



GARDU INDUK :BUROKO

TANGGAL

:26Agustus 2023

UNDER FREKUENSI RELE TEST

I. DATA PERALATAN

	Relay Under Frequency
Relay Name	:UFR_BUROKO
Merk	: SIEMENS
Туре	: 7SJ82
No. Serie	:BM2103000991
Function	:UFR
CVT Ratio	:20.000 Volt/ 100 Volt

II. SETTING

	Rela	y Under I	Frequen	су		LED
Stage 1	: 49.2	Hz	Time	:0	ms	LED 1.1
Stage 2	: 49.05	Hz	Time	:0	ms	LED 1.2
Stage 3	: 48.9	Hz	Time	:0	ms	LED 1.3
Stage 4	: 48.75	Hz	Time	:0	ms	LED 1.4
Stage 5	: 48.65	Hz	Time	:0	ms	LED 1.5
Stage 6	: 48.5	Hz	Time	:0	ms	LED 1.6
Stage 7	: 48.3	Hz	Time	:0	ms	LED 1.7
dt/dt 1	:					
dt/dt 2	;					
V Block	: 50.8	VAC		Sisi sekun	der	

	Characteristic					V Block				Voterengen
		Hz	Pick Up	Reset	Time	Pick Up	Reset	LED	Delay	Keterangan
_	F1	49.20	49.19		79ms					
S	F2	49.05	49.05		47ms					
FREQUENCY	F3	48.90	48.88		52ms					
REC	F4	48.75	48.74		62ms					
	F5	48.65	48.65		63ms					
UNDER	F6	48.50	48.43		75ms					
5	F7	48.30	48.29		54ms					
	dt/dt 1									
	dt/dt 2									

Note: Saat diinjeksitegangan<50.8 Volt, UFR tidakbekerja

IV. METERING TEST

	In	out	Rele		
	Volt	Angle	Volt	Angle	
V R-N	57.73	0°	11.537 kV	0°	
V S-N	57.73	-120°	11.538 kV	-120°	
V T-N	57.73	120°	11.537 kV	120°	
Frekuensi	50	.00 Hz	50.	00 Hz	

V. ALAT YANG DIGUNAKAN

Merk/Type: Omicron CMC-353

	Nama	Jabatan	Tanggal	Tanda Tangan
Pelaksana	Yudha Komara	Engineer / PT. KMU	26/08/2023	Bilow
Pelaksana	M. Asri Arifin	Pengawas/ PT. KMU	26/08/2023	Shr
Diketahui	AlfriantoSangkop	SPV GI BUROKO	26/08/2023	SAD
Diketahui	Maryo H. Nunumete	UP2B SistemMinahasa	26/08/2023	a de la constante de la consta