VOLTAGE 12/24/36/52kV RATED CURRENT 2000A M42

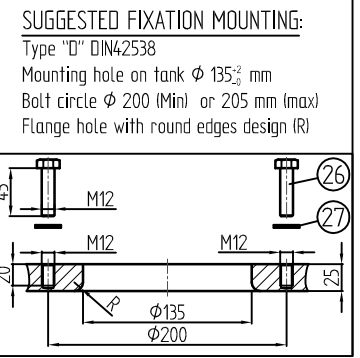
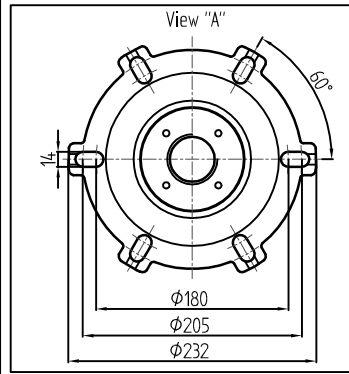
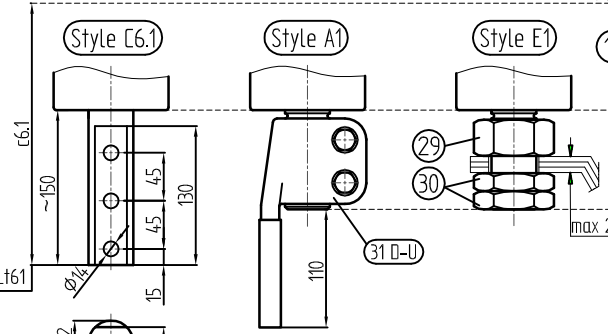
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Rod	Copper
4	Top washer "F"	Brass
7	Ring gasket "J"	NBR
8	Spacer "O"	Fiber
10	Flange gasket "N"	NBR
110	Flag DIN FP 2000	Brass
11U	Flag 2000 UNEL	Brass
12	Ring "P"	Brass
13	Ring "S"	Copper
14	Nut M42 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Locking screw	Steel
23	Contact ring "U"	Bronze
26	Screws M12 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
29	Nut M42 DIN 934	Brass
30	Locknut M42 DIN 936	Brass
310-U	Brass flag esec. DIN or UNEL	Brass
32	Center ring	T-IV Pressboard



CANTILEVER OPERATING LOAD
- VERTICAL: 1000 N
- INCLINED 30°: 600 N
- OPERATING TEST LOAD: 2000 N



REF.	OPTION CT ACCOMODATION			
	FUT=90	LT 150	LT 300	LT 500
	L2=350	L3=500	L5=700	
Rod Length				
	Bushing	L12	L13	L15
	SBC12-M42/d(P4)	767	917	1117
	SBC24-M42/d(P4)	842	992	1192
	SBC36-M42/d(P4)	947	1097	1297
	SBC52-M42/c(P3)	1037	1187	1387
	SBC54-M42/d(P4)	1082	1232	1432



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1° (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheeds	a	H	L1	E2	e	C0	Lt0	c6.1	Lt61	G.W. Kg
SBC12-M42/d(P4)	12	2000	30	75	505	210	3+2	523	413	715	90	260	192	605	237	650	20
SBC24-M42/d(P4)	24		55	125	828	295	5+4	600	490	800	100	337	200	690	245	735	22
SBC36-M42/d(P4)	36		77	170	1180	385	7+6	699	589	935	120	436	236	825	281	870	25
SBC52-M42/c(P3)	52		105	250	1520	472	9+8	787	677	1082	175	524	295	972	330	1007	28
SBC52-M42/e(P4)	52		105	250	1689	516	10+9	831	721	1137	175	568	306	1017	331	1052	29

SERIAL NUMBER
MATERIAL NUMBER
SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 01/12/21	Curti M.	4983	
CHKO:		CHANGE NO.	SCALE
STAND:		12	15

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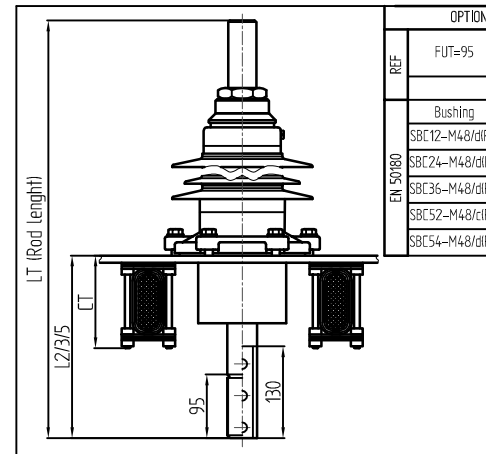
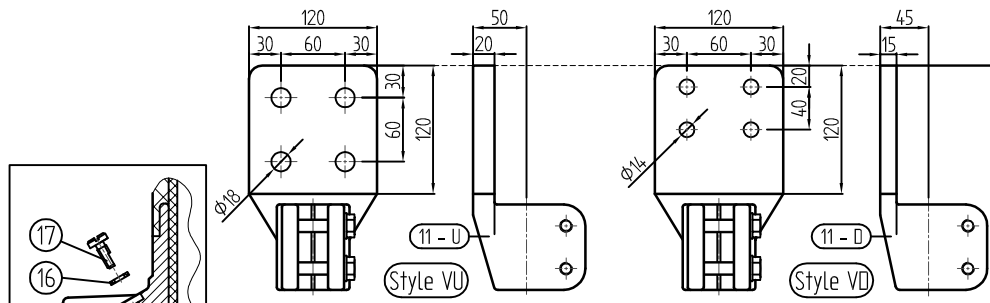
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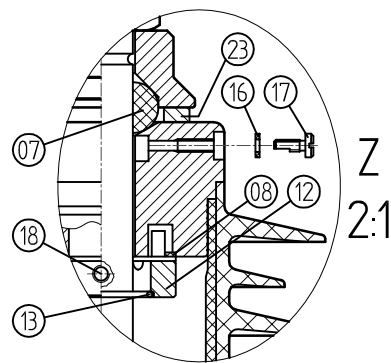


SILICONE COMPOSITE BUSHING CEDASPE
RATED VOLTAGE 12/24/36/52kV RATED CURRENT 3150A M48

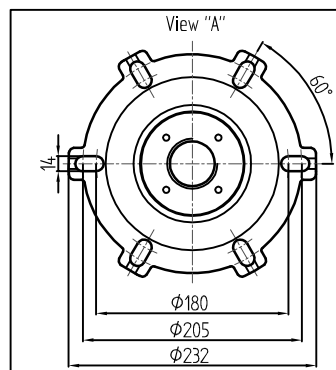
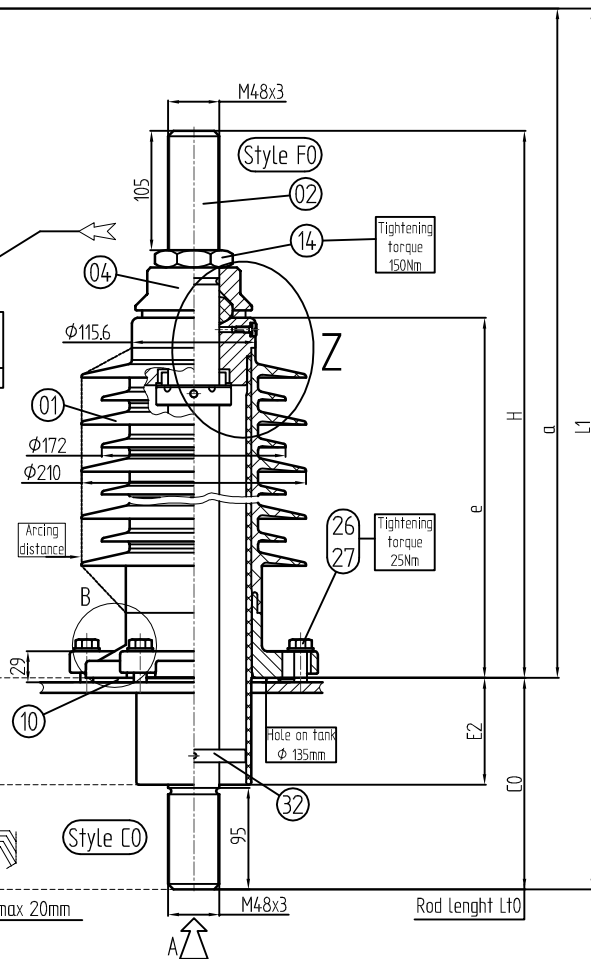
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Rod	Copper
4	Top washer "F"	Brass
7	Ring gasket "J"	NBR
8	Spacer "O"	Fiber
10	Flange gasket "N"	NBR
11D	Flag DIN FP 3150	Brass
11U	Flag UNEI 3150	Brass
12	Ring "P"	Brass
13	Ring "S"	Copper
14	Nut M48 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Locking screw	Steel
23	Contact ring "U"	Bronze
26	Screws M12 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
29	Nut M48 DIN 934	Brass
30	Locknut M48 DIN 936	Brass
31D-U	Brass flag esec. DIN or UNEI	Brass
32	Center ring	T-IV Pressboard



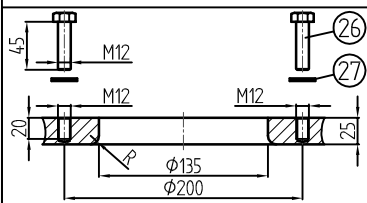
REF.	OPTION CT ACCOMMODATION			
	FUT=95	ET 150 L2=350	ET 300 L3=500	ET 500 L5=700
Rod Length				
	Bushing	Lt2	Lt3	Lt5
SBC12-M48/d(P4)		772	922	1122
SBC24-M48/d(P4)		847	997	1197
SBC36-M48/d(P4)		952	1102	1302
SBC52-M48/c(P3)		1042	1192	1392
SBC54-M48/d(P4)		1087	1237	1437



CANTILEVER OPERATING LOAD	
- VERTICAL:	1575 N
- INCLINED 30°:	945 N
- OPERATING TEST LOAD:	3150 N



SUGGESTED FIXATION MOUNTING:
Type "D" DIN42538
Mounting hole on tank $\phi 135^{+2}$ mm
Bolt circle $\phi 200$ (Min) or 205 mm (max)
Flange hole with round edges design (R)



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1 (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	a	H	L1	E2	e	C0	Lt0	c6.1	Lt61	G.W. Kg
SBC12-M48/d(P4)	12	3150	30	75	505	210	3+2	548	418	755	90	260	207	625	237	655	24
SBC24-M48/d(P4)	24		55	125	828	295	5+4	625	495	840	100	337	215	710	245	740	26
SBC36-M48/d(P4)	36		77	170	1180	385	7+6	724	594	975	120	436	251	845	281	875	30
SBC52-M48/c(P3)	52		105	250	1520	475	9+8	812	682	1112	175	524	300	982	330	1012	33
SBC54-M48/e(P4)	52		105	250	1689	516	10+9	856	726	1157	175	568	301	1027	331	1057	35

SERIAL NUMBER
MATERIAL NUMBER
SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 04/04/22	Curti M.	4501	
CHKD: 04/04/22	Giorgi G.F.	CHANGE NO.	SCALE
STAND: 04/04/22	Giorgi G.F.	04	15

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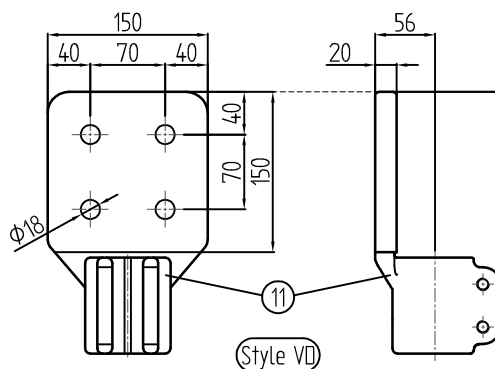
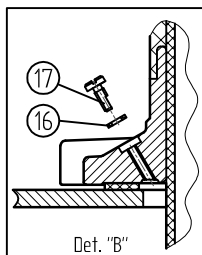
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DIMENSION IN mm EXCEPT AS NOTED

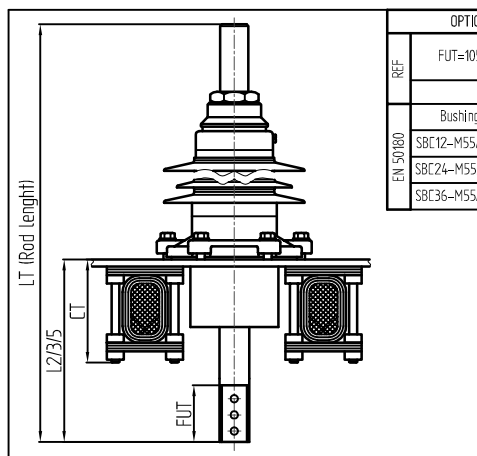
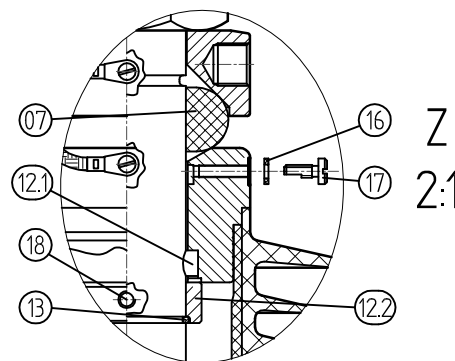


SILICONE COMPOSITE BUSHING CEDASPE RATED VOLTAGE 12/24/36kV RATED CURRENT 4500A M55

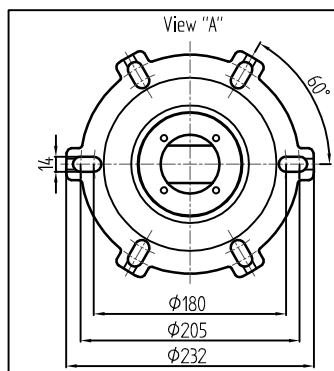
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Rod	Copper
4	Top washer "F"	Brass
7	Ring gasket "J"	NBR
10	Flange gasket "N"	NBR
11	Flag DIN EP 4500	Brass
12.1	Ring "P" - DIN 4500	Brass
12.2	Antirotation pin	Brass
13	Ring "S"	Copper
14	Nut M55 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Locking screw	Steel
26	Screws M12 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
32	Center ring	T-IV Pressboard
33-35	Equipoflat link	Copper



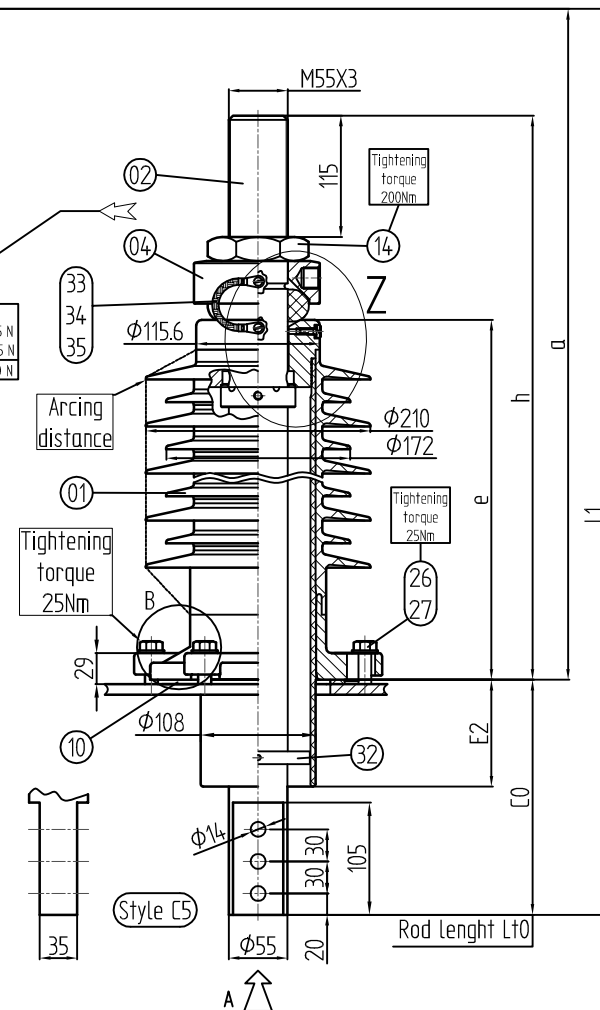
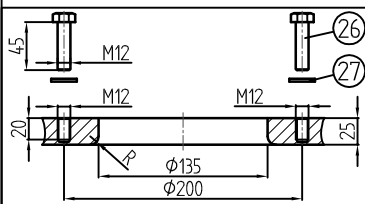
CANTILEVER OPERATING LOAD
 - VERTICAL: 1575 N
 - INCLINED 30°: 945 N
 - OPERATING TEST LOAD: 3150 N



OPTION: CT ACCOMMODATION				
REF.	FUT=105	CT 150	CT 300	CT 500
		L2=350	L3=500	L5=700
Rod Length				
EN 50180	Bushing	Lt2	Lt3	Lt5
	SBC12-M55/d(P4)	805	955	1155
	SBC24-M55/d(P4)	880	1030	1230
SBC36-M55/d(P4)	985	1135	1335	



SUGGESTED FIXATION MOUNTING:
 Type "D" DIN42538
 Mounting hole on tank $\phi 135^{+3}$ mm
 Bolt circle $\phi 200$ (Min) or 205 mm (max)
 Flange hole with round edges design (R)



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1' (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	a	h	L1	E2	e	C0	Lt0	G.W. kV
SBC 12-M55/d (P4)	12	4500	30	75	505	210	3+2	610	455	820	90	260	210	665	33
SBC 24-M55/d (P4)	24		55	125	828	295	5+4	685	530	905	100	337	220	750	40
SBC 36-M55/d (P4)	36		77	170	1180	385	7+6	790	635	1035	120	436	245	880	50

SERIAL NUMBER

MATERIAL NUMBER

SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 05/04/22	Curti M.	4496	
CHKO.		CHANGE NO.	SCALE
STAND.		02	15

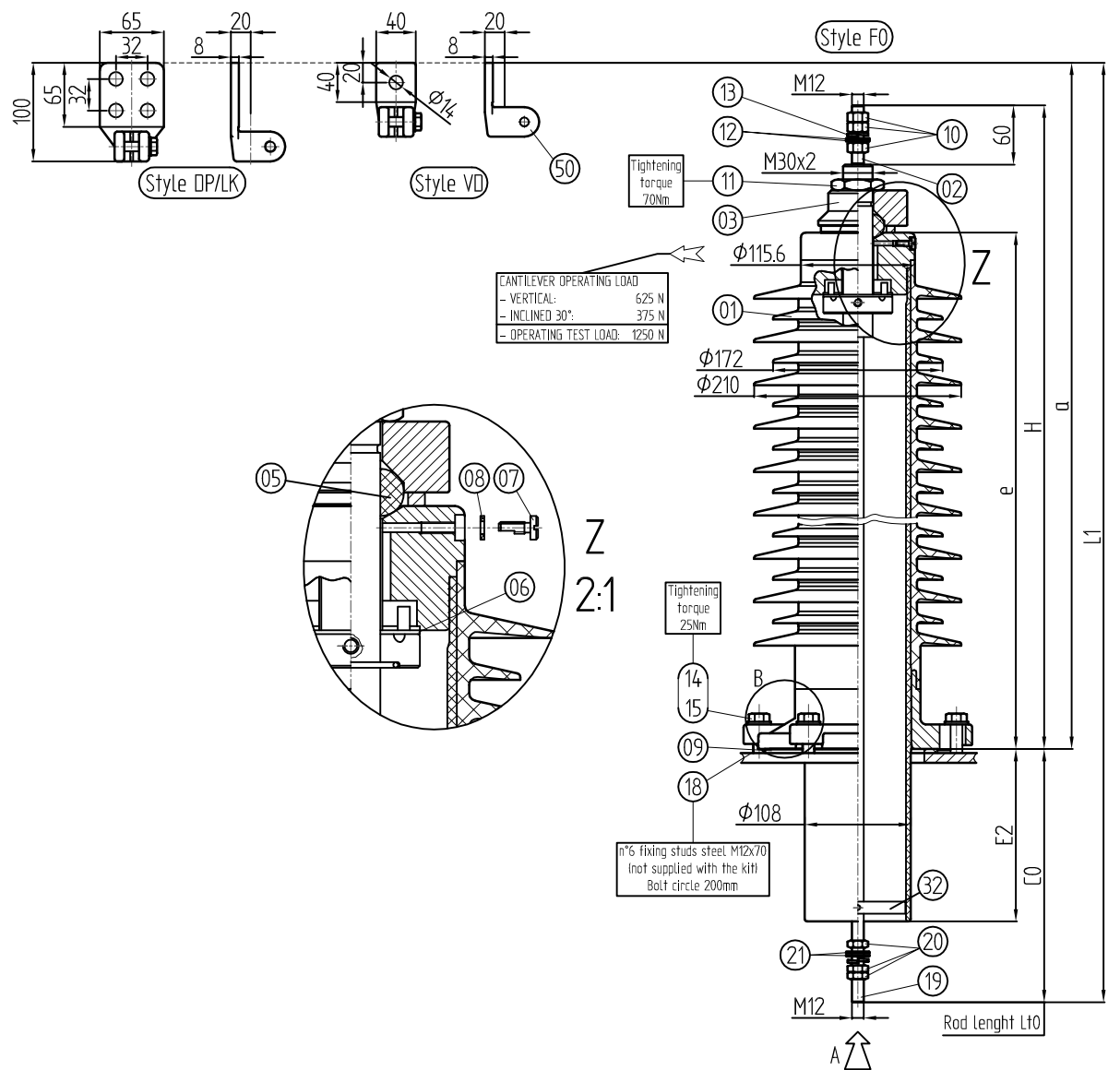
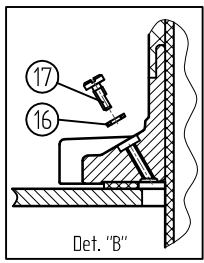
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DIMENSION IN mm EXCEPT AS NOTED

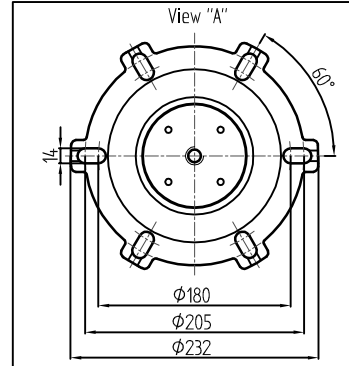
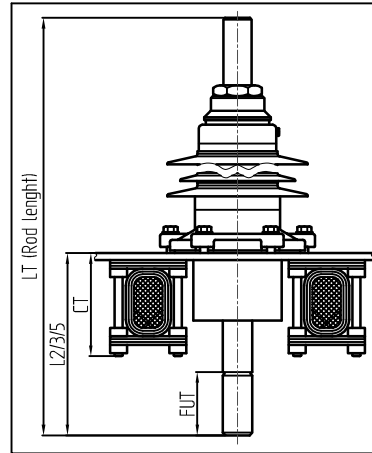


SILICONE COMPOSITE BUSHING CEDASPE RATED VOLTAGE 52kV RATED CURRENT 250A M12

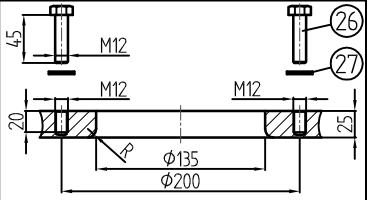
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Bolt "D"	Brass
3	Cap "E"	Brass
5	Ring gasket "I"	NBR
6	Gasket "O"	Fiber
7	Vent/Screw "R"	Brass
8	Gasket	Nylon
9	Flange gasket "N"	NBR
10	Nut DIN 934-M12	Brass
11	Nut DIN 936 M30x2	Brass
12	Washer DIN 125	Brass
13	Spring washer DIN 127	Brass
14	Mild steel zinkplated nut	Steel
15	Mild steel zinkplated washer	Steel
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Fixing stud (not supplied)	Steel
19	Rigid rod	Brass
20	Locknut DIN 936	Brass
21	Washer	Brass
32	Center ring	T-IV Pressboard
50	Flag FP	Brass



OPTION: CT ACCOMODATION				
REF	FUT=90	CT 150	CT 300	CT 500
	L2=300	L3=450	L5=650	
	Rod Length			
EN 50180	Bushing	L2	L3	L5
	SBC52-M12/c(P3)	953	1103	1303
	SBC54-M12/d(P4)	997	1147	1347



SUGGESTED FIXATION MOUNTING:
 Type "D" DIN42538
 Mounting hole on tank $\phi 135^{+0.2}$ mm
 Bolt circle $\phi 200$ (Min) or 205 mm (max)
 Flange hole with round edges design (R)



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1 (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	a	H	L1	E2	e	C0	Lt0	G.W. Kg
SBC 52-M12/c (P3)	52	250	105	250	1520	472	9+8	698	653	955	175	524	257	910	18
SBC 52-M12/e (P4)					1689	516	10+9	741	697	998	175	568	257	954	19

SERIAL NUMBER MATERIAL NUMBER SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 05/04/22	Curti M.	4497	
CHKD:		CHANGE NO.	SCALE
STAND:		02	15

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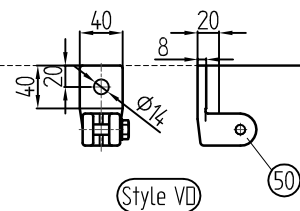
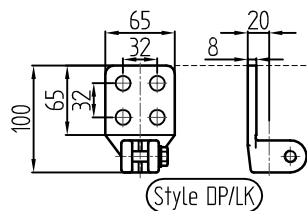
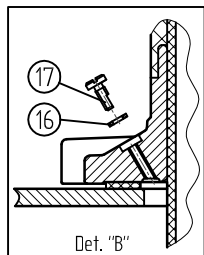
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DIMENSION
IN mm
EXCEPT AS
NOTED

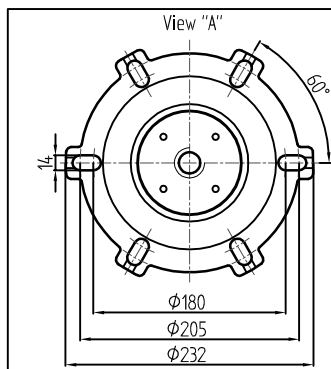
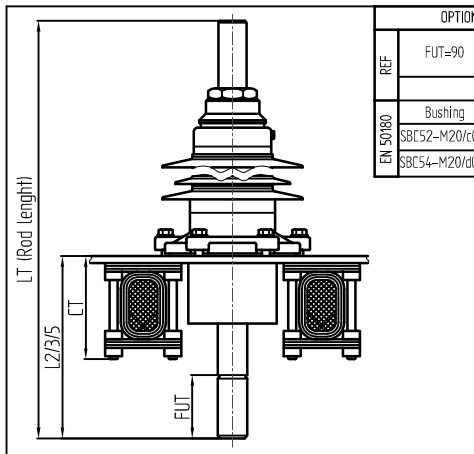


SILICONE COMPOSITE BUSHING CEDASPE
RATED VOLTAGE 52kV RATED CURRENT 630A M20

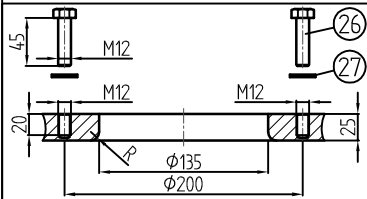
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Bolt "D"	Copper
3	Cap "E"	Brass
5	Ring gasket "J"	NBR
6	Gasket "O"	Fiber
7	Vent/Screw "R"	Brass
8	Gasket	Nylon
9	Flange gasket "N"	NBR
10	Nut DIN 934-M20	Brass
11	Nut DIN 936 M30x2	Brass
12	Washer DIN 125	Brass
13	Spring washer DIN 127	Brass
14	Mild steel zincplated nut	Steel
15	Mild steel zincplated washer	Steel
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Fixing stud (not supplied)	Steel
19	Rigid rod	Copper
20	Locknut DIN 936	Brass
21	Washer	Brass
32	Center ring	T-IV Pressboard
50	Flag FP	Brass



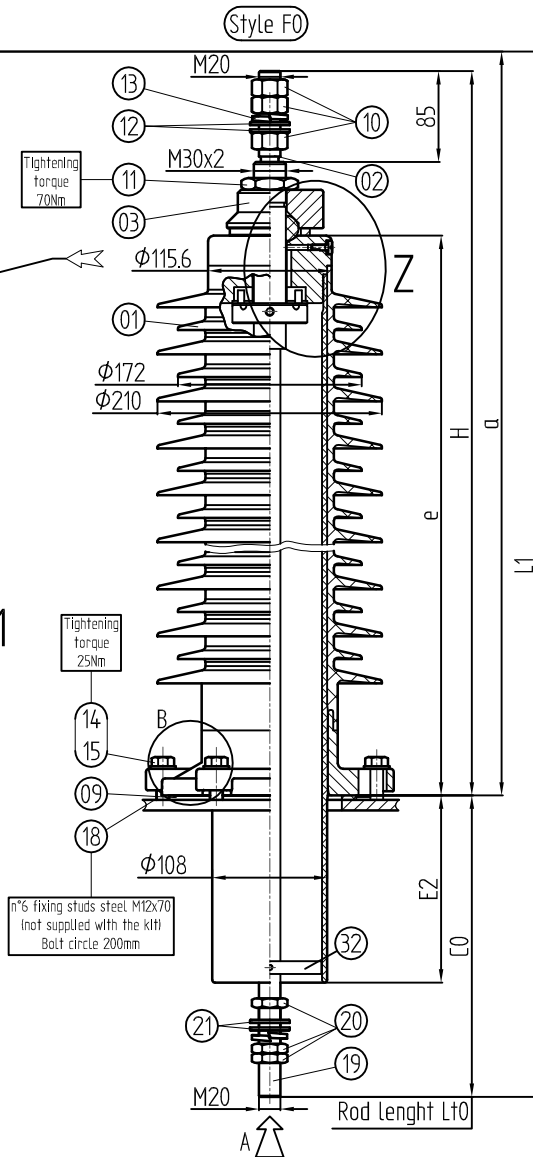
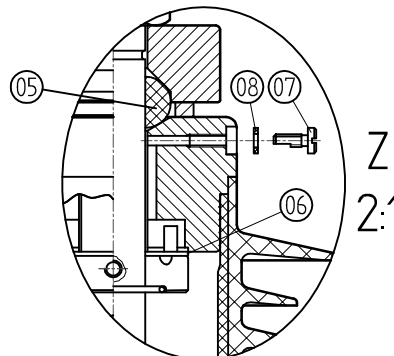
OPTION: CT ACCOMODATION				
REF	FUT=90	CT 150	CT 300	CT 500
		L2=300	L3=450	L5=650
		Rod Length		
EN 50160	Bushing	L12	L13	L15
	SBC52-M20/c(P3)	978	1128	1328
	SBC54-M20/d(P4)	1022	1172	1372



SUGGESTED FIXATION MOUNTING:
Type "D" DIN42538
Mounting hole on tank $\phi 135^{\pm 0.2}$ mm
Bolt circle $\phi 200$ (Min) or 205 mm (max)
Flange hole with round edges design (R)



CANTILEVER OPERATING LOAD
- VERTICAL: 625 N
- INCLINED 30°: 375 N
- OPERATING TEST LOAD: 1250 N



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1 (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	a	H	L1	E2	e	C0	Lt0	G.W. Kg
SBC 52-M20/c (P3)	52	630	105	250	1520	472	9+8	723	678	1005	175	524	282	960	19
SBC 52-M20/e (P4)					1689	516	10+9	767	722	1049	175	568	282	1004	20

SERIAL NUMBER

MATERIAL NUMBER SHEET 1/1

DATE	NAME	DOCUMENT NO.	
DFTR: 01/12/21	Curti M.	4981	
CHKO.		CHANGE NO.	SCALE
STAND.		12	15

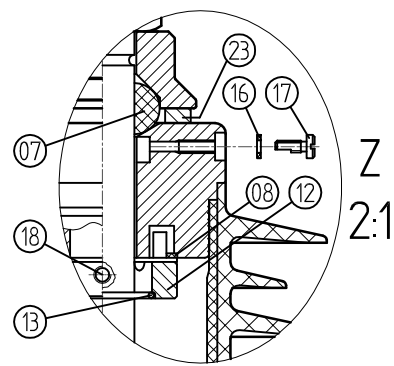
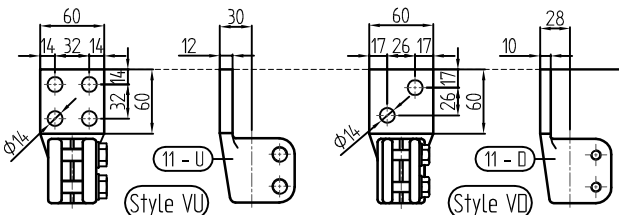
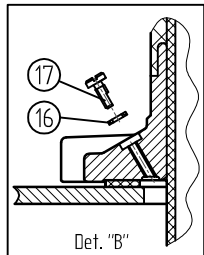
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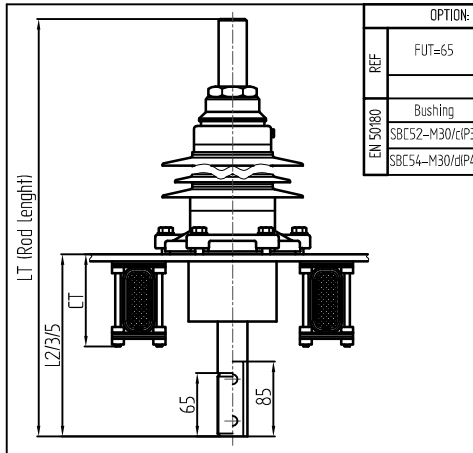
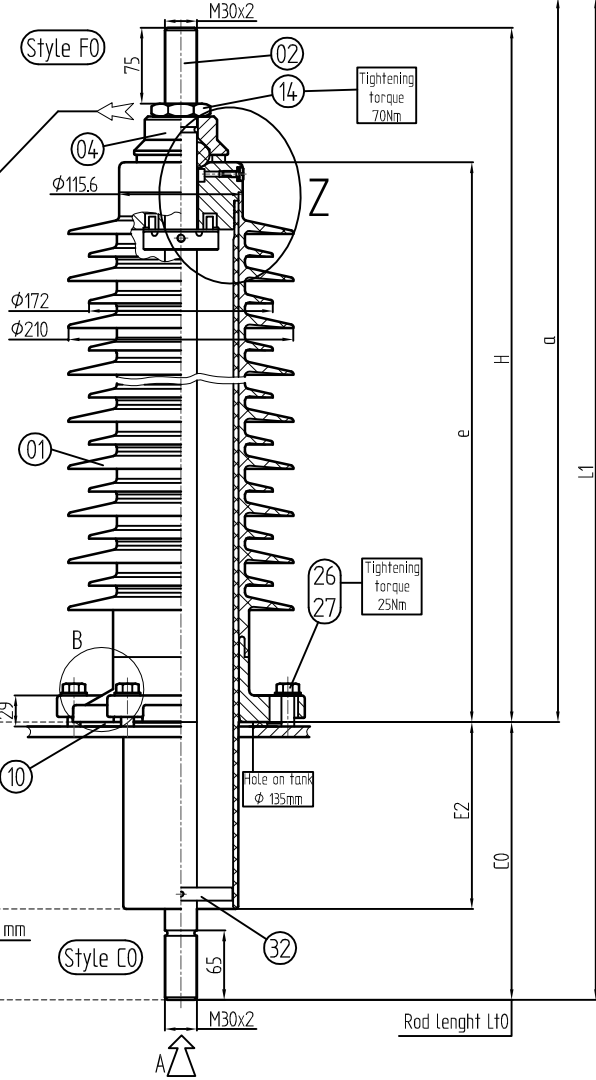


SILICONE COMPOSITE BUSHING CEDASPE RATED VOLTAGE 52KV RATED CURRENT 1250A M30

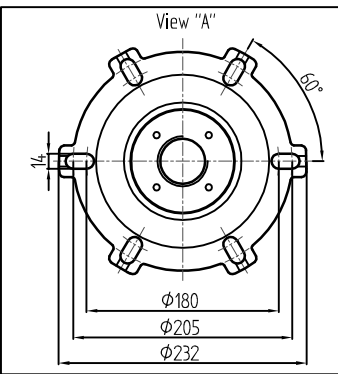
Pos.	Description	Material
1	SBC hollow body	Silicon
2	Rod	Copper
4	Top washer "F"	Brass
7	Ring gasket "J"	NBR
8	Spacer "O"	Fiber
10	Flange gasket "N"	NBR
11U	Flag DIN EP 1000	Brass
11U	Flag esec. 1000 UNEL	Brass
12	Ring "P"	Brass
13	Ring "S"	Copper
14	Nut M30 DIN 936	Brass
16	Gasket	Fiber
17	Vent/screw "R"	Brass
18	Locking screw	Steel
23	Contact ring "U"	Bronze
26	Screws M12 (not supplied)	Steel AISI304
27	Washer $\phi 13$	Steel AISI304
29	Nut M30 DIN 934	Brass
30	Locknut M30 DIN 936	Brass
31U-U	Brass flag esec. DIN or UNEL	Brass
32	Center ring	T-IV Pressboard



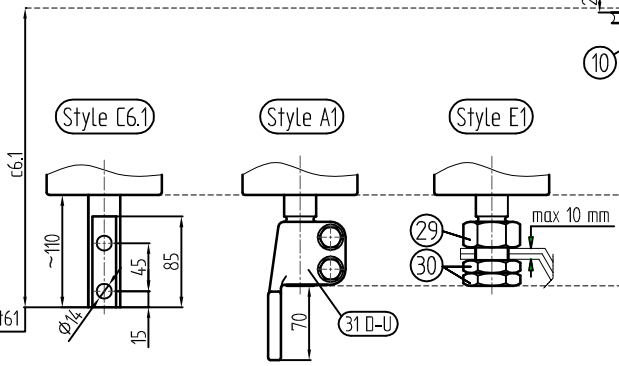
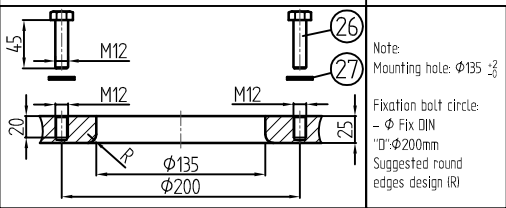
CANTILEVER OPERATING LOAD
 - VERTICAL: 625 N
 - INCLINED 30°: 375 N
 - OPERATING TEST LOAD: 1250 N



OPTION: CT ACCOMODATION				
REF	FUT=65	CT 150	CT 300	CT 500
		L2=300	L3=450	L5=650
		Rod Length		
	Bushing	Lt2	Lt3	Lt5
EN 50180	SBC52-M30/c/P3	957	1107	1307
	SBC54-M30/d/P4	1002	1152	1352



SUGGESTED FIXATION MOUNTING:
 Type "D" DIN42538
 Mounting hole on tank $\phi 135_{-0.2}^{+0.2}$ mm
 Bolt circle $\phi 200$ (Min) or 205 mm (max)
 Flange hole with round edges design (R)



Bushing type	Rated voltage (kV)	Rated current (A)	P.F. 1° (kV)	BIL (kV)	Creepage distance (mm)	Arcing distance (mm)	n° of sheds	a	H	L1	E2	e	C0	Lt0	c6.1	Lt61	G.W. (kg)
SBC52-M30/c/P3	52	1250	105	250	1520	475	9+8	712	647	975	175	524	263	910	290	937	20
SBC52-M30/e/P4	52	1250	105	250	1689	519	10+9	756	691	1020	175	568	264	955	291	982	21

SERIAL NUMBER MATERIAL NUMBER SHEET 1/1

ORDER FORM

System Rated Voltage (kV):

12

24

36

52

Rated Current (A):

630

1250

2000

3150

4500

Flange type B
(For 52kV : D)

Flange type C
(For 52kV : D)

Flange type D

Flange type D

Flange type D
(Only for 12;24;36kV)

Creepage distance:

..... mm

OR

..... mm/kV

Airside components:

Nuts
(Only for 630A)

DIN Flag

UNEL Flag

NEMA Flag

SPECIAL

Oil side components:

Style C0

Style C6

Style E1

Style A1
(Flag)

SPECIAL

Gasket:

NBR
(-30°C/+120°C)

NBC (Cork TD1120)
(-30°C/+120°C)

Low temp.
(Cork TD7000)
(-45°C/+120°C)

Very Low temp.
(Blue Fl/Sil)
(-60°C/+150°C)

Heavy Duty
(VITON)
(-20°C/+150°C)

Surface finishing:

Tinplated 6/10 μm

Silver plated 6/10 μm

Only Flag (F)

Flag & Cap (F+C)

Flag/Cap/Rod (F+C+R)

CT accomodation:

CT150

CT300

CT500

SPECIAL
C0=.....

Notes:

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DATE	NAME	DOCUMENT NO.	
DFTR: 05/12/17	A.GIORGI		
CHKD: 05/12/17	A.GIORGI	CHANGE NO.	SCALE
STAND: 05/12/17	A.GIORGI	03	=====

DIMENSION IN mm EXCEPT AS NOTED		COMPOSITE BUSHING ORDER SHEET	SERIAL NUMBER MATERIAL NUMBER	SHEET /
------------------------------------------	--	-------------------------------	--------------------------------------	------------