

PROTECTION FUNCTION	ANSI CODE	OUT PUT	HV MAIN CB		HV TIE CB		IV MAIN CB		IV TIE CB		LUB PHOTO INITIATION	TO LV CB TRIP COIL-1&2	TO LV CB CLOSE	HV MAIN CB 3PH MASTER TRIP GROUP-A/B	HV TIE CB 3PH MASTER TRIP GROUP-A/B	IV MAIN CB 3PH MASTER TRIP GROUP-A/B	IV TIE CB 3PH MASTER TRIP GROUP-A/B	LV CB 3PH MASTER TRIP GROUP-A/B	HV BUSBAR PROTECTION (M1/M2)	IV BUSBAR PROTECTION (M1/M2)	DR TRIGGER	REMARKS	
			TO CB TRIP COIL-1	TO CB TRIP COIL-2	CLOSE MAIN CB	LUB PHOTO INITIATION	TO CB TRIP COIL-1	TO CB TRIP COIL-2	CLOSE TIE CB	LUB PHOTO INITIATION													TO CB TRIP COIL-1
DIFF PROTECTION(PDIF, 87T)	87T	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
HV OVER FLUXING(PVPH, 24)	24HV	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
HV BACKUP IMPEDANCE(PDIS)**	21HV	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP	** BUI BLOCK LOGIC AS PER SETTING TEMPLATE	
HV DIRECTIONAL O/C & E/F PROTECTION (PTOC, 67/87N)	67, 67N	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
REF PROTECTION(PDIF, 64T) ##	64T	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
TRANSFORMER TROUBLE TRIPS (OTI, WTI, PRV, BUCHHOLZ, OSR ,ETC)##		3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP	## IF 1-PH TRAF0 BANK USED THEN TRIPPING SHOULD BE AS PER SELECTION LOGIC OF R, Y, B AND SPARE TRANSFORMER IN SERVICE	
IV OVER FLUXING(PVPH, 24)	24IV	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
IV BACKUP IMPEDANCE(PDIS) **	21IV	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP	** BUI BLOCK LOGIC AS PER SETTING TEMPLATE	
IV DIRECTIONAL O/C & E/F PROTECTION(PTOC, 67/87N)	67, 67N	3 Ph	-	-	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	TP	-	-	IP		
NEUTRAL O/C#	51N	3 Ph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	# ONLY FOR ALARM IF NETURAL CT CORE AVAILABLE	
HV BUSBAR OPTD(PDIF, 87BB, CBF) MAIN-1	87BB	3 Ph	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	NOTE: FOR CENTRALIZED BUSBAR, TRIP MUST BE EXTENDED TO MASTER TRIP RELAY 96 A & B	
HV BUSBAR OPTD(PDIF, 87BB, CBF) MAIN-2	87BB	3 Ph	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	NOTE: FOR CENTRALIZED BUSBAR, TRIP MUST BE EXTENDED TO MASTER TRIP RELAY 96 A & B	
MANUAL TRIP HV MAIN CB			-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MANUAL TRIP HV TIE CB			-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MANUAL TRIP IV MAIN CB			-	-	-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	
MANUAL TRIP IV TIE CB			-	-	-	-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	
HV MAIN BAY BREAKER FAIL PROTECTION RETRIP (RBRF,50BF)	50BF	3 Ph	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
HV MAIN BAY BREAKER FAIL PROTECTION BACKTRIP (RBRF,50BF)	50BF	3 Ph	-	-	RS	-	-	-	-	-	-	-	-	-	TP	TP	TP	TP	IP	-	IP		
HV TIE BAY BREAKER FAIL PROTECTION RETRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
HV TIE BAY BREAKER FAIL PROTECTION BACKTRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	-	-	-	RS	-	-	-	-	-	-	-	-	-	-	IP	ⓈⓈ IF THE BAY IS HALF DIA, TIE BACKTRIP TO BE EXTENDED TO BUSBAR WITH FUTURE BAY(WITHOUT CB)	
IV MAIN BAY BREAKER FAIL PROTECTION RETRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	-	-	IP	
IV MAIN BAY BREAKER FAIL PROTECTION BACKTRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	-	-	-	RS	-	-	-	-	TP	TP	-	TP	TP	-	IP		
IV TIE BAY BREAKER FAIL PROTECTION RETRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	-	-	-	TP	TP	-	-	-	-	-	-	-	-	-	-	IP	
IV TIE BAY BREAKER FAIL PROTECTION BACKTRIP (RBRF,50BF)	50BF	3 Ph	-	-	-	-	-	-	-	-	RS	-	-	-	TP	TP	TP	-	TP	-	IP	ⓈⓈ IF THE BAY IS HALF DIA, TIE BACKTRIP TO BE EXTENDED TO BUSBAR WITH FUTURE BAY(WITHOUT CB)	
IV BUS BAR OPTD(PDIF, 87BB, CBF) MAIN-1	87BB	3 Ph	-	-	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	IP	NOTE: FOR CENTRALIZED BUSBAR, TRIP MUST BE EXTENDED TO MASTER TRIP RELAY 96 A & B
IV BUS BAR OPTD(PDIF, 87BB, CBF) MAIN-2	87BB	3 Ph	-	-	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	IP	NOTE: FOR CENTRALIZED BUSBAR, TRIP MUST BE EXTENDED TO MASTER TRIP RELAY 96 A & B
HV MAIN CB 3PH MASTER TRIP GROUP-A/B	86	3 Ph	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
HV MAIN BAY - 96 MASTER TRIP RELAY GROUP-A/B	96	3 Ph	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
HV TIE CB 3PH MASTER TRIP GROUP-A/B	86	3 Ph	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	-	-	IP	
IV MAIN CB 3PH MASTER TRIP GROUP-A/B	86	3 Ph	-	-	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	IP	
IV MAIN BAY - 96 MASTER TRIP RELAY GROUP-A/B	86	3 Ph	-	-	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	-	-	IP	
IV TIE CB 3PH MASTER TRIP GROUP-A/B	86	3 Ph	-	-	-	-	-	-	-	TP	TP	RS	IP	-	-	-	-	-	-	-	-	IP	
TERTIARY CB 3PH MASTER TRIP(A/B)(IFAPPLICABLE)	86	3 Ph	-	-	-	-	-	-	-	-	-	-	TP	RS	-	-	-	-	-	-	-	IP	
TERTIARY NON DIRECTIONAL O/C & E/F PROTECTION (51/51N)	51/51N	3 Ph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
TERTIARY VOLTAGE DISPLACEMENT PROTECTION	59N	3 Ph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	
TERTIARY MECHANICAL TROUBLE TRIP		3 Ph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IP	

RS:- INDICATES RESET STATUS FOR CB CLOSING TP:- INDICATES TRIP FROM PROT.N. FUNCTION IP:- INDICATES INITIATION FROM PROT.N. FUNCTION



PROTECTION TRIP LOGIC DIAGRAM - 765/400KV ICT