

PV-KST4-EVO 2A/6I-UR

MC4-Evo 2 Male Cable Coupler

Photovoltaic DC cable coupler, plug – DC 1500 V, 4–6 mm²
Order No. 32.0317P0001-UR | Stäubli Electrical Connectors



The Stäubli PV-KST4-EVO 2A/6I-UR is the male (plug) half of the Original MC4-Evo 2 cable coupler, used to terminate PV string cable in the DC circuits of a photovoltaic array. It is a crimp connector for 4 mm² and 6 mm² conductor with a cable outer diameter of 4.7–6.4 mm, approved for DC 1500 V under both IEC 62852 and UL 6703. The MULTILAM contact system maintains constant spring pressure across many contact points, holding contact resistance below 0.2 mΩ for the service life of the connector and preventing the localised heating that drives hot-spots and power loss. IP65/IP68 sealing when mated, UL94-V0 insulation and certified UV and ammonia resistance suit it to permanent outdoor installation.

GENERAL / IDENTIFICATION

Manufacturer	Stäubli Electrical Connectors AG
Type designation	PV-KST4-EVO 2A/6I-UR
Order number	32.0317P0001-UR
Product family	Original MC4-Evo 2
Function	Male cable coupler (plug), single-pole
Gender / polarity convention	Plug – negative (–) side in standard PV practice

ELECTRICAL

Rated voltage (IEC 62852:2014+Amd.1:2020)	DC 1500 V
Rated voltage (UL 6703)	DC 1500 V
Rated current, IEC	45 A (4 mm ²) / 53 A (6 mm ²)
Rated current, UL	39 A (12 AWG) / 50 A (10 AWG)
Conductor cross-section	4 mm ² and 6 mm ² (IEC); 12 AWG and 10 AWG (UL)
Cable outer diameter	4.7 – 6.4 mm
Width of crimp opening	5.8 mm
Contact resistance	< 0.2 mΩ
Overvoltage category	III

MECHANICAL & ENVIRONMENTAL

Protection class (IEC)	II
Contact system	MULTILAM
Type of termination	Crimping
Locking system	Locking type
Contact material	Copper, tin plated
Insulation material	PA (polyamide)
Flame class	UL94-V0
Degree of protection, mated	IP65 / IP68 (1 m, 168 h)
Degree of protection, unmated	IP2X
Ambient temperature range	-40 °C ... +85 °C
Upper limiting temperature (IEC)	115 °C

Transport / storage temperature	-30 °C / +60 °C
Transport / storage humidity	< 70 % RH
Temperature level (IEC TS 63126)	Level 2

COMPLIANCE / STANDARDS

Maximum operating altitude	5000 m above sea level
UV resistance	Yes
Ammonia resistance	TÜV Rheinland certified to 2 PFG 1911/03.2011 (Q60139020-0001)
TÜV Rheinland certificate (IEC 62852)	R 60127169
UL file number (UL 6703 / CSA C22.2 No. 182.5)	E343181 – cULus Listed and UL Recognized
Assembly instructions	MA298

ORDERING / ACCESSORIES

Order number, individual part	32.0317P0001-UR
Order number, contacts on carrier band	32.0317P2000 (2000 contacts per reel)
Mating half	PV-KBT4-EVO 2A/6I-UR, order no. 32.0316P0001-UR
Sealing cap, plug side	PV-SVK4, order no. 32.0717
Crimping tool	PV-CZM-61100, order no. 32.6020-61100 with locator 32.6084
Unlocking tool	PV-MS-MC4-EVO, order no. 32.6066

TYPICAL APPLICATIONS

Module-to-module and module-to-string interconnection, string harnesses, combiner-box and inverter string inputs, module table and string wiring in rooftop, ground-mount and tracker PV arrays.

Installation note: do not disconnect under load. In accordance with NEC 2023 the connector requires a tool to open. Unmated connectors must be protected with Stäubli sealing caps.