

Standard Signal List

Digital Input Signals - 33/66kV BCPU	Signal Type on IEC-104
50BF/LBB Operated	Single Point Information
86 Supervision	Single Point Information
BCPU Communication Fail	Single Point Information
BCPU Watchdog Operated	Single Point Information
Busbar Isolator 1	Single Point Information
Busbar Isolator 2	Single Point Information
CB in Remote	Single Point Information
CB Status	Double Point Information
E/F General Trip	Single Point Information
E/F Highset Trip	Single Point Information
E/F Highset Trip-Spare	Single Point Information
E/F IDMT Trip	Single Point Information
Earth Isolator	Single Point Information
Line Isolator	Single Point Information
Local Remote Switch	Single Point Information
Negative Ph sequence	Single Point Information
P/F General Trip	Single Point Information
P/F Highset Trip	Single Point Information
P/F IDMT Trip	Single Point Information
P/F Overload Trip	Single Point Information
PT Fuse Failure	Single Point Information
Relay Reset	Single Point Information
SF6 Gas Pressure Low	Single Point Information
SF6 Lockout Operated	Single Point Information
Spring Charged	Single Point Information
TCS Alarm-1	Single Point Information
TCS Alarm-2	Single Point Information
Digital Output Signals - 33/66kV BCPU	Signal Type on IEC-104
CB Command	Double Command
Relay Reset	Single Command
Measurement Signals - 33/66kV BCPU	Signal Type on IEC-104
Active Energy Export	Measured Float
Active Energy Import	Measured Float
Active Power	Measured Float
Current Bph	Measured Float
Current Rph	Measured Float
Current Yph	Measured Float
Fault Current Bph	Measured Float
Fault Current Nph	Measured Float
Fault Current Rph	Measured Float
Fault Current Yph	Measured Float
Frequency	Measured Float
Power Factor	Measured Float
Reactive Energy Export	Measured Float

Reactive Energy Import	Measured Float
Reactive Power	Measured Float
Sigma kA Square	Measured Float
Voltage BR	Measured Float
Voltage RY	Measured Float
Voltage YB	Measured Float
Digital Input Signals - 33/66kV Trafo. Diff. Relay	Signal Type on IEC-104
Diff. Trip Bph	Single Point Information
Diff. Trip Rph	Single Point Information
Diff. Trip Yph	Single Point Information
Differential Highset Trip	Single Point Information
Differential Trip	Single Point Information
Inrush Detected	Single Point Information
REF Trip	Single Point Information
Trafo. Diff. Lockout Operated	Single Point Information
Trafo. Diff. Relay Communication Fail	Single Point Information
Trafo. Diff. Relay Watchdog Operated	Single Point Information
Trafo. Trouble Trip	Single Point Information
Digital Output Signals - 33/66kV Trafo. Diff. Relay	Signal Type on IEC-104
Trafo. Diff. Lockout Operated	Single Command
Measurement Signals - 33/66kV Trafo. Diff. Relay	Signal Type on IEC-104
Current Bph	Measured Float
Current Rph	Measured Float
Current Yph	Measured Float
Fault Current Bph	Measured Float
Fault Current Nph	Measured Float
Fault Current Rph	Measured Float
Fault Current Yph	Measured Float
Fault Locator in Some Relays	Measured Float
Sigma kA Square	Measured Float
Digital Input Signals - 33/66kV BCPU	Signal Type on IEC-104
Bucholz Alarm	Single Point Information
Bucholz Trip	Single Point Information
MOG Alarm	Single Point Information
OSR Trip	Single Point Information
OTI Alarm	Single Point Information
OTI Trip	Single Point Information
PRV Trip	Single Point Information
SPRV Trip	Single Point Information
TMU Auto/Manual	Single Point Information
TMU Communication Fail	Single Point Information
TMU L/R Switch	Single Point Information
TMU Watchdog Operated	Single Point Information
WTI Alarm	Single Point Information
WTI Trip	Single Point Information
Measurement Signals - 33/66kV BCPU	Signal Type on IEC-104
Oil Temperature	Measured Float
Tap Position	Step Position

Winding Temperature	Measured Float
Voltage BR (of 11KV)	Measured Float
Voltage RY(of 11KV)	Measured Float
Voltage YB(of 11KV)	Measured Float
Digital Input Signals - 11kV BCPU	Signal Type on IEC-104
50BF/LBB Operated	Single Point Information
86 Supervision	Single Point Information
BCPU Communication Fail	Single Point Information
BCPU Watchdog Operated	Single Point Information
CB in Service	Single Point Information
CB Status	Double Point Information
CBFP Trip	Single Point Information
E/F Highset Trip	Single Point Information
E/F Highset Trip-Spare	Single Point Information
E/F IDMT Trip	Single Point Information
L/O Reset	Single Point Information
Local Remote Switch	Single Point Information
Negative Ph sequence	Single Point Information
P/F Highset Trip	Single Point Information
P/F IDMT Trip	Single Point Information
P/F Overload Trip	Single Point Information
Spring Charged	Single Point Information
TCS Alarm-1	Single Point Information
TCS Alarm-2	Single Point Information
Digital Output Signals - 11kV BCPU	Signal Type on IEC-104
CB Command	Double Command
Relay Reset	Single Command
Measurement Signals - 11kV BCPU	Signal Type on IEC-104
Active Energy Export	Measured Float
Active Energy Import	Measured Float
Active Power	Measured Float
Current Bph	Measured Float
Current Rph	Measured Float
Current Yph	Measured Float
Fault Current Bph	Measured Float
Fault Current Nph	Measured Float
Fault Current Rph	Measured Float
Fault Current Yph	Measured Float
Fault Locator in Some Relays	Measured Float
Power Factor	Measured Float
Reactive Energy Export	Measured Float
Reactive Energy Import	Measured Float
Reactive Power	Measured Float
Sigma kA Square	Measured Float
Voltage BR	Measured Float
Voltage RY	Measured Float
Voltage YB	Measured Float
Digital Input Signals - 11kV BCPU (Shunt Cap - Backup)	Signal Type on IEC-104

BCPU Communication Fail	Single Point Information
BCPU Watchdog Operated	Single Point Information
E/F Highset Trip	Single Point Information
E/F IDMT Trip	Single Point Information
L/O Reset	Single Point Information
NUBR Operated	Single Point Information
Over Voltage Trip	Single Point Information
P/F Highset Trip	Single Point Information
P/F IDMT Trip	Single Point Information
Under Voltage Trip	Single Point Information
Digital Output Signals - 11kV PU (Shunt Cap - Backup)	Signal Type on IEC-104
L/O Reset	Single Command
Measurement Signals - 33/66/11kV MFT	Signal Type on IEC-104
Active Energy Export	Measured Float/Integrated Total
Active Energy Import	Measured Float/Integrated Total
Active Power	Measured Float
Current Bph	Measured Float
Current Rph	Measured Float
Current Yph	Measured Float
Frequency	Measured Float
Power Factor	Measured Float
Reactive Energy Export	Measured Float/Integrated Total
Reactive Energy Import	Measured Float/Integrated Total
Reactive Power	Measured Float
Voltage BR	Measured Float
Voltage RY	Measured Float
Voltage YB	Measured Float
Digital Input Signals - DCDB	Signal Type on IEC-104
DC Voltage Earth Leakage	Single Point Information
Measurement Signals - DCDB	Signal Type on IEC-104
Grid DC Voltage	Measured Float

Note: These are tentative IO list , The signals shall be finalized during Detailed Engineering