

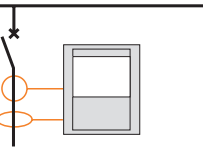
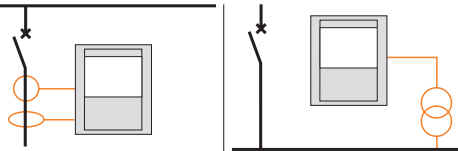


	series 10 <span>See catalogue Sepam series 10</span>			series 20 <span>Page 51</span>		
						
						
<b>Protections</b>						
Current	■	■	■	■	■	
Voltage						■ ■
Frequency						■ ■
Specifics	phase and earth fault overcurrent	phase and earth fault overcurrent	earth fault overcurrent		breaker failure	disconnection by rate of change of frequency
<b>Applications</b>						
<b>Substation</b> <span>P. 18</span>	A	B	N	S20	S24	
<b>Busbar</b> <span>P. 20</span>						B21 B22
<b>Transformer</b> <span>P. 22</span>	A	B	N	T20	T24	
<b>Motor</b> <span>P. 28</span>				M20		
<b>Generator</b> <span>P. 32</span>						
<b>Capacitor</b> <span>P. 36</span>						
<b>Characteristics</b>						
Logic inputs/ outputs	Inputs: 4 Outputs: 7	Inputs: 0 Outputs: 3	Inputs: 0 Outputs: 3	0 to 10 4 to 8	0 to 10 4 to 8	0 to 10 4 to 8
Temperature sensors				0 to 8	0 to 8	0 to 8
Channel	Current: 3I + Io Voltage: LPCT <sup>(1)</sup>	Current: 3I + Io Voltage: LPCT <sup>(1)</sup>	Current: Io Voltage: LPCT <sup>(1)</sup>	Current: 3I + Io Voltage: LPCT <sup>(1)</sup>	Current: 3I + Io Voltage: LPCT <sup>(1)</sup>	Current: 3I + Io Voltage: LPCT <sup>(1)</sup>
Communication ports	1			1 to 2	1 to 2	1 to 2
IEC61850 Protocol				Yes	Yes	Yes
	Redundancy					
	Goose message					
Control	Matrix <sup>(2)</sup> Logic equation editor Logipam <sup>(3)</sup>			Yes	Yes	Yes
Other	Backup Front Memory cartridge with settings	Lithium battery <sup>(4)</sup>				

(1) LPCT: low-power current transducer complying with standard IEC 60044-8.  
 (2) Control matrix for simple assignment of information from the protection, control and monitoring functions.  
 (3) Logipam ladder language (PC programming environment) to make full use of Sepam series 80 functions.  
 (4) Standard lithium battery 1/2 AA format 3.6 V front face exchangeable.

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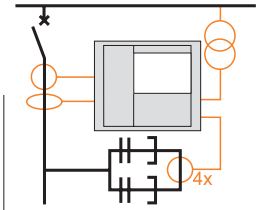
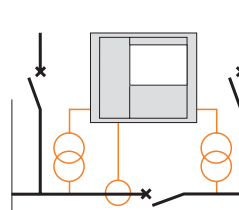
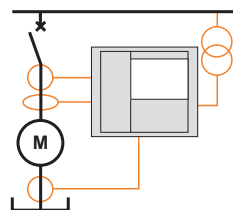
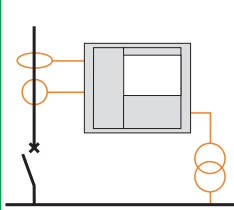

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Protections								
Current		■	■	■	■	■	■	■
Voltage		■	■	■	■	■	■	■
Frequency		■	■	■	■	■	■	■
Specifics			directional earth fault	directional earth fault and phase overcurrent	directional earth fault		directional earth fault	directional earth fault and phase overcurrent
Applications								
<b>Substation</b> P. 18		S40	S41	S42	S43	S44	S60	S62
		S50 <sup>(6)</sup>	S51 <sup>(6)</sup>	S52 <sup>(6)</sup>	S53 <sup>(6)</sup>	S54 <sup>(6)</sup>		
<b>Busbar</b> P. 20								
<b>Transformer</b> P. 22		T40		T42			T60	T62
		T50 <sup>(6)</sup>		T52 <sup>(6)</sup>				
<b>Motor</b> P. 28		M40	M41				M61	
<b>Generator</b> P. 32		G40					G60	G62
<b>Capacitor</b> P. 36							C60	
Characteristics								
Logic inputs/ outputs	Inputs	0 to 10					0 to 28	
	Outputs	4 to 8					4 to 16	
Temperature sensors		0 to 16					0 to 16	
Channel	Current	3I + Io					3I + Io	
	Voltage	3V, 2U + Vo					3V, 2U + Vo or Vnt	
	LPCT <sup>(1)</sup>	Yes					Yes	
Communication ports		1 to 2					1 to 2	
IEC61850 Protocol		Yes					Yes	
	Redudancy	Yes					Yes	
	Goose message	Yes					Yes	
Control	Matrix <sup>(2)</sup>	Yes					Yes	
	Logic equation editor	Yes					Yes	
	Logipam <sup>(3)</sup>	Yes					Yes	
Other	Backup	48 hours					Lithium battery <sup>(4)</sup>	
	Front Memory cartridge with settings						Standard cartridge	

(1) LPCT: low-power current transducer complying with standard IEC 60044-8.  
 (2) Control matrix for simple assignment of information from the protection, control and monitoring functions.  
 (3) Logipam ladder language (PC programming environment) to make full use of Sepam series 80 functions.  
 (4) Standard lithium battery 1/2 AA format 3.6 V front face exchangeable.

## series 80



■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
	directional earth fault	directional earth fault and phase overcurrent	disconnection by rate of change of frequency	transformer & transformer-machine unit differential	machine differential	voltage and frequency protection for 2 sets of busbars	capacitor-bank unbalance
S80	S81	S82	S84				
B80						B83	
	T81	T82		T87			
	M81			M88	M87		
		G82		G88	G87		
							C86
0 to 42	5 to 23	0 to 16	3I + 2 x I <sub>o</sub> 3V + V <sub>o</sub> Yes	2 to 4	Yes	Yes	Yes
0 to 42	5 to 23	0 to 16	2 x 3I + 2 x I <sub>o</sub> 3V + V <sub>o</sub> Yes	2 to 4	Yes	Yes	Yes
0 to 42	5 to 23	0 to 16	3I + I <sub>o</sub> 2 x 3V + 2 x V <sub>o</sub> Yes	2 to 4	Yes	Yes	Yes
0 to 42	5 to 23	0 to 16	2 x 3I + 2 x I <sub>o</sub> 3V + V <sub>o</sub> Yes	2 to 4	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lithium battery <sup>(4)</sup> Standard or extended cartridge	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.	Lithium battery <sup>(4)</sup> Standard or extended cart.

(5) S5X applications are identical to S4X applications with the following additional functions:

- earth fault and phase overcurrent cold load pick-up,
- broken wire detection,
- fault locator.

(6) T5X applications are identical to T4X applications with the following additional functions:

- earth fault and phase overcurrent cold load pick-up
- broken wire detection.