

POWER.S³ 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

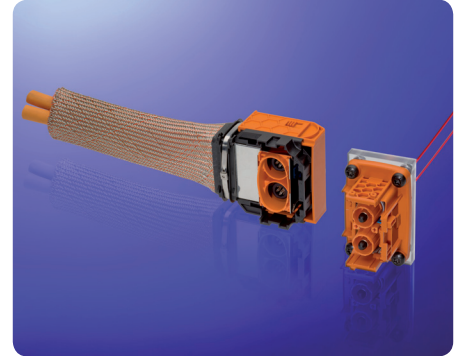
- ▶ Dual sealing feature when mated :
 - External : IPx9K, IP67, 1000 mbars under air pressure
 - Internal : individual cavity sealing
- ▶ IPX2B electrical shock protection

Physical features

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

Typical applications

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

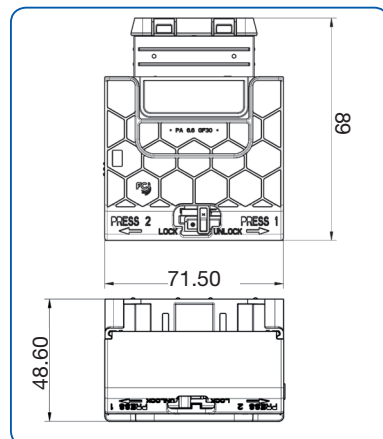


Technical characteristics

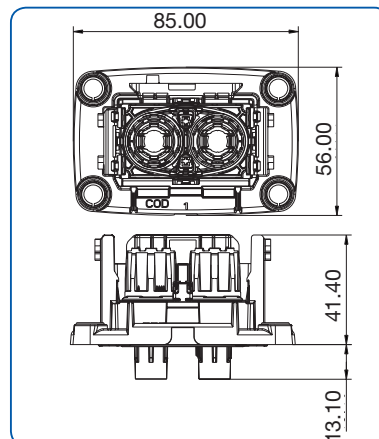
Voltage		400 - 750 V
Max. current carrying capacity	Wire section 40 mm ²	185 A at 70°C
	Wire section 50 mm ²	210 A at 70°C
Sealing protection		IP67 & IPx9K
Electrical shock protection		IP2XB
Temperature range		-40°C to + 125 °C
Terminal insertion force	RCS890	30 N max.
	DCS-2 1.5 mm (Interlock)	12 N 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.S³ 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

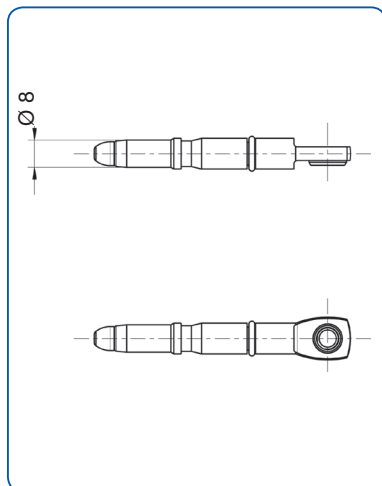
* with 50 mm² cable - for reference only

Part Numbers for Female Connectors

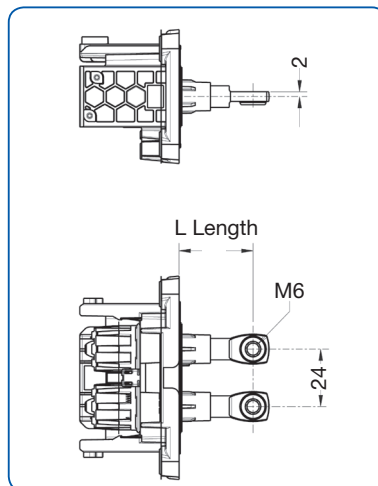
Type of terminal	Terminal P/N	Seal & retainer P/N	Cable wire section
RCS890 female	F601010	F232210	50 mm ²
RCS890 female		F132210	35 to 40 mm ²

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 ²	-
	60001534	60993928	>0.5 mm ² - 1.0 mm ²	-



Male terminals



Available lengths (L)

Dimensions in mm