SOLAR IPC ASSEMBLIES SIPC 240/400

INSULATION PIERCING CONNECTORS WITH PRE-ASSEMBLED MULTI-TAP

SIPC 240 & 400
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 mm^2 to 400 mm^2
- 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 mm^2 to 50 mm^2.**

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 mm^2**, 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/IP69-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	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		Black	Female
2512538-1	SIPC 400 SHMPR2BBMS	1-2512538-1	SIPC 400-ES SHMPR2BBMS	10 mm²	Red	Male
2512537-1	SIPC 400 SHMNB2BBFS	1-2512537-1	SIPC 400-ES SHMNB2BBFS		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		Black	Female
2512534-1	SIPC 400 SHMPR4DBMS	1-2512534-1	SIPC 400-ES SHMPR4DBMS	10 mm²	Red	Male
2512533-1	SIPC 400 SHMNB4DBFS	1-2512533-1	SIPC 400-ES SHMNB4DBFS		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		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		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
SIPC240 SIPC400	SHM: Solar Harness Multitap	P = Positive N = Negative	B = Black R = Red	0	x = no tap wire	x = no PV connector cable	F = Female M = Male	T = TE S = STAUBLI
				2	B = 10 mm^2	B = 10 mm^2		
				4	D = 25 mm^2	B = 10 mm^2		
				6	E = 35 mm^2	B = 10 mm^2		

DESIGN DATA

Parameters	Connector Ratings	Tap Ratings
Maximum Current at 55°C (131°F) Ambient	300 A	Cu stranded 10 mm^2 50 A each
		Cu stranded 16 mm^2 70 A per side
		Cu stranded 25 mm^2 105 A per side
		Cu stranded 35 mm^2 150 A 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 VDC	

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