

SOLAR IPC ASSEMBLIES SIPC 240/400

INSULATION PIERCING CONNECTORS WITH PRE-ASSEMBLED MULTI-TAP







SIPC 240 ES & 400 ES Multi-tap

APPLICATIONS

Utility-Scale Solar Projects

RELEVANT STANDARDS AND TESTING

 EN 50483-4 and IEC 62852 certified by DEKRA - 6158847.01AOC

ROBUST DESIGN FOR SOLAR EBOS APPLICATIONS WITH SIMPLER, SAFER INSTALLATION AND RELIABLE CONNECTIONS

KEY FEATURES

- Accommodates the full range of trunk bus sizes with a single SIPC, from 95 mm² to 400 mm²
- The multi-tap feature allows more strings per connection, optimizing EBOS architecture
- Real-time flexibility allows on-site adjustments during construction, keeping the project on schedule
- End-seal caps for dead-end applications are integrated with the main SIPC assemblies
- Ease of Installation:
 A factory-integrated
 multi-tap harness minimizes
 the need for field-installed
 components, improving
 overall reliability

TE Connectivity (TE) Solar IPC Assemblies SIPC offer protection, insulation, and high-quality sealing for fast, easy, and safer installation of PV cables ranging from 10 mm² to 50 mm².

The factory-assembled dual or multi-tap jumpers provide accurate tap cable alignment, allowing for a simple and safer installation process in the field. **No craft labor is required to install the connectors.**

Designed to accommodate a trunk bus range of **95-400 mm²**, the system supports larger array groups with fewer disconnects, resulting in significant savings on both material and labor costs.

Our Solar IPC assemblies are built from the ground up using field-proven, highly engineered materials and components known for their reliability. They are designed to withstand the harshest conditions in utility-scale solar projects, providing a maintenance-free, worry-free connection throughout the system's lifespan.

Our SIPC assemblies integrate TE SOLARLOK Safe Locks, which are UV resistant, IP68 rated, and reusable. These connectors are pre-installed on all integrated tap cables to prevent unsafe connections before energization.

SIPC WITHOUT MULTI-TAP

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

SIPC 240/400 - 2 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description Part Number Part Description Ca		Cable Size	Cable Color	Connector Type	
2512550-1	SIPC 240 SHMPR2BBMS	1-2512550-1	SIPC 240-ES SHMPR2BBMS	10 mm²	Red	Male
2512549-1	SIPC 240 SHMNB2BBFS	1-2512549-1	SIPC 240-ES SHMNB2BBFS	10 mm	Black	Female
2512538-1	SIPC 400 SHMPR2BBMS	1-2512538-1	SIPC 400-ES SHMPR2BBMS	102	Red	Male
2512537-1	SIPC 400 SHMNB2BBFS	1-2512537-1	SIPC 400-ES SHMNB2BBFS	10 mm²	Black	Female

SIPC 240/400 - 4 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description Part Number		Part Description	Cable Size	Cable Color	Connector Type
2512546-1	SIPC 240 SHMPR4DBMS	1-2512546-1	SIPC 240-ES SHMPR4DBMS	10 mm²	Red	Male
2512545-1	SIPC 240 SHMNB4DBFS	1-2512545-1	SIPC 240-ES SHMNB4DBFS	10 mm	Black	Female
2512534-1	SIPC 400 SHMPR4DBMS	1-2512534-1	SIPC 400-ES SHMPR4DBMS	102	Red	Male
2512533-1	SIPC 400 SHMNB4DBFS	1-2512533-1	SIPC 400-ES SHMNB4DBFS	10 mm²	Black	Female

SIPC 240/400 - 6 TAPS

MID-SPAN		DEAD-END		TAP CABLE		
Part Number	Part Description	Part Number	Part Description	Cable Size	Cable Color	Connector Type
2512548-1	SIPC 240 SHMPR6EBMS	1-2512548-1	SIPC 240-ES SHMPR6EBMS	10 mm²	Red	Male
2512547-1	SIPC 240 SHMNB6EBFS	1-2512547-1	SIPC 240-ES SHMNB6EBFS	10 mm	Black	Female
2512536-1	SIPC 400 SHMPR6EBMS	1-2512536-1	SIPC 400-ES SHMPR6EBMS	10 mm²	Red	Male
2512535-1	SIPC 400 SHMNB6EBFS	1-2512535-1	SIPC 400-ES SHMNB6EBFS	10 mm	Black	Female

PRODUCT SELECTION GUIDE

SIPC Model	Harness Prefix	Polarity	Tap Cable Color	Number of Taps	Center Tap Cable Size	Tap PV Cable Size	Connector Type	Connector Brand
				0	x = no tap wire	x = no PV connector cable	F = Female	T = TE S = STAUBLI
SIPC240 SIPC400		P = Positive N = Negative	B = Black R = Red	2	B = 10 mm ²	B = 10 mm ²		
Multitap N - Negativ	N - Negative	ve k – Red	4	D = 25 mm ²	B = 10 mm ²	M = Male	3 - STAUBLI	
			6	E = 35 mm ²	B = 10 mm ²			

DESIGN DATA

Parameters	Connector Ratings	Tap Ratings		
		Cu stranded 10 mm² 50 A each		
Maximum Current at 55°C (131°F) Ambient	700 4	Cu stranded 16 mm² 70 A per side		
	300 A	Cu stranded 25 mm² 105 A per side		
		Cu stranded 35 mm² 150 A per side		
Cable Type	Use cable suitable for photovoltaic systems comp	liant 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 VDC			

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