

SE Mejillones / Carpeta / Autotrafo 220 110 13,8 k / 7SA611 V4.7 21T Var

MLFB: 7SA61155AC912CD0

Versión del juego de parámetros: V04.70.07

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Modo de operación: Sin línea

Comentario:

Valores de ajuste en: Presentación secundaria de los valores

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1 Device Configuration

Nº	Función	Volumen
0103	Setting Group Change Option	Disabled
0114	21 Distance protection pickup program	Z< (quadrilateral)
0119	Additional Threshold $I_{ph}>(Z1)$	Disabled
0121	85-21 Pilot Protection for Distance prot	Disabled
0122	DTT Direct Transfer Trip	Disabled
0124	50HS Instantaneous SOTF	Disabled
0125	Weak Infeed (Trip and/or Echo)	Disabled
0126	50(N)/51(N) Backup OverCurrent	Time Overcurrent Curve ANSI
0136	81 Over/Underfrequency Protection	Disabled
0137	27, 59 Under/Overvoltage Protection	Disabled
0138	Fault Locator	Disabled
0139	50BF Breaker Failure Protection	Disabled
0140	74TC Trip Circuit Supervision	Disabled
0142	49 Thermal Overload Protection	Disabled

2 General Device Settings

2.1 Grupo Device, General Settings

N°	Parámetro	Valor	Grupo
0610	Fault Display on LED / LCD	Display Targets on every Pickup	todo
0625A	Minimum hold time of latched LEDs	0 min	todo
0640	Start image Default Display	image 1	todo

3 Power System Data 1

3.1 Grupo Power System Data 1; Grupo Transformers

Nº	Parámetro	Valor	Grupo
0201	CT Starpoint	towards Line	todo
0203	Rated Primary Voltage	230,0 kV	todo
0204	Rated Secondary Voltage (Ph-Ph)	115 V	todo
0205	CT Rated Primary Current	400 A	todo
0206	CT Rated Secondary Current	5A	todo
0210	V4 voltage transformer is	not connected	todo
0211	Matching ratio Phase-VT To Open-Delta-VT	1,73	todo
0215	Matching ratio Vsy1 / Vsy2	1,00	todo
0220	I4 current transformer is	Neutral Current (of the protected line)	todo
0221	Matching ratio I4/Iph for CT's	1,000	todo

3.2 Grupo Power System Data 1; Grupo Power System

Nº	Parámetro	Valor	Grupo
0207	System Starpoint is	Solid Grounded	todo
0230	Rated Frequency	50 Hz	todo
0235	Phase Sequence	A B C	todo
0237	Setting format for zero seq.comp. format	Zero seq. comp. factors RG/RL and XG/XL	todo

3.3 Grupo Power System Data 1; Grupo Breaker

Nº	Parámetro	Valor	Grupo
0240A	Minimum TRIP Command Duration	0,10 sec	todo
0241A	Maximum Close Command Duration	0,10 sec	todo
0242	Dead Time for CB test-autoreclosure	0,10 sec	todo

4 Oscillographic Fault Records

4.1 Grupo Oscillographic Fault Records

N°	Parámetro	Valor	Grupo
0402A	Waveform Capture	Save with Pickup	todo
0403A	Scope of Waveform Data	Fault event	todo
0410	Max. length of a Waveform Capture Record	2,00 sec	todo
0411	Captured Waveform Prior to Trigger	0,25 sec	todo
0412	Captured Waveform after Event	0,10 sec	todo
0415	Capture Time via Binary Input	0,50 sec	todo

5 Grupos de parámetros

5.1 Grupo Power System Data 2; Grupo Power System

Nº	Parámetro	Valor	Grupo
1103	Measurement: Full Scale Voltage (100%)	230,0 kV	A
1104	Measurement: Full Scale Current (100%)	400 A	A
1105	Line Angle	89 °	A
1211	Angle of inclination, distance charact.	89 °	A
1107	P,Q operational measured values sign	not reversed	A
1116	Zero seq. comp. factor RG/RL for Z1	0,00	A
1117	Zero seq. comp. factor XG/XL for Z1	0,00	A
1118	Zero seq. comp.factor RG/RL(> Z1)	0,00	A
1119	Zero seq. comp.factor XG/XL(> Z1)	0,00	A

5.2 Grupo Power System Data 2; Grupo Line Status

Nº	Parámetro	Valor
1130A	Pole Open Current Threshold	0,50 A
1131A	Pole Open Voltage Threshold	30 V
1132A	Seal-in Time after ALL closures	0,05 sec
1133A	minimal time for line open before SOTF	0,25 sec
1134	Recognition of Line Closures with	CBpos(52a) OR Current or Manual close BI
1135	RESET of Trip Command	with Pole Open Current Threshold only
1136	open pole detector	with measurement (V/I,trip, pickup, 52a
1140A	CT Saturation Threshold	100,0 A
1150A	Seal-in Time after MANUAL closures	0,30 sec
1151	Manual CLOSE COMMAND generation	NO
1152	MANUAL Closure Impulse after CONTROL	<none>

5.3 Grupo 21 Distance protection, general settings; Grupo General



Grupo
A
A
A
A
A
A
A
A
A
A
todo



Nº	Parámetro	Valor	Grupo
1201	21 Distance protection is	ON	A
1202	Phase Current threshold for dist. meas.	0,25 A	A
1211	Angle of inclination, distance charact.	89 °	A
1208	Series compensated line	NO	A
1232	Instantaneous trip after SwitchOnToFault	Inactive	A
1241	R load, minimum Load Impedance (ph-g)	oo Ohm	A
1242	PHI load, maximum Load Angle (ph-g)	45 °	A
1243	R load, minimum Load Impedance (ph-ph)	oo Ohm	A
1244	PHI load, maximum Load Angle (ph-ph)	45 °	A
1357	Z1B enabled before 1st AR (int. or ext.)	NO	A

5.4 Grupo 21 Distance protection, general settings; Grupo Ground faults

Nº	Parámetro	Valor	Grupo
1203	3I0 threshold for neutral current pickup	0,25 A	A
1204	3V0 threshold zero seq. voltage pickup	5 V	A
1207A	3I0>-pickup-stabilisation (3I0>/ Iphmax)	0,10	A
1209A	Criterion of ground fault recognition	3I0> OR 3V0>	A
1221A	Loop selection with 2Ph-G faults	only phase-ground loops	A

5.5 Grupo 21 Distance protection, general settings; Grupo Time Delays

Nº	Parámetro	Valor	Grupo
1210	21 Condition for zone timer start	with distance pickup	A
1305	T1-1phase, delay for single phase faults	0,00 sec	A
1306	T1multi-ph, delay for multi phase faults	0,00 sec	A
1315	T2-1phase, delay for single phase faults	1,20 sec	A
1316	T2multi-ph, delay for multi phase faults	1,20 sec	A
1325	T3 delay	oo sec	A
1335	T4 delay	oo sec	A
1345	T5 delay	oo sec	A
1365	T6 delay	oo sec	A
1355	T1B-1phase, delay for single ph. faults	oo sec	A
1356	T1B-multi-ph, delay for multi ph. faults	oo sec	A

5.6 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z1

Nº	Parámetro	Valor	Grupo
1301	Operating mode Z1	Forward	A
1302	R(Z1), Resistance for ph-ph-faults	1,792 Ohm	A
1303	X(Z1), Reactance	1,792 Ohm	A
1304	RG(Z1), Resistance for ph-gnd faults	3,584 Ohm	A
1305	T1-1phase, delay for single phase faults	0,00 sec	A
1306	T1multi-ph, delay for multi phase faults	0,00 sec	A
1307	Zone Reduction Angle (load compensation)	0 °	A

5.7 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z1B-exten.

Nº	Parámetro	Valor	Grupo
1351	Operating mode Z1B (overreach zone)	Inactive	A
1352	R(Z1B), Resistance for ph-ph-faults	0,300 Ohm	A
1353	X(Z1B), Reactance	0,600 Ohm	A
1354	RG(Z1B), Resistance for ph-gnd faults	0,600 Ohm	A
1355	T1B-1phase, delay for single ph. faults	oo sec	A
1356	T1B-multi-ph, delay for multi ph. faults	oo sec	A
1357	Z1B enabled before 1st AR (int. or ext.)	NO	A

5.8 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z2

Nº	Parámetro	Valor	Grupo
1311	Operating mode Z2	Forward	A
1312	R(Z2), Resistance for ph-ph-faults	2,816 Ohm	A
1313	X(Z2), Reactance	2,816 Ohm	A
1314	RG(Z2), Resistance for ph-gnd faults	5,632 Ohm	A
1315	T2-1phase, delay for single phase faults	1,20 sec	A
1316	T2multi-ph, delay for multi phase faults	1,20 sec	A

5.9 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z3

Nº	Parámetro	Valor	Grupo
1321	Operating mode Z3	Inactive	A
1322	R(Z3), Resistance for ph-ph-faults	1,000 Ohm	A
1323	X(Z3), Reactance	2,000 Ohm	A
1324	RG(Z3), Resistance for ph-gnd faults	2,000 Ohm	A
1325	T3 delay	oo sec	A

5.10 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z4

Nº	Parámetro	Valor	Grupo
1331	Operating mode Z4	Inactive	A
1332	R(Z4), Resistance for ph-ph-faults	2,400 Ohm	A
1333	X(Z4), Reactance	2,400 Ohm	A
1334	RG(Z4), Resistance for ph-gnd faults	2,400 Ohm	A
1335	T4 delay	oo sec	A

5.11 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z5

Nº	Parámetro	Valor	Grupo
1341	Operating mode Z5	Inactive	A
1342	R(Z5), Resistance for ph-ph-faults	2,400 Ohm	A
1343	X(Z5)+, Reactance for Forward direction	2,400 Ohm	A
1344	RG(Z5), Resistance for ph-gnd faults	2,400 Ohm	A
1345	T5 delay	oo sec	A
1346	X(Z5)-, Reactance for Reverse direction	0,800 Ohm	A

5.12 Grupo 21 Distance zones (quadrilateral); Grupo Zone Z6

Nº	Parámetro	Valor	Grupo
1361	Operating mode Z6	Inactive	A
1362	R(Z6), Resistance for ph-ph-faults	3,000 Ohm	A
1363	X(Z6)+, Reactance for Forward direction	3,000 Ohm	A
1364	RE(Z6), Resistance for ph-g faults	3,000 Ohm	A
1365	T6 delay	oo sec	A
1366	X(Z6)-, Reactance for Reverse direction	0,800 Ohm	A

5.13 Grupo 50(N)/51(N) Backup OverCurrent; Grupo General

Nº	Parámetro	Valor	Grupo
2601	Operating mode	ON: always active	A
2680	Trip time delay after SOTF	0,00 sec	A

5.14 Grupo 50(N)/51(N) Backup OverCurrent; Grupo 50(N)-B1

Nº	Parámetro	Valor	Grupo
2610	50-B1 Pickup	oo A	A
2611	50-B1 Delay	0,30 sec	A
2612	50N-B1 Pickup	oo A	A
2613	50N-B1 Delay	2,00 sec	A
2614	Instantaneous trip via BI	YES	A
2615	Instantaneous trip after SwitchOnToFault	NO	A

5.15 Grupo 50(N)/51(N) Backup OverCurrent; Grupo 50(N)-B2

Nº	Parámetro	Valor	Grupo
2620	50-B2 Pickup	37,00 A	A
2621	50-B2 Delay	0,20 sec	A
2622	50N-B2 Pickup	31,30 A	A
2623	50N-B2 Delay	0,00 sec	A
2624	Instantaneous trip via Pilot Prot./BI	NO	A
2625	Instantaneous trip after SwitchOnToFault	NO	A

5.16 Grupo 50(N)/51(N) Backup OverCurrent; Grupo 51(N)-B

Nº	Parámetro	Valor	Grupo
2640	51-B Pickup	3,95 A	A
2643	51-B Time Dial	3,50	A
2646	51-B Additional Time Delay	0,00 sec	A
2650	51N-B Pickup	1,00 A	A
2653	51N-B Time Dial	0,60	A
2656	51N-B Additional Time Delay	0,00 sec	A
2661	ANSI Curve	Inverse	A
2670	Instantaneous trip via Pilot Prot./BI	NO	A
2671	Instantaneous trip after SwitchOnToFault	NO	A

5.17 Grupo 50(N)/51(N) Backup OverCurrent; Grupo 50(N)-STUB

Nº	Parámetro	Valor	Grupo
2630	50-STUB Pickup	oo A	A
2631	50-STUB Delay	0,30 sec	A
2632	50N-STUB Pickup	oo A	A
2633	50N-STUB Delay	2,00 sec	A
2634	Instantaneous trip via Pilot Prot./BI	NO	A
2635	Instantaneous trip after SwitchOnToFault	NO	A

5.18 Grupo Measurement Supervision; Grupo Balance / Summ.

N°	Parámetro	Valor	Grupo
2901	Measurement Supervision	ON	A
2902A	Voltage Threshold for Balance Monitoring	50 V	A
2903A	Balance Factor for Voltage Monitor	0,75	A
2904A	Current Threshold for Balance Monitoring	2,50 A	A
2905A	Balance Factor for Current Monitor	0,50	A
2906A	Summated Current Monitoring Threshold	0,50 A	A
2907A	Summated Current Monitoring Factor	0,10	A
2908A	T Balance Factor for Voltage Monitor	5 sec	A
2909A	T Current Balance Monitor	5 sec	A

5.19 Grupo Measurement Supervision; Grupo Meas.Volt.Fail

N°	Parámetro	Valor	Grupo
2910	Fuse Failure Monitor	ON	A
2911A	Minimum Voltage Threshold V>	30 V	A
2912A	Maximum Current Threshold I<	0,50 A	A
2913A	Maximum Voltage Threshold V< (3phase)	5 V	A
2914A	Differential Current Threshold (3phase)	0,50 A	A
2915	Voltage Failure Supervision	with current supervision	A
2916A	Delay Voltage Failure Supervision	3,00 sec	A

5.20 Grupo Measurement Supervision; Grupo VT mcb

N°	Parámetro	Valor	Grupo
2921	VT mcb operating time	0 ms	A

5.21 Grupo Measurement Supervision; Grupo Load Angle

Nº	Parámetro	Valor	Grupo
2941	Limit setting PhiA	200 °	A
2942	Limit setting PhiB	340 °	A
2943	Minimum value I1>	0,25 A	A
2944	Minimum value U1>	20 V	A