

## SEL-2414 Transformer Monitor

### SEL-2414 Base Unit

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| <ul style="list-style-type: none"> <li>• Vertical Chassis</li> <li>• Front Panel                             <ul style="list-style-type: none"> <li>◦ Large LCD Display</li> <li>◦ 4 Programmable Pushbuttons w/LEDs</li> <li>◦ 7 Programmable LEDs</li> <li>◦ Operator Control Interface</li> <li>◦ EIA-232 Port</li> </ul> </li> <li>• Processor and Communications Board                             <ul style="list-style-type: none"> <li>◦ EIA-232 Port</li> <li>◦ IRIG-B Time Code Input</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Power Supply Card with 2 DI, 3 DO</li> <li>• ACSELERATOR QuickSet SEL-5030 Software</li> <li>• User Configurable Labels</li> <li>• Instruction Manual CD (printed manual available)</li> <li>• Protocols                             <ul style="list-style-type: none"> <li>◦ Modbus RTU</li> <li>◦ SEL ASCII and Compressed ASCII</li> <li>◦ SEL Fast Meter, Fast Operate</li> <li>◦ Ymodem File Transfer</li> <li>◦ SEL MIRRORRED BITS</li> </ul> </li> </ul> |
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Part Number:

<b>2</b>	<b>4</b>	<b>1</b>	<b>4</b>											
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#### Chassis

Vertical Panel Mount				2										
Vertical Surface Mount*				3										

#### Slot A Power Supply Voltage | Slot A Digital Input Voltage

125-250 Vdc (120-240 Vac)   24 Vdc/Vac				1	B
125-250 Vdc (120-240 Vac)   48 Vdc/Vac				1	C
125-250 Vdc (120-240 Vac)   110 Vdc/Vac				1	D
125-250 Vdc (120-240 Vac)   125 Vdc/Vac				1	A
125-250 Vdc (120-240 Vac)   220 Vdc/Vac				1	G
125-250 Vdc (120-240 Vac)   250 Vdc/Vac				1	H
24-48 Vdc   24 Vdc/Vac				2	B
24-48 Vdc   48 Vdc/Vac				2	C
24-48 Vdc   110 Vdc/Vac				2	D
24-48 Vdc   125 Vdc/Vac				2	A
24-48 Vdc   220 Vdc/Vac				2	G
24-48 Vdc   250 Vdc/Vac				2	H

#### Slot C Card Selection

Empty				0	X
Serial Communications (EIA-232/485)*				A	0
4 DI (24 Vdc/Vac) / 4 DO (Standard)*				1	B
4 DI (48 Vdc/Vac) / 4 DO (Standard)*				1	C
4 DI (110 Vdc/Vac) / 4 DO (Standard)*				1	D
4 DI (125 Vdc/Vac) / 4 DO (Standard)*				1	A
4 DI (220 Vdc/Vac) / 4 DO (Standard)*				1	G
4 DI (250 Vdc/Vac) / 4 DO (Standard)*				1	H
4 DI (24 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*				B	B
4 DI (48 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*				B	C
4 DI (110 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*				B	D

4 DI (125 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*									B	A								
4 DI (220 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*									B	G								
4 DI (250 Vdc/Vac) / 4 DO (Fast High Current Interrupting)*									B	H								
4 DI (24 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	B								
4 DI (48 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	C								
4 DI (110 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	D								
4 DI (125 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	A								
4 DI (220 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	G								
4 DI (250 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	H								
8 DO (Standard Form A)*									2	X								
8 DO (Standard Form B)*									2	A								
8 DO (Standard 6 Form A and 2 Form B)*									2	B								
8 DO (Standard 2 Form A and 6 Form B)*									2	C								
8 DI (24 Vdc/Vac)*									3	B								
8 DI (48 Vdc/Vac)*									3	C								
8 DI (110 Vdc/Vac)*									3	D								
8 DI (125 Vdc/Vac)*									3	A								
8 DI (220 Vdc/Vac)*									3	G								
8 DI (250 Vdc/Vac)*									3	H								
14 DI (24 Vdc/Vac)*									D	B								
14 DI (48 Vdc/Vac)*									D	C								
14 DI (110 Vdc/Vac)*									D	D								
14 DI (125 Vdc/Vac)*									D	A								
14 DI (220 Vdc/Vac)*									D	G								
14 DI (250 Vdc/Vac)*									D	H								
8 AI ( $\pm 20$ mA or $\pm 10$ V Selectable)*									5	X								
8 AI (4 Inputs $\pm 20$ mA or $\pm 10$ V Selectable and 4 Inputs $\pm 300$ V Only)*									5	2								
4 AI / 4 AO ( $\pm 20$ mA or $\pm 10$ V Selectable) *									6	X								

### Slot D Card Selection

Empty									0	X								
10 RTD/TC*									9	1								
10 RTD*									9	X								
4 DI (24 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	B								
4 DI (48 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	C								
4 DI (110 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	D								
4 DI (125 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	A								
4 DI (220 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	G								
4 DI (250 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*									C	H								

8 DO (Standard Form A)*																			2	X								
8 DO (Standard Form B)*																			2	A								
8 DO (Standard 6 Form A and 2 Form B)*																			2	B								
8 DO (Standard 2 Form A and 6 Form B)*																			2	C								
8 DI (24 Vdc/Vac)*																			3	B								
8 DI (48 Vdc/Vac)*																			3	C								
8 DI (110 Vdc/Vac)*																			3	D								
8 DI (125 Vdc/Vac)*																			3	A								
8 DI (220 Vdc/Vac)*																			3	G								
8 DI (250 Vdc/Vac)*																			3	H								
14 DI (24 Vdc/Vac)*																			D	B								
14 DI (48 Vdc/Vac)*																			D	C								
14 DI (110 Vdc/Vac)*																			D	D								
14 DI (125 Vdc/Vac)*																			D	A								
14 DI (220 Vdc/Vac)*																			D	G								
14 DI (250 Vdc/Vac)*																			D	H								

**Slot E Card Selection**

Empty																			0	X								
3 AVI (300 Vac Max)*																			7	1								
3 ACI / 3 AVI (300 Vac Max, 5 A Phase)*																			7	4								
4 DI (24 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	B								
4 DI (48 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	C								
4 DI (110 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	D								
4 DI (125 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	A								
4 DI (220 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	G								
4 DI (250 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																			C	H								
8 DO (Standard Form A)*																			2	X								
8 DO (Standard Form B)*																			2	A								
8 DO (Standard 6 Form A and 2 Form B)*																			2	B								
8 DO (Standard 2 Form A and 6 Form B)*																			2	C								
8 DI (24 Vdc/Vac)*																			3	B								
8 DI (48 Vdc/Vac)*																			3	C								
8 DI (110 Vdc/Vac)*																			3	D								
8 DI (125 Vdc/Vac)*																			3	A								
8 DI (220 Vdc/Vac)*																			3	G								
8 DI (250 Vdc/Vac)*																			3	H								
14 DI (24 Vdc/Vac)*																			D	B								
14 DI (48 Vdc/Vac)*																			D	C								
14 DI (110 Vdc/Vac)*																			D	D								
14 DI (125 Vdc/Vac)*																			D	A								
14 DI (220 Vdc/Vac)*																			D	G								

14 DI (250 Vdc/Vac)*																	D	H											
8 AI (±20 mA or ±10 V Selectable)*																	5	X											
8 AI (4 Inputs ±20 mA or ±10 V Selectable and 4 Inputs ±300 V Only)*																5	2												
4 AI / 4 AO (±20 mA or ±10 V Selectable) *																6	X												

**Slot Z Card Selection**

Empty																	0	X											
4 ACI (1 A Phase, 1 A Neutral)*																	8	1											
4 ACI (1 A Phase, 5 A Neutral)*																	8	2											
4 ACI (5 A Phase, 5 A Neutral)*																	8	5											
4 ACI (5 A Phase, 1 A Neutral)*																	8	6											
4 DI (24 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	B											
4 DI (48 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	C											
4 DI (110 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	D											
4 DI (125 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	A											
4 DI (220 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	G											
4 DI (250 Vdc/Vac) / 3 DO (Standard 2 Form C and 1 Form B)*																	C	H											
8 DO (Standard Form A)*																	2	X											
8 DO (Standard Form B)*																	2	A											
8 DO (Standard 6 Form A and 2 Form B)*																	2	B											
8 DO (Standard 2 Form A and 6 Form B)*																	2	C											
8 DI (24 Vdc/Vac)*																	3	B											
8 DI (48 Vdc/Vac)*																	3	C											
8 DI (110 Vdc/Vac)*																	3	D											
8 DI (125 Vdc/Vac)*																	3	A											
8 DI (220 Vdc/Vac)*																	3	G											
8 DI (250 Vdc/Vac)*																	3	H											
8 AI (±20 mA or ±10 V Selectable)*																	5	X											
8 AI (4 Inputs ±20 mA or ±10 V Selectable and 4 Inputs ±300 V Only)*																	5	2											
4 AI / 4 AO (±20 mA or ±10 V Selectable) *																	6	X											

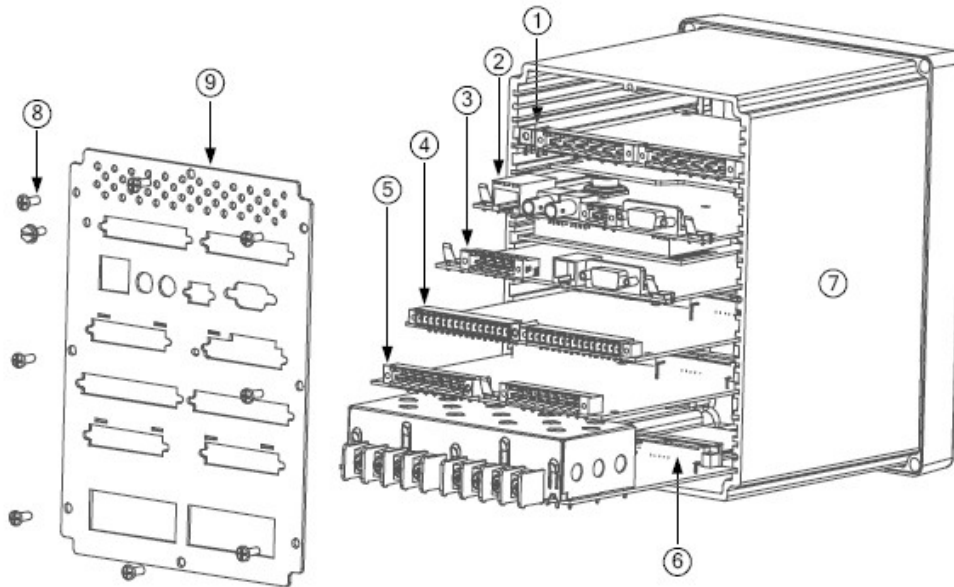
**Slot B Processor Selection**

Standard   EIA-232, IRIG Connector: SEL Protocols, Modbus																	0	0	0										
Standard   EIA-232, IRIG Connector: SEL Protocols, Modbus, DNP3*																	0	0	3										
Fiber-Optic Serial   EIA-232, IRIG Connector: SEL Protocols, Modbus*																	1	0	0										
Fiber-Optic Serial   EIA-232, IRIG Connector: SEL Protocols, Modbus, DNP3*																	1	0	3										
Ethernet   EIA-232, IRIG Connector: Single 10/100BASE-T   SEL Protocols, Modbus*																	0	1	0										
Ethernet   EIA-232, IRIG Connector: Single 10/100BASE-T   SEL Protocols, Modbus, DNP3*																	0	1	3										

Ethernet   EIA-232, IRIG Connector: Single 10/100BASE-T   SEL Protocols, Modbus, DNP3, IEC-61850*	0	1	4
Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus*	0	6	0
Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus, DNP3*	0	6	3
Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus, DNP3, IEC-61850*	0	6	4
Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus*	0	4	0
Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus, DNP3*	0	4	3
Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus, DNP3, IEC-61850*	0	4	4
Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus*	0	8	0
Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus, DNP3*	0	8	3
Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus, DNP3, IEC-61850*	0	8	4
Fiber-Optic Serial With Ethernet   EIA-232, IRIG Connector: Single 10/100BASE-T   SEL Protocols, Modbus*	1	1	0
Fiber-Optic Serial With Ethernet   EIA-232, IRIG Connector: Single 10/100 BASE-T   SEL Protocols, Modbus, DNP3*	1	1	3
Fiber-Optic Serial With Ethernet   EIA-232, IRIG Connector: Single 10/100BASE-T   SEL Protocols, Modbus, DNP3, IEC-61850*	1	1	4
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus*	1	6	0
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus, DNP3*	1	6	3
Fiber-Optic Serial and Ethernet   EIA-232, No IRIG Connector: Dual 10/100BASE-T   SEL Protocols, Modbus, DNP3, IEC-61850*	1	6	4
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus*	1	4	0
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus, DNP3*	1	4	3
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Single 100BASE-FX LC   SEL Protocols, Modbus, DNP3, IEC-61850*	1	4	4
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus*	1	8	0
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus, DNP3*	1	8	3
Fiber-Optic Serial With Ethernet   EIA-232, No IRIG Connector: Dual 100BASE-FX LC   SEL Protocols, Modbus, DNP3, IEC-61850*	1	8	4



## Chassis Card Slot Configuration



- ① SELECT Power Supply Card with I/O (Slot A)
- ② SELECT Processor and Communications Card (Slot B)
- ③ SELECT I/O Expansion Card (Slot C)
- ④ SELECT I/O Expansion Card (Slot D)
- ⑤ SELECT I/O Expansion Card (Slot E)
- ⑥ SELECT I/O Expansion Card (Slot Z)
- ⑦ Device Case
- ⑧ Rear Panel Mounting Screws
- ⑨ Rear Panel

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

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