



Main

Relay application	Capacitor
Range of product	Sepam series 80 NPP Sepam series 80
Device short name	C86
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 Logipam programming (ladder language) (option) Logic equation editor 200 operators Capacitor step control (option)
Metering type	Measured residual current I0, calculated I'0Σ 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 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)
Network and machine diagnosis type	Datalog (DLG) 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 Apparent positive sequence impedance Zd Apparent phase-to-phase impedances Z21, Z32, Z13 Capacitor unbalance current and capacitance Phase displacement

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

Switchgear diagnosis type	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) Cumulative breaking current
---------------------------	--

Complementary

Type of measurement	Energy Power (P,Q) Current Frequency Power factor Voltage Peak demand power Temperature
Protection type	Overvoltage (L-L or L-N) ANSI code: 59 Temperature monitoring (16 RTDs) (option) ANSI code: 38/49T Thermal overload for capacitors ANSI code: 49RMS Capacitor bank unbalance ANSI code: 51C 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
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	42 inputs + 23 outputs
Communication compatibility	IEC 60870-5-103 IEC 61850 goose message DNP3 IEC 61850 Modbus TCP/IP Modbus RTU
User machine interface type	Mimic-based Remote Without Advanced