



PT. PLN (Persero) Unit Induk Transmisi Jawa Bagian Barat
 UPT : Cawang
 PLN ULTG : Cawang

1.1 HASIL UJI PROTEKSI TRANSFORMER DIFFERENTIAL

Merk	: Schneider	Ratio CT HV	: 300/1 A
Type	: P643	Ratio CT LV	: 2000/5 A
Rating	:	Lokasi	: GI Cibubur
No.Serie	: 39692550	Bay	: Trafo#3
Thn Operasi	: 2019	Proteksi	: ULTG Cawang
Alat Uji	: Omicron CMC356	Tanggal	: 27 Mei 2025

1. Pengujian Arus minimum Pick Up.

A. Sisi HV

No.	Setting arus (Amp)	Phase Injection Fault	Indication	Pick Up (Amp.)	Waktu Kerja (ms)
1	0,3	Phasa RST	Trip, Diff RST	0,299	31
2	0,3	Phasa R	Trip, Diff R	0,299	37
3	0,3	Phasa S	Trip, Diff S	0,299	33
4	0,3	Phasa T	Trip, Diff T	0,299	37

B. Sisi LV

No.	Setting arus (Amp)	Phase Injection Fault	Indication	Pick Up (Amp.)	Waktu Kerja (ms)
1	0,3	Phasa RST	Trip, Diff RST	0,273	32
2	0,3	Phasa R	Trip, Diff R	0,273	41
3	0,3	Phasa S	Trip, Diff S	0,273	38
4	0,3	Phasa T	Trip, Diff T	0,273	37

2. Pengujian Slope

FASA R						
I1	A	0,779	1,039	1,299	1,949	2,598
I2	A	0,993	1,293	1,617	2,402	3,210
IR = (I1 + I2) / 2	A	0,886	1,166	1,458	2,175	2,904
ID	A	0,214	0,254	0,318	0,453	0,612

FASA S						
I1	A	0,779	1,039	1,299	1,949	2,598
I2	A	0,993	1,293	1,617	2,402	3,210
IR = (I1 + I2) / 2	A	0,886	1,166	1,458	2,175	2,904

ID	A	0,214	0,254	0,318	0,453	0,612
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FASA T						
I1	A	0,779	1,039	1,299	1,949	2,598
I2	A	0,993	1,293	1,617	2,402	3,210
IR = (I1 + I2) / 2	A	0,886	1,166	1,458	2,175	2,904
ID	A	0,214	0,254	0,318	0,453	0,612

Catatan :

Ratio bias terhadap setting % Standard +/- 10% u/bias

Karakteristik slope Fasa R % Standard +/- 80% u/slope

Fasa S %
Fasa T %

3. Pengujian Fungsi PMT

No.	Injeksi	Phasa	Indikasi Relai	Annoucinator	PMT		Keterangan
					HV	LV	
1	Internal Fault	R	Trip, I Diff R, LO K401	MPU Operated	Trip	Trip	OK
2	Internal Fault	S	Trip, I Diff S, LO K401	MPU Operated	Trip	Trip	OK
3	Internal Fault	T	Trip, I Diff T, LO K401	MPU Operated	Trip	Trip	OK
4	Eksternal Fault	R	Alarm, Eksternal Fault	-	No Trip	No Trip	OK
5	Eksternal Fault	S	Alarm, Eksternal Fault	-	No Trip	No Trip	OK
6	Eksternal Fault	T	Alarm, Eksternal Fault	-	No Trip	No Trip	OK
7	Eksternal Fault REF HV	R	Alarm, Eksternal Fault	-	No Trip	No Trip	OK
8	Eksternal Fault REF LV	R	Alarm, Eksternal Fault	-	No Trip	No Trip	OK

catatan :

PELAKSANA

- 1 Arta
- 2 Fajar
- 3 Yosep

SUPERVISI



(Budi Setyo)