

# 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 mm<sup>2</sup> 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

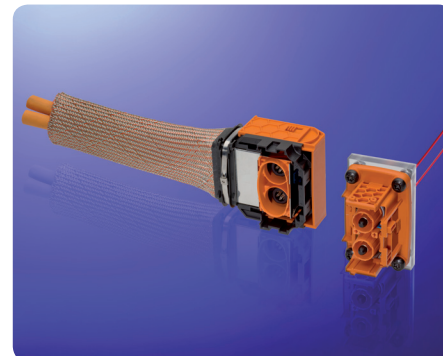
- Dual sealing feature when mated :
  - External : IPx9K, IP67, 1000 mbars under air pressure
  - Internal : individual cavity sealing
- IPX2B electrical shock protection

#### Physical features

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

#### Typical applications

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

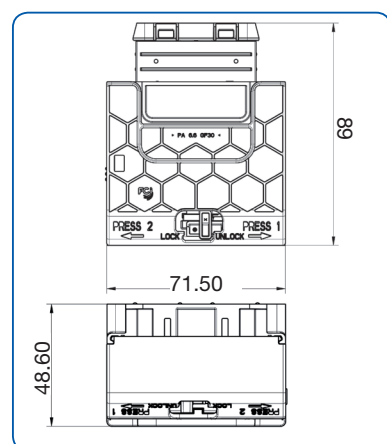


### Technical characteristics

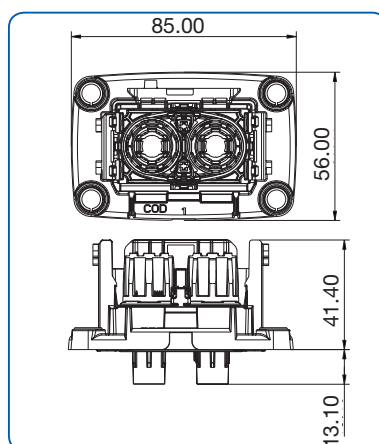
Voltage		400 - 750 V
Max. current carrying capacity	Wire section 40 mm <sup>2</sup>	185 A at 70°C
	Wire section 50 mm <sup>2</sup>	210 A at 70°C
Sealing protection		IP67 & IPx9K
Electrical shock protection		IP2XB
Temperature range		-40°C to + 125 °C
Terminal insertion force	RCS890	30 N max.
	DCS-2 1.5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



Header

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 lengths 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

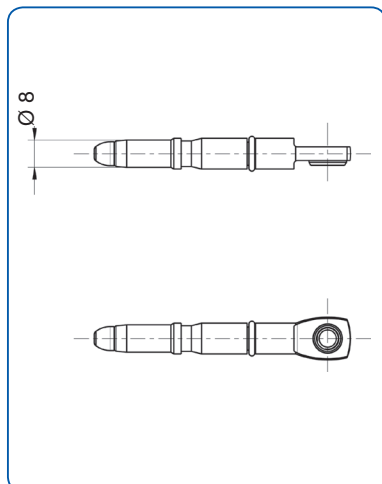
\* with 50 mm<sup>2</sup> cable - for reference only

## Part Numbers for Female Connectors

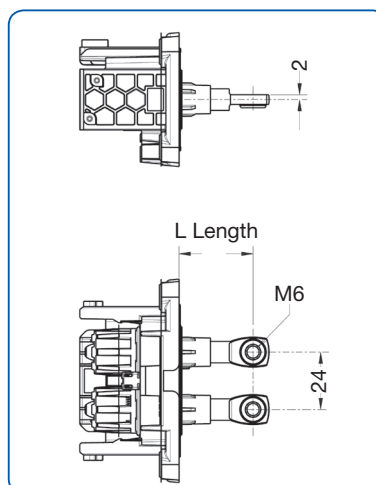
Type of terminal	Terminal P/N	Seal & retainer P/N	Cable wire section
RCS890 female	F601010	F232210	50 mm <sup>2</sup>
RCS890 female		F132210	35 to 40 mm <sup>2</sup>

## 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>	-



Male terminals



Available lengths (L)

Dimensions in mm

For other requirements, please consult [www.fci.com/powers3](http://www.fci.com/powers3)

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