

Metering Accessories Catalog



Metering accessories for all types of applications and mounting needs

SEL provides a multitude of metering accessories that allow you to easily expand your system's flexibility and integration capabilities. Whether you're just getting started, making field upgrades, connecting your meters with communications cables, reviewing your mounting options, or aiming to turn your metering data into action, SEL's metering accessories make upgrading your system a simple and streamlined process. Take advantage of the benefits SEL metering accessories can provide today.



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On the Cover

Vantage Data Centers is committed to supplying their customers with high-quality, uninterrupted power. They achieve that goal by using the SEL-735 Power Quality and Revenue Meter, a utility-grade meter that provides energy reliability information and accurate power quality measurements. Learn more about Vantage's story at selinc.com/solutions/success-stories/vantage-data.

Getting-Started Kit

Everything you need for the initial installation and commissioning of your SEL-735 Power Quality and Revenue Meter is in one easy-to-use kit.

Kit	Part number
Getting-Started Kit	915900431



Getting-Started Kit Components

Quickly set up your meter using the included connectors, screwdriver, communications cables, configurable templates, installation documentation, and settings configuration documentation.

Kit Components	Part Number
SEL-735 Quick-Start Guide	PM735-03
SEL-735 Configurable Label Instructions	PLS735-02
Metering Accessories Catalog	PF00097
Wiring SEL-700 Series Devices Application Note	LAN2014-08
Flathead Screwdriver for Euro-Style Connectors	240-1104

Connectors (10 each)

Terminal, Blade, Blue, 16–14 AWG	300-0577
Terminal, #6, Ring, 10–12 AWG	300-0777-01
Ferrule, Crimp, 14 AWG	300-0710
Ferrule, Crimp, 16 AWG	300-1232
Ferrule, Crimp, Dual Wire, 16 AWG	300-1233
Ferrule, Crimp, 18 AWG	300-1236

Connectors (6 each)

Combination Jumper Assembly, 4P × 0.400"	300-1235-04
SEL-C662 USB-to-Serial Cable	C662-15
SEL-C497 USB-A to USB-C Serial Cable, 10 Feet	C497
SEL-735 Faceplate Configurable Label Kit	9260073
SEL-735 Color Touchscreen Configurable Label Kit	9260143
120/240 Vac Line Cord (only included with loan and evaluation unit)	C5308

Connector Kits

Order one of the following connector kits, which contain 100 terminals each, if additional materials are required for your application needs.

Terminal Style	Wire Size	Color	Part Number
Ferrule	18 AWG	Red	915900363
Ferrule	16 AWG	Black	915900364
Ferrule	14 AWG	Yellow	915900365
Ferrule (dual)	16 AWG (2)	Black	915900366
Blade	10–12 AWG	Yellow	915900367
Blade	14–16 AWG	Blue	915900368
Blade	18–22 AWG	Red	915900369
#6 Ring	10–12 AWG	Yellow	915900370
#6 Ring	14–16 AWG	Blue	915900371
#6 Ring	18–22 AWG	Red	915900372
Jumper, 4P (100)	–	–	915900241
Jumper Kit for SEL-2533/SEL-700 Series	–	–	915900239

Rear-Panel Connector Kit

Simplify wiring and testing setups with an extra set of rear-panel connectors for your meter. SEL “keys” the connectors for easy and correct positioning.

Rear-Panel Connector Kit	Kit Number
Complete Set of Rear-Panel Connectors	915900014
90-Degree Connector Kit	915900223
Rear Connector Kit for SEL-735 (Barrier Style)	915900532



Kit 915900014



Kit 915900532

Field Upgrades

Enable additional product features by ordering an easy-to-use firmware upgrade tool. These tools provide advanced capabilities as well as ensure that your meter has the most up-to-date features and capabilities.

Upgrade Kits	Kit Number
SEL-734P Advanced Power Quality and Recording	9160*
SEL-734 DNP3 Communications Protocol	9160*
SEL-735 Basic to Intermediate Power Quality and Recording	9160*
SEL-735 IEC 61850 With GOOSE and MMS	9160*
Latest Firmware Version Upgrade Kit (Specify product and serial number when ordering.)	9160*

*Contact your SEL customer service representative for additional ordering information.

Interface Boards

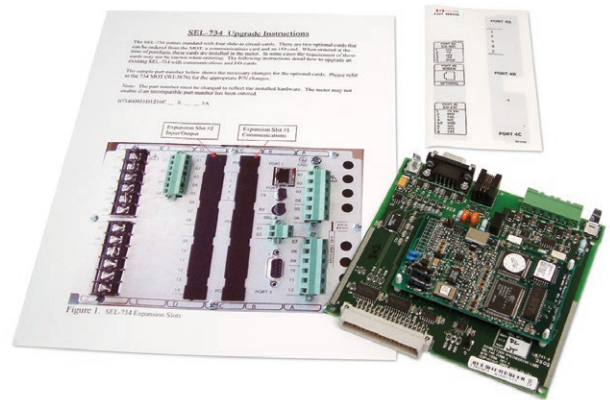
Slot A, Power Supply

125/250 Vdc or Vac Power Supply	Standard Meter Kit Number	Touchscreen Meter Kit Number
With 24 Vdc or Vac Control Input Voltage	9754001	
With 48 Vdc or Vac Control Input Voltage	9754002	
With 110 Vdc or Vac Control Input Voltage	9754003	9754L432
With 125 Vdc or Vac Control Input Voltage	9754004	9754L442
With 220 Vdc or Vac Control Input Voltage	9754005	9754L452
With 250 Vdc or Vac Control Input Voltage	9754006	9754L462

12/24 Vdc Power Supply*	Standard Meter Kit Number
With 12 Vdc Control Input Voltage	9754016
With 24 Vdc or Vac Control Input Voltage	9754017
With 125 Vdc or Vac Control Input Voltage	9754018

*Not available on the touchscreen meter

24/48 Vdc Power Supply	Standard Meter Kit Number	Touchscreen Meter Kit Number
With 24 Vdc or Vac Control Input Voltage	9754007	9754L212
With 48 Vdc or Vac Control Input Voltage	9754008	9754L222
With 110 Vdc or Vac Control Input Voltage	9754009	
With 125 Vdc or Vac Control Input Voltage	9754010	
With 220 Vdc or Vac Control Input Voltage	9754011	
With 250 Vdc or Vac Control Input Voltage	9754012	



Slot C, Communications Board (Expansion Slot 1)

Provide increased integration capabilities by adding an additional communications port. The interface board retrofit kit is complete with instructions and terminal labels.

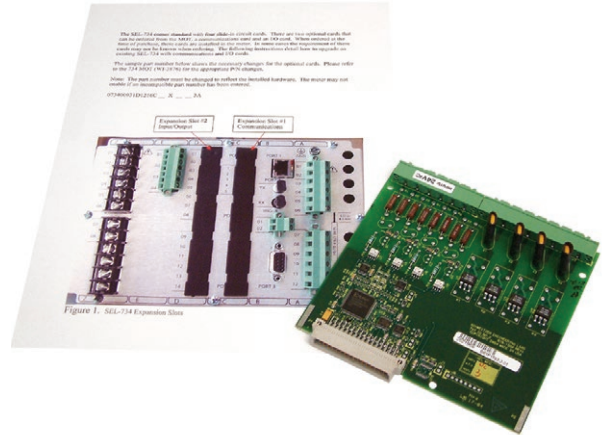
Communications Boards	Kit Number
EIA-232/EIA-485 Port Expansion Board	9751001
Telephone Modem/EIA-232/EIA-485 Port Expansion Board	9751002

Slot D, Analog Output Board (Expansion Slot 2)

Connect to legacy equipment with an analog/solid-state output board. This board includes 4 high-accuracy ± 1 mA analog outputs and 4 solid-state KYZ pulse outputs.

Analog Output	Kit Number
Output Card, 4 AO (± 1 mA)/4 DO	9752013
Output Card, 4 AO (± 20 mA)/4 DO	9752014

Note: Output Card, 4 AO (± 20 mA)/4 DO is compatible with serial numbers 2009315xxx and later.



Slot D, I/O Board (Expansion Slot 2)

Expand the control capabilities or increase the number of KYZ pulse outputs with an additional I/O board that supplies 4 inputs and 4 outputs. Select from either electromechanical or solid-state contact outputs, depending upon the use and duty cycle. KYZ outputs should be solid-state to avoid mechanical wear out of electromechanical contacts. Inputs function with either ac or dc voltage applied.

Electromechanical Outputs (Not for KYZ)	Kit Number
Electromechanical Outputs With 24 Vdc or Vac Inputs	9752001
Electromechanical Outputs With 48 Vdc or Vac Inputs	9752002
Electromechanical Outputs With 110 Vdc or Vac Inputs	9752003
Electromechanical Outputs With 125 Vdc or Vac Inputs	9752004
Electromechanical Outputs With 220 Vdc or Vac Inputs	9752005
Electromechanical Outputs With 250 Vdc or Vac Inputs	9752006

Solid-State Outputs	Kit Number
Solid-State Outputs With 24 Vdc or Vac Inputs	9752007
Solid-State Outputs With 48 Vdc or Vac Inputs	9752008
Solid-State Outputs With 110 Vdc or Vac Inputs	9752009
Solid-State Outputs With 125 Vdc or Vac Inputs	9752010
Solid-State Outputs With 220 Vdc or Vac Inputs	9752011
Solid-State Outputs With 250 Vdc or Vac Inputs	9752012

Communications Accessories

Electrical Cables

Choose SEL high-quality cables. SEL tests each cable for quality, high reliability, and proper operation. Visit selinc.com/SEL-5801 to access the SEL-5801 Cable Selector Program. Use this program to find the right cable for your application. For hardened EIA-232 serial cable options, choose from the cables listed in the table below.

Serial Cables	Cable Length	Part Number*
SEL (DTE) 9-Pin Male "D" DB-9-P to Modem (DCE) 25-Pin Male "D" DB-25-P	1-100 feet	C222R
SEL (DTE) 9-Pin Male "D" DB-9-P to Computer/Terminal/Printer (DTE) 25-Pin Female "D" DB-25-P	1-100 feet	C227R
SEL (DTE) 9-Pin Male "D" DB-9-P to Computer/Terminal/Printer (DTE) 9-Pin Female "D" DB-9-S	1-100 feet	C234R
SEL (DTE) 9-Pin Male "D" DB-9-P to SEL (DTE) 9-Pin Male "D" DB-9-P	1-100 feet	C272R
SEL Communications Processor (DTE) 9-Pin Male "D" DB-9-P to SEL-300/500 With IRIG 9-Pin Male "D" DB-9-P	1-100 feet	C273R
SEL (DTE) 9-Pin Male "D" DB-9-P to EIA-232 9-Pin Female "D" DB-9-S	1-100 feet	C280R
EIA-232 9-Pin Female "D" DB-9-P to EIA-232 9-Pin Female "D" DB-9-S	1-100 feet	C287R
SEL Device EIA-232 9-Pin Male "D" DB-9-P to USB Standard "A" Plug	6 or 15 feet	C662
SEL Device USB A-Type Male to USB C-Type Male	10 feet	C497

*Contact your SEL customer service representative for additional ordering information.



SEL-C662 USB-to-Serial Port Cable

Fiber-Optic Cables

Purchase SEL terminated fiber-optic cables, which are finished and cut to your specifications, or purchase SEL unterminated cables and use simple hand tools to build durable terminations.

Visit selinc.com/fiber-opticcables or contact your SEL customer service representative for more information.



ST Connectors



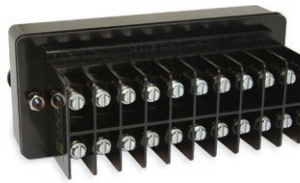
V-Pin Connectors

Self-Shorting Current Connector and FT-1 Test Switch

Safely disconnect live voltages and currents and easily service your meter with a self-shorting current connector or test switch.

Self-Shorting Current Connector and FT-1 Test Switch

	Part Number
SEL-735 Self-Shorting Current Connector, 20 Feet (with 6-position male)	915900264
SEL-734 Self-Shorting Current Connector, 25 Feet (with 8-position male)	915900263
Self-Shorting Current Connector, 8 Feet (with 8-position male)	915900048
FT-1 Test Switch	240-1010



FT-1 Test Switch



Self-Shorting Current Connector

Power Accessories

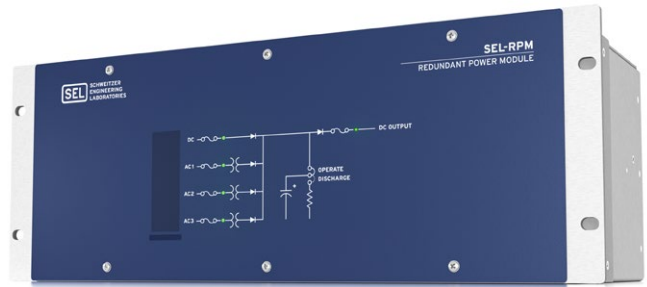
SEL-9321 Low-Voltage DC Power Supply

Provide +5 Vdc and ± 10 Vdc (5 W total) power from the station battery or station ac sources for low-voltage communications and instrumentation devices, such as the SEL-2401 Satellite-Synchronized Clock, SEL-3021 Serial Encrypting Transceiver, and SEL-2814 Fiber-Optic Transceiver. The SEL-9321 easily mounts to any flat surface or the DIN rail with the included hardware.



SEL-RPM Redundant Power Module

Combine as many as three ac sources and one dc source to provide a single reliable dc output (unregulated 125 Vdc) to power your protection, monitoring, and control equipment. The large energy storage capacitors in the SEL-RPM provide ride-through capability and support switch or breaker trip/close applications when all input sources are lost.



SEL-9322 15 Vdc Power Supply

Provide +15 Vdc nominal (15 W) power for low-voltage communications and instrumentation devices using this ac-to-dc and dc-to-dc converter. The SEL-9322 easily mounts to any flat surface or DIN rail with the included hardware. It can also be used with the wall-mount version of the SEL-3031 Serial Radio Transceiver.



Precise-Time Accessory

SEL-2401 Satellite-Synchronized Clock

The SEL-2401 is a precise-time device suitable for SEL meters that offers satellite-synchronized time in tight spaces.

The SEL-2401 provides one demodulated IRIG-B time-code output with ± 100 ns accuracy (average). The SEL-2401 also exceeds protective relay durability standards: IEEE C37.90 and IEC 60255.



Faceplate Configurable Labels

Use simple and sturdy insert labels to customize alarm or status indications on the front of the meter. Display the status of input voltages, harmonic alarms, control status, or other programmable functions. The overlay kit includes replacement inserts and an insertion/removal tool.

Faceplate Configurable Label Kit	Kit Number
SEL-734 Kit—Horizontal	9260020
SEL-734 Kit—Vertical	9260035
SEL-735 Kit—Horizontal/Vertical	9260073
SEL-735 Color Touchscreen Kit	9260143



Dust Protection and Sealing Cover

Seal the front and rear panel of your meter, and protect it from dust and other environmental contaminants.

Dust Protection and Sealing Cover	Kit Number
SEL-734 and SEL-735 Vertical and EXM Front-Panel Sealing Cover Kit (for meters with optical ports)	915900176
7xx/24xx Vertical Dust Protection Assembly, Black Rear Cover	915900170
7xx/24xx Vertical Dust Protection Assembly, Transparent Rear Cover	915900452

Kit 915900176

Kit 915900170



Current Transformers

Use a clamp-on or split-core CT with the SEL-735 Portable Power Quality Meter.

Current Transformer	Part Number
Three 200:1 Clamp-On CTs, 0.6" Window, ± 1 Percent Accuracy	915900209
Three 1000:5 Clamp-On CTs, 2.0" Window, ± 1 Percent Accuracy	915900210
Three 1000:5 Split-Core CTs, 4.5" Window, ± 3 Percent Accuracy	915900211
Three 2000:5 Split-Core CTs, 6.0" Window, ± 3 Percent Accuracy	915900212
Three 3000:5 Split-Core CTs, 8.0" Window, ± 3 Percent Accuracy	915900213



Kit 915900212



Kit 915900210

Blank Cover Plates

Provide a safe environment by using blank plates to cover unused openings in the panel.

Blank Cover Plates	Kit Number
ABB FT-21/FT-22 (CO FT-2) Blank Cover Plate	915900084
GE S1 (IAC S1) Blank Cover Plate	915900085
GE M1 Blank Cover Plate	915900142
ABB FT-31/FT-32 (CO FT-3) Blank Cover Plate	915900143
ABB FT-11 (CO FT-1) Blank Cover Plate	915900144
GE MDP/S2 Blank Cover Plate	915900230
241x/7xx Blanker Plate	915900387



Kit 915900143

Test-Socket Adapters

Connect SEL meters to a socket-based test set with test-socket adapters.

Test-Socket Adapters	Kit Number
Test-Socket Adapter Form 5	915900256
Test-Socket Adapter Form 9	915900257
EXM Test-Socket Adapter Form 5	915900258
EXM Test-Socket Adapter Form 9	915900259



Kit 915900258

Projection Mounting Collar

Gain rear-panel clearance and wire-routing space with SEL projection collars.

Projection Mounting Collar	Kit Number
Projection Mounting Collar, 45 mm	915900028
Projection Mounting Collar, 90 mm	915900029



Kit 915900028

Mounting Accessories

19-Inch Rack-Mounting Kits

Use a precut bracket to mount meters into 19-inch racks. A variety of brackets are available for one or two meters or to mount a meter with an FT-1 test switch (not included).

Horizontal Meter

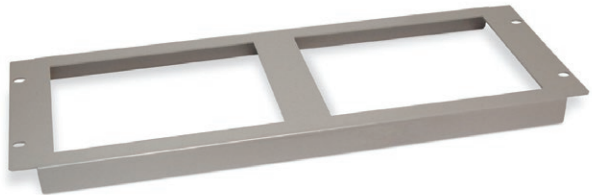
Horizontal Meter Bracket for 19-Inch Rack	Kit Number
Single Horizontal Meter	915900007
Two Horizontal Meters	915900008
Horizontal Meter and FT-1 Test Switch	915900009
Meter and 2 FT-1 Test Switches	915900035



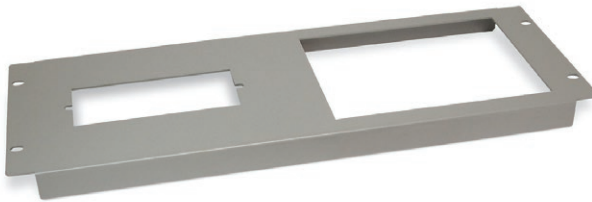
Single Horizontal Meter

Vertical Meter

Vertical Meter Bracket for 19-Inch Rack	Kit Number
Single Vertical Meter	915900050
Two Vertical Meters	915900051
Vertical Meter and FT-1 Test Switch	915900052
7xx/24xx Vertical Meter and 2 FT-1 Test Switches	915900158
Rack-Mount Kit, 7xx/24xx Vertical and 7xx/24xx Horizontal Retrofit	915900141
Rack-Mount Kit, 7xx/24xx Vertical	915900169
19" Rack-Mount Bezel for 7xx/24xx Vertical (centered)	915900228
Three Vertical 7xx/24xx Rack Mount	915900243



Two Horizontal Meters



Horizontal Meter and Test Switch

Mounting Gaskets

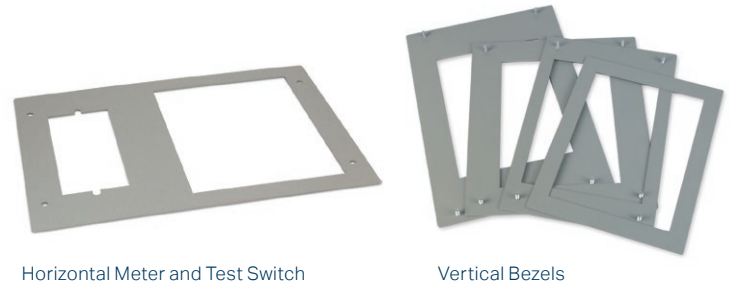
Gasket	Kit Number
Mounting Gasket (for applications requiring IP65 enclosure protection)	915900097

Panel-Mounting Kits

Use a precut panel-mounting bezel to retrofit meters into existing panel cutouts. A variety of bezels are available for one or two meters or to mount a meter with an FT-1 test switch (not included).

Horizontal Meter Retrofit Bezel*	Kit Number
Horizontal Meter and Test Switch, Short SB	915900005
Single Horizontal Meter, Short SB	915900006
Horizontal Meter and Test Switch, Tall SB	915900023
Single Horizontal Meter, Tall SB	915900024
Square D PowerLogic 37xx to 7xx Horizontal Retrofit	915900198

*For dimensions, visit selinc.com/applications/mountingselector.



Vertical Meter Retrofit Bezels	Kit Number
Single Meter	915900053
Appearance Bezel	915900058
GE kV	915900068
AMETEK JEM 1/10 SB	915900069
AMETEK JEM 1/10 Panel Mount	915900070
AMETEK JEMStar SB/TransData MK-5 SB and Basler Electric BE1-851/951 to 7xx	915900072
Electro Industries/GaugeTech Nexus 1260/1270 SB	915900073
Square D PowerLogic PML ION 8000 Series SB	915900074
Schlumberger Q1000 SB	915900075
Siemens Q4, Tall SB	915900076
Siemens Q4, Short SB	915900077
Siemens Q4, Tall SB With FT-1 Test Switch Cutout	915900140
Square D PowerLogic 2000	915900275
GE 169/269/369	915900054
GE 469	915900055
Cutler-Hammer MP-3000	915900057
ABB FT-21/FT-22 (CO FT-2) to 7xx	915900078
GE F650 to 7xx	915900079
GE 700 Series to 7xx	915900080

Vertical Meter Retrofit Bezels, Continued	Kit Number
ABB 500 Series to 7xx/24xx	915900082
Siemens SIPROTEC 7SJ61 (1/3 rack case) to 7xx	915900083
ABB 500 Series (1/2 rack case) to 7xx	915900086
GE ML 269 Plus to 7xx/24xx	915900099
ABB FT-31/FT-32 (CO FT-3) to 7xx/24xx With 2 FT-1 Test Switch Cutouts	915900130
GE MDP/S2 to 7xx/24xx	915900132
GE M1 to 7xx/24xx	915900133
GE M2 to 7xx/24xx	915900134
GE 565 to 7xx/24xx	915900145
ABB FT-41/FT-42 (CO FT-4) to 7xx/24xx With 2 FT-1 Test Switch Cutouts	915900156
ABB DPU to 7xx/24xx	915900157
GE S1 (IAC S1) to 2 FT-1 Test Switch Cutouts	915900159
GE 269/369 to 7xx/24xx With FT-1 Test Switch Cutout	915900165
JEMSTAR SB to 7xx EXM	915900196
GE DGP to 7xx	915900355
SEL-701/Siemens SIMPRO	915900197

Mounting-Option Kits

Use a mounting-option kit to install meters into a variety of locations. Enclosures have internal DIN-rail mounting brackets for additional accessories. Wall- and surface-mount brackets can be hinged for easy back access. (The kits shown do not include meters or accessories.)

Outdoor Wall- and Surface-Mount Bracket Kits

Outdoor Enclosure (16" x 18" x 8") Kits	Kit Number
7xx Outdoor Enclosure + FT-1 Cutout, Horizontal	915900062
7xx Outdoor Enclosure, No FT-1 Cutout, Horizontal	915900092
7xx Outdoor Enclosure + FT-1 Cutout, Vertical	915900066
7xx Outdoor Enclosure, No FT-1 Cutout, Vertical	915900093
Enclosure Mounting	
Mounting Brackets for 16" x 18" x 8" Enclosure	915900297

Indoor Wall- and Surface-Mount Bracket Kits

Fixed	
7xx Wall-Mount Bracket	915900047
7xx/24xx Horizontal Surface-Mount Kit	915900116
Hinged	
7xx Horizontal Hinged Wall-Mount Bracket	915900063
Vertical Hinged Wall-Mount Bracket	915900136
Low Profile, Hinged, Contains 2 Ribbon Cables	915900255
Low Profile, Hinged, Contains CT/PT Wiring and 1 Serial Cable	915900317
Low Profile, Hinged, Contains CT/PT Wiring and 2 Serial Cables	915900318
Low Profile, Hinged, Contains CT/PT Wiring and 3 Serial Cables	915900319
Enclosed	
7xx Indoor Enclosure + FT-1 Cutout, Horizontal	915900046
7xx Indoor Enclosure, No FT-1 Cutout, Horizontal	915900090
7xx Indoor Enclosure + FT-1 Cutout, Vertical	915900065
7xx Indoor Enclosure, No FT-1 Cutout, Vertical	915900091



Outdoor enclosure (kit 915900066 shown above) with add-on test switch, wiring harness, and meter. Indoor enclosure (below) consists of inside sleeve only.



Kit 915900318

Direct-Replacement Assemblies

SEL direct-replacement assemblies are designed to closely match the features, form-factor, and terminal blocks of specific legacy devices. Learn more at selinc.com/products/7250.

Direct-Replacement Assembly	Part Number
Square D PowerLogic CM2000	7250-00023
Schneider PM820, PM850, PM870	7250-00053
Schneider ION7550, ION7650 Siemens 9510, 9610	7250-00054
Schneider PM8000 Siemens 9410	7250-00055

Legacy devices with panel cutout dimensions smaller than 7.36 × 5.47 in (187 × 139 mm) may require modification to accommodate SEL-700 series relays.



SEL-735 Retrofit Direct-Replacement Assembly for Square D PowerLogic CM2000

Transceivers

Safely connect your EIA-232 communications ports using SEL fiber-optic cables and fiber-optic transceivers. Easily connect to other station equipment, including SEL relays and communications processors.

Model	Connector	Transceiver	Range
SEL-2800	V-Pin	Serial-to-Fiber-Optic Transceiver	500 m
SEL-2814	ST	Serial-to-Fiber-Optic Transceiver	5 km
SEL-2815	ST	Serial-to-Fiber-Optic Transceiver	15 km
SEL-2830	ST	Serial-to-Fiber-Optic Transceiver	80 km
SEL-2886	EIA-485	EIA-232 to EIA-485 Transceiver	-
SEL-2890	RJ-45	Serial-to-Ethernet Transceiver	-

Note: All references to serial are EIA-232.



SEL-2890 Ethernet Transceiver