SCHWEITZER ENGINEERING LABORATORIES, INC.

SEL-451-4

Bay Control, Automation, and Prot											Nea	sure	eme	nt,	8 0	utpu	uts,	7 Ir	put	s,	
ACSELERATOR [®] QuickSet SEL-5030					-	onfig	jura	bie i	Lab	eis		1	1	1							v
Part Number:	0	4	5	1	4																Χ
Firmware																					
Standard Bay Control					4																
Power Supply																					
24/48 Vdc						2															
48/125 Vdc or 120 Vac						4															
125/250 Vdc or 120/240 Vac						6															
Connector Type																					
Screw Terminal Block							1														
Connectorized [®] Relay (specify wiring harness SEL-WA04210 using order form WI-2262)*							2														
Secondary Inputs																					
300V Phase - Neutral Maximum (Wye), 1 Amp Phase								1													
300V Phase - Neutral Maximum (Wye), 5 Amp Phase								5													
300V Phase - Neutral Maximum (Wye), 1 Amp Phase with High Impedance Fault Detection*								D													
300V Phase - Neutral Maximum (Wye), 5 Amp Phase with High Impedance Fault Detection*								E													
Serial Communications Proto	ocol	s																			
SEL ASCII, Compressed ASCII, and Settings File Transfer, SEL Fast Meter with Configuration, Fast																					
Operate, Fast SER, Phasor Measurement, and Enhanced MIRRORED BITS [®] Communications									1												
DNP3 Level 2 Slave Plus Dial-Out				1					2												
and Virtual Terminal (Includes all protocols listed above)*									2												
Ethernet Communications Pr	oto	col	S																		
None										Х	Х										
FTP, Telnet, Synchrophasors, and IEC 61850*										Α											
FTP, Telnet, Synchrophasors, and DNP3 LAN/WAN*										В											
FTP, Telnet, Synchrophasors, DNP3 LAN/WAN, and IEC 61850*										С											
Ethernet Connection Options	5																				
None										Х	Х										
Ethernet Card with Two 10/100BASE-T Connectors*											0										
Ethernet Card with Two 100BASE-FX Connectors*											2										
Ethernet Card with One 10/100BASE-T, One 100BASE-FX Connector*											4										

Mainboard I/O Configuration

Standard with 3 High-Current											
Interrupting Outputs, 2 Standard											
Form A Outputs, 3 Standard Form C						В					
Outputs, and 7 Optoisolated Level-											
Sensitive Inputs											

Mainboard Input Voltage 24 Vdc В 1 48 Vdc В 2 110 Vdc В 3 125 Vdc В 4 220 Vdc В 5 250 Vdc В 6 Mounting Horizontal Rack Mount Н 3 Horizontal Panel Mount V Vertical Rack Mount Vertical Panel Mount 4 Chassis 3U, Standard I/O 1 Х Х ХХ 2 XX 4U, Up to One Additional I/O Board 4U, Front Panel with 24 Target LEDs, 12 Operator Control 3 Х Х Pushbuttons, and Tri-Color LEDs* 5U, Up to Two Additional I/O Boards 6 5U, Front Panel with 24 Target LEDs, 12 Operator Control 7 Pushbuttons, and Tri-Color LEDs* I/O Board Position B For 4U or 5U Chassis Empty I/O Board Position 0 Х 8 Independent Inputs, 13 Standard Form A, 2 Standard 1 Х Form C Outputs* 8 Optoisolated Independent Level-Sensitive Inputs

13 Standard Form A, 2 Standard Form C Outputs*							2			
24 Optoisolated Level-Sensitive Inputs, 8 Outputs ⁽²⁾ *							4			
8 Independent Inputs, 8 High-Speed High-Current Interrupting Form A Outputs*							5	Х		
8 Independent Inputs, 13 High-Current Interrupting Form A, 2 Standard Form C Outputs*							6	Х		
8 Optoisolated Independent Level- Sensitive Inputs, 13 High-Current Interrupting Form A, 2 Standard Form C Outputs*							7			
8 Optoisolated Independent Level- Sensitive Inputs, 8 High-Speed High-Current Interrupting Form A Outputs*							8			
Auxiliary Trip/Close Pushbuttons, 24 Optoisolated Independent Level-						3	Α			

Sensitive Inputs, 4 High-Current		
Interrupting Form A Outputs*		

Auxiliary Trip/Close Pushbuttons, 24 Optoisolated Independent Level- Sensitive Inputs, 4 High-Current Interrupting Form A Outputs*							7	A		
Auxiliary Trip/Close Pushbuttons with Guards, 24 Optoisolated Independent Level-Sensitive Inputs, 4 High-Current Interrupting Form A Outputs ⁽³⁾ *							3	В		
Auxiliary Trip/Close Pushbuttons with Guards, 24 Optoisolated Independent Level-Sensitive Inputs, 4 High-Current Interrupting Form A Outputs ⁽³⁾ *							7	В		

I/O Board Position B Input Voltage

User-Settable Pickup Voltage Level (Available only on I/O Board Options 1, 5, and 6)							Х		
24 Vdc							1		
48 Vdc							2		
110 Vdc							3		
125 Vdc							4		
220 Vdc							5		
250 Vdc							6		

I/O Board Position C For 5U Chassis Only

Empty I/O Board Position									0	Х	
8 Independent Inputs, 13 Standard Form A, 2 Standard Form C Outputs*									1	Х	
8 Optoisolated Independent Level- Sensitive Inputs, 13 Standard Form A, 2 Standard Form C Outputs*									2		
24 Optoisolated Level-Sensitive Inputs, 8 Outputs ⁽²⁾ *									4		
8 Independent Inputs, 8 High-Speed High-Current Interrupting Form A Outputs*									5	Х	
8 Independent Inputs, 13 High-Current Interrupting Form A, 2 Standard Form C Outputs*									6	Х	
8 Optoisolated Independent Level- Sensitive Inputs, 13 High-Current Interrupting Form A, 2 Standard Form C Outputs*									7		
8 Optoisolated Independent Level- Sensitive Inputs, 8 High-Speed High-Current Interrupting Form A Outputs*									8		

I/O Board Position C Input Voltage

User-Settable Pickup Voltage Level (Available only on I/O Board Options 1, 5, and 6)								Χ	
24 Vdc								1	
48 Vdc								2	
110 Vdc								3	
125 Vdc									

										4		
220 Vdc										5		
250 Vdc										6		
Conformal Coat												
None											Х	
Conformal Coated Circuit Boards*											2	
Accessories	, 1 (marked)											
Wiring Harpoos for SEL 421 and			 1									

Wiring Harness for SEL-421 and WA0421 SEL-451 Relays

* Additional Cost

⁽¹⁾ Download acSELerator QuickSet SEL-5030 software for free at www.selinc.com/software.htm. acSELerator QuickSet on CD (503001WX4) is available upon request.

(2) 18 Common Inputs, 6 Independent Inputs, 6 High-Speed High-Current Interrupting Form A Outputs, 2 Standard Form A Outputs. ⁽³⁾ The guards help prevent inadvertent operation of the auxiliary Trip/Close pushbuttons. These guards may be ordered separately in a kit (part number 9252001).

Note: The SEL-451 comes standard with a CD manual. A printed instruction manual is available upon request.

Making Electric Power Safer, More Reliable, and More Economical ®

SEL SCHWEITZER ENGINEERING LABORATORIES, INC.

2350 NE Hopkins Court - Pullman, WA 99163 USA Phone: +1.509.332.1890 - Fax: +1.509.332.7990