



Main

Relay application	Transformer
Range of product	Sepam series 60
Device short name	T60
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) Logic equation editor 200 operators
Metering type	Measured residual current I ₀ , calculated I' ₀ Σ Positive sequence voltage V _d /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 I ₁ , I ₂ , I ₃ RMS Demand current I ₁ , I ₂ , I ₃ Peak demand current IM ₁ , IM ₂ , IM ₃ Measured residual current I' ₀ Voltage U ₂₁ , U ₃₂ , U ₁₃ , V ₁ , V ₂ , V ₃ Residual voltage V ₀ Negative sequence voltage V _i Active power P, P ₁ , P ₂ , P ₃ Reactive power Q, Q ₁ , Q ₂ , Q ₃ Apparent power S, S ₁ , S ₂ , S ₃ Peak demand power PM, QM Power factor Temperature (16 RTDs) (option)
Network and machine diagnosis type	Datalog (DLG) Unbalance ratio/negative sequence current I _i Disturbance recording Running hours counter/operating time Tripping context Phase fault and earth fault trip counters Harmonic distortion (THD), current and voltage I _{thd} , U _{thd} Difference in amplitude, frequency and phase of voltages with synchro-check (option) Cable arcing fault detection Phase displacement
Switchgear diagnosis type	CT/VT supervision ANSI code: 60FL Trip circuit supervision ANSI code: 74 (option) Nb of operations, operating time, charging time, nb of racking out operations (option) Cumulative breaking current

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

Complementary

Type of measurement	Power (P,Q) Frequency Harmonic distortion (I THD & U THD) Power factor Voltage Peak demand power Current Energy
Protection type	Synchro-check (option) ANSI code: 25 Overvoltage (L-L or L-N) ANSI code: 59 Thermal overload for machines ANSI code: 49RMS Restricted earth fault ANSI code: 64REF Earth fault/sensitive earth fault ANSI code: 50N/51N Earth fault/sensitive earth fault ANSI code: 50G/51G Negative sequence/unbalance ANSI code: 46 Remanent undervoltage ANSI code: 27R Overfrequency ANSI code: 81H Underfrequency ANSI code: 81L Negative sequence overvoltage ANSI code: 47 Positive sequence undercurrent ANSI code: 27D Undervoltage (L-L or L-N) ANSI code: 27 Breaker failure ANSI code: 50BF Neutral voltage displacement ANSI code: 59N Phase overcurrent ANSI code: 50/51 Thermostat / buchholz (option) ANSI code: 26/63
Communication port protocol	Measurement readout (option) : Modbus Remote control orders (option) : Modbus Remote indication and time tagging of events (option) : Modbus Remote protection setting (option) : Modbus Transfer of disturbance recording data (option) : Modbus
Input output max capacity	28 inputs + 16 outputs
Communication compatibility	DNP3 IEC 60870-5-103 IEC 61850 Modbus TCP/IP Modbus RTU IEC 61850 goose message
User machine interface type	Without Mimic-based Advanced Remote