Base Load Power Hub (BLPH)

Switchgear IO list

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Revision / Change Log

Rev.	Description
00	ISSUE FOR INFORMATION (IFI)
01	ISSUE FOR INFORMATION (IFI)
02	ISSUE FOR INFORMATION (IFI)

HOLDS LIST

No.	Description
1.	
2.	
3.	
4.	

[Protection relay harwired I/Os]

▣ **Manufacturer : SIEMENS**

▣ **Model No. : 7UT85 (P1F460983)**

▣ **IED Name : 7UT85**

▣ **Module imformation : IO203 , PS201, IO207**

IED Terminal Information				Signal Name	CHECK	Remark
Module		Terminal				
POS1 IO203	BI 1.1	D9	D11	SPARE		
	BI 1.2	D10	D12	SPARE		
	BI 1.3	D13	D11	SPARE		
	BI 1.4	D14	D12	SPARE		
	BO 1.1	D1	D2	SPARE		
	BO 1.2	D3	D4	CB-Q0(QA1) TRIP COIL-1		
	BO 1.3	D5	D6	CB-Q0(QA1) TRIP COIL-2		
	BO 1.4	D7	D8	LOR SET COMMAND / 87, 87N		
	I1	A1	A2	TR 2nd side(6.6kV) A		
	I2	A3	A4	TR 2nd side(6.6kV) B		
	I3	A5	A6	TR 2nd side(6.6kV) C		
	I4	A7	A8	Y-NCT		
	I5	B1	B2	SPARE		
	I6	B3	B4	SPARE		
	I7	B5	B6	SPARE		
	I8	B7	B8	SPARE		
POS2 PS201	BI 2.1	2.B12	2.B11	7SJ85 Relay Failure		
	BI 2.2	2.B14		SPARE		
	BI 2.3	2.B13		SPARE		
	BO 2.1	2.B4	2.B3	SPARE		
	BO 2.2	2.B8	2.B5	SPARE		
	Life-"b"	2.B7	2.B10	7UT85 Relay Failure to 7SJ85		

POS3 IO207	BI 3.1	3.A1	3.A3	SPARE		
	BI 3.2	3.A2	3.A4	SPARE		
	BI 3.3	3.A5	3.A7	SPARE		
	BI 3.4	3.A6	3.A8	SPARE		
	BI 3.5	3.A9	3.A11	SPARE		
	BI 3.6	3.A10	3.A12	SPARE		
	BI 3.7	3.A13	3.B1	SPARE		
	BI 3.8	3.A14	3.B2	SPARE		
	BI 3.9	3.B3	3.B5	SPARE		
	BI 3.10	3.B4	3.B6	SPARE		
	BI 3.11	3.B7	3.B9	SPARE		
	BI 3.12	3.B8	3.B10	SPARE		
	BI 3.13	3.D5	3.D7	SPARE		
	BI 3.14	3.D6	3.D8	SPARE		
	BI 3.15	3.D9	3.D11	SPARE		
	BI 3.16	3.D10	3.D12	SPARE		
	BO 3.1	3.B12	3.B11	SPARE		
	BO 3.2	3.B14	3.B13	SPARE		
	BO 3.3	3.C2	3.C1	SPARE		
	BO 3.4	3.C4	3.C3	SPARE		
	BO 3.5	3.C6	3.C5	SPARE		
	BO 3.6	3.C8	3.C7	SPARE		
	BO 3.7	3.C12	3.C11	SPARE		
	BO 3.8	3.C14	3.C13	SPARE		
INTERNAL SIGNAL				TR 1st side A		
				TR 1st side B		
				TR 1st side C		
				TR 1st side N		
				Protection 87		
				Protection 87REF		

[Protection relay harwired I/Os]

▣ **Manufacturer : SIEMENS**

▣ **Model No. : 7SJ85 (P1J1595031)**

▣ **IED Name : 7SJ85**

▣ **Module imformation : IO202 , PS201 , IO207 , IO207 , IO207**

IED Terminal Information				Signal Name	CHECK	Remark
Module		Terminal				
POS1 IO202	BI 1.1	1.C13	1.D1	Open or Disconnected (Disconnector) - QZ91		
	BI 1.2	1.C14	1.D2	Closed & Connected (Disconnector) - QZ91		
	BI 1.3	1.D3	1.D5	Open or Disconnected (Earth Switch) - QZ91		
	BI 1.4	1.D4	1.D6	Closed & Connected (Earth Switch) - QZ91		
	BI 1.5	1.D7	1.D9	Open or Disconnected (Disconnector) - QZ92		
	BI 1.6	1.D8	1.D10	Closed & Connected (Disconnector) - QZ92		
	BI 1.7	1.D11	1.D13	Open or Disconnected (Earth Switch) - QZ92		
	BI 1.8	1.D12	1.D14	Closed & Connected (Earth Switch) - QZ92		
	BO 1.1	1.B10	1.B9	Close (Disconnector) - QZ92		
	BO 1.2	1.B12	1.B11	Open (Disconnector) - QZ92		
	BO 1.3	1.B13	1.B14	SPARE		
	BO 1.4	1.C1	1.C2	Close (Earth Switch) - QZ92		
	BO 1.5	1.C6	1.C3	Open (Earth Switch) - QZ92		
	BO 1.6	1.C10	1.C7	SPARE		
	1.I1	1.A1	1.A2	SPARE		
	1.I2	1.A3	1.A4	SPARE		
	1.I3	1.A5	1.A6	SPARE		
	1.I4	1.A7	1.A8	Y-NCT		
	1.V1	1.B1	1.B2	SPARE		
	1.V2	1.B3	1.B4	SPARE		
	1.V3	1.B5	1.B6	SPARE		
	1.V4	1.B7	1.B8	SPARE		
POS2 PS201	BI 2.1	2.B12	2.B11	SPARE		
	BI 2.2	2.B14		SPARE		
	BI 2.3	2.B13		SPARE		
	BO 2.1	2.B4	2.B3	SPARE		
	BO 2.2	2.B8	2.B5	SPARE		
	Life-"b"	2.B7	2.B10	7SJ85 Relay Failure to 7UT85		
POS4 IO207	BI 3.1	3.A1	3.A3	CB Open or Disconnected		
	BI 3.2	3.A2	3.A4	CB Closed & Connected		
	BI 3.3	3.A5	3.A7	SPARE		
	BI 3.4	3.A6	3.A8	DC Control Voltage Failure		
	BI 3.5	3.A9	3.A11	AC Control Voltage Failure		
	BI 3.6	3.A10	3.A12	SPARE		
	BI 3.7	3.A13	3.B1	SPARE		
	BI 3.8	3.A14	3.B2	6.6kV SWGR CB Open Status		
	BI 3.9	3.B3	3.B5	6.6kV SWGR ES Open Status		
	BI 3.10	3.B4	3.B6	SIS OVERRIDE ENABLED		
	BI 3.11	3.B7	3.B9	SPARE		
	BI 3.12	3.B8	3.B10	SPARE		
	BI 3.13	3.D5	3.D7	SPARE		
	BI 3.14	3.D6	3.D8	VD1 NO VOLTAGE		
	BI 3.15	3.D9	3.D11	VD2 NO VOLTAGE		
	BI 3.16	3.D10	3.D12	SPARE		
	BO 3.1	3.B12	3.B11	Close (CB Q0)		
	BO 3.2	3.B14	3.B13	SPARE		
	BO 3.3	3.C2	3.C1	SPARE		
	BO 3.4	3.C4	3.C3	Intertrip Send (to downstream)		

	BO 3.5	3.C6	3.C5	LOR RESET COMMAND		
	BO 3.6	3.C8	3.C7	LOR SET COMMAND / 50N/51N, 50/51, 51G		
	BO 3.7	3.C12	3.C11	CB-Q0(QA1) TRIP COIL-1 / OPEN COMMAND		
	BO 3.8	3.C14	3.C13	CB-Q0(QA1) TRIP COIL-2 / OPEN COMMAND		
	BI 4.1	4.A1	4.A3	CB Warning Gas Low Stage-1		
	BI 4.2	4.A2	4.A4	CB Warning Gas Low Stage-2		
	BI 4.3	4.A5	4.A7	CB Spring Motor Overload		
	BI 4.4	4.A6	4.A8	CB Spring Motor Excessive Run Time		
	BI 4.5	4.A9	4.A11	CB Motor Exceeded & Spring Uncharged		
	BI 4.6	4.A10	4.A12	DS/ES MOTOR MCB TRIP		
	BI 4.7	4.A13	4.B1	SPARE		
	BI 4.8	4.A14	4.B2	SPARE		
	BI 4.9	4.B3	4.B5	DS OR ES MANUAL OPER. MODE		
	BI 4.10	4.B4	4.B6	HAND CRANK INSERTED		
	BI 4.11	4.B7	4.B9	SPARE		
POS4	BI 4.12	4.B8	4.B10	7UT85 Relay Failure		
IO207	BI 4.13	4.D5	4.D7	LOCAL Status		
	BI 4.14	4.D6	4.D8	REMOTE Status		
	BI 4.15	4.D9	4.D11	SPARE		
	BI 4.16	4.D10	4.D12	SPARE		
	BO 4.1	4.B12	4.B11	Close (Disconnector) - QZ91		
	BO 4.2	4.B14	4.B13	Open (Disconnector) - QZ91		
	BO 4.3	4.C2	4.C1	SPARE		
	BO 4.4	4.C4	4.C3	Close (Earth Switch) - QZ91		
	BO 4.5	4.C6	4.C5	Open (Earth Switch) - QZ91		
	BO 4.6	4.C8	4.C7	SPARE		
	BO 4.7	4.C12	4.C11	SPARE		
	BO 4.8	4.C14	4.C13	SPARE		
	BI 5.1	5.A1	5.A3	TCS1 FAIL		
	BI 5.2	5.A2	5.A4	TCS2 FAIL		
	BI 5.3	5.A5	5.A7	SAFETY SYSTEM POWER WATCHDOG		
	BI 5.4	5.A6	5.A8	SPARE		
	BI 5.5	5.A9	5.A11	MCB Alarm - Q0		
	BI 5.6	5.A10	5.A12	SPARE		
	BI 5.7	5.A13	5.B1	SPARE		
	BI 5.8	5.A14	5.B2	SPARE		
	BI 5.9	5.B3	5.B5	DS/ES QZ92 GAS Pressure Low Stage-1		
	BI 5.10	5.B4	5.B6	DS/ES QZ92 GAS Pressure Low Stage-2		
	BI 5.11	5.B7	5.B9	DS/ES QZ91 GAS Pressure Low Stage-1		
POS5	BI 5.12	5.B8	5.B10	DS/ES QZ91 GAS Pressure Low Stage-2		
IO207	BI 5.13	5.D5	5.D7	SPARE		
	BI 5.14	5.D6	5.D8	SPARE		
	BI 5.15	5.D9	5.D11	SPARE		
	BI 5.16	5.D10	5.D12	SPARE		
	BO 5.1	5.B12	5.B11	SPARE		
	BO 5.2	5.B14	5.B13	SPARE		
	BO 5.3	5.C2	5.C1	SPARE		
	BO 5.4	5.C4	5.C3	SPARE		
	BO 5.5	5.C6	5.C5	SPARE		
	BO 5.6	5.C8	5.C7	SPARE		
	BO 5.7	5.C12	5.C11	SPARE		
	BO 5.8	5.C14	5.C13	SPARE		

INTERNAL SIGNAL				CB-Q0 1st side		
				CB-Q0 2st side		
				TR 1st side A		
				TR 1st side B		
				TR 1st side C		
				TR 1st side N		
				Protection 50		
				Protection 50N		
				Protection 51		
				Protection 51G		

[7UT85 IED Protocol information]

■ Model : SIEMENS 7UT85

■ Manufacture : SIEMENS

■ Purpose : Protection

■ DataSet Configuration

No.	IED	Dataset Location	DataSet Name	Number of Data	Remark
1	BLPH_EW100	BLPH_EW100Application	LLN0	1	IED status
2	BLPH_EW100	BLPH_EW100Mod	LCCH	4	IED status
3	BLPH_EW100	BLPH_EW100Application	LPHD	2	IED status
4	BLPH_EW100	BLPH_EW100Application	LTMS	1	IED status
5	BLPH_EW100	BLPH_EW100ComSupervision_SV	ComSupervision_SV	2	IED status
6	BLPH_EW100	BLPH_EW100UD	USER1	1	BI Status
7	BLPH_EW100	BLPH_EW100PTS	PTRC	2	Protection
8	BLPH_EW100	BLPH_EW100PTD	PDIF, MHAI	16	Protection
9	BLPH_EW100	BLPH_EW100PowS_PB_MeasPointI3ph1	MMXU	24	Measurment

■ RCB Configuration

No.	IED	RCB Name	Connect DataSet	Report ID	Buffer	Remark
1	BLPH_EW100	EMCS_st	Signal	BLPH_EW100/UD1/LLN0RPEMCS_st	UnBuffered	
1	BLPH_EW100	EMCS_me	Mesurment	BLPH_EW100/UD1/LLN0RPEMCS_me	UnBuffered	

※ RCB Preferences

RCB Name	Optional Fields								Tirgger Options				Integrity Period [ms]
	seq Num	Time Stamp	reason Code	dataSet	DA Ref	entry ID	config Rev	Buffer OVF	dchg	qchg	dupd	period	
EMCS	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	10,800

■ GoCB Pub Configuration

No.	IED	GoCB Location	GoCB Name	Connect DataSet	APP ID	MAC Address	Goose ID	Config Revision
1								

■ GoCB Sub Configuration

No.	IED	GoCB Location	GoCB Name	Connect DataSet	APP ID	MAC Address	Goose ID	Config Revision
1								
2								

■ LSVS Configuration

No.	IED	SvCB Location	LSVS Name	Connect DataSet	APP ID	MAC Address	smvID	Config Revision
1	BLPH_EW100	BLPH_EW100/PowS_MeasPointI3ph1	LSVS1	PowS_MeasPointI3ph1				
2	BLPH_EW100	BLPH_EW100/PowS_MeasPointV3ph1	LSVS2	PowS_MeasPointV3ph1				

■ Data List

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
1	SIEMENS_7UT85	Physical channel status (Station bus)	LCCH	BLPH_EW100Mod3_Channel1PRP_LCCH1ST$ChLiv$stVal		●						
2	SIEMENS_7UT85	Physical channel status of redundant channel (Station bus)	LCCH	BLPH_EW100Mod3_Channel1PRP_LCCH1ST$RedChLiv$stVal		●						
3	SIEMENS_7UT85	Physical channel status (Process bus)	LCCH	BLPH_EW100Mod2_Channel1PRP_LCCH1ST$ChLiv$stVal		●						
4	SIEMENS_7UT85	Physical channel status of redundant channel (Process bus)	LCCH	BLPH_EW100Mod2_Channel1PRP_LCCH1ST$RedChLiv$stVal		●						
5	SIEMENS_7UT85	IED physical device health	LPHD	BLPH_EW100Application$LPHD0$ST$PhyHealth$stVal:3		●						
6	SIEMENS_7UT85	Time synchronized	LTMS	BLPH_EW100Application$LTMS0$ST$TmSynErr$stVal		●						
7	SIEMENS_7UT85	Memory fail alarm	LPHD	BLPH_EW100Application$LPHD0$ST$FlshDskHth$stVal		●						
8	SIEMENS_7UT85	Process bus processor fail alarm	LLN0	BLPH_EW100ComSupervision_SV$LLN0$ST$Health$stVal:3		●						
9	SIEMENS_7UT85	Sampled value Sub. fail alarm	LLN0	BLPH_EW100ComSupervision_SV$CALH1$ST$GrAlm$stVal		●						
10	SIEMENS_7UT85	IED Locla/Remote Status	LLN0	BLPH_EW100Application$LLN0$ST$LocKey$stVal		●						
11	SIEMENS_7UT85	7SJ85 Relay Failure	USER1	BLPH_EW100UD1$USER1$STSPSstVal		●						
12	SIEMENS_7UT85	Level 1 87T pick-up General	PTRC	BLPH_EW100PTD1_87TrafoDiffProt1$PTRC5$STStrgeneral		●						
13	SIEMENS_7UT85	Level 1 87T operation General	PTRC	BLPH_EW100PTD1_87TrafoDiffProt1$PTRC5$STOpgeneral		●						
14	SIEMENS_7UT85	Level 1 87N pick-up General	PDIF	BLPH_EW100PTS2REF_PDIF1STStrgeneral		●						
15	SIEMENS_7UT85	Level 1 87N operation General	PDIF	BLPH_EW100PTS2REF_PDIF1STOpgeneral		●						
16	SIEMENS_7UT85	TR 1st side(FDR_P1) A Phase currents magnitude	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsA$cVal$mag$f			●					
17	SIEMENS_7UT85	TR 1st side(FDR_P1) A Phase currents angle	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsA$cVal$ang$f			●					
18	SIEMENS_7UT85	TR 1st side(FDR_P1) B Phase currents magnitude	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsB$cVal$mag$f			●					
19	SIEMENS_7UT85	TR 1st side(FDR_P1) B Phase currents angle	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsB$cVal$ang$f			●					
20	SIEMENS_7UT85	TR 1st side(FDR_P1) C Phase currents magnitude	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsC$cVal$mag$f			●					
21	SIEMENS_7UT85	TR 1st side(FDR_P1) C Phase currents angle	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAphsC$cVal$ang$f			●					
22	SIEMENS_7UT85	TR 1st side(FDR_P1) N Phase currents magnitude	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAres$cVal$mag$f			●					
23	SIEMENS_7UT85	TR 1st side(FDR_P1) N Phase currents angle	MMXU	BLPH_EW100VI3p1_FundSymComp$FPRE_MMXU2$MXAres$cVal$ang$f			●					
16	SIEMENS_7UT85	TR 1st side(FDR_P2) A Phase currents magnitude	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$mag$f			●					
17	SIEMENS_7UT85	TR 1st side(FDR_P2) A Phase currents angle	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$ang$f			●					
18	SIEMENS_7UT85	TR 1st side(FDR_P2) B Phase currents magnitude	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$mag$f			●					
19	SIEMENS_7UT85	TR 1st side(FDR_P2) B Phase currents angle	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$ang$f			●					
20	SIEMENS_7UT85	TR 1st side(FDR_P2) C Phase currents magnitude	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$mag$f			●					
21	SIEMENS_7UT85	TR 1st side(FDR_P2) C Phase currents angle	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$ang$f			●					
22	SIEMENS_7UT85	TR 1st side(FDR_P2) N Phase currents magnitude	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAres$cVal$mag$f			●					
23	SIEMENS_7UT85	TR 1st side(FDR_P2) N Phase currents angle	MMXU	BLPH_EW100VI3p2_FundSymComp$FPRE_MMXU1$MXAres$cVal$ang$f			●					

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
24	SIEMENS_7UT85	TR 2nd side A Phase currents magnitude	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsA$cVal$mag$f			●					
25	SIEMENS_7UT85	TR 2nd side A Phase currents angle	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsA$cVal$ang$f			●					
26	SIEMENS_7UT85	TR 2nd side B Phase currents magnitude	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsB$cVal$mag$f			●					
27	SIEMENS_7UT85	TR 2nd side B Phase currents angle	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsB$cVal$ang$f			●					
28	SIEMENS_7UT85	TR 2nd side C Phase currents magnitude	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsC$cVal$mag$f			●					
29	SIEMENS_7UT85	TR 2nd side C Phase currents angle	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAphsC$cVal$ang$f			●					
30	SIEMENS_7UT85	TR 2nd side N Phase currents magnitude	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAres$cVal$mag$f			●					
31	SIEMENS_7UT85	TR 2nd side N Phase currents angle	MMXU	BLPH_EW100PTS2_FundSymComp$FPRE_MMXU2$MXAres$cVal$ang$f			●					
~~32~~	~~SIEMENS_7UT85~~	~~TR 1st current Total Harmonic Distortion phsA~~	~~MHAI~~	~~BLPH_EW100PTS1_THDHarmonicsI_MHAI1MX$ThdA$phsA$cVal$mag$f~~			~~●~~					
~~33~~	~~SIEMENS_7UT85~~	~~TR 1st current Total Harmonic Distortion phsB~~	~~MHAI~~	~~BLPH_EW100PTS1_THDHarmonicsI_MHAI1MX$ThdA$phsB$cVal$mag$f~~			~~●~~					
~~34~~	~~SIEMENS_7UT85~~	~~TR 1st current Total Harmonic Distortion phsC~~	~~MHAI~~	~~BLPH_EW100PTS1_THDHarmonicsI_MHAI1MX$ThdA$phsC$cVal$mag$f~~			~~●~~					
~~35~~	~~SIEMENS_7UT85~~	~~TR 2nd current Total Harmonic Distortion phsA~~	~~MHAI~~	~~BLPH_EW100PTS2_THDHarmonicsI_MHAI1MX$ThdA$phsA$cVal$mag$f~~			~~●~~					
~~36~~	~~SIEMENS_7UT85~~	~~TR 2nd current Total Harmonic Distortion phsB~~	~~MHAI~~	~~BLPH_EW100PTS2_THDHarmonicsI_MHAI1MX$ThdA$phsB$cVal$mag$f~~			~~●~~					
~~37~~	~~SIEMENS_7UT85~~	~~TR 2nd current Total Harmonic Distortion phsC~~	~~MHAI~~	~~BLPH_EW100PTS2_THDHarmonicsI_MHAI1MX$ThdA$phsC$cVal$mag$f~~			~~●~~					

[7SJ85 IED Protocol information]

■ Model : SIEMENS 7SJ85

■ Manufacture : SIEMENS

■ Purpose : Control & Protection

■ DataSet Configuration

No.	IED	Dataset Location	DataSet Name	Number of Data	Remark
1	BLPH_EW200	BLPH_EW200Application	LLN0	1	IED status
2	BLPH_EW200	BLPH_EW200Mod	LCCH	6	IED status
3	BLPH_EW200	BLPH_EW200Application	LPHD	2	IED status
4	BLPH_EW200	BLPH_EW200Application	LTMS	1	IED status
5	BLPH_EW200	BLPH_EW200ComSupervision_SV	ComSupervision_SV	2	IED status
6	BLPH_EW200	BLPH_EW200CB,DC	CSWI, XSWI	16	CB, DS, ES Status & Command
7	BLPH_EW200	BLPH_EW200UD	USER1	51	Goose Status, BI Status, BO Control
8	BLPH_EW200	BLPH_EW2005051	PTOC	5	Protection
9	BLPH_EW200	BLPH_EW20067,27	PTRC	10	Protection
10	BLPH_EW200	BLPH_EW200VI3p1	MMXU	94	Measurment
11	BLPH_EW200	BLPH_EW200VI3p1	MHAI	3	Measurment
12	BLPH_EW200	BLPH_EW200VI3p1	QVUB	1	Measurment
13	BLPH_EW200	BLPH_EW200VI3p1	QVVR	6	Measurment

■ RCB Configuration

No.	IED	RCB Name	Connect DataSet	Report ID	Buffer	Remark
1	BLPH_EW200	EMCS_st	Signal	BLPH_EW200/UD1/LLN0RPEMCS_st	UnBuffered	
2	BLPH_EW200	EMCS_me	Mesurment	BLPH_EW200/UD1/LLN0RPEMCS_me	UnBuffered	
3	BLPH_EW200	HVSCADA_st	CB, DS, ES Status & Command	BLPH_EW200/UD1/LLN0RPHVSCADA_st	UnBuffered	

※ RCB Preferences

RCB Name	Optional Fields								Tirgger Options				Integrity Period [ms]
	seq Num	Time Stamp	reason Code	dataSet	DA Ref	entry ID	config Rev	Buffer OVF	dchg	qchg	dupd	period	
EMCS	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	10,800
HVSCADA	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	10,800

■ GoCB Pub Configuration

No.	IED	GoCB Location	GoCB Name	Connect DataSet	APP ID	MAC Address	Goose ID	Config Revision
1								

■ GoCB Sub Configuration

No.	IED	GoCB Location	GoCB Name	Connect DataSet	APP ID	MAC Address	Goose ID	Config Revision
1	BLPH_EW200	BLPH_EW200$GS	GODATA1	GODATA1				
2								

■ LSVS Configuration

No.	IED	SvCB Location	LSVS Name	Connect DataSet	APP ID	MAC Address	smvID	Config Revision
1	BLPH_EW200	BLPH_EW200/V3p1	LSVS1	BLPH_EW200/V3p1				
2	BLPH_EW200	BLPH_EW200/V3p2	LSVS2	BLPH_EW200/V3p2				
3	BLPH_EW200	BLPH_EW200/VI3p1	LSVS3	BLPH_EW200/VI3p1				
4	BLPH_EW200	BLPH_EW200/VI3p2	LSVS4	BLPH_EW200/VI3p2				

■ Data List

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
1	SIEMENS_7SJ85	Physical channel status (Station bus)-EMCS	LCCH	BLPH_EW200Mod3_Channel1PRP_LCCH2ST$ChLiv$stVal		●						
2	SIEMENS_7SJ85	Physical channel status of redundant channel (Station bus)-EMCS	LCCH	BLPH_EW200Mod3_Channel1PRP_LCCH2ST$RedChLiv$stVal		●						
3	SIEMENS_7SJ85	Physical channel status (Station bus)-HV SCADA	LCCH	BLPH_EW200Mod4_Channel1PRP_LCCH3ST$ChLiv$stVal		●						
4	SIEMENS_7SJ85	Physical channel status of redundant channel (Station bus)-HV SCADA	LCCH	BLPH_EW200Mod4_Channel1PRP_LCCH3ST$RedChLiv$stVal		●						
5	SIEMENS_7SJ85	Physical channel status (Process bus)	LCCH	BLPH_EW200Mod2_Channel1PRP_LCCH1ST$ChLiv$stVal		●						
6	SIEMENS_7SJ85	Physical channel status of redundant channel (Process bus)	LCCH	BLPH_EW200Mod2_Channel1PRP_LCCH1ST$RedChLiv$stVal		●						
7	SIEMENS_7SJ85	IED physical device health	LPHD	BLPH_EW200Application$LPHD0$ST$PhyHealth$stVal:3		●						
8	SIEMENS_7SJ85	Time synchronized	LTMS	BLPH_EW200Application$LTMS0$ST$TmSynErr$stVal		●						
9	SIEMENS_7SJ85	GOOSE Sub. fail alarm	LPHD	BLPH_EW200ComSupervision_GOOSE$CALH1$ST$GrAlm$stVa		●						
10	SIEMENS_7SJ85	Memory fail alarm	LPHD	BLPH_EW200Application$LPHD0$ST$FlshDskHth$stVal:3		●						
11	SIEMENS_7SJ85	Process bus processor fail alarm	LLN0	BLPH_EW200ComSupervision_SV$LLN0$ST$Health$stVal:3		●						
12	SIEMENS_7SJ85	Sampled value sub. fail alarm	CALH	BLPH_EW200ComSupervision_SV/CALH1STGrAlm$stVal		●						
13	SIEMENS_7SJ85	IED Local/Remote Status	LLN0	BLPH_EW200Application$LLN0$ST$LocKey$stVal		●						
14	SIEMENS_7SJ85	CB QA1 status(Q0) For EMCS	CSWI	BLPH_EW200CB1$CSWI4$STPosstVal		●						
15	SIEMENS_7SJ85	CB QA1 control(Q0) For EMCS	CSWI	BLPH_EW200CB1$CSWI4$STPosctVal	●							
16	SIEMENS_7SJ85	DS QZ91 status For EMCS	CSWI	BLPH_EW200Dc1$CSWI1$COPosstVal		●						
17	SIEMENS_7SJ85	DS QZ91 control For EMCS	CSWI	BLPH_EW200Dc1$CSWI1$COPosctVal	●							
18	SIEMENS_7SJ85	DS QZ92 status For EMCS	XSWI	BLPH_EW200Dc2$XSWI2$STPosstVal		●						
19	SIEMENS_7SJ85	ES QZ91 status For EMCS	CSWI	BLPH_EW200Dc3$CSWI3$COPosctVal		●						
20	SIEMENS_7SJ85	ES QZ91 control For EMCS	CSWI	BLPH_EW200Dc3$CSWI3$COPosctVal	●							
21	SIEMENS_7SJ85	ES QZ92 status For EMCS	XSWI	BLPH_EW200Dc4$XSWI4$STPosstVal		●						
22	SIEMENS_7SJ85	CB QA1 status(Q0) For HV-SCADA	CSWI	BLPH_EW200CBc1$CSWI6$STPosstVal						●		
23	SIEMENS_7SJ85	CB QA1 open command(Q0) For HV-SCADA	CSWI	BLPH_EW200CBc1$CSWI6$STPosctVal					●			
24	SIEMENS_7SJ85	DS QZ91 status For HV-SCADA	XSWI	BLPH_EW200Dc1$XSWI1$STPosstVal						●		
25	SIEMENS_7SJ85	DS QZ92 status For HV-SCADA	CSWI	BLPH_EW200Dc2$CSWI2$STPosstVal						●		
26	SIEMENS_7SJ85	DS QZ92 control For HV-SCADA	CSWI	BLPH_EW200Dc2$CSWI2$STPosctVal					●			
27	SIEMENS_7SJ85	ES QZ91 status For HV-SCADA	XSWI	BLPH_EW200Dc3$XSWI3$STPosstVal						●		
28	SIEMENS_7SJ85	ES QZ92 status For HV-SCADA	CSWI	BLPH_EW200Dc4$CSWI5$STPosstVal						●		
29	SIEMENS_7SJ85	ES QZ92 control For HV-SCADA	CSWI	BLPH_EW200Dc4$CSWI5$STPosctVal					●			
30	SIEMENS_7SJ85	DC Control Voltage Failure	USER1	BLPH_EW200UD$USER1$STSPSstVal		●						
31	SIEMENS_7SJ85	AC Control Voltage Failure	USER1	BLPH_EW200UD$USER1$ST$SPS1$stVal		●						
32	SIEMENS_7SJ85	6.6kV SWGR CB Open Status	USER1	BLPH_EW200UD$USER1$ST$SPS2$stVal		●						
33	SIEMENS_7SJ85	6.6kV SWGR ES Open Status	USER1	BLPH_EW200UD$USER1$ST$SPS3$stVal		●						
34	SIEMENS_7SJ85	VD1 NO VOLTAGE	USER1	BLPH_EW200UD$USER1$ST$SPS4$stVal		●						

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
35	SIEMENS_7SJ85	VD2 NO VOLTAGE	USER1	BLPH_EW200UD$USER1$ST$SPS5$stVal		●						
36	SIEMENS_7SJ85	CB Warning Gas Low Stage-1	USER1	BLPH_EW200UD$USER1$ST$SPS6$stVal		●						
37	SIEMENS_7SJ85	CB Warning Gas Low Stage-2	USER1	BLPH_EW200UD$USER1$ST$SPS7$stVal		●						
38	SIEMENS_7SJ85	CB Spring Motor Overload	USER1	BLPH_EW200UD$USER1$ST$SPS8$stVal		●						
39	SIEMENS_7SJ85	CB Spring Motor Excessive Run Time	USER1	BLPH_EW200UD$USER1$ST$SPS9$stVal		●						
40	SIEMENS_7SJ85	CB Motor Exceeded & Spring Uncharged	USER1	BLPH_EW200UD$USER1$ST$SPS10$stVal		●						
41	SIEMENS_7SJ85	DS/ES MOTOR MCB TRIP	USER1	BLPH_EW200UD$USER1$ST$SPS11$stVal		●						
42	SIEMENS_7SJ85	DS OR ES MANUAL OPER MODE	USER1	BLPH_EW200UD$USER1$ST$SPS12$stVal		●						
43	SIEMENS_7SJ85	HAND CRANK INSERTED	USER1	BLPH_EW200UD$USER1$ST$SPS13$stVal		●						
44	SIEMENS_7SJ85	7UT85 Relay Failure	USER1	BLPH_EW200UD$USER1$ST$SPS14$stVal		●						
45	SIEMENS_7SJ85	LCC LOCAL Status	USER1	BLPH_EW200UD$USER1$ST$SPS15$stVal		●						
46	SIEMENS_7SJ85	LCC REMOTE Status	USER1	BLPH_EW200UD$USER1$ST$SPS16$stVal		●						
47	SIEMENS_7SJ85	TCS1 FAIL	USER1	BLPH_EW200UD$USER1$ST$SPS17$stVal		●						
48	SIEMENS_7SJ85	TCS2 FAIL	USER1	BLPH_EW200UD$USER1$ST$SPS18$stVal		●						
49	SIEMENS_7SJ85	SAFETY SYSTEM POWER WATCHDOG	USER1	BLPH_EW200UD$USER1$ST$SPS19$stVal		●						
50	SIEMENS_7SJ85	MCB Alarm - Q0	USER1	BLPH_EW200UD$USER1$ST$SPS20$stVal		●						
51	SIEMENS_7SJ85	DS/ES QZ92 GAS Pressure Low Stage-1	USER1	BLPH_EW200UD$USER1$ST$SPS21$stVal		●						
52	SIEMENS_7SJ85	DS/ES QZ92 GAS Pressure Low Stage-2	USER1	BLPH_EW200UD$USER1$ST$SPS22$stVal		●						
53	SIEMENS_7SJ85	DS/ES QZ91 GAS Pressure Low Stage-1	USER1	BLPH_EW200UD$USER1$ST$SPS23$stVal		●						
54	SIEMENS_7SJ85	DS/ES QZ91 GAS Pressure Low Stage-2	USER1	BLPH_EW200UD$USER1$ST$SPS24$stVal		●						
55	SIEMENS_7SJ85	LOR RESET COMMAND	USER1	BLPH_EW200UD$USER1$COSPCctVal	●							
56	SIEMENS_7SJ85	CB QA1 open command by HV SCADA	USER1	BLPH_EW200UD$USER1$ST$SPS25$stVal		●						
57	SIEMENS_7SJ85	DS QZ92 open command by HV SCADA	USER1	BLPH_EW200UD$USER1$ST$SPS26$stVal		●						
58	SIEMENS_7SJ85	DS QZ92 close command by HV SCADA	USER1	BLPH_EW200UD$USER1$ST$SPS27$stVal		●						
59	SIEMENS_7SJ85	ES QZ92 open command by HV SCADA	USER1	BLPH_EW200UD$USER1$ST$SPS28$stVal		●						
60	SIEMENS_7SJ85	ES QZ92 close command by HV SCADA	USER1	BLPH_EW200UD$USER1$ST$SPS29$stVal		●						
61	SIEMENS_7SJ85	SIS OVERRIDE ENABLED	USER1	BLPH_EW200UD$USER1$ST$SPS30$stVal		●						
62	SIEMENS_7SJ85	Physical channel status (Process bus)	USER1	BLPH_EW200GS$USER1$ST$RxChLiv$stVal		●						
63	SIEMENS_7SJ85	Physical channel status of redundant channel (Process bus)	USER1	BLPH_EW200GS$USER1$ST$RxRedChLiv$stVal		●						
64	SIEMENS_7SJ85	IED physical device health	USER1	BLPH_EW200GS$USER1$ST$RxPhyHealth$stVal		●						
65	SIEMENS_7SJ85	Time synchronized	USER1	BLPH_EW200GS$USER1$ST$RxTmSyn$stVal		●						
66	SIEMENS_7SJ85	Internal power fail alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd005$stVal		●						
67	SIEMENS_7SJ85	Process bus processor fail alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd012$stVal		●						
68	SIEMENS_7SJ85	Sampled value publish fail alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd030$stVal		●						
69	SIEMENS_7SJ85	CH1 SC Critical alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd020SC1$stVal		●						
70	SIEMENS_7SJ85	CH1 SC Temperature alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd021SC1$stVal		●						

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
71	SIEMENS_7SJ85	CH1 SC Pressure alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd022SC1$stVal		●						
72	SIEMENS_7SJ85	CH2 SC Critical alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd020SC2$stVal		●						
73	SIEMENS_7SJ85	CH2 SC Temperature alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd021SC2$stVal		●						
74	SIEMENS_7SJ85	CH2 SC Pressure alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd022SC2$stVal		●						
75	SIEMENS_7SJ85	CH3 SC Critical alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd020SC3$stVal		●						
76	SIEMENS_7SJ85	CH3 SC Temperature alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd021SC3$stVal		●						
77	SIEMENS_7SJ85	CH3 SC Pressure alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd022SC3$stVal		●						
78	SIEMENS_7SJ85	CH4 SC Critical alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd020SC4$stVal		●						
79	SIEMENS_7SJ85	CH4 SC Temperature alarm	USER1	BLPH_EW200GS$USER1$ST$RxInd021SC4$stVal		●						
80	SIEMENS_7SJ85	Level 1 50 pick-up General	PTOC	BLPH_EW200GS$USER1$ST$RxInd022SC4$stVal		●						
81	SIEMENS_7SJ85	Level 1 50 operation General	PTOC	BLPH_EW200VI3p2_5051OC3phase1ID_PTOC1STOpgeneral		●						
82	SIEMENS_7SJ85	~~Level 1 50N pick-up General~~	~~PTOC~~	~~BLPH_EW200VI3p2_5051NOCgndB1ND_PTOC1STStrgeneral~~		●						
83	SIEMENS_7SJ85	~~Level 1 50N operation General~~	~~PTOC~~	~~BLPH_EW200VI3p2_5051NOCgndB1ND_PTOC1STOpgeneral~~		●						
84	SIEMENS_7SJ85	Level 1 51 pick-up General	PTOC	BLPH_EW200VI3p2_5051OC3phase1II_PTOC1STStrgeneral		●						
85	SIEMENS_7SJ85	Level 1 51 operation General	PTOC	BLPH_EW200VI3p2_5051OC3phase1II_PTOC1STOpgeneral		●						
86	SIEMENS_7SJ85	Level 1 51N pick-up General	PTOC	BLPH_EW200VI3p2_5051NOCgndA1$PTRC1$STStrgeneral		●						
87	SIEMENS_7SJ85	Level 1 51N operation General	PTOC	BLPH_EW200VI3p2_5051NOCgndA1$PTRC1$STOpgeneral		●						
86	SIEMENS_7SJ85	Level 1 51G pick-up General	PTOC	BLPH_EW200VI1p1_50N51NOC1phA1$PTRC1$ST$Str		●						
87	SIEMENS_7SJ85	Level 1 51G operation General	PTOC	BLPH_EW200VI1p1_50N51NOC1phA1$PTRC1$ST$Op		●						
88	SIEMENS_7SJ85	~~Level 1 67 pick-up General~~	~~PTRC~~	~~BLPH_EW200VI3p2_67DirOC3phB1$PTRC5$STStrgeneral~~		●						
89	SIEMENS_7SJ85	~~Level 1 67 operation General~~	~~PTRC~~	~~BLPH_EW200VI3p2_67DirOC3phB1$PTRC5$STOpgeneral~~		●						
90	SIEMENS_7SJ85	~~Level 1 67N pick-up General~~	~~PTRC~~	~~BLPH_EW200VI3p2_67NDirOCgndB1$PTRC1$STStrgeneral~~		●						
91	SIEMENS_7SJ85	~~Level 1 67N operation General~~	~~PTRC~~	~~BLPH_EW200VI3p2_67NDirOCgndB1$PTRC1$STOpgeneral~~		●						
92	SIEMENS_7SJ85	~~Level 1 27 pick-up General~~	~~PTRC~~	~~BLPH_EW200V3p2_27Undervoltage1$PTRC1$STStrgeneral~~		●						
93	SIEMENS_7SJ85	~~Level 1 27 operation General~~	~~PTRC~~	~~BLPH_EW200V3p2_27Undervoltage1$PTRC1$STOpgeneral~~		●						
94	SIEMENS_7SJ85	CB 1st(BUS_P1)-AB Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsAB$cVal$mag$f			●					
95	SIEMENS_7SJ85	CB 1st(BUS_P1)-AB Phase to phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsAB$cVal$ang$f			●					
96	SIEMENS_7SJ85	CB 1st(BUS_P1)-BC Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsBC$cVal$mag$f			●					
97	SIEMENS_7SJ85	CB 1st(BUS_P1)-BC Phase to phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsBC$cVal$ang$f			●					
98	SIEMENS_7SJ85	CB 1st(BUS_P1)-CA Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsCA$cVal$mag$f			●					
99	SIEMENS_7SJ85	CB 1st(BUS_P1)-CA Phase to phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPPVphsCA$cVal$ang$			●					
100	SIEMENS_7SJ85	CB 1st(BUS_P1)-A Phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsA$cVal$mag$f			●					
101	SIEMENS_7SJ85	CB 1st(BUS_P1)-A Phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsA$cVal$ang$f			●					
102	SIEMENS_7SJ85	CB 1st(BUS_P1)-B Phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsB$cVal$mag$f			●					
103	SIEMENS_7SJ85	CB 1st(BUS_P1)-B Phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsB$cVal$ang$f			●					
104	SIEMENS_7SJ85	CB 1st(BUS_P1)-C Phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsC$cVal$mag$f			●					

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
105	SIEMENS_7SJ85	CB 1st(BUS_P1)-C Phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVphsC$cVal$ang$f			●					
106	SIEMENS_7SJ85	CB 1st(BUS_P1)-N Phase voltages magnitude	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVres$cVal$mag$f			●					
107	SIEMENS_7SJ85	CB 1st(BUS_P1)-N Phase voltages angle	MMXU	BLPH_EW200V3p1_FundSymComp$FPRE_MMXU3$MXPhVres$cVal$ang$f			●					
108	SIEMENS_7SJ85	CB 1st(BUS_P2)-AB Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$mag$f			●					
109	SIEMENS_7SJ85	CB 1st(BUS_P2)-AB Phase to phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$ang$f			●					
110	SIEMENS_7SJ85	CB 1st(BUS_P2)-BC Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$mag$f			●					
111	SIEMENS_7SJ85	CB 1st(BUS_P2)-BC Phase to phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$ang$f			●					
112	SIEMENS_7SJ85	CB 1st(BUS_P2)-CA Phase to phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$mag$f			●					
113	SIEMENS_7SJ85	CB 1st(BUS_P2)-CA Phase to phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$ang$			●					
114	SIEMENS_7SJ85	CB 1st(BUS_P2)-A Phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$mag$f			●					
115	SIEMENS_7SJ85	CB 1st(BUS_P2)-A Phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$ang$f			●					
116	SIEMENS_7SJ85	CB 1st(BUS_P2)-B Phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$mag$f			●					
117	SIEMENS_7SJ85	CB 1st(BUS_P2)-B Phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$ang$f			●					
118	SIEMENS_7SJ85	CB 1st(BUS_P2)-C Phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$mag$f			●					
119	SIEMENS_7SJ85	CB 1st(BUS_P2)-C Phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$ang$f			●					
120	SIEMENS_7SJ85	CB 1st(BUS_P2)-N Phase voltages magnitude	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$mag$f			●					
121	SIEMENS_7SJ85	CB 1st(BUS_P2)-N Phase voltages angle	MMXU	BLPH_EW200V3p2_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$ang$f			●					
122	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Total active power	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MX$TotW$mag$f			●				●	
123	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Total reactive power	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MX$TotVAr$mag$f			●				●	
124	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Total apparent power	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MX$TotVA$mag$f			●				●	
125	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Average power factor	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MX$TotPF$mag$f			●				●	
126	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Frequency	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MX$TotPF$mag$f			●				●	
127	SIEMENS_7SJ85	CB 2nd(FDR_P1)-AB Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$mag$f			●					
128	SIEMENS_7SJ85	CB 2nd(FDR_P1)-AB Phase to phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$ang$f			●					
129	SIEMENS_7SJ85	CB 2nd(FDR_P1)-BC Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$mag$f			●					
130	SIEMENS_7SJ85	CB 2nd(FDR_P1)-BC Phase to phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$ang$f			●					
131	SIEMENS_7SJ85	CB 2nd(FDR_P1)-CA Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$mag$f			●					
132	SIEMENS_7SJ85	CB 2nd(FDR_P1)-CA Phase to phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$ang$f			●					
133	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$mag$f			●					
134	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$ang$f			●					
135	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$mag$f			●					
136	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$ang$f			●					
137	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$mag$f			●					
138	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$ang$f			●					
139	SIEMENS_7SJ85	CB 2nd(FDR_P1)-N Phase voltages magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$mag$f			●					
140	SIEMENS_7SJ85	CB 2nd(FDR_P1)-N Phase voltages angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$ang$f			●					

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
141	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase currents magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$mag$f			●					
142	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase currents angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$ang$f			●					
143	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase currents magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$mag$f			●					
144	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase currents angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$ang$f			●					
145	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase currents magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$mag$f			●					
146	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase currents angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$ang$f			●					
147	SIEMENS_7SJ85	CB 2nd(FDR_P1)-N Phase currents magnitude	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAres$cVal$mag$f			●					
148	SIEMENS_7SJ85	CB 2nd(FDR_P1)-N Phase currents angle	MMXU	BLPH_EW200VI3p1_FundSymComp$FPRE_MMXU1$MXAres$cVal$ang$f			●					
149	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase active power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXWphsA$cVal$mag$f			●					
150	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase active power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXWphsB$cVal$mag$f			●					
151	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase active power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXWphsC$cVal$mag$f			●					
152	SIEMENS_7SJ85	CB 2nd(FDR_P1)-A Phase reactive power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXVArphsA$cVal$mag$f			●					
153	SIEMENS_7SJ85	CB 2nd(FDR_P1)-B Phase reactive power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXVArphsB$cVal$mag$f			●					
154	SIEMENS_7SJ85	CB 2nd(FDR_P1)-C Phase reactive power magnitude	MMXU	BLPH_EW200VI3p1_OperationalValues$PPRE_MMXU1$MXVArphsC$cVal$mag$f			●					
155	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Import active energy	MMTR	BLPH_EW200VI3p1_Energy$XPRE_MMTR1$ST$DmdWh$actVal			●					
156	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Export active energy	MMTR	BLPH_EW200VI3p1_Energy$XPRE_MMTR1$ST$SupVArh$actVal			●					
157	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Import reactive energy	MMTR	BLPH_EW200VI3p1_Energy$XPRE_MMTR1$ST$DmdVArh$actVal			●					
158	SIEMENS_7SJ85	CB 2nd(FDR_P1)-Export reactive energy	MMTR	BLPH_EW200VI3p1_Energy$XPRE_MMTR1$ST$SupVArh$actVal			●					
159	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Total active power	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MX$TotW$mag$f			●				●	
160	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Total reactive power	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MX$TotVAr$mag$f			●				●	
161	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Total apparent power	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MX$TotVA$mag$f			●				●	
162	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Average power factor	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MX$TotPF$mag$f			●				●	
163	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Frequency	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MX$TotPF$mag$f			●				●	
164	SIEMENS_7SJ85	CB 2nd(FDR_P2)-AB Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$mag$f			●					
165	SIEMENS_7SJ85	CB 2nd(FDR_P2)-AB Phase to phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsAB$cVal$ang$f			●					
166	SIEMENS_7SJ85	CB 2nd(FDR_P2)-BC Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$mag$f			●					
167	SIEMENS_7SJ85	CB 2nd(FDR_P2)-BC Phase to phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsBC$cVal$ang$f			●					
168	SIEMENS_7SJ85	CB 2nd(FDR_P2)-CA Phase to phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$mag$f			●					
169	SIEMENS_7SJ85	CB 2nd(FDR_P2)-CA Phase to phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPPVphsCA$cVal$ang$f			●					
170	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$mag$f			●					
171	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsA$cVal$ang$f			●					
172	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$mag$f			●					
173	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsB$cVal$ang$f			●					
174	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$mag$f			●					
175	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVphsC$cVal$ang$f			●					
176	SIEMENS_7SJ85	CB 2nd(FDR_P2)-N Phase voltages magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$mag$f			●					

No	Signal Name(Description)		Data Type	Signal Name	EMCS				HV SCADA			
					Control	Status	Measur	Config	Control	Status	Measure	Config
177	SIEMENS_7SJ85	CB 2nd(FDR_P2)-N Phase voltages angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXPhVres$cVal$ang$f			●					
178	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase currents magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$mag$f			●					
179	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase currents angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsA$cVal$ang$f			●					
180	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase currents magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$mag$f			●					
181	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase currents angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsB$cVal$ang$f			●					
182	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase currents magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$mag$f			●					
183	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase currents angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAphsC$cVal$ang$f			●					
184	SIEMENS_7SJ85	CB 2nd(FDR_P2)-N Phase currents magnitude	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAres$cVal$mag$f			●					
185	SIEMENS_7SJ85	CB 2nd(FDR_P2)-N Phase currents angle	MMXU	BLPH_EW200VI3p2_FundSymComp$FPRE_MMXU1$MXAres$cVal$ang$f			●					
186	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase active power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXWphsA$cVal$mag$f			●					
187	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase active power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXWphsB$cVal$mag$f			●					
188	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase active power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXWphsC$cVal$mag$f			●					
189	SIEMENS_7SJ85	CB 2nd(FDR_P2)-A Phase reactive power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXVArphsA$cVal$mag$f			●					
190	SIEMENS_7SJ85	CB 2nd(FDR_P2)-B Phase reactive power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXVArphsB$cVal$mag$f			●					
191	SIEMENS_7SJ85	CB 2nd(FDR_P2)-C Phase reactive power magnitude	MMXU	BLPH_EW200VI3p2_OperationalValues$PPRE_MMXU1$MXVArphsC$cVal$mag$f			●					
192	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Import active energy	MMTR	BLPH_EW200VI3p2_Energy$XPRE_MMTR1$ST$DmdWh$actVal			●					
193	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Export active energy	MMTR	BLPH_EW200VI3p2_Energy$XPRE_MMTR1$ST$SupVArh$actVal			●					
194	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Import reactive energy	MMTR	BLPH_EW200VI3p2_Energy$XPRE_MMTR1$ST$DmdVArh$actVal			●					
195	SIEMENS_7SJ85	CB 2nd(FDR_P2)-Export reactive energy	MMTR	BLPH_EW200VI3p2_Energy$XPRE_MMTR1$ST$SupVArh$actVal			●					
~~196~~	~~SIEMENS_7SJ85~~	~~Current Total Demand Distortion phsA~~	~~MHAI~~	~~BLPH_EW200VI3p2_TDDC_MHAI1MX$TddA$phsA$cVal$mag$f~~			●					
~~197~~	~~SIEMENS_7SJ85~~	~~Current Total Demand Distortion phsB~~	~~MHAI~~	~~BLPH_EW200VI3p2_TDDC_MHAI1MX$TddA$phsB$cVal$mag$f~~			●					
~~198~~	~~SIEMENS_7SJ85~~	~~Current Total Demand Distortion phsC~~	~~MHAI~~	~~BLPH_EW200VI3p2_TDDC_MHAI1MX$TddA$phsC$cVal$mag$f~~			●					
~~199~~	~~SIEMENS_7SJ85~~	~~Voltage unbalance max overall~~	~~QVUB~~	~~BLPH_EW200VI3p2_QVUB$V2toV1_QVUB1$MX$MaxVVa$mag$f~~			●					
~~200~~	~~SIEMENS_7SJ85~~	~~Voltage dip Dur.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVarDip_QVVR1MX$VVaTm$mag$f~~			●					
~~201~~	~~SIEMENS_7SJ85~~	~~Voltage dip Vres.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVarDip_QVVR1MXVvamag$f~~			●					
~~202~~	~~SIEMENS_7SJ85~~	~~Voltage swell Dur.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVar$Swell_QVVR1$MX$VVaTm$mag$f~~			●					
~~203~~	~~SIEMENS_7SJ85~~	~~Voltage swell Vsw.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVar$Swell_QVVR1$MXVvamag$f~~			●					
~~204~~	~~SIEMENS_7SJ85~~	~~Voltage interrup. Dur.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVar$Intr_QVVR1$MXVvamag$f~~			●					
~~205~~	~~SIEMENS_7SJ85~~	~~Voltage interrup. Vres.~~	~~QVVR~~	~~BLPH_EW200VI3p2_VoltVar$Intr_QVVR1$MX$VVaTm$mag$f~~			●					