



F79	Auto-reclosure	
F67 & F67N	Directional Overcurrent	
F50/S1 & F50/S1N	Three-Phase overcurrent Earth Fault protection	
F51 & F51N	Overcurrent time relay, 3 phases & earth	
F50 & F50N	Instantaneous overcurrent Instantaneous earth-fault	
F49	Thermal overload	
F81UO	Under/Over frequency	
F87L	Line Differential	
F25	Check synchronism	
F201	Distance	
F50BF	Breaker failure	
F2759	Over/Under voltage	
F27	Undervoltage	
F59	Overnight	
F89	Carrier interface/remote trip	
K85R	Interlocking Received Relay	
K85S	Interlocking Send Relay	
K94	Lockout Tripping Relay	
K24	Transformer Overexcitation	
F68	Power Swing Blocking	
F87R	Restricted Earth Fault	
VTS	CVT Fuse Failure Supervision	
CVTS	CVT Fuse Failure Supervision	
K44	Trip Circuit Supervision	
ER	Event Recorder	
DFR	Digital Fault Recorder	
FL	Field Locator	
SOTF	Switch On to Fault	
K461	Transfer Relay (Bays)	
K46	Transfer Relay (Bus Transfer)	

MARK	IDENTIFICATION CODE
F81	P43312E3M0*DC
F87T	P433849124M0Q1E02
F50BF	P141318A3M0150C
F50/S1/87REF1	P141318A3M0150C
K94	MVA1105RA082A
K85S	MVA1105RA082A
K44	MVA181AA075A
K461	MVA205TA0810A

MARK	IDENTIFICATION CODE
F50BF	P141318A3M0150C
F25	KAVS1000115J5*
K94	MVA1105RA082A
K44	MVA181AA075A
K461	MVA205TA0810A

MARK	IDENTIFICATION CODE
F25	P454318F3M024C
F87L-2	F75S221-SD29-3M3M2J
F25	KAVS1000115J5*
K94	MVA1105RA082A
K44	MVA181AA075A
K461	MVA205TA0810A

DESIGNATION	AREVA MARK	EN MARK
220KV VOLTAGE TRANSFORMER BBT PH A	DWL06-Q21	12 915 ET 000 1
220KV VOLTAGE TRANSFORMER BBT PH B	DWL06-Q22	12 915 ET 000 2
220KV VOLTAGE TRANSFORMER BBT PH C	DWL06-Q23	12 915 ET 000 3
220KV CURRENT TRANSFORMER PH A	DWL06-TS1	12 915 ET 004 1
220KV CURRENT TRANSFORMER PH B	DWL06-TS2	12 915 ET 004 2
220KV CURRENT TRANSFORMER PH C	DWL06-TS3	12 915 ET 004 3
220KV LINE SCALING SWITCH	DWL06-Q28	12 915 ET 004 4
220KV LINE EARTHING SWITCH	DWL06-Q29	12 915 ET 004 5
220KV LINE TRAP PH A	DWL06-T18	12 915 ET 004 6
220KV LINE TRAP PH B	DWL06-T19	12 915 ET 004 7
220KV LINE TRAP PH C	DWL06-T20	12 915 ET 004 8
220KV SURGE ARRESTER PH A	DWL06-F101	12 915 ET 006 1
220KV SURGE ARRESTER PH B	DWL06-F102	12 915 ET 006 2
220KV SURGE ARRESTER PH C	DWL06-F103	12 915 ET 006 3

DESIGNATION	AREVA MARK	EN MARK
220KV DISCONNECTING SWITCH BBT	DWL06-Q21	12 915 ET 004 1
220KV DISCONNECTING SWITCH BBT	DWL06-Q22	12 915 ET 004 2
220KV DISCONNECTING SWITCH BBT	DWL06-Q23	12 915 ET 004 3
220KV CIRCUIT BREAKER	DWL06-Q28	12 915 ET 004 4
220KV SURGE ARRESTER PH A	DWL06-F101	12 915 ET 006 1
220KV SURGE ARRESTER PH B	DWL06-F102	12 915 ET 006 2
220KV SURGE ARRESTER PH C	DWL06-F103	12 915 ET 006 3

DESIGNATION	AREVA MARK	EN MARK
220KV DISCONNECTING SWITCH BBT	DWL07-Q21	12 915 ET 004 1
220KV DISCONNECTING SWITCH BBT	DWL07-Q22	12 915 ET 004 2
220KV DISCONNECTING SWITCH BBT	DWL07-Q23	12 915 ET 004 3
220KV CIRCUIT BREAKER	DWL07-Q28	12 915 ET 004 4
220KV SURGE ARRESTER PH A	DWL07-F101	12 915 ET 006 1
220KV SURGE ARRESTER PH B	DWL07-F102	12 915 ET 006 2
220KV SURGE ARRESTER PH C	DWL07-F103	12 915 ET 006 3

DESIGNATION	AREVA MARK	EN MARK
220KV DISCONNECTING SWITCH BBT	DWL08-Q21	12 915 ET 004 1
220KV DISCONNECTING SWITCH BBT	DWL08-Q22	12 915 ET 004 2
220KV DISCONNECTING SWITCH BBT	DWL08-Q23	12 915 ET 004 3
220KV CIRCUIT BREAKER	DWL08-Q28	12 915 ET 004 4
220KV SURGE ARRESTER PH A	DWL08-F101	12 915 ET 006 1
220KV SURGE ARRESTER PH B	DWL08-F102	12 915 ET 006 2
220KV SURGE ARRESTER PH C	DWL08-F103	12 915 ET 006 3

DESIGNATION	AREVA MARK	EN MARK
220KV DISCONNECTING SWITCH BBT	DWL10-Q21	12 915 ET 004 1
220KV DISCONNECTING SWITCH BBT	DWL10-Q22	12 915 ET 004 2
220KV DISCONNECTING SWITCH BBT	DWL10-Q23	12 915 ET 004 3
220KV CIRCUIT BREAKER	DWL10-Q28	12 915 ET 004 4
220KV SURGE ARRESTER PH A	DWL10-F101	12 915 ET 006 1
220KV SURGE ARRESTER PH B	DWL10-F102	12 915 ET 006 2
220KV SURGE ARRESTER PH C	DWL10-F103	12 915 ET 006 3

EX-AB	00	01/12/2014	FINAL ISSUE	MAMZH	ROUDY	SAMBARDEB	
EX-CO	00	06/02/2015	FOR REVIEW	JOUR	ROUDY	SAMBARDEB	
EX-DE	00	06/02/2015	FOR REVIEW	JOUR	ROUDY	SAMBARDEB	
EX-DE	00	12/11/2015	FOR REVIEW	JOUR	ROUDY	SAMBARDEB	

Project name: NATIONAL ELECTRICAL GRID REVAMPING

Company identification: 013041.12.DFU.A2013

Contractor identification: 013041.12.DFU.A2013

Vendor identification: AREVA

Order No: 22030/20KV MONGOKAMBA 2 S/S

Location: ONSHORE

Scale: NA

Sheet of: 1 of 1

Supplement No: 01304102.BEFU21460_001_01

Customer file: 220KV SINGLE LINE DIAGRAM

Revision: NA

Part Unit: NA

Sheet: ENGINEERING BASE

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