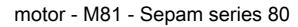
Disclaimer. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications





59736

① To be discontinued

Main

Relay application	Motor
Range of product	Sepam series 80
	Sepam series 80 NPP
Device short name	M81
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
	Load shedding/automatic restart
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 l'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)
	Rotation speed (option)
	Neutral point voltage Vnt
	Measured residual current I0, calculated I'0∑
Network and machine diagnosis	Unbalance ratio/negative sequence current li
type	Disturbance recording
	Thermal capacity used
	Remaining operating time before overload tripping
	Waiting time after overload tripping
	Running hours counter/operating time
	Starting current and time
	Start inhibit time, number of starts before inhibition
	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
	Phase displacement
	Datalog (DLG)
	Motor start report (MSR)
	Motor start trend (MST)

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	Energy Rotation speed Peak demand power Power (P,Q) Temperature Current Frequency Harmonic distorsion (I THD & U THD) Power factor Voltage
Protection type	Thermostat / buchholz ANSI code: 26/63 (option) Phase undercurrent ANSI code: 37 (1) Starts per hour ANSI code: 66 (1) Neutral voltage displacement ANSI code: 59N (2) Breaker failure ANSI code: 50BF (1) Directional earth fault ANSI code: 67N/67NC (2) 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) Excessive starting time, locked rotor ANSI code: 48/51LR (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) 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: 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

Modbus TCPIP IEC 61850 goose message IEC 60870-5-103

DNP3 Modbus RTU IEC 61850

User machine interface type

Mimic-based Remote Without Advanced

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