

Product datasheet

Specifications



substation - S81 - Sepam series 80

59730

Main

Relay application	Substation
Range of product	Sepam series 80 Sepam series 80 NPP
Device short name	S81
Control and monitoring type	Circuit breaker/contactors control ANSI code: 94/69 (option) Latching/acknowledgement ANSI code: 86 Logic discrimination ANSI code: 68 (option) Switching of groups of settings Annunciation ANSI code: 30 Automatic transfer (AT) (option) Logipam programming (ladder language) (option) Logic equation editor 200 operators
Metering type	Positive sequence voltage Vd/rotation direction Frequency Calculated active and reactive energy (+/- W.h, +/- VAR.h) Active and reactive energy by pulse counting (+/- W.h, +/- VAR.h) (option) Phase current I1, I2, I3 RMS Demand current I1, I2, I3 Peak demand current IM1, IM2, IM3 Measured residual current I'0 Voltage U21, U32, U13, V1, V2, V3 Residual voltage V0 Negative sequence voltage Vi Active power P, P1, P2, P3 Reactive power Q, Q1, Q2, Q3 Apparent power S, S1, S2, S3 Peak demand power PM, QM Power factor Measured residual current I0, calculated I'0Σ
Network and machine diagnosis type	Unbalance ratio/negative sequence current li Disturbance recording Thermal capacity used Remaining operating time before overload tripping Waiting time after overload tripping Tripping context Phase fault and earth fault trip counters Harmonic distortion (THD), current and voltage Ithd, Uthd Difference in amplitude, frequency and phase of voltages with synchro-check option Apparent positive sequence impedance Zd Apparent phase-to-phase impedances Z21, Z32, Z13 Phase displacement Datalog (DLG)
Switchgear diagnosis type	Cumulative breaking current CT/VT supervision ANSI code: 60FL Trip circuit supervision ANSI code: 74 (option) Auxiliary power supply monitoring Nb of operations, operating time, charging time, nb of racking out operations (option)

Complementary

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Type of measurement	Voltage Peak demand power Current Harmonic distortion (I THD & U THD) Power factor Frequency Power (P,Q) Energy
Protection type	Recloser (4 cycles) ANSI code: 79 (option) Neutral voltage displacement ANSI code: 59N (2) Breaker failure ANSI code: 50BF (1) Directional earth fault ANSI code: 67N/67NC (2) Synchro-check ANSI code: 25 (option) Overvoltage (L-L or L-N) ANSI code: 59 (4) Thermal overload for cables ANSI code: 49RMS (2) Negative sequence/unbalance ANSI code: 46 (2) Overfrequency ANSI code: 81H (2) Underfrequency ANSI code: 81L (4) Positive sequence undercurrent ANSI code: 27D (2) Remanent undervoltage ANSI code: 27R (2) Undervoltage (L-L or L-N) ANSI code: 27 (4) Negative sequence overvoltage ANSI code: 47 (2) Phase overcurrent ANSI code: 50/51 (8) Earth fault/sensitive earth fault ANSI code: 50N/51N (8) Earth fault/sensitive earth fault ANSI code: 50G/51G (8) Directional active overpower ANSI code: 32P (2)
Communication port protocol	Measurement readout (option) : Modbus Remote indication and time tagging of events (option) : Modbus Remote control orders (option) : Modbus Remote protection setting (option) : Modbus Transfer of disturbance recording data (option) : Modbus
Input output max capacity	42 inputs + 23 outputs
Communication compatibility	IEC 61850 IEC 60870-5-103 IEC 61850 goose message Modbus RTU Modbus TCPIP DNP3
User machine interface type	Without Advanced Remote Mimic-based

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.1 cm
Package 1 Width	0.1 cm
Package 1 Length	0.2 cm
Package 1 Weight	1.0 g