



## Main

Relay application	Transformer
Range of product	Sepam series 80 NPP Sepam series 80
Device short name	T82
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 Temperature (16 RTDs) (option) Measured residual current I0, calculated I'0Σ
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

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

	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	Peak demand power Voltage Temperature Harmonic distortion (I THD & U THD) Energy Power (P,Q) Power factor Current Frequency
Protection type	Thermostat / buchholz ANSI code: 26/63 (option) Neutral voltage displacement ANSI code: 59N Breaker failure ANSI code: 50BF Directional earth fault ANSI code: 67N/67NC Directional phase overcurrent ANSI code: 67 Synchro-check ANSI code: 25 (option) Overvoltage (L-L or L-N) ANSI code: 59 Temperature monitoring (16 RTDs) ANSI code: 38/49T (option) Thermal overload for machines ANSI code: 49RMS Restricted earth fault ANSI code: 64REF Negative sequence/unbalance ANSI code: 46 Overfrequency ANSI code: 81H Underfrequency ANSI code: 81L Positive sequence undercurrent ANSI code: 27D Remanent undervoltage ANSI code: 27R Undervoltage (L-L or L-N) ANSI code: 27 Negative sequence overvoltage ANSI code: 47 Phase overcurrent ANSI code: 50/51 Earth fault/sensitive earth fault ANSI code: 50N/51N Earth fault/sensitive earth fault ANSI code: 50G/51G Directional active overpower ANSI code: 32P
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 Modbus TCP/IP DNP3 IEC 61850 goose message Modbus RTU
User machine interface type	Without Mimic-based Remote Advanced

## Packing Units

Package 1 Weight	0.001 kg
Package 1 Height	0.010 dm
Package 1 width	0.010 dm
Package 1 Length	0.020 dm