

# POWER. S<sup>3</sup> RCS890 High Voltage - 210 A

# 2 way right-angled Connectors

# Features & benefits

#### **Electrical features**

- ► High voltage 400-750 V
- ► High current carrying capacity: 210 A at 70°C with 50 mm² wire section

# Shielding performances

► EMI/RFI 60 dB Shielding protection

### Mechanical features

- Slider mating device on female connector
  - Easy handling
  - Reduced mating forces
  - 2-step disconnection feature for safe unmating
- Unique integrated electric interlock
- ► CPA (Connector Position Assurance)

### Terminal system

New RCS890 compact 8mm round terminals complying to high electrical performances

#### **Environmental features**

- Dual sealing feature when mated :
  - External : IPx9K, IP67, 1000 mbars under air pressure
  - Internal: individual cavity sealing
- ► IPX2B electrical shock protection

### Physical features

- Plastic parts: PBT-PA66
- ► Shielding plates: Copper Alloy Tin-plated



► High voltage DC connections for batteries, junction boxes, inverters, Power Electronic Boxes (PEB) and others

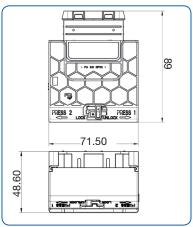


# **Technical characteristics**

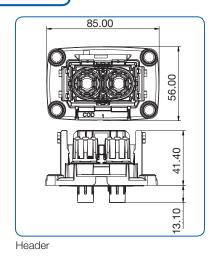
Voltage		400 - 750 V	
May assument compline consolts	Wire section 40 mm <sup>2</sup>	185 A at 70°C	
Max. current carrying capacity	Wire section 50 mm <sup>2</sup>	210 A at 70°C	
Sealing protection		IP67 & IPx9K	
Electrical shock protection		IP2XB	
Temperature range		-40°C to + 125 °C	
Terminal insertion force	RCS890	30 N max.	
	DCS-2 1.5 mm (Interlock)	12 N max	
	RCS890	300 N min.	
Terminal retention force	DCS-2 1.5 mm (Interlock)	120 N min.	
Connector mating force		< 85 N	
Shielding performance	at 100 MHz	60 dB	

# Part Numbers

Gender	Housing P/N	
Female/Plug (black slider)	F922210	
Male/Header	F722210	



Female plug



Dimensions in mm



# POWER. S<sup>3</sup> RCS890 Terminals

# Round Connection System (RCS) - high current / high voltage (400/750 V) applications

# **Features**

### Female terminal

- ≥ 8 contact blades
- 2-piece right-angle female terminal
- Protective plastic cage
- Copper alloy with Silver plating

# Male terminal

- ≥ 8.0 mm round terminal
- Several male terminal lenghts available for bus bar connection
- ► Plastic cap for IP2xB protection
- Integrated O-ring sealing
- ► M6 integrated threaded insert
- Copper alloy with Silver plating



# Technical characteristics\*

Contact resistance	< 0.1 mΩ
Contact mating force	< 30 N
Contact unmating force	< 20 N
Max. current carrying capacity at 70°C*	210 A

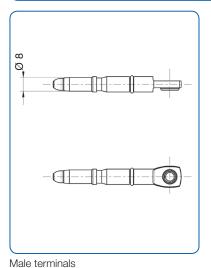
<sup>\*</sup> with 50 mm² cable - for reference only

# Part Numbers for Female Connectors

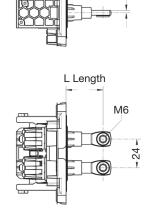
Type of terminal	Terminal P/N Seal & retainer F		Cable wire section	
RCS890 female	F601010	F232210	50 mm <sup>2</sup>	
RCS890 female		F132210	35 to 40 mm <sup>2</sup>	

# Part Numbers for Male Connectors

Type of terminal	Terminal P/N	Single wire seal P/N	Cable wire section	Length L
RCS800 male	F076600	-	-	28.6
RCS800 male	F176600	-	-	50.6
RCS800 male	F276600	-	-	74.6
DCS-2 1.5 mm female interlock, Gold plated	60001534	60993913	0.5 mm <sup>2</sup>	-
	60001534	60993928	>0.5 mm <sup>2</sup> - 1.0 mm <sup>2</sup>	-



Available lengths (L)



Dimensions in mm

# **Mouser Electronics**

**Authorized Distributor** 

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# Aptiv:

F276600 F176600 F922210 F722210