

SEL-2431

Single-Phase Voltage Regulator Control, Two 120 Vac Voltage Inputs, Eight Contact Inputs (Two 120 Vac Programmable, Four 12 Vdc Self-Whetted Programmable, and Two Dedicated), Seven Contact Outputs (Four Programmable and Three Dedicated), Front Panel EIA-232 Port, Standard with acSELERATOR QuickSet® SEL-5030 Software⁽¹⁾

Part Number:

2 4 3 1 0 1 1 X 1 X X

Firmware

Standard - Voltage Regulator Control with Forward/Reverse Operating Modes, Line Drop Compensation, SELoGic Programming, Metering, Event Reporting, SER, Load Profiling, Synchrophasors, and Load Sense Technology

0

USB Interface

None

0

Type A USB Flash Drive Interface

1

Power Supply

Standard - 120 Vac, 50/60 Hz

1

Manual Raise/Lower Operators

Pushbutton Raise/Lower Operators⁽²⁾

1

Toggle Switch Raise/Lower Operators

2

Communications Port (Port 1)

None

X

EIA-232⁽³⁾

1

EIA-485 (4-wire)⁽³⁾

2

Fiber Optic, 200µm, Multimode, VPIN Style Connector⁽³⁾⁽⁴⁾

3

Fiber Optic, 62.5µm, Multimode, ST Style Connector⁽³⁾⁽⁴⁾

4

EIA-485 (2-wire)⁽⁵⁾

5

Communications Port (Port 2)

None (Future Serial Compatible)

X

None (Future Ethernet Compatible)

0

EIA-232^{(3)*}

1

EIA-485 (4-wire)^{(3)*}

2

Fiber Optic, 200µm, Multimode, VPIN Style Connector^{(3)(4)*}

3

Fiber Optic, 62.5µm, Multimode, ST Style Connector^{(3)(4)*}

4

EIA-485 (2-wire)^{(5)*}

5

Two 100BASE-FX Multimode Fiber^{(6)*}

6

Two 10/100BASE-T Copper^{(7)*}

7

One 10/100BASE-T Copper ⁽⁷⁾ , One 100BASE-FX Multimode Fiber ^{(6)*}																		8																
Two 100BASE-LX Single-Mode Fiber ^{(6)*}																			9															
One 10/100BASE-T Copper ⁽⁷⁾ , One 100BASE-LX Single-Mode Fiber ^{(6)*}																			A															

Conformal Coat

None																					X														
Conformally Coated Circuit Boards*																							2												

Retrofit Kits (Wiring Harness and Mounting Hardware)⁽⁸⁾

None																							X	X										
Siemens/Allis-Chalmers: 10-Position Polarized Disconnect Switch (PDS) Interface ^{(9)*}																							1	0										
Howard Industries: 10-Position Connector Terminal Strip (CTS) Interface ^{(9)*}																							2	0										
Cooper/McGraw-Edison: 18/10-Position Fanning Strip (Traditional) Interface ^{(9)*}																							3	0										
Cooper: 20-Position Connector (Dead-Front) Interface ^{(9)*}																							3	1										
Cooper: 20-Position Connector (Dead-Front) with Extended Harness Interface ^{(9)*}																							3	2										
GE: Fork-Terminal Connection (Traditional Interface to Cabinet NN Terminals) ^{(9)*}																							4	0										
GE: 24-Position Connector (Power Disconnect Interface) ^{(9)*}																							4	1										
Generic Fork Terminals for Siemens/Allis-Chalmers/Howard/GE (Does not Include Mounting Hardware) ^{(10)*}																							0	1										
Generic Fork Terminals for Cooper/McGraw-Edison (Does not Include Mounting Hardware) ^{(10)*}																							0	2										

Packaged Accessories

None																									X	X								
SEL-2401 Satellite-Synchronized Clock Accessory ^{(11)*}																									1	1								
SEL-2431 Surge-Suppression Accessory*																									1	2								
Industrial Temperature-Rated USB Flash Drive, 2 GB*																	1									3	0							

Accessories

Retrofit Kits (Wiring Harness and Mounting Hardware)	
Siemens/Allis-Chalmers: 10-Position Polarized Disconnect Switch (PDS) Interface Kit ^{(9)*}	9 2 5 3 0 0 2
Howard Industries: 10-Position Connector Terminal Strip (CTS) Interface Kit ^{(9)*}	9 2 5 3 0 0 3

	Cooper/McGraw-Edison; 18/10-Position Fanning Strip (Traditional Interface Kit) ^{(9)*}	9 2 5 3 0 0 4
	Cooper: 20-Position Connector (Dead-Front) Interface Kit ^{(9)*}	9 2 5 3 0 0 5
	Cooper Interface Kit for SEL-2431 (20-Position, Dead Front, 10-inch Extended Harness Interface)*	9 2 5 3 0 0 8
	GE: Fork-Terminal Connection (Traditional Interface to Cabinet NN Terminals) Kit ^{(9)*}	9 2 5 3 0 0 6
	GE: 24-Position Connector (Power Disconnect Interface) Kit ^{(9)*}	9 2 5 3 0 0 7
	Generic Fork Terminals for Siemens/Allis-Chalmers/Howard/GE (Does not Include Mounting Hardware) ^{(10)*}	9 2 5 3 0 0 1
	Generic Fork Terminals for Cooper/McGraw-Edison (Does not Include Mounting Hardware) ^{(10)*}	9 2 5 3 0 5 5
Mounting Hardware Kits		
	Siemens/Allis-Chalmers Mounting Hardware Kit*	9 2 5 3 0 5 9
	Howard Mounting Hardware Kit*	9 2 5 3 0 6 0
	Cooper/McGraw-Edison Mounting Hardware Kit*	9 2 5 3 0 5 8
	GE Mounting Hardware Kit*	9 2 5 3 0 5 7
Other Accessories		
	SEL-2401 Satellite-Synchronized Clock Accessory Kit ^{(11)*}	9 2 5 3 0 5 1
	Replacement Fuse Kit	9 2 5 3 0 5 2
	SEL-2431 Configurable Labels Kit*	9 2 6 0 0 3 4
	Industrial Temperature-Rated USB Flash Drive, 2 GB*	9 2 5 3 0 6 2

	SEL-2431 Surge-Suppression Accessory	9 1 5 9 0 0 4 5 5
Communications		
	EIA-232 Communications Card Kit ^{(3)*}	9 2 5 3 0 4 0
	EIA-232 Communications Card Kit with Conformal Coating ^{(3)*}	9 2 5 3 0 4 0 C
	EIA-485 (4-wire) Communications Card Kit ^{(3)*}	9 2 5 3 0 4 1
	EIA-485 (4-wire) Communications Card Kit with Conformal Coating ^{(3)*}	9 2 5 3 0 4 1 C
	Fiber-Optic, 200µm, Multimode, VPIN Communications Card Kit ^{(3)*}	9 2 5 3 0 4 2
	Fiber-Optic, 200µm, Multimode, VPIN Communications Card Kit with Conformal Coating ^{(3)*}	9 2 5 3 0 4 2 C
	Fiber-Optic, 62.5µm, Multimode, ST Communications Card Kit ^{(3)*}	9 2 5 3 0 4 3
	Fiber-Optic, 62.5µm, Multimode, ST Communications Card Kit with Conformal Coating ^{(3)*}	9 2 5 3 0 4 3 C
	EIA-485 (2-wire) Communications Card Kit ^{(5)*}	9 2 5 3 0 4 4
	EIA-485 (2-wire) Communications Card Kit with Conformal Coating ^{(5)*}	9 2 5 3 0 4 4 C
	Ethernet Card Kit (Two 10/100BASE-T Copper ^{(7)*})	9 2 5 3 0 6 3
	Ethernet Card Kit (Two 10/100BASE-T Copper ^{(7)*} , Conformal Coat)*	9 2 5 3 0 6 3 C
	Ethernet Card Kit (One 10/100BASE-T Copper ^{(7)*} , One 100BASE-FX Multimode Fiber ^{(6)*})	9 2 5 3 0 6 4

Ethernet Card Kit (One 10/100BASE-T Copper ⁽⁷⁾ , One 100BASE-FX Multimode Fiber ⁽⁶⁾ , Conformal Coat)*	9 2 5 3 0 6 4 C
Ethernet Card Kit (One 10/100BASE-T Copper ⁽⁷⁾ , One 100BASE-LX Single- Mode Fiber ⁽⁶⁾)*	9 2 5 3 0 6 5
Ethernet Card Kit (One 10/100BASE-T Copper ⁽⁷⁾ , One 100BASE-LX Single- Mode Fiber ⁽⁶⁾ , Conformal Coat)*	9 2 5 3 0 6 5 C
Ethernet Card Kit (Two 100BASE-FX Multimode ⁽⁶⁾)*	9 2 5 3 0 6 6
Ethernet Card Kit (Two 100BASE-FX Multimode ⁽⁶⁾ , Conformal Coat)*	9 2 5 3 0 6 6 C
Ethernet Card Kit (Two 100BASE-LX Single-Mode Fiber ⁽⁶⁾)*	9 2 5 3 0 6 7
Ethernet Card Kit (Two 100BASE-LX Single-Mode Fiber ⁽⁶⁾ , Conformal Coat)*	9 2 5 3 0 6 7 C
EIA-485 DB9 to 4- Position Compression Terminal Block Adapter (2-wire 485)*	C 6 7 7
EIA-485 DB9 to 8- Position Compression Terminal Block Adapter (4-wire 485)*	C 6 7 8
Literature	
Printed Instruction Manual ⁽¹²⁾	P M 2 4 3 1 - 0 1

* Additional Cost

(1) Download ACSELERATOR QuickSet SEL-5030 software for free at <https://www.selinc.com/software/solutions/>. ACSELERATOR QuickSet on CD (503001WX4) is available upon request.

(2) Membrane Raise/Lower Pushbuttons do not provide manual operation when control power is lost.

(3) Communication Port includes SEL-ASCII, SEL Compressed ASCII, Fast Meter, Fast Operate, PMU, and DNP3 Level 2 Slave protocols.

(4) The optional VPIN style fiber-optic communication port is compatible with SEL-2800 and SEL-2810 Fiber-Optic Transceiver/Modems. The optional ST style fiber-optic communication port is compatible with the SEL-2812 Fiber-Optic Transceiver/Modem.

(5) Communication Port includes: DNP3 Level 2 Slave protocol.

(6) Fiber Ethernet ports use LC connectors. 100BASE-FX is capable of up to 2 km distance. 100BASE-LX is capable of up to 10 km distance.

(7) Copper Ethernet ports use RJ45 connectors and are capable of up to 100 m distance.

(8) The SEL-2431 supports the following Single Phase Voltage Regulators:

- Siemens/Allis-Chalmers or Howard Type A with both a source and a load side PT.
- Siemens/Allis-Chalmers Type A Single Phase Voltage Regulator with only a source side PT.
- General Electric or Cooper/McGraw Edison Type A.

- Siemens/Allis-Chalmers, General Electric, Howard, or Cooper/McGraw Edison Type B.

(9) Includes mounting hardware (hinges and latch), and all necessary wiring harnesses (including PDS, CTS, Fanning Strip, or other applicable enclosure connector for mating with existing voltage regulator interfaces).

(10) Does not include mounting hardware (hinges and latch). Includes wiring harness only. If mounting hardware is required, select appropriate kit from Accessories.

(11) The SEL-2401 requires an EIA-232 or EIA-485 (4-wire) card in Port 1 for IRIG-B.

(12) The SEL-2431 manual is available for download at selinc.com. One complimentary printed instruction manual is available upon request with each product purchased.

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

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