

MC4-Evo 2 In-line Fuse MC4-Evo 2 Y-Splitter

Solarline | Solutions for renewable energy

EN



DC INTERCONNECTION SOLUTIONS

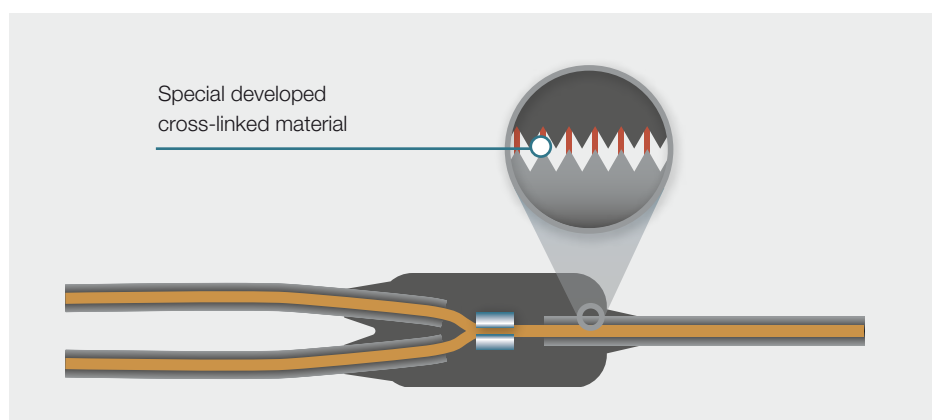
Best-in-class eBOS components for your PV system

Our DC cabling system offers first-class quality and outstanding functionalities.

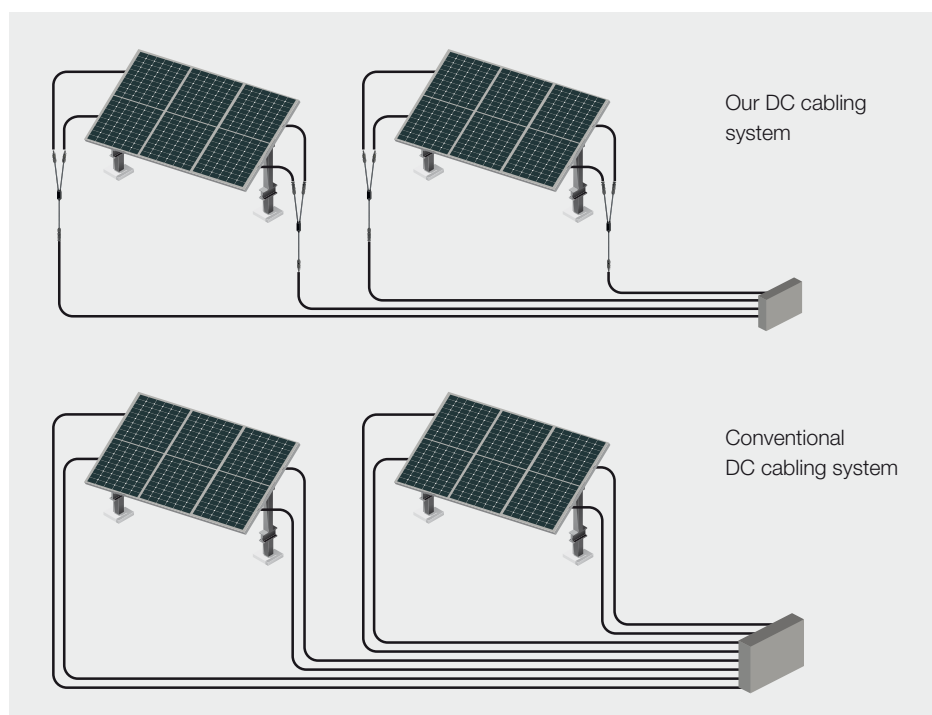
The unique manufacturing process through vulcanization ensures permanent highest

protection against ingress and will provide best-in-class performance even under harsh climatic conditions.

Worldwide unique vulcanization process



Less material use and short assembly time



Product features and your benefits

Product features and advantages

Customer benefits

Enclosure concept and design (Vulcanization Process)

Best-in-class **product reliability**

- Product lifetime expectancy
- Insulation performance
- Harsh environment compliant



Certified product safety

Product trust in **safety and reliability**

- Meeting relevant industry standards (2PfG 1911, 2PfG 2380)
- Verified by independent third party



Track record

Proven long-term reliability

- Installed base (>4 GW)
- Systems operating in harsh environment and conditions



Original MC4-Evo 2 connectors

Best-in-class **connector technology**

- More reliable and durable operation
- Less downtimes and performance losses



Solution features and advantages

Customer benefits

Lower total cost of ownership

Cost savings compared to conventional DC cabling design

- Less material and components used (optimized CAPEX)
- Insensitivity due to fewer components and maintenance (optimized OPEX)



Plug and play

Time and cost savings compared to field assembly

- Ready-to-use product design with connector assembly
- Reducing potential failure risks due to incorrect installation



Stäubli Excellence

Well acknowledged **Stäubli quality**

- Trustworthy product and solution source
- Controlled supply chain with state-of-the-art quality components



Engineered in Europe and sustainable manufactured

Meeting state-of-the-art ESG requirements

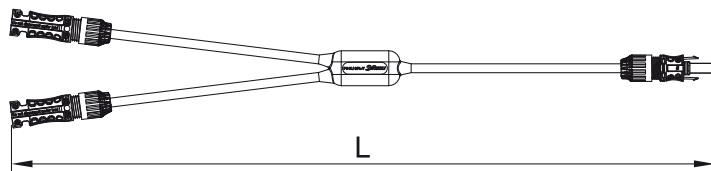
- Highest **product quality**
- Sustainable supply chain and **low carbon footprint**



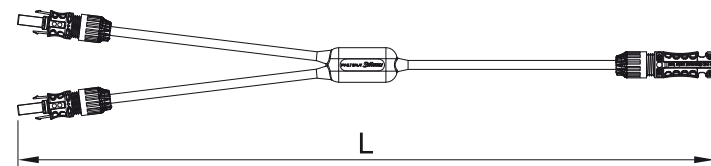
Y-SPLITTER

MC4-Evo 2 Y-Splitter (PV-K/SPL-Y)

PV-K/SPL-Y...ES...



PV-K/SPL-Y...EP...



Technical data

Connector system	MC4-Evo 2
Voltage rating	DC 1500 V
Test voltage	8 kV
Safety class	II
Overvoltage category Pollution degree	CATIII/3
Mating connectors, only genuine Stäubli connectors shall be used!	Original MC4 cable coupler and panel receptacle Original MC4-Evo 2 cable coupler and panel receptacle
Ambient temperature range	-40 °C ... +85 °C
Transportation/storage temperature range	-30 °C ... +60 °C
Transportation/storage relative humidity	< 70 %
Degree of Protection (IP), mated unmated	IP65/IP68 (1 m, 1 h) IP2X
Insulation material	PA, EVA, XLPE
Contact material	Copper, tin plated
Max. contact resistance of the connector	< 0.5 mΩ
Certified according to TÜV Rheinland 2PfG 1913	R 60164319

The MC4-Evo 2 Y-Splitter is TÜV Rheinland certified and guarantees a long-lasting, stable connection within a PV DC string: Minimal energy loss, low heat generation. Ro-

bust housing, safety class IP68 (1 m, 1 h).
Cable cross-section 6 mm².

Order No.	Type	TÜV Rheinland (2PFG 1913)		Lead length L (cm)	Connector system	Input Connector	Output Connector	Approvals
		DC V	A					
32.0333	PV-K/SPL-Y-6-15/15-15EPP/ES-0050	1500	53	50	MC4-Evo 2	Plug (2 x)	Socket (1 x)	x
32.0334	PV-K/SPL-Y-6-15/15-15ESS/EP-0050	1500	53	50	MC4-Evo 2	Socket (2 x)	Plug (1 x)	x



Assembly instructions MA706

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IN-LINE FUSE

MC4-Evo 2 In-line Fuse (PV-K/ILF3)

PV-K/ILF3...



Technical data	
Connector system	MC4-Evo 2
Voltage rating	DC 1500 V
Test voltage	8 kV
Safety class	II
Overvoltage category	CATIII/3
Pollution degree	
Mating connectors, only genuine Stäubli connectors shall be used!	Original MC4 cable coupler and panel receptacle Original MC4-Evo 2 cable coupler and panel receptacle
Rated current gPV	<div>4 A 15 A</div> <div>5 A 20 A</div> <div>6 A 25 A</div> <div>10 A 30 A</div>
Ambient temperature range	-40 °C ... +50 °C
Transportation/storage temperature range	-40 °C ... +50 °C
Transportation/storage relative humidity	< 70 %
Degree of Protection (IP), mated unmated	IP65/IP68 (1 m, 1 h) IP2X
Insulation material	PA, EVA, XLPE
Contact material	Copper, tin plated
Max. contact resistance of the connector	< 0.25 mΩ
Certified according to TÜV Rheinland 2PfG 2380	R 60163375

The MC4-Evo 2 In-line Fuse (PV-K/ILF3) with a crimping connection guarantees a long-lasting, stable connection in comparison to conventional omega-style clips: Minimal energy loss, low heat generation. Ro-

bust housing, safety class IP68 (1 m, 1 h).
Cable cross-section 6 mm².

Order No.	Type	TÜV Rheinland (2PfG 2380)		Lead length	Connector system	Approvals
		DC V	A	L (cm)		TÜV
32.0326	PV-K/1500ILF3-4/6E-0059	1500	4	59	MC4-Evo 2	x
32.0327	PV-K/1500ILF3-5/6E-0059	1500	5	59	MC4-Evo 2	x
32.0328	PV-K/1500ILF3-6/6E-0059	1500	6	59	MC4-Evo 2	x
32.0399	PV-K/1500ILF3-10/6E-0059	1500	10	59	MC4-Evo 2	x
32.0329	PV-K/1500ILF3-15/6E-0059	1500	15	59	MC4-Evo 2	x
32.0330	PV-K/1500ILF3-20/6E-0059	1500	20	59	MC4-Evo 2	x
32.0331	PV-K/1500ILF3-25/6E-0059	1500	25	59	MC4-Evo 2	x
32.0332	PV-K/1500ILF3-30/6E-0059	1500	30	59	MC4-Evo 2	x



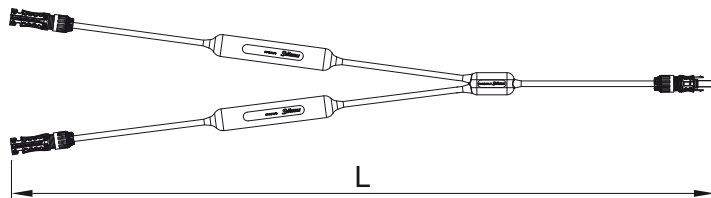
Assembly instructions MA707

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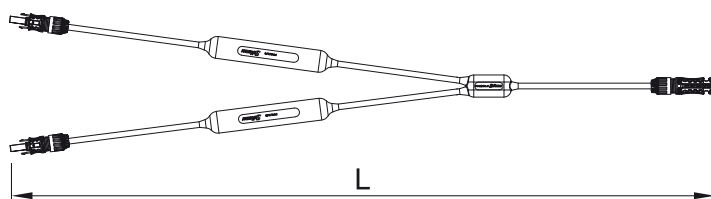
Y-SPLITTER + IN-LINE FUSE

MC4-Evo 2 Y-Splitter und In-line Fuse (PV-K/SPL-Y/ILF3)

PV-K/SPL-Y/ILF3...-PPS



PV-K/SPL-Y/ILF3...-SSP



Technical data		
Connector system	MC4-Evo 2	
Voltage rating	DC 1500 V	
Test voltage	8 kV	
Safety class	II	
Overvoltage category	CATIII/3	
Pollution degree		
Mating connectors, only genuine Stäubli connectors shall be used!	Original MC4 cable coupler and panel receptacle Original MC4-Evo 2 cable coupler and panel receptacle	
Rated current gPV	4 A	15 A
	5 A	20 A
	6 A	25 A
	10 A	30 A
Ambient temperature range	-40 °C ... +50 °C	
Transportation/storage temperature range	-40 °C ... +50 °C	
Transportation/storage relative humidity	< 70 %	
Degree of Protection (IP), mated unmated	IP65/IP68 (1 m, 1 h) IP2X	
Insulation material	PA, EVA, XLPE	
Contact material	Copper, tin plated	
Max. contact resistance of the connector	< 0.25 mΩ	
Certified according to TÜV Rheinland 2PfG 1913 and 2PfG 2380	Statement availabale	

The MC4-Evo 2 Y-Splitter and In-line Fuse combination product aggregates the unique advantages within one product.

The crimping connections guarantee a long-lasting, stable connection with minimal

energy loss and low heat generation. Robust housing, safety class IP68 (1 m, 1 h). Cable cross-section 6 mm².

Order No.	Type	TÜV Rheinland (2PfG 2380 and 2PfG 1913)		Lead length L (cm)	Connector system	Input Connector	Output Connector	Approvals
		DC V	A					
32.0373	PV-K-SPL-Y/2-ILF3-4/6/E-PPS	1500	4	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0374	PV-K-SPL-Y/2-ILF3-4/6/E-SSP	1500	4	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0375	PV-K-SPL-Y/2-ILF3-5/6/E-PPS	1500	5	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0376	PV-K-SPL-Y/2-ILF3-5/6/E-SSP	1500	5	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0377	PV-K-SPL-Y/2-ILF3-6/6/E-PPS	1500	6	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0378	PV-K-SPL-Y/2-ILF3-6/6/E-SSP	1500	6	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0379	PV-K-SPL-Y/2-ILF3-10/6/E-PPS	1500	10	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0380	PV-K-SPL-Y/2-ILF3-10/6/E-SSP	1500	10	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0381	PV-K-SPL-Y/2-ILF3-15/6/E-PPS	1500	15	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0382	PV-K-SPL-Y/2-ILF3-15/6/E-SSP	1500	15	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0383	PV-K-SPL-Y/2-ILF3-20/6/E-PPS	1500	20	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0384	PV-K-SPL-Y/2-ILF3-20/6/E-SSP	1500	20	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0391	PV-K-SPL-Y/2-ILF3-25/6/E-PPS	1500	25	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0392	PV-K-SPL-Y/2-ILF3-25/6/E-SSP	1500	25	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x
32.0393	PV-K-SPL-Y/2-ILF3-30/6/E-PPS	1500	30	84	MC4-Evo 2	Socket (1 x)	Plug (2 x)	x
32.0394	PV-K-SPL-Y/2-ILF3-30/6/E-SSP	1500	30	84	MC4-Evo 2	Plug (1 x)	Socket (2 x)	x



Assembly instructions MA715

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Standard cable assemblies

PV-K4..../PV-KBT4/6X/1PV-KST4/6X/...

Cable assembly MC4



PV-K4..../PV-EVO2-BI/PV-EVO2-BI/...

Cable assembly MC4-Evo 2



These extensions help to connect your PV components to the PV system. IEC 62930 certified PV DC pre-assembled cable.

Please review specifications for your installation.

Technical data	
Connector system	MC4 / MC4-Evo 2
Voltage rating IEC 62852:2014+Amd 2:2020 2 PfG 2330/03.23 UL6703	MC4: DC 1000 V / MC4-Evo 2: DC 1500 V MC4: DC 1500 V ¹⁾ MC4: DC 1500 V
Ambient temperature rage	-40 °C...+85 °C (IEC) -40 °C...+85 °C (UL)
Transportation/storage temperature range	-30 °C/+60 °C
Transportation/storage relative humidity	< 70 %
Safety instruction	Do not disconnect under load
Mating connectors: Only Original Stäubli connectors shall be used!	

¹⁾ IEC DC 1500 V: Only for use in PV-systems in access-restricted areas.

Attention

When connecting the connectors, it must be ensured that the rated data (current carrying capacity and rated voltage) of the products are dependent on the mating connectors used. Observe the information in the assembly instructions for the connectors used.

Order No.	Length	Cable cross-section	Connector system
13002820-100	1 m	4 mm ²	MC4
13002820-150	1.5 m		
13002820-200	2 m		
13002820-300	3 m		
13002820-500	5 m		
13002820-10M	10 m		
13002812-100	1 m	6 mm ²	MC4
13002812-150	1.5 m		
13002812-200	2 m		
13002812-300	3 m		
13002812-500	5 m		
13002812-10M	10 m		
13002843-100	1 m	4 mm ²	MC4-Evo 2
13002843-150	1.5 m		
13002843-200	2 m		
13002843-300	3 m		
13002843-500	5 m		
13002843-10M	10 m		
13002844-100	1 m	6 mm ²	MC4-Evo 2
13002844-150	1.5 m		
13002844-200	2 m		
13002844-300	3 m		
13002844-500	5 m		
13002844-10M	10 m		




Assembly instructions **MA711**


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Customer and application specific cable assemblies

MC4-Evo 2 In-line Fuse (PV-K/ILF3) according to your request


Connector 1


☐ PV-KBT4-EVO 2 (female)
 

☐ PV-KST4-EVO 2 (male)
 

MC4-Evo 2 cable coupler


Connector 2

☐ PV-KBT4-EVO 2 (female)
 

☐ PV-KST4-EVO 2 (male)
 

MC4-Evo 2 cable coupler


Connector 1



Cable

Cable

Fuse



Connector 2

Fuse

Fuse size

☐ 4 A

☐ 5 A

☐ 6 A

☐ 10 A

☐ 15 A

☐ 20 A

☐ 25 A

☐ 30 A

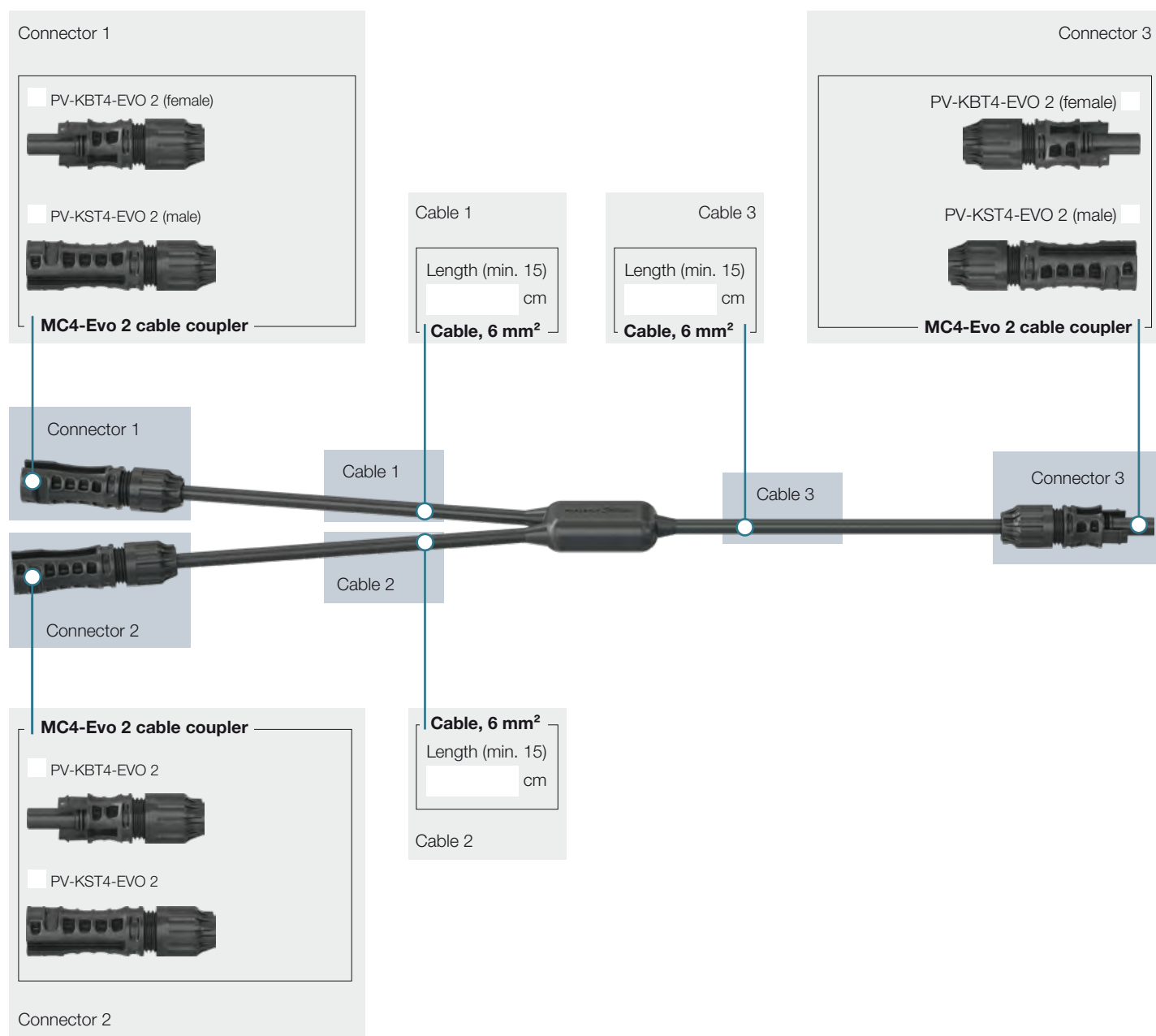
Cable, 6 mm²

Overall length of In-line Fuse
(min 59 cm)

cm

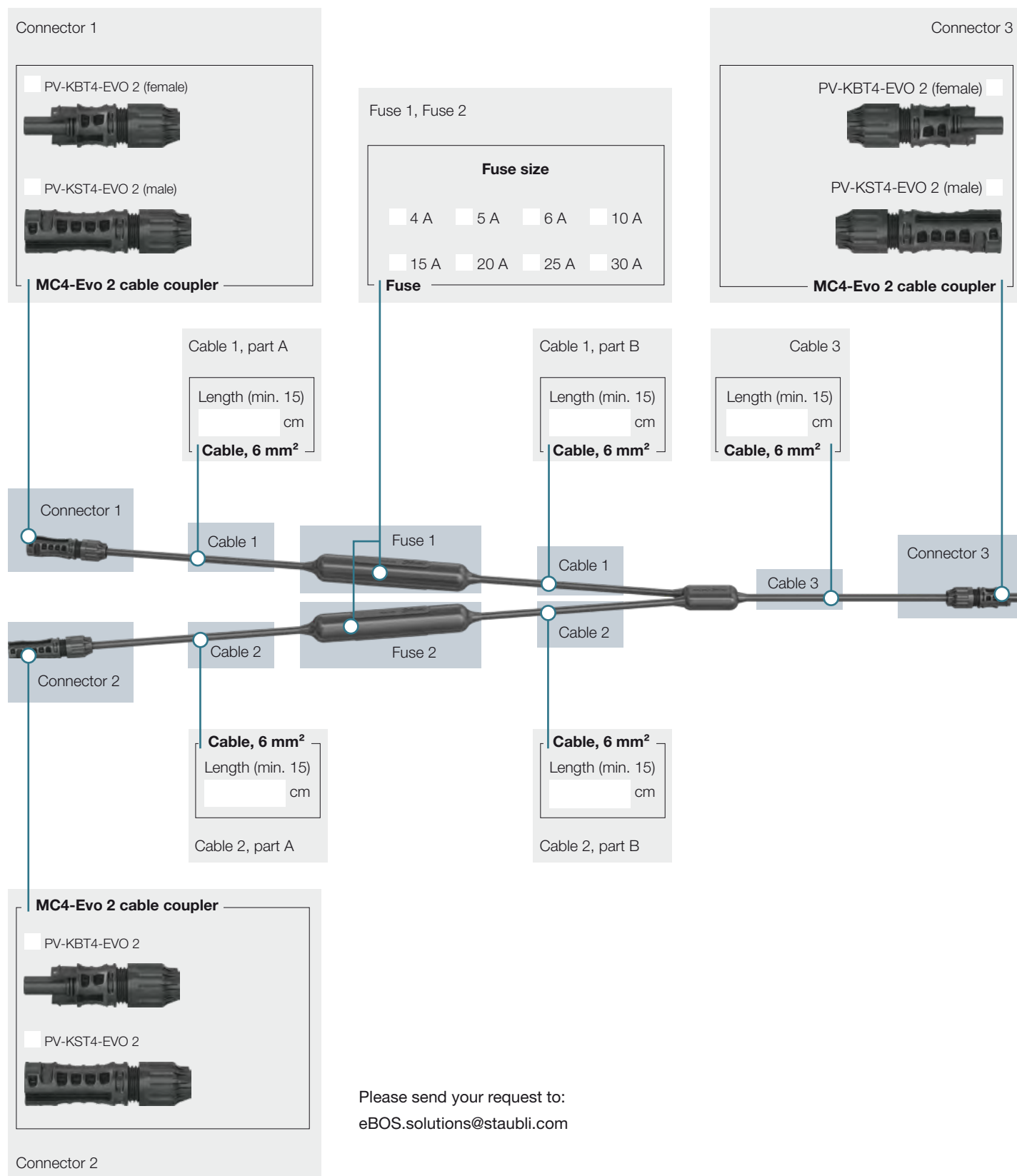
Please send your request to:
eBOS.solutions@staubli.com

MC4-Evo 2 Y-Splitter (SPL-Y) according to your request



Please send your request to:
eBOS.solutions@staubli.com

MC4-Evo 2 Y-Splitter + In-line Fuse (PV-K/SPL-Y/ILF3) according to your request





Please send your request to:
eBOS.solutions@staubli.com

Cable extensions according to your request


Side 1


MC4 cable coupler

☐ PV-KBT4



☐ PV-KST4



MC4-Evo 2 cable coupler

☐ PV-KBT4-EVO 2



☐ PV-KST4-EVO 2



MC4 panel receptacle

☐ PV-ADBP4-S2



☐ PV-ADSP4-S2



MC4-Evo 2 panel receptacle

☐ PV-ADB4-EVO 2


☐ PV-ADS4-EVO 2


MC4-Evo stor

☐ PV-KBT4-EVO ST


☐ PV-KST4-EVO ST


Cable

Cable cross section (mm²):


☐ 4 mm
☐ 6 mm


Length of cable extension:
(Cable certified according IEC62930)

 cm


Side 2


MC4 cable coupler


☐ PV-KBT4



☐ PV-KST4


MC4-Evo 2 cable coupler


☐ PV-KBT4-EVO 2



☐ PV-KST4-EVO 2

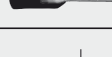
Cable lug



☐ Ø


☐ Ø

End sleeve for strands

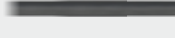

☐ Ø


☐ Ø

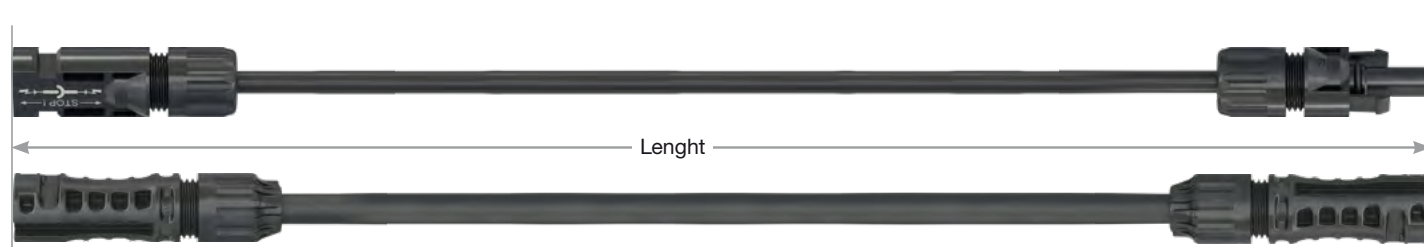


Partial stripping ☐

Length (max. 45 mm)



Not stripped ☐



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