

SEL-651R-2

Recloser Control With Automatic Network Reconfiguration, Harmonic Analysis, Single-Phase Trip Capability, 6 Voltage Inputs, Power Quality Monitoring, 8 Settings Groups, Template Storage, SEL Fast SER, and DNP3 Level 2 Outstation

Standard with ACSELERATOR QuickSet[®] SEL-5030 Software⁽¹⁾

Part Number:

0	6	5	1	R	2								A									
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Firmware

Standard						2																	
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Control Cable Interface

Traditional Retrofit (14-Pin)						1																	
G&W Viper [®] -ST, G&W Viper-LT, ABB Gridshield, or ABB Elastimold MVR (32-Pin)*						2																	
ABB OVR-3/VR3S (15 and 27 kV only) (24-Pin)*						3																	
G&W Control Power Viper-S or Control-Powered Eaton NOVA (19-Pin)*						4																	
ABB Joslyn TriMod [™] 600R (27-Pin)*						5																	
Eaton NOVA-TS Triple-Single or NOVA-STTS Single-Tank Triple-Single (26-Pin)*						6																	
Siemens SDR Triple-Single (40-Pin)*						8																	
Siemens SDR 3-Phase (40-Pin)*						9																	
SEL Multi-Recloser Interface (42-Pin)*						A																	

Enclosure⁽²⁾

Dual Door (Side Mount), Painted Steel With 3-Point Latches																							A
Dual Door (Side Mount), Painted Type 304 Stainless Steel With 3-Point Latches*																							B
Single Door (Rear Mount), Painted Steel With 3-Point Latches																							C
Single Door (Rear Mount), Painted Type 304 Stainless Steel With 3-Point Latches*																							D

Conformal Coat

None																							X
Conformally Coated Circuit Boards*																							1

Secondary Input Voltage

(6) 300 Vac Max Inputs																							A
(3) 8 Vac Max LEA Inputs ⁽³⁾ and (3) 300 Vac Max Inputs																							B
(3) 8 Vac Max LEA Inputs and (3) 120 Vac, 1M Lindsey SVM I LEA Inputs ⁽³⁾																							C
(3) Eaton Nova LEA Inputs ⁽³⁾ and (3) 300 Vac Max Inputs ⁽⁴⁾																							D

(3) Eaton Nova LEA Inputs and (3) 120 Vac, 1M Lindsey SVMLEA Inputs ⁽³⁾⁽⁴⁾	E									
(3) 300 Vac Max Inputs and (3) 120 Vac, 1M Lindsey SVMLEA Inputs	F									
(6) 8 Vac Max LEA Inputs ⁽³⁾	G									
(3) 300 Vac Max inputs and (3) Siemens SDR LEA Inputs ⁽³⁾⁽⁵⁾	H									
(3) 120 Vac, 1M Lindsey SVMLEA Inputs and (3) Siemens SDR LEA Inputs ⁽³⁾⁽⁵⁾	J									
(6) Siemens SDR LEA Inputs ⁽³⁾⁽⁵⁾	K									

Secondary Input Current

1 A Phase, 0.2 A Neutral	A									
1 A Phase, 0.2 A Neutral With High-Impedance Fault Detection*	G									

Extra Inputs/Outputs

None ⁽⁶⁾	X									
(7) 12 Vdc Inputs/(8) Standard Outputs*	8									
(2) 125 Vdc and (5) 12 Vdc Inputs/(8) Standard Outputs*	A									

Communications Port

3 EIA-232, USB	A									
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Communications Interface

(1) 100BASE-FX, EIA-485*	D									
(2) 10/100BASE-T, EIA-485	E									
(2) 100BASE-FX, EIA-485*	F									

Communications Protocol

Standard	1									
Standard Plus IEC 61850*	2									

Power Supply

120 Vac (Includes GFCI Outlet)	1									
230 Vac	2									
48 Vdc	4	X								
125 Vdc	3	X								

Battery Option

None	X									
12 V, 16 Ahr	1									
12 V, 40 Ahr*	2									

User Interface

Configurable Labels ⁽⁷⁾	2									
Configurable Labels ⁽⁷⁾ and Tri-Colored LEDs*	3									

Installed Accessories⁽⁸⁾

None	X	X								
Accessory Shelf*	1	0								

Voltage Input Fuse Block (Secondary Voltages)*																			1	1			
Universal Fuse Block (Incoming Power)*																				1	2		
AC Transfer Switch ^{(9)*}																				1	3		
100 W Heater ^{(9)*}																				1	4		
SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf ^{(9)*}																				1	6		
SEL-2725 Ethernet Switch (2725D33XX) on Accessory Shelf ^{(9)*}														E						1	7		
SEL-3031 Serial Radio Transceiver (30310W01XXX) on Accessory Shelf ^{(9)*}																				1	8		
Two SEL-2812MR Transceivers (2812MRX0)*																				1	A		
SEL-2925 BLUETOOTH [®] Serial Adapter (29250120X)*																				1	C		
100 W Heater and SEL-2925 BLUETOOTH [®] Serial Adapter (29250120X) ^{(9)*}																				1	E		
SEL-3061 Cellular Router for AT&T, T-Mobile, and Rogers (Canada) Networks (3061#DNCF) on Accessory Shelf ^{(9)(10)*}														E						1	F		
SEL-3061 Cellular Router for Verizon Network (3061#JBCB) on Accessory Shelf ^{(9)(10)*}														E						1	G		
SEL-3060 Ethernet Radio (3060A1W0X1XX1) on Accessory Shelf ^{(9)*}														E						1	H		
SEL-2401 Satellite-Synchronized Clock (24010XXX0) and SEL-3060 Ethernet Radio (3060A1W0X1XX1) on Accessory Shelf ^{(9)*}														E						1	J		
Security Package 1: SEL-3622 Security Gateway (3622XDE00XX1) on Accessory Shelf and Door Switch ^{(9)(11)(12)*}														E						1	M		
2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) ^{(9)*}																			1			2	0
8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22)*																						2	1
4-Position Pin Contact Receptacle for LEA Inputs (MS5015, Size 22) ^{(13)*}																						2	2
3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12)*																						3	0
2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) and 8-Position Pin Contact Receptacle for Voltage Inputs (MS5105, Size 22) ^{(9)*}																			1			A	0

Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Input Power), AC Transfer Switch, 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22), and 8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22)*	1	1	A	1
Accessory Shelf, Universal Fuse Block, and 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) ^{(9)*}	1		A	3
100 W Heater and 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) ^{(9)*}	1		A	4
SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf and 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22)*	1		A	5
Accessory Shelf, Universal Fuse Block (Incoming Power), 100 W Heater, and 3-Position Pin Contact Receptacle for Input Power (MS5015, Size 22) ^{(9)*}	1		A	8
Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Incoming Power), 100 W Heater, SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf, 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22), and 8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22) ^{(9)*}	1		A	9
Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Input Power), AC Transfer Switch, 2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22), 8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22), and Door Switch Wired to IN101*	1	8	1	A A
Accessory Shelf and Door Switch Wired to IN103 ^{(9)(11)*}			A	N
AC Transfer Switch and Two 3-Position Pin Contact Receptacles for Input Power (MS26482, Size 12)*			1	B 0
AC Transfer Switch, Two 3-Position Pin Contact Receptacles for Input Power (MS26482, Size 12), and 8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22)*			1	B 1
Accessory Shelf, Universal Fuse Block (Input Power), and 3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12)*			B	2

Accessory Shelf, Universal Fuse Block (Input Power), 100 W Heater, and 3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) ^{(9)*}													B	3			
Accessory Shelf and 3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12)*													B	4			
Accessory Shelf, Universal Fuse Block (Incoming Power), AC Transfer Switch, and (2) 3-Position Pin Contact Receptacles for Input Power (MS26482, Size 12)*												1		B	6		
Accessory Shelf, Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Incoming Power), AC Transfer Switch, 100 W Heater, and (2) 3-Position Pin Contact Receptacles for Input Power (MS26482, Size 12)*												1		B	7		
100 W Heater and 3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) ^{(9)*}													B	9			
AC Transfer Switch, SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf, and (2) 3-Position Pin Contact Receptacles for Input Power (MS26482, Size 12)*												1		B	A		
8-Position Pin Contact Receptacle for Voltage Inputs (MS26482, Size 12)*													4		C	3	
AC Transfer Switch, 8-Position Pin Contact Receptacle for Voltage Inputs (MS26482, Size 12), and 5-Position Pin Contact Receptacle for AC Input (MS5015, Size 22)*												1		C	4		
3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) and 8-Position Pin Contact Receptacle for Voltage Inputs (MS26482, Size 12)*													4		C	7	
Accessory Shelf and Voltage Input Fuse Block (Secondary Voltages)*													D	2			
100 W Heater and SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf ^{(9)*}													D	3			
Accessory Shelf and 100 W Heater ^{(9)*}													D	4			
Voltage Input Fuse Block (Secondary Voltages), 100 W Heater, and SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf ^{(9)*}													D	5			
Voltage Input Fuse Block (Secondary Voltages) and SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf ^{(9)*}													D	6			
AC Transfer Switch and 100W Heater*												1		D	8		

SEL-2401 Satellite-Synchronized Clock (24010XXX0) and SEL-3031 Serial Radio Transceiver (30310W01XXX) on Accessory Shelf ^{(9)*}	D 9
SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf and 3-Position Pin contact Receptacle for Input Power (MS26482, Size 12) ^{(9)*}	D A
Accessory Shelf and AC Transfer Switch*	1 D C
Accessory Shelf, Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Incoming Power), and 100 W Heater ^{(9)*}	D E
SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf and SEL-2925 BLUETOOTH [®] Serial Adapter (29250120X) ^{(9)*}	D G
3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) and FT-14 Test Switch (FT4A14T08CN4286) ^{(14)*}	F T
Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Incoming Power), 100 W Heater, and SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf ^{(9)*}	G 5
Accessory Shelf, 100 W Heater, and Door Switch Wired to IN104 ^{(9)(11)*}	L 1
SEL-FR12 Fault Receiver (FR12-0001) on Accessory Shelf ^{(9)(14)*}	L 3
Accessory Shelf, 100 W Heater, AC Transfer Switch and 8-Position Pin Contact Receptacle for Input Power (MS5015 Size 22)*	2 1 M 7

Bundled Accessories (Shipped in box with SEL-651R but not installed in enclosure)

None	X X
Security Sleeve (2" Diameter)*	0 1
Two Security Sleeves (2" Diameter)*	0 2
Three Security Sleeves (2" Diameter)*	0 3
Four Security Sleeves (2" Diameter)*	0 4
Five Security Sleeves (2" Diameter)*	0 5
SEL-C553 40' Control Cable (32-Socket MS26482 to 32-Socket MS26482) and SEL-C533 40' Incoming Power Cable (3-Socket MS26482 to Ring Terminals)*	2 A 2
Security Strap*	0 6
Security Strap and (1) Security Sleeve*	0 7
Security Strap and (2) Security Sleeves*	0 8

Security Strap and (3) Security Sleeves*																			0	9	
Security Strap and (4) Security Sleeves*																				1	0

Accessories (Shipped Separately)

Security Sleeve (2" Diameter)*	9	2	5	0	0	1	1
Security Strap for 42-Pin SEL Multi-Recloser Interface and 32-Pin Tavrada OSM Control Cables*	9	2	5	0	8	2	7
Security Strap for 24-Pin ABB Control Cables*	9	2	5	0	8	2	8
Security Strap for 40-Pin Siemens SDR Control Cables*	9	2	5	0	8	2	9
Accessory Shelf (For Dual-Door Enclosure)*	9	2	5	0	5	5	0
Accessory Shelf (For Single-Door Enclosure)*	9	2	5	0	5	6	7
Voltage Input Fuse Block (For Dual-Door Enclosure)*	9	2	5	0	5	5	1
Voltage Input Fuse Block (For Single-Door Enclosure)*	9	2	5	0	5	6	8
Universal Fuse Block (For Dual-Door Enclosure)*	9	2	5	0	5	5	2
Universal Fuse Block (For Single-Door Enclosure)*	9	2	5	0	5	6	9
100 W Heater (For Dual-Door Enclosure)*	9	2	5	0	5	8	5
100 W Heater (For Single-Door Enclosure)*	9	2	5	0	8	3	1
120 Vac Transfer Switch (For Dual-Door Enclosure)*	9	2	5	0	5	5	3
120 Vac Transfer Switch (For Single-Door Enclosure)*	9	2	5	0	5	7	0
SEL-2401 Satellite-Synchronized Clock (For Dual-Door Enclosure) With Accessory Shelf*	9	2	5	0	5	9	3
SEL-2401 Satellite-Synchronized Clock (For Single-Door Enclosure) With Accessory Shelf*	9	2	5	0	5	9	5
2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) for Dual-Door Cabinet*	9	2	5	0	5	5	4
2-Position Socket Contact Receptacle for Low-Voltage Close (MS5015, Size 22) for Single-Door Cabinet*	9	2	5	0	5	7	1
8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22) for Dual-Door Cabinet*	9	2	5	0	5	5	5
8-Position Pin Contact Receptacle for Voltage Inputs (MS5015, Size 22) for Single-Door Cabinet*	9	2	5	0	5	7	2
3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) for Dual-Door Cabinet*	9	2	5	0	5	5	6
3-Position Pin Contact Receptacle for Input Power (MS26482, Size 12) for Single-Door Cabinet*	9	2	5	0	5	8	0
4-Position Pin Contact Receptacle for LEA Inputs (MS5015, Size 22) for Single-Door Cabinet*	9	2	5	0	6	9	1
4-Position Pin Contact Receptacle for LEA Inputs (MS5015, Size 22) for Dual-Door Cabinet*	9	2	5	0	6	9	2

8-Position Pin Contact Receptacle for Voltage Inputs (MS26482, Size 12) for Dual-Door Cabinet*	9 2 5 0 5 5 7
8-Position Pin Contact Receptacle for Voltage Inputs (MS26482, Size 12) for Single-Door Cabinet*	9 2 5 0 5 8 1
16 Ahr Replacement Battery Kit*	9 1 5 9 0 0 2 0 0
40 Ahr Replacement Battery Kit*	9 1 5 9 0 0 1 9 9
SEL-C510 Control Cable (14-Socket MS5015 to 14-Pin MS5015) for Recloser*	C 5 1 0
SEL-C520 Control Cable (14-Socket MS5015 to 14-Pin MS5015) with Overmolding for Recloser*	C 5 2 0
SEL-C524 Control Cable (32-Socket MS26482 to 32-Pin MS26482) for Recloser*	C 5 2 4
SEL-C553 Control Cable (32-Socket MS26482 to 32-Socket MS26482) for Recloser*	C 5 5 3
SEL-C550 Control Cable (42-Socket Rectangular to 32-Socket MS26482) for Recloser*	C 5 5 0
SEL-C551 Control Cable (42-Socket Rectangular to 32-Pin MS26482) for Recloser*	C 5 5 1
SEL-C552 Control Cable (42-Socket Rectangular to 32-Pin MS26482) for Control Cable Extension*	C 5 5 2
SEL-C515 Low-Voltage Close Cable (2-Pin MS5015 to 2-Socket MS5015) for Recloser*	C 5 1 5
SEL-C517 Voltage Input Cable (8-Socket MS5015 to 8-Pin MS5015) for Recloser*	C 5 1 7
SEL-C5469 Quick Disconnect Battery Cable for Recloser Control*	C 5 4 6 9

* Additional Cost

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

(2) The Dual Door (side mount) enclosure dimensions are 24.5" W x 30" H x 16.6" D (11,200 in³). The Single Door (rear mount) enclosure dimensions are 17" W x 32.5" H x 14" D (7,700 in³). The SEL-651R enclosure includes doorstop(s), document holder, and padlockable handle(s).

(3) Refer to Low Energy Analog (LEA) voltage inputs in the installation section of the SEL-651R Instruction Manual for details.

(4) Only Available with Control Cable Interface Options 1, 4, or 6.

(5) Only Available with Control Cable Interface Options 8 or 9.

(6) Not Available with Control Cable Interface Options 3 or A.

(7) For model numbers specifying "Configurable Labels," a configuration kit (9260011 or 9260021) is provided (packaged in the shipping box).

(8) Installed Accessories are mounted and wired inside the SEL-651R enclosure. The compatibility of selected accessory combinations must be verified using the SEL online product configurator (website).

(9) Available on AC Input Powered units only.

(10) The SEL-651R cabinet solution including the pre-installed SEL-3061 is rated for -40° to +50°C. The SEL-3061 accessory includes two floor mounted N-type antenna surge arresters. It is pre-wired to both a Serial and an Ethernet port on the SEL-651R. External antennas and cables must be ordered separately. Refer to the SEL-3061 web page for cable and antenna options.

(11) Requires Extra I/O options 8 or A.

(12) Door switch is wired to SEL-3622 and SEL-651R IN104.

(13) Only Available with Control Cable Interface Options 1 or 4.

(14) Only Available with CCI Options 2 and A. Only Available with Enclosure options C and D. Only Available with SIV options B and G.

(15) The SEL-FR12 accessory includes a floor-mounted N-type antenna surge arrester. SEL-FT50 Fault Transmitters, an external antenna, and cable must be ordered separately. Refer to the SEL-FR12 web page for cable and antenna options.

Note: The SEL-651R comes standard with a CD manual. 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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