New generation 84 way Sealed Rectangular Connectors, with single-handed blind mate functionality, use proven MX150™ and MX150L™ terminals to offer a hybrid, high power-and-signal circuit-count system for harsh applications in commercial vehicles

Commercial vehicle applications, especially agricultural machinery, are becoming more intelligent with increased wiring requirements and demands for hybrid technology. The new generation SRC family offers a rugged, sealed, wire-to-panel (bulkhead) and wire-to-wire hybrid connection system designed for high circuit-count applications in harsh environments. The primary location for this system is as the firewall connector, situated between the cab and the engine, but SRC can also replace existing circular connectors in various in-vehicle applications.

The SRC system uses proven MX150<sup>™</sup> terminals with current ratings up to 18A and MX150L<sup>™</sup> terminals with current ratings up to 40A. Flexible standard or mixed power /signal options are available. The MX150 and MX150L terminal systems provide cost savings by eliminating the need to purchase, handle and crimp individual wire seals. This proven terminal technology provides flexibility to increase circuit-count and allows for simple field repair and replacement of headers and connectors.

Optional flange seal and dust cover are available. Tooling options include fine-adjust crimp press applicators for high-volume production and hand tools for low volume production and field repairs. For additional information visit: www.molex.com/link/src.html

#### **FEATURES AND BENEFITS**

- Pre-assembled connector housing, seals, rear cover and TPA ship in one-piece
- Simple crimp, poke and plug application using standard MX150<sup>™</sup> and MX150L<sup>™</sup> terminals; no need to crimp individual wire seals
- Sliding latch with cam action
- Integral Terminal Position Assurance (TPA) with new anti-scooping feature
- . .
- Integral, two-way matte and interface seal with improved retention features
- Protective rear cover
- Connector system retention greater than 200N
- Superior electrical and mechanical performance capabilities
- Unused circuits can be blocked using plastic seal plugs

- Easier, quicker assembly processes resulting in applied labour and cost savings
- Flexible system; easily increase circuit count using existing connectors
- Quick, low cost field repairs using common screw driver, needle nose pliers and terminal extraction tool
- Single handed mating and locking action, no screw action or tools required for mating assembly
- Latch does not interfere with wire harness
- Assures that crimped terminal leads are properly locked into connector
- Prevents terminals from being damaged during mating operation
- Passes IP69K testing; suitable for applications in harsh environments
- Seal is securely retained in two directions
- Protects and provides strain relief to wireseal interface
- Suitable for harsh applications in highvibration environments
- Surpasses performance of most other competitive products in the market
- Provides flexibility; sealing unused circuits without adding complexity to part numbers and customer inventory



## SRC - Sealed Rectangular Connectors

93287 84-Circuit Header 93288 84-Circuit Connector 85083 Power & Signal Header 85084 Power & Signal Connector



MX150™ Terminals Female (Left) Male (Right)



MX150L<sup>™</sup> Terminals Female (Left) Male (Right)







## **MARKETS AND APPLICATIONS**

- Agricultural machines
- · Construction and mining equipment
- · Forest and garden equipment
- · Commercial vehicles
- Marine equipment
- Gensets
- · Search, detection and navigation equipment
- Trains and rail equipment
- · Material handling equipment



# SRC - Sealed Rectangular Connectors

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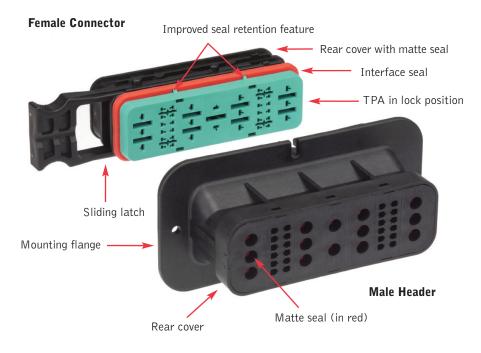
93287 84-Circuit Header 93288 84-Circuit Connector 85083 Power & Signal Header 85084 Power & Signal Connector



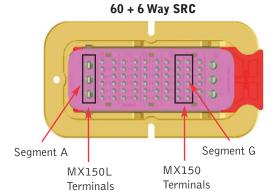




## **ADDITIONAL PRODUCT FEATURES**



- Modular design with 7 segments (A to G) which can be either power or control segments
- One control segment consists of 12 circuits
- One power segment consists of 3 circuits
- Control circuits use MX150 terminals up to 18A
- Power circuits use MX150L terminals up to 40A
- Possible circuit options for shell size B: 84 + 0 (Control only)
  - 72 + 3
  - 60 + 6
  - 48 + 7
  - 36 + 12
  - 24 + 14 12 + 18
  - 0 + 20 (Power only)



### **Anti-Scooping Feature**

Addition of new plastic stand-offs all along TPA prevents damage when header and connector are mated



TPA with plastic stand-offs, molded in one piece



Optional Dust Cover

Different cable exit options available. See Sales for full details

## **SPECIFICATIONS**

#### **Reference Information**

Packaging: See PK-85071-001 and PK-85070-001

Mates With: 85084 mates with 85083

Use With:

MX150 Terminals series 33012/33000 MX150L Terminals series 19434/19431

Designed In: mm RoHS: Yes Halogen Free: Yes Glow Wire Compliant: Yes

#### **Physical**

Housing: SPS/ Nylon

Contact: See MX150 and MX150L Operating Temperature: -40 to +125°C Degree of protection: IP68 / IP69K

#### **Electrical**

Voltage (max.): 500V DC Current (max.):

-84 way fully loaded 6A\* with 30o temp rise (AWG 14 MX150) (\*individual terminal 18amps)

-20 way fully loaded 15A\* with 30° temp rise (AWG 8, MX150L)

(\*individual terminal 40amps)
Contact Resistance: 10 m max. (MX150)

30m max. (MX150L)
Insulation Resistance: 20 m min.

#### Mechanical

Contact Insertion Force: 200N max. Contact Retention to Housing: 50N min. Mating/Unmating Force: 200N max.

Results from sample trial:

Average Measured Mating Force: 98N Measured Mating Force: 111N max. Measured Mating Force: 84N min.

Durability (min.): Tin: 25 cycles Gold: 100 cycles

## **ORDERING INFORMATION**

	No. of			
Order No.	Control MX150™ Terminals	Power MX150L™ Terminals	Gender	
93288-0001	0.4	0	Female	
93287-0001	84	0	Male	
85084-0700	60	,	Female	
85083-0300	7	6	Male	
85084-3612	2/	12	Female	
85083-3612	36	12	Male	
85084-2414	24	1.4	Female	
85083-2414	24	14	Male	
85084-0020	0	20	Female	
85083-0020	0		Male	

SRC in 72+3, 48+8 and 12+18 versions are available on request - Please contact the Product Manager directly

## MX150 Terminals (Control) - Insulation overall diameter 1.50 to 2.69mm

Gender	MX150 Terminals Order No.	AWG	mm²	Hand Crimp Tool	Applicator
Female	33012-3003	22	-	63811-6000	63900-1000
		-	0.5	63811-6200	63900-1000
	33012-3002	20/18	-	63811-6000	63900-0900 (20 AWG) 63900-0800 (18 AWG)
		-	0.75/1	63811-6200 (0.75mm²), 63811-6100 (1mm²)	63900-0900 (0.75mm²) 63900-0800 (1mm²)
	33012-3001	16/14	-	63811-5900	63900-0700
		-	1.5	63811-6100	63900-0700
Male	33000-1003	22	-	63811-2600	63900-0600
		-	0.5	-	63900-0600
	33000-1002	20/18/16	-	63811-2600 (20/18 AWG), 63811-2400 (16AWG)	63900-0500 (20 AWG) 63900-0400 (18 AWG) 63900-0300 (16 AWG)
		-	0.75/1	-	63900-0500 (0.75mm²) 63900-0300 (1mm²)
	33000-1001	14	=	63811-2400	63900-0200
		-	1.5	-	63900-0200

## MX150L Terminals (Power) - Insulation overall diameter 3.61 to 5.54mm

Gender	MX150L Terminals Order No.	AWG	mm²	Hand Crimp Tool	Applicator
Female	19434-0001	10-Dec	-	63811-5300	63895-0400
	19434-0002	8	-	63811-5400	63832-5100
Male	19431-0001	10-Dec	-	63811-5300	63895-0400
	19431-0015	8	-	63811-5400	63832-5100



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