Product datasheet

Specifications

generator - G88 - Sepam series 80

59742

Main

Relay application	Generator
Range of product	Sepam series 80 NPP Sepam series 80
Device short name	G88
Control and monitoring type	Circuit breaker/contactor 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 Temperature (16 RTDs) (option) Phase current I'1, I'2, I'3 RMS Rotation speed (option) Neutral point voltage Vnt Measured residual current I0, calculated I'0∑ Calculated residual current I'0∑
Network and machine diagnosis type	Unbalance ratio/negative sequence current Ii Disturbance recording Thermal capacity used Remaining operating time before overload tripping Waiting time after overload tripping Running hours counter/operating time 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 Differential current Idiff1, idiff2, Idiff3 Through current It1, It2, It3 Third harmonic voltage, neutral point residual Current phase displacement θ 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

Type of measurement	Voltage Rotation speed Power factor Harmonic distorsion (I THD & U THD) Temperature Energy Frequency Current Peak demand power Power (P,Q)
Protection type	Thermostat / buchholz ANSI code: 26/63 (option) Neutral voltage displacement ANSI code: 59N (2) Breaker failure ANSI code: 50BF (1) Directional earth fault ANSI code: 67N/67NC (2) Directional phase overcurrent ANSI code: 67 (2) Synchro-check ANSI code: 25 (option) Overvoltage (L-L or L-N) ANSI code: 59 (4) Temperature monitoring (16 RTDs) ANSI code: 38/49T (option) Thermal overload for machines ANSI code: 49RMS (2) Restricted earth fault ANSI code: 64REF (2) Overfluxing (V/Hz) ANSI code: 24 (2) Two-winding transformer differential ANSI code: 87T (1) Field loss (underimpedance) ANSI code: 40 (1) Pole slip ANSI code: 78PS (1) Overspeed (2 set points) ANSI code: 12 (option) Underspeed (2 set points) ANSI code: 14 (option) Directional reactive overpower ANSI code: 32Q (1) Underimpedance ANSI code: 21B (1) Inadvertent energisation ANSI code: 50/27 (1) Third harmonic undervoltage/100 % stator earth fault ANSI code: 27TN/64G2 (2) Third harmonic undervoltage/100 % stator earth fault ANSI code: 64G (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) Voltage-restrained overcurrent ANSI code: 50V/51V (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 goose message Modbus RTU DNP3 IEC 61850 Modbus TCPIP IEC 60870-5-103
User machine interface type	Mimic-based Advanced Without Remote

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