

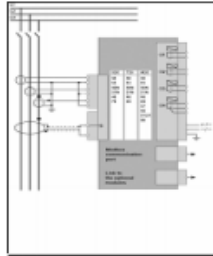
Relay Proteksi Digital SEPAM

Sepam series 20

INENP

SEPAM series 20

- 3 Aplikasi proteksi arus:
 - S20 : proteksi incoming dan feeder/outgoing substation
 - T20 : proteksi trafo
 - M20 : proteksi motor

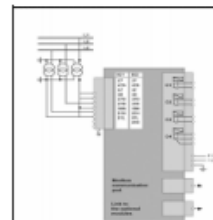


Protection	ANSI code	S20	T20	M20
Phase overcurrent	50/51	4	4	4
Earth fault (or neutral)	50N/51N	4	4	4
Unbalance / negative sequence	46	1	1	1
Thermal overload	49RMS		2	2
Phase undercurrent	37			1
Excessive starting time, locked rotor	48/51LR			1
Starts per hour	66			1
Recloser (4 cycles)	79	☐		
Thermostat / bucholtz			☐	
Temperature monitoring	38/49T		☐	☐
Metering				
Phase current I1, I2, I3 rms		☒	☒	☒
Residual current Io		☒	☒	☒
Average current I1, I2, I3		☒	☒	☒
Peak demand phase current IM1, IM2, IM3		☒	☒	☒
Temperature measurement			☐	☐
Network diagnosis				
Tripping current I1, I2, I3 and Io		☒	☒	☒
Unbalance ratio / negative sequence current I(2)		☒	☒	☒
Running hours counter / operating time			☒	☒
Thermal capacity used			☒	☒
Remaining operating time before overload tripping			☒	☒
Waiting time after overload tripping			☒	☒
Starting current and time			☒	☒
Start inhibit time delay			☒	☒
Disturbance recording		☒	☒	☒
Switchgear diagnosis				
Cumulative breaking current		☒	☒	☒
Trip circuit supervision		☐	☐	☐
Number of operation		☐	☐	☐
Operating time		☐	☐	☐
Charging time		☐	☐	☐
Self diagnosis				
Watch dog		☒	☒	☒
Output relay test		☐	☐	☐
Control and monitoring				
Circuit breaker / contactor control		☐	☐	☐
Logic discrimination		☐	☐	☐
4 addressable logic output		☒	☒	☒

■ standard, □ according to parameter setting and optional module

SEPAM 1000+ series 20

- 2 Aplikasi proteksi tegangan
 - B21 : proteksi busbar
 - B22 : proteksi loss of mains



Protection	ANSI code	B21	B22
Positive sequence undervoltage	27D/47	2	2
Remanent undervoltage	27R	1	1
Phase to phase undervoltage	27	2	2
Phase to neutral undervoltage	27S	1	1
Phase to phase overvoltage	59	2	2
Neutral voltage displacement	59N	2	2
Over frequency	81H	1	1
Under frequency	81L	2	2
Rate of change of frequency	81R		1
Metering			
Line voltage U21, U32, U13		☒	☒
Phase to neutral voltage V1, V2, V3		☒	☒
Residual voltage Vo		☒	☒
Positive sequence voltage / rotation direction		☒	☒
Frequency		☒	☒
Network diagnosis			
Disturbance recording		☒	☒
Self diagnosis			
Watch dog		☒	☒
Output relay test		☐	☐
Control and monitoring			
Circuit breaker / contactor control		☐	☐

■ standard, □ according to parameter setting and optional module