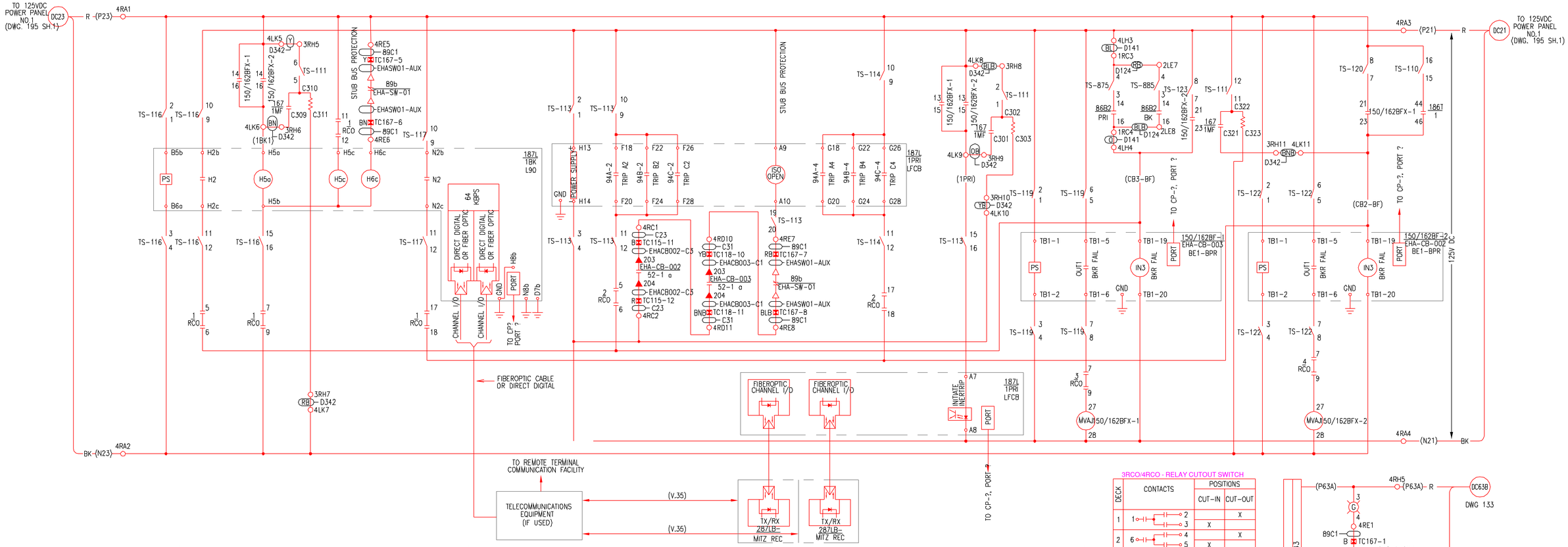

CONTACT TABLE

DEVICE	CONTACTS	FUNCTION	DRAWING
QF	B1a – B1b	CRITICAL FAILURE ALARM	139
	B3b – 48V DC – B3a		
	B5b – POWER SUPPLY – B6a	SET-A PWR SUPPLY, 125V DC (PP, NP)	THIS
	B8a	SURGE GROUND (SEE NOTE 1)	
	B8b	FILTER GROUND	
CH1 64KBPS	CH1 IN FIBEROPTIC OR DIRECT; CH1 OUT/GEN.	CH1&2 COMMUNICATION OR DIRECT DIGITAL REQUIRE CLOCK INPUT	THIS
CH2 64KBPS	CH2 IN FIBEROPTIC OR DIRECT; CH2 OUT/GEN.		
	F5a – VA – F5c	HVCB EHA-CB-003 LINE SIDE POTENTIALS	121
	F6a – VB – F6c		
	F7a – VC – F7c		
	F1a – IA – F1b	HVCB EHA-CB-003- BUS SIDE CURRENTS 5 AMPS INPUTS SHOWN ONLY	121
	F2a – IB – F2b		
	F3a – IC – F3b		
	F4a – IG – F4b		
	H1b	TRIP HVCB EHA-CB-003 (LOCAL OR BY DTT)	143
	H2b	INITIATE BREAKER FAILURE 150/162BF-1 (LOCAL OR BY DTT)	THIS
	H3b		
	H4b		
	H5a – INPUT – H5b	DIRECT TRANSFER TRIP KEY	THIS
	H6a – INPUT – H6b	RELAY CUTOUT SWITCH STATUS OR DC REMOVED	THIS
	H6a – INPUT – H6b	LINE SWITCH STATUS	
	H6c – INPUT –	STUB BUS PROTECTION	THIS
	H7a – INPUT – H7b	BREAKER EHA-CB-003 STATUS 52a SEAL IN	143
	H7c – INPUT –		
	H8a – INPUT –		
	H8c – INPUT –		
	H8b	SURGE GROUND	THIS
	N1b	TRIP HVCB EHA-CB-002 (LOCAL OR BY DTT)	142
	N2c	INITIATE BRKR FAIL FOR 150/162BF-2	THIS
	N3b		
	N4b		
	N5c		
	N6b		
I87L-1BK (-90)	N7a – INPUT – N7b	BREAKER EHA-CB-002 STATUS 52a SEAL IN	142
	N7c – INPUT –		
	N8a – INPUT –		
	N8c – INPUT –		
	N8b	SURGE GROUND	
	PORT 1 – ETHERNET	COMMUNICATION 1	THIS
	PORT 2 – RS485	COMMUNICATION 2	
	BNC-1 – 10a – COAXIAL CABLE		
	D7b	SURGE GROUND	THIS

CONTACT TABLE

DEVICE	CONTACTS	FUNCTION	TS-119	DRAWING
BASLER (BE1-BPR)	TB1-1 – PS – TB1-2	125V DC POWER SUPPLY	2 – 1, 3 – 4	THIS
	TB1-3 – ALARM – TB1-4	RELAY TROUBLE ALARM	20 – 19	139
	TB1-5 – OUT-1 – TB1-6	INITIATES DEV 150/162BFX-1	6 – 5, 7 – 8	THIS
	TB1-9 – ALARM – TB1-10	MAINTENANCE ALARM		139
	TB1-11 – OUT-4 – TB1-12	BREAKER ARC DETECTOR	10 – 9, 11 – 12	143
	TB1-13 – OUT-5 – TB1-14	BREAKER RETRIP	16 – 15, 13 – 14	143
	TB1-15 – 52 – TB1-16	BREAKER STATUS		143
	TB1-17 – 52 – TB1-18	TRIP COIL STATUS MONITOR	18 – 17	143
	TB1-19 – 52 – TB1-20	INPUTS TO BREAKER FAILURE RELAY		THIS
150/162BF-1	TB2-1 – IA – TB2-2	HVCB EHA-CB-003- BUS SIDE (CURRENTS)		121
	TB2-3 – IB – TB2-4			
	TB2-5 – IC – TB2-6			
	TB2-8 – N – TB2-7			

TYPE WA21		TS-120	
1 – 3	INIT BF EHA-CB-002 (SEL-421)	10 – 9	131
2 – 4	SPARE		
5 – 7	SPARE		
6 – 8	SPARE		
9 – 11	BUS 2 DIFF. TRIPPING PRI.	2 – 1	114
10 – 12	BUS 2 DIFF. TRIPPING BK	4 – 3	114
13 – 15	KEY 187L-1PRI		THIS
14 – 16	KEY 187L-1BK		THIS
17 – 19	TRIP EHA-CB-002	6 – 5	142
21 – 23	INIT BF EHA-CB-002 (BE1-BPR)	8 – 7	THIS

CONTACT TABLE

DEVICE	CONTACTS	FUNCTION	TS-122	DRAWING
BASLER (BE1-BPR)	TB1-1 – PS – TB1-2	125V DC POWER SUPPLY	2 – 1, 3 – 4	THIS
	TB1-3 – ALARM – TB1-4	RELAY TROUBLE ALARM	20 – 19	139
	TB1-5 – OUT-1 – TB1-6	INITIATES DEV 150/162BFX-2	6 – 5, 7 – 8	THIS
	TB1-9 – ALARM – TB1-10	MAINTENANCE ALARM		139
	TB1-11 – OUT-4 – TB1-12	BREAKER ARC DETECTOR	10 – 9, 11 – 12	142
	TB1-13 – OUT-5 – TB1-14	BREAKER RETRIP	16 – 15, 13 – 14	142
	TB1-15 – 52 – TB1-16	BREAKER STATUS		142
	TB1-17 – 52 – TB1-18	TRIP COIL STATUS MONITOR	18 – 17	142
	TB1-19 – 52 – TB1-20	INPUTS TO BREAKER FAILURE RELAY		THIS
150/162BF-2	TB2-1 – IA – TB2-2	HVCB EHA-CB-002- BUS SIDE (CURRENTS)		121
	TB2-3 – IB – TB2-4			
	TB2-5 – IC – TB2-6			
	TB2-8 – N – TB2-7			

TYPE WA21		TS-123	
1 – 3	TRANSFER TRIP PLANT LOCKOUT	20 – 19	131 SH.2
2 – 4	SPARE		
5 – 7	TRIP EHA-CB-001	2 – 1	141
6 – 8	INIT BF EHA-CB-001	4 – 3	131
9 – 11	SPARE		
10 – 12	SPARE		
13 – 15	KEY 187L-1PRI		THIS
14 – 16	KEY 187L-1BK		THIS
17 – 19	TRIP EHA-CB-003	6 – 5	143
21 – 23	INIT BF EHA-CB-003	8 – 7	THIS

CONTACT TABLE

DEVICE	CONTACTS	DESCRIPTION	FUNCTION	DRAWING
LFCB103	A21 – IA – A22	CURRENT INPUT	HVCB EHA-CB-003 BUS SIDE CURRENTS	121
	A23 – IB – A24			
	A25 – IC – A26			
	H13 – POWER SUPPLY – H14	DC POWER SUPPLY	SET-B PWR SUPPLY, 125V DC(PF,NF)	THIS
	A7 – OPTO INPUT – A8	INITIATE INTERTRIP	INITIATE INTERTRIP	THIS
	A9 – OPTO INPUT – A10	RESET OR STUB BUS	STUB BUS PROTECTION(122, 123, 222 MODELS)	THIS
	A11 – OPTO INPUT – A12	TIME SYNC		
	56/64 KBPS – TX – RX – CH 1	FIBEROPTIC COMMUNICATION	COMMUNICATION 1	THIS
	56/64 KBPS – TX – RX – CH 2	FIBEROPTIC COMMUNICATION		
	F17 – TRIP A1 – F19	A-PHASE FAULT TRIP	TRIP HVCB EHA-CB-003	143
	F18 – TRIP A2 – F20		INITIATE BREAKER FAILURE 150/162BF-1	THIS
	G17 – TRIP A3 – G19		TRIP HVCB EHA-CB-002	142
	G18 – TRIP A4 – G20		INITIATE BREAKER FAILURE 150/162BF-2	THIS
	F21 – TRIP B1 – F23	B-PHASE FAULT TRIP	TRIP HVCB EHA-CB-003	143
	F22 – TRIP B2 – F24		INITIATE BREAKER FAILURE 150/162BF-1	THIS
	G21 – TRIP B3 – G23		TRIP HVCB EHA-CB-002	142
	G22 – TRIP B4 – G24		INITIATE BREAKER FAILURE 150/162BF-2	THIS
	F25 – TRIP C1 – F27	C-PHASE FAULT TRIP	TRIP HVCB EHA-CB-003	143
	F26 – TRIP C2 – F28		INITIATE BREAKER FAILURE 150/162BF-1	THIS
	G25 – TRIP C3 – G27		TRIP HVCB EHA-CB-002	142
	G26 – TRIP C4 – G28		INITIATE BREAKER FAILURE 150/162BF-2	THIS
	F13 – ANY TRIP – F15	ANY TYPE OF FAULT TRIP		
	F14 – ANY TRIP – F16			
	G13 – BAR 1 – G15	BLOCK AUTO RECLOSE		
	G14 – BAR 2 – G16			
	F9 – INTRTRP 1 – F11	INTERTRIP	TRIP HVCB EHA-CB-003	143
	F10 – INTRTRP 2 – F12		TRIP HVCB EHA-CB-002	142
	G9 – INTRTRP 5 – G11			
	G10 – INTRTRP 6 – G12			
	– 52/a – F1	PROTECTION OPERATED CONTACTS (NOT TRIP RATED)		
	F5 – 52/a – F5	PO A		
	– 52/a – F2	PO B		
	F4 – 52/a – F6	PO C		
	F7 – 52/a – F8	CSA		
	G7 – 52/a – G8	COMMUNICATION SUPERVISION ALARM		
187L-1PRI	G2 – 87V-1 – PSIA	PROTECTION SCHEME INOPERATIVE ALARM	ALARM (WINDOW) (PARALLEL WITH RIA)	139
	G4 – 87V-2 – G6			
	G5 – 87V-3 – RIA – G3	RELAY INOPERATIVE ALARM	ALARM (WINDOW) (PARALLEL WITH PSIA)	139
	G1 – 87V-4 – PSFA – H5	POWER SUPPLY FAILURE ALARM	ALARM (WINDOW)	139

REV	DESCRIPTION	DATE	DFTR	ENG
3				
2				
1				

REV	DESCRIPTION	DATE	DFTR	ENG
6				
5				
4				

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DATE:
DRAFTED BY:
DATE:

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