

DAFTAR PUSTAKA

1. Arismunandar,A., & Kuwahara, S ; Buku Pegangan Teknik Tenaga Listrik ,Jilid II : Gardu Induk, Jakarta : Paradnya Paramita, Cetakan Kelima 1991.
2. Arismunandar,A., & Kuwahara, S ; Buku Pegangan Teknik Tenaga Listrik ,Jilid III : Saluran Transmisi, Jakarta : Paradnya Paramita, Cetakan Kelima 1979.
3. Energoinvest ; Book E2 Operation Diagram , 150/20 kV Substation Sei Rotan Extentions: 1988.
4. PT. PLN (Persero) WIL – II Sektor Glugur ; Pengetahuan Dasar Peralatan Gardu Induk, Medan : 1989.
5. Rao, Sunil S ; Switchgear and Protection : Khana Publisher, 3rd Edition New Delhi, 1978.

Lampiran -1

DATA-DATA PERALATAN TERPASANG DI TRAGI SEI ROTAN

No	LOKASI	NAME PLATE : PMT									KETERANGAN
		MERЕК	BUATAN	TYPE	NOMOR SERI	In A	Vn KV	MEDIA	PENGGERAK	TAHUN	
1.	SWITCHYARD Penghantar S. Rotan - P. Pasir 1	EIB	Belgium	S1-170/F3	91/4882.72/08 /37/27	2000	170	Gas SF ₆	Mekanik	1993	
2.	Penghantar S. Rotan - P. Pasir 2	EIB	Belgium	HGF 113/1B	2126152-14a	2000	170	Gas SF ₆	Mekanik	1988	
3.	Penghantar S. Rotan - T. Kuning 1	EIB	Belgium	S1-170/F3	91/4882.72/08	3150	170	Gas SF ₆	Mekanik	1993	
4.	Penghantar S. Rotan - T. Kuning 2	EIB	Belgium	HGF 113/1B	2126152-11c	2000	170	Gas SF ₆	Mekanik	1988	
5.	Penghantar S. Rotan - T. Tinggi	EIB	Belgium	S1-170/F3	91/4882.72/10	3150	170	Gas SF ₆	Mekanik	1993	
6.	Penghantar S. Rotan - Perbaungan	EIB	Belgium	S1-170/F3	91/4882.72/10	3150	170	Gas SF ₆	Mekanik	1993	
7.	Penghantar S. Rotan - Belawan 1	AEG	Germany	CRR 5-5	91/4882.72/29	3150	170	Gas SF ₆	Mekanik	1993	
8.	Penghantar S. Rotan - Belawan 2	AEG	Germany	CRR 5-5	91/4882.72/12	3150	170	Gas SF ₆	Mekanik	1993	
9.	Penghantar S. Rotan - KIM 1	AEG	Germany	S1-170/F3	3005-016/26	3150	170			1996	
10.	Penghantar S. Rotan - KIM 2	AEG	Germany	S1-170/F3	3005-016/22	3150	170			1996	
11.	Penghantar S. Rotan - T. Morawa 1	AEG	Germany	S1-170/F3	3005-016/24	3150	170			1996	
12.	Penghantar S. Rotan - T. Morawa 2	AEG	Germany	S1-170/F3	3005-016/28	3150	170			1996	
13.	Kopel Bus 150 KV	AEG	Germany	S1-170/F3	310.920	3150	170	Gas SF ₆	Mekanik	1988	
14.	Sisi 150 KV TD-1 (30 MVA)	EIB	Belgium	HGF 113/1B	2126153-2	2000	170	Gas SF ₆	Mekanik	1983	Tidak operasi
15.	Sisi 150 KV TD-2 (31,5 MVA)	EIB	Belgium	HGF 113/1B	2126153-2	2000	170	Gas SF ₆	Mekanik	1993	
16.	Sisi 150 KV TD-3 (60 MVA)	AEG	Germany	CRR 5-5	91/4882.71/07			Gas SF ₆	Mekanik	1993	
	CUBICLE 20 KV (INCOMING)										
17.	Inc. TD-1 30 MVA (Energoinvest)	Fuji	Japan	HS-2520 P-12MF	FA 6070/1.27	1250	24	VCB	Mekanik	1993	
18.	Inc. TD-2 31,5 MVA (Gold Star)	Inoue	Japan	20 VC-12 MS	86005715	1250	24	VCB	Mekanik	1988	
19.	Inc. TD-3 60 MVA (Modalek)	Modalek	Indonesia	VB 6-26/20	587	2000	24	VCB	Mekanik	1993	

DATA-DATA PERALATAN TERPASANG DI TRAGI SEI ROTAN

No	LOKASI	NAME PLATE : PMS									Keterangan
		MEREK	BUATAN	TYPE	NOMOR SERI	In A	Vn kV	MEDIA	PENGGERAK	TAHUN	
A.	SWITCHYARD										
1.	Penghantar S. Rotan-P. Pasir1	Energoinvest	Yugoslavia	VRN-1F	0290020	1250	170		Mekanik	1983	
2.	Bus1 Penghantar S. Rotan-P. Pasir1	Energoinvest	Yugoslavia	VRN-1F		1250	170		Mekanik	1983	Stand by
3.	Bus2 Penghantar S. Rotan-P. Pasir1	Energoinvest	Yugoslavia	VRN-1F		1250	170		Mekanik	1983	
4.	Penghantar S. Rotan-P. Pasir2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1988	
5.	Bus1 Penghantar S. Rotan-P. Pasir2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1988	
6.	Bus2 Penghantar S. Rotan-P. Pasir2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1988	Stand by
7.	Penghantar S. Rotan-T. Kuning 1	Energoinvest	Yugoslavia	VRV-13F	0290018	1250	170		Mekanik	1983	
8.	Bus1 Penghantar S. Rotan-T. Kuning1	Energoinvest	Yugoslavia	VRV-13F		1250	170		Mekanik	1983	
9.	Bus2 Penghantar S. Rotan-T. Kuning1	Energoinvest	Yugoslavia	VRV-13F		1250	170		Mekanik	1983	Stand by
10.	Penghantar S. Rotan-T. Kuning 2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1986	
11.	Bus1 Penghantar S. Rotan-T. Kuning2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1986	
12.	Bus2 Penghantar S. Rotan-T. Kuning2	Coelme	Italy	VRN-1F		1250	170		Mekanik	1986	Stand by
13.	Penghantar S. Rotan-T. Tinggi	Takaoka	Japan	THBE	1610601D02-20	1250	170		Mekanik	1983	
14.	Bus1 Penghantar S. Rotan-T. Tinggi	Takaoka	Japan	THBE		1250	170		Mekanik	1983	
15.	Bus2 Penghantar S. Rotan-T. Tinggi	Takaoka	Japan	THBE		1250	170		Mekanik	1983	Stand by
16.	Penghantar S. Rotan-Perbaungan	Takaoka	Japan	THBE	1610601D02-20	1250	170		Mekanik	1983	
17.	Bus1 Penghantar S. Rotan-Perbaungan	Takaoka	Japan	THBE		1250	170		Mekanik	1983	
18.	Bus2 Penghantar S. Rotan-Perbaungan	Takaoka	Japan	THBE		1250	170		Mekanik	1983	Stand by
19.	Penghantar S. Rotan-Belawan1	EIB	Belgium	SDCT	5483/I	3150	170		Mekanik	1993	
20.	Bus1 Penghantar S. Rotan-Belawan1	EIB	Belgium	SDCT	5486/2	3150	170		Mekanik	1993	
21.	Bus2 Penghantar S. Rotan-Belawan1	EIB	Belgium	SDCT		3150	170		Mekanik	1993	Stand by
22.	Penghantar S. Rotan-Belawan2	EIB	Belgium	SDCT	5484/I	3150	170		Mekanik	1993	
23.	Bus1 Penghantar S. Rotan-Belawan2	EIB	Belgium	SDCT	5485/2	3150	170		Mekanik	1993	Stand by
24.	Bus2 Penghantar S. Rotan-Belawan2	EIB	Belgium	SDCT		3150	170		Mekanik	1993	
25.	Penghantar S. Rotan- KIM1	Coelme	Italy	SDCT	10215/I	1250	170		Mekanik	1996	
26.	Bus1 Penghantar S. Rotan- KIM1	Coelme	Italy	SDCT	1023/I	1250	170			1996	
27.	Bus2 Penghantar S. Rotan- KIM1	Coelme	Italy	SDCT		1250	170			1996	Stand by

DATA-DATA PERALATAN TERPASANG DI TRAGI SEI ROTAN

No	LOKASI	NAME PLATE PMS									Keterangan
		MEREK	BUATAN	TYPE	NOMOR SERI	In A	Vn kV	MEDIA	PENGGERAK	TAHUN	
28	Penghantar S. Rotan – KIM 2	Coelme	Italy	SDCT	10216/I	1250	170		Mekanik	1996	
29	Bus 1 Penghantar S. Rotan – KIM 2	Coelme	Italy	SDCT	10224/I	1250	170			1996	Stand by
30	Bus 2 Penghantar S. Rotan – KIM 2	Coelme	Italy	SDCT		1250	170			1996	
31	Penghantar S. Rotan – Tamora 1	Coelme	Italy	SDCT	10226/I	1250	170		Mekanik	1996	
32	Bus1 Penghantar S. Rotan – Tamora 1	Coelme	Italy	SDCT	10229/I	1250	170			1996	
33	Bus2 Penghantar S. Rotan – Tamora 1	Coelme	Italy	SDCT		1250	170			1996	Stand by
34	Penghantar S. Rotan – Tamora 2	Coelme	Italy	SDCT	10227/I	1250	170		Mekanik	1996	
35	Bus1 Penghantar S. Rotan – Tamora 2	Coelme	Italy	SDCT	10231/I	1250	170			1996	
36	Bus2 Penghantar S. Rotan – Tamora 2	Coelme	Italy	SDCT		1250	170			1996	Stand by
37	Kopel Bus 150 KV	EIB	Belgium	SDCT	389.673	1600	170		Mekanik	1988	
38	Bus 1 sisi 150 KV TD-1 30 MVA	Energoinvest	Yugoslavia	VRN-1F		1250	170		Mekanik	1983	
39	Bus 2 sisi 150 KV TD-1 30 MVA	Energoinvest	Yugoslavia	VRN-1F		1250	170		Mekanik	1983	Stand by
40	Bus 1 sisi 150 KV TD-2 31,5 MVA	Coelme	Italy	SDC	5525/I	1250	170		Mekanik	1988	
41	Bus 2 sisi 150 KV TD-2 31,5 MVA	Coelme	Italy	SDC		1250	170		Mekanik	1988	Stand by
42	Bus 1 sisi 150 KV TD-3 60 MVA	Coelme	Italy	SDC	5525/I	1250	170		Mekanik	1993	
43	Bus 2 sisi 150 KV TD-3 60 MVA	Coelme	Italy	SDC		1250	170		Mekanik	1993	Stand by
B	CUBICLE 20 KV										
44	Bus Inc. 20 KV TD-1 30 MVA	FUJI				1250	24		Mekanik	1983	Tidak operasi
45	Bus Inc. 20 KV TD-2 31,5 MVA	INOUE	Japan			1250	24		Mekanik	1988	
46	Bus Inc. 20 KV TD-3 60 MVA	EIB				1250	24		Mekanik	1993	