# Product data sheet Characteristics

## 59792

## motor - M61 - Sepam series 60



Relay application	Motor	
Range of product	Sepam series 60	
Device short name	M61	
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 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 IM1, IM2, IM3 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) Rotation speed (option) Measured residual current I0, calculated I'0∑	
Network and machine diagnosis type	Unbalance ratio/negative sequence current li 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 lthd, Uthd Apparent positive sequence impedance Zd Apparent phase-to-phase impedances Z21, Z32, Z13 Cable arcing fault detection	

	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) Nb of operations, operating time, charging time, nb of racking out operations (option)

#### Complementary

Complementary	
Type of measurement	Power factor Current Rotation speed Peak demand power Harmonic distorsion (I THD & U THD) Frequency Temperature Voltage Power (P,Q) Energy
Protection type	Thermostat / buchholz ANSI code: 26/63 (option) Phase undercurrent ANSI code: 37 Starts per hour ANSI code: 66 Neutral voltage displacement ANSI code: 59N Breaker failure ANSI code: 50BF Directional earth fault ANSI code: 67N/67NC Temperature monitoring (16 RTDs) ANSI code: 38/49T (option) Thermal overload for machines ANSI code: 49RMS Excessive starting time, locked rotor ANSI code: 48/51LR Field loss (underimpedance) ANSI code: 40 Overspeed (2 set points) ANSI code: 12 (option) Underspeed (2 set points) ANSI code: 14 (option) Directional reactive overpower ANSI code: 32Q Phase overcurrent ANSI code: 50/51 Earth fault/sensitive earth fault ANSI code: 50N/51N Earth fault/sensitive earth fault ANSI code: 50G/51G Negative sequence/unbalance ANSI code: 46 Overfrequency ANSI code: 81L Positive sequence undercurrent ANSI code: 27D Remanent undervoltage ANSI code: 27R Negative sequence overvoltage ANSI code: 47 Directional active overpower ANSI code: 32P Undervoltage (L-L or L-N) ANSI code: 27 Overvoltage (L-L or L-N) ANSI code: 27 Overvoltage (L-L or L-N) ANSI code: 59
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	28 inputs + 16 outputs
Communication compatibility	Modbus RTU IEC 61850 goose message IEC 60870-5-103 IEC 61850 Modbus TCPIP DNP3
User machine interface type	Without Mimic-based Advanced Remote

#### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	100 g
Package 1 Height	1 cm
Package 1 width	1 cm