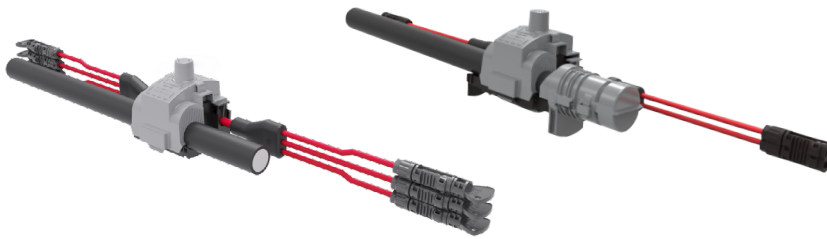


# SOLAR INSULATION PIERCING CONNECTORS SIPC

WITH PRE-ASSEMBLED MULTI-TAP FOR DC SOLAR APPLICATIONS



SIPC 240 & 400  
Multi-tap

SIPC 240 ES &  
400 ES Multi-tap

**ROBUST DESIGN SPECIFICALLY FOR SOLAR EBOS APPLICATIONS, OFFERING A SAFE, SIMPLE, AND RELIABLE CONNECTION.**

## KEY FEATURES

- Cover a wide range of trunk bus cables from 95 mm<sup>2</sup> to 400 mm<sup>2</sup>.
- Real-time configurability and flexibility, allowing adjustments during site construction to maintain project velocity.
- End-seal caps for dead-end applications integrated with the main SIPC assemblies.
- A factory-integrated multi-tap harness increases the number of strings per connection and decreases the number of field-installed components for enhanced reliability and a reduction in installation time.

TE Connectivity's (TE) Solar Insulation Piercing Connectors SIPC offer protection, insulation, and high-quality sealing for fast, easy, and safe cable connection of PV cables from 6 mm<sup>2</sup> to 50 mm<sup>2</sup>.

The factory-pre-installed dual or multi-tap harness provide perfect tap cable alignment, allowing for a simple and safe installation process in the field. No specialized skill is required to install the connector.

Designed to accommodate a trunk bus range of 95-400 mm<sup>2</sup> to allow larger array groups with fewer disconnects, resulting in significant savings in material and labor costs.

Our SIPC Assemblies have been built from the ground up on a foundation of field-proven, highly engineered materials and components that our connections are known for. The SIPC 240 and 400 are Class II connectors as defined by IEC 61140:2001 and are designed specifically for solar farms to withstand harsh environmental conditions. They are maintenance-free and robust enough to last for the lifetime of the system.

For safe connections before energization and protect the PV connectors from harsh environments, our SIPC assemblies are pre-installed with our SAFE-TE connectors. SAFE-TE caps are UV-resistant, IP-68-rated and re-usable.

## APPLICATIONS

- Utility-scale and commercial solar power generation

## RELEVANT STANDARDS AND TESTING

- Tested and certified according to EN 62852 and IEC 62852 connectors for DC-applications in photovoltaic systems by DEKRA- 6158847.01AOC

## SIPC WITHOUT MULTI-TAP

MID-SPAN		DEAD-END	
Part Number	Description	Part Number	Description
2448514-1	SIPC 240	SIPC 240-ES	2448514-2
2448513-1	SIPC 400	SIPC 400-ES	2448513-2

## SIPC - 2 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description	Part Number	Part Description	Cable Size	Cable Color	Connector Type
2477592-1	SIPC 240 SHMPR2AAMT	1-2477592-1	SIPC 240-ES SHMPR2AAMT	6 mm <sup>2</sup>	Red	Male
2477591-1	SIPC 240 SHMNB2AAFT	1-2477591-1	SIPC 240-ES SHMNB2AAFT		Black	Female
2477588-1	SIPC 400 SHMPR2AAMT	1-2477588-1	SIPC 400-ES SHMPR2AAMT	6 mm <sup>2</sup>	Red	Male
2477587-1	SIPC 400 SHMNB2AAFT	1-2477587-1	SIPC 400-ES SHMNB2AAFT		Black	Female
2477590-1	SIPC 240 SHMPR2BBMS	1-2477590-1	SIPC 240-ES SHMPR2BBMS	10 mm <sup>2</sup>	Red	Male
2477519-1	SIPC 240 SHMNB2BBFS	1-2477519-1	SIPC 240-ES SHMNB2BBFS		Black	Female
2477585-1	SIPC 400 SHMPR2BBMS	1-2477585-1	SIPC 400-ES SHMPR2BBMS	10 mm <sup>2</sup>	Red	Male
2476935-1	SIPC 400 SHMNB2BBFS	1-2476935-1	SIPC 400-ES SHMNB2BBFS		Black	Female

## SIPC - 4 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description	Part Number	Part Description	Cable Size	Cable Color	Connector Type
2477503-1	SIPC 240 SHMPR4CAMT	1-2477503-1	SIPC 240-ES SHMPR4CAMT	6 mm <sup>2</sup>	Red	Male
2477508-1	SIPC 240 SHMNB4CAFT	1-2477508-1	SIPC 240-ES SHMNB4CAFT		Black	Female
2475424-1	SIPC 400 SHMPR4CAMT	1-2475424-1	SIPC 400-ES SHMPR4CAMT	6 mm <sup>2</sup>	Red	Male
2475425-1	SIPC 400 SHMNB4CAFT	1-2475425-1	SIPC 400-ES SHMNB4CAFT		Black	Female
2477515-1	SIPC 240 SHMPR4DBMS	1-2477515-1	SIPC 240-ES SHMPR4DBMS	10 mm <sup>2</sup>	Red	Male
2477512-1	SIPC 240 SHMNB4DBFS	1-2477512-1	SIPC 240-ES SHMNB4DBFS		Black	Female
2475429-1	SIPC 400 SHMPR4DBMS	1-2475429-1	SIPC 400-ES SHMPR4DBMS	10 mm <sup>2</sup>	Red	Male
2475427-1	SIPC 400 SHMNB4DBFS	1-2475427-1	SIPC 400-ES SHMNB4DBFS		Black	Female

## SIPC - 6 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description	Part Number	Part Description	Cable Size	Cable Color	Connector Type
2477517-1	SIPC 240 SHMPR6DAMT	1-2477517-1	SIPC 240-ES SHMPR6DAMT	6 mm <sup>2</sup>	Red	Male
2477511-1	SIPC 240 SHMNB6DAFT	1-2477511-1	SIPC 240-ES SHMNB6DAFT		Black	Female
2475431-1	SIPC 400 SHMPR6DAMT	1-2475431-1	SIPC 400-ES SHMPR6DAMT	6 mm <sup>2</sup>	Red	Male
2475426-1	SIPC 400 SHMNB6DAFT	1-2475426-1	SIPC 400-ES SHMNB6DAFT		Black	Female
2477516-1	SIPC 240 SHMPR6EBMS	1-2477516-1	SIPC 240-ES SHMPR6EBMS	10 mm <sup>2</sup>	Red	Male
2477513-1	SIPC 240 SHMNB6EBFS	1-2477513-1	SIPC 240-ES SHMNB6EBFS		Black	Female
2475430-1	SIPC 400 SHMPR6EBMS	1-2475430-1	SIPC 400-ES SHMPR6EBMS	10 mm <sup>2</sup>	Red	Male
2475428-1	SIPC 400 SHMNB6EBFS	1-2475428-1	SIPC 400-ES SHMNB6EBFS		Black	Female

SIPC MODEL	HARNESS PREFIX	NUMBER OF TAPS	CENTER TAP CABLE SIZE	TAP PV CABLE SIZE	CONNECTOR TYPE	CONNECTOR BRAND	POLARITY	TAP CABLE COLOR
SIPC240 SIPC400	SHM: Solar Harness Multitap	0	x = no tap wire	x = no PV connector cable	F = FEMALE M = MALE	T = TE S = STAUBLI	P = Positive N = Negative	B = Black R = Red
		2	A = 6 mm <sup>2</sup> B = 10 mm <sup>2</sup>	A = 6 mm <sup>2</sup> B = 10 mm <sup>2</sup>				
		4	C = 16 mm <sup>2</sup> D = 25 mm <sup>2</sup>	A = 6 mm <sup>2</sup> B = 10 mm <sup>2</sup>				
		6	D = 25 mm <sup>2</sup> E = 35 mm <sup>2</sup>	A = 6 mm <sup>2</sup> B = 10 mm <sup>2</sup>				

## MAXIMUM OPERATING CONDITIONS

PARAMETERS	CONNECTOR RATINGS	TAP RATINGS
Maximum Current at 55°C (131°F) ambient	300A	Cu stranded 6 mm <sup>2</sup> 35A each
		Cu stranded 10 mm <sup>2</sup> 50A each
		CU stranded 16 mm <sup>2</sup> 70A per side
		Cu stranded 25 mm <sup>2</sup> 105A per side
		Cu stranded 35 mm <sup>2</sup> 150A per side
Cable Type	Use cable suitable for photovoltaic systems compliant with EN 50618 and IEC 62930, (2 kV PV wire)	
Operating Ambient Temperature	-40°C to 85°C (-40°F to 185°F)	
Connector Installation Temperature	0°C to 55°C (32°F to 131°F)	
Voltage Rating	1500 V DC	

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