





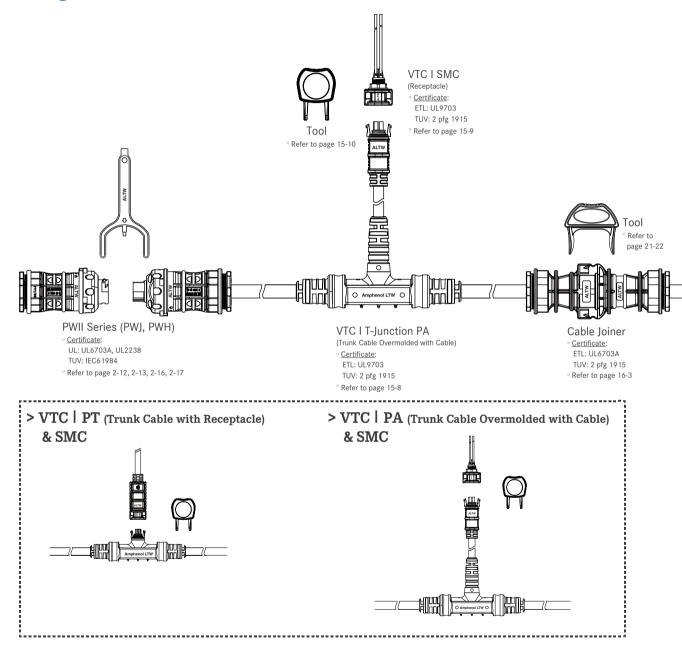
CATALOGUE

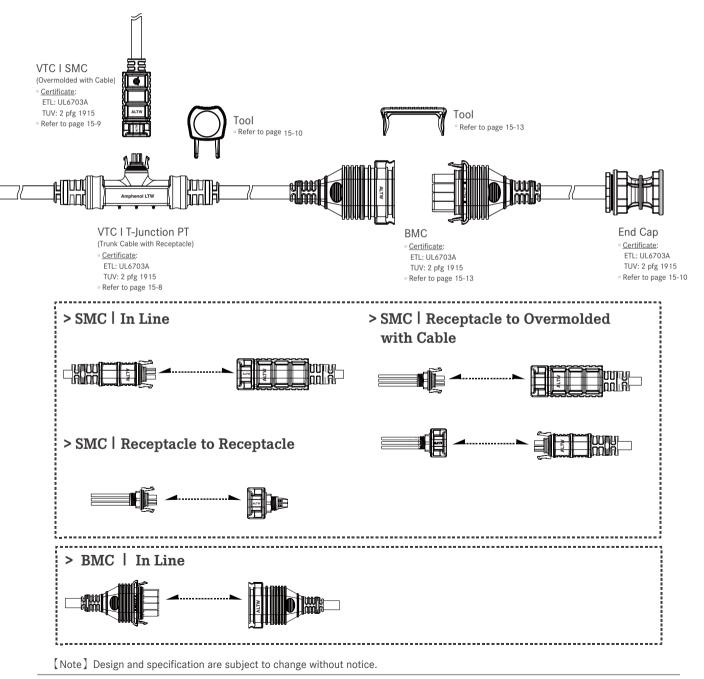
http://www.amphenolltw.com



PV AC Connectors / T-Junction Connector

Range Overview







Specification

| Identifications | VTC I T Junction: PT & PA (For Trunk Cable) VTC I SMC (For Drop or Receptacle) BMC |
|-----------------------|--|
| Description | Cabling System for Micro-inverter |
| Current Rating / Data | VTC I T Junction: Trunk Range: UL15A~30A / TUV17-25A / 3~4Pin VTC I SMC: 5A / 3~4Pin BMC: UL17A / TUV19A / 3~4Pin |
| Material | Contacts: Copper Alloy Connector Body: m-PPE |
| Waterproof Rating | IP67 |
| Temperature Range | Ambient: -40°C ~ +85°C Upper Limited Temperature:+105°C |
| Contact Resistance | \leq 10m Ω |
| Insulation Resistance | \geq 100m at DC500V |
| Durability | 500 cycles |
| Breakdown Voltage | \geq DC6000V / 1 minute |
| Certificate | VTC I T-Juntion: ETL: UL9703, TUV: 2 pfg 1915 VTC I SMC: ETL: UL6703A, TUV: 2 pfg 1915 BMC: ETL: UL6703A, TUV: 2 pfg 1915 |
| Voltage Rating | AC 300V |
| More to know | Salt Spray Corrosion test: 48H Cable for Trunk: 14~10AWG or 2.5mm ² ~4mm ² Cable for Drop: 18AWG or 0.75mm ² Trunk Cable Pitch: Upon request |

Ordering Information | VTC | T-Junction

| | | 1-2 | 3 4 | 5-6 | > VTC PT (Trunk Cable with |
|---|-------------------------|-----------------------------------|---------------|-----|------------------------------------|
| Specification | | | | | Receptacle) & SMC |
| <u>>PT Type</u> | | | | | Ń |
| (PT) Trunk Cable with Recept | acle | | | | |
| <u>>PA Type</u> | | | | | |
| (PA) Trunk Cable Overmoled | with Cable | | | | |
| Number of Contacts | | | | | <u>به</u> ال |
| (3) 3 Contacts | (4) 4 Contact | ts | | | |
| Cable Style | | | | | |
| >UL : TCER Cable Style | <u>>TUV : EU Cat</u> | | | | |
| (10) 10# | (4A) 4mm ² 1 | | | | · |
| (12) 12# | (4B) 4mm ² H | | | | > VTC PA (Trunk Cable Overmolded |
| (14) 14# | (2A) 2.5mm ² | 1940Cable | | | with Cable) & SMC |
| Cable pitch | | | | | |
| (105) 1.05m pitch | | | | | i 👗 i |
| (170) 1.7m pitch (205) 2.05m pitch | | | | | |
| | * More options a | vailable | | | 🚆 🕅 |
| > For Trunk Cable with Recept (00) SMC connector | tacie (PT) | | | | |
| · / | ore options availab | ale (Lloon request) | | | |
| > For Trunk Cable Overmoled | | , | | | |
| (□)+(■): (Drop Cable Length | | - | tor) | | |
| EX. (07B) = 0.7m length + 18# witho | | | | | |
| () : Drop Cable Length | | | | | |
| (07) 0.7m length | | | | | |
| (10) 1.0m length | | | | | |
| (15) 1.5m length * More optic | ons available | | | | |
| (() : Cable type with or with | out connector | | | | |
| >UL : TCER Cable Style | | >TUV : EU Cable Style | | | |
| (A) 18# With SMC connector | | (E) 0.75mm ² HAR Cab | le With SMC | | |
| (B) 18# Without Connector (C | | (F) 0.75mm ² HAR Cab | | ЛС | |
| (C) 16# Without Connector (C | • / | (G) 1.0mm ² HAR Cable | | | |
| (D) 14# Without Connector (C | Open ended) | (H) 0.75mm ² 1940 Ca | ble With SMC | C | |
| | | (I) 0.75mm ² 1940 Cab | ole Without S | MC | |
| | | (J) 1.0mm ² 1940 Cable | e Without SM | IC | |

Number of T-Junctions

008, 011, 017,, 999 EX. (008) = 8 T-Junctions



Ordering Information | VTC | SMC Specification (SPS) Solar Power AC (Small size) Number of Contacts (03) 3 Contacts (04) 4 Contacts **Connector Body (Style)** > Receptacle > Overmolded with Cable (R) ALTW Rear Fastened (A) With Strain Relief **Connector Housing Gender** (M) Male (Plug) (F) Female (Socket) **Contact Gender** (M) Male (F) Female **Assemble Style** > Receptacle > Overmolded with Cable (C) Crimp Type (With Wire) (M) Overmolded with Cable Mating Style (L) 2 Points Lock (Push & Pull) (With Unlocking Tool) Backshell > Overmolded with Cable > Receptacle (C) Circular (L) Straight Waterproof Rating (7) IP 67

More Information
For Receptacle
001, 002, 003.....

001 is US Spec, 002 is EU Spec

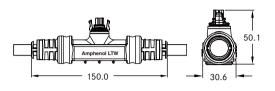
> For Overmolded with Cable

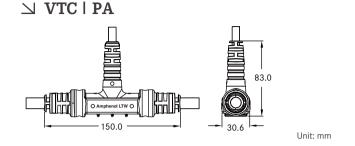
(□)+(■) : Cable Type + Cable Length EX. (T01) = US Cable For TCER 18# Cable + 1M

(<u>)</u> : <u>Cable Type</u> (T) US Cable For TCER 18# Cable (D) EU Cable For HAR 0.75mm² Cable (E) EU Cable For 1940 0.75mm² Cable (
) : Cable Length From 1M to 99M EX. (01) = 1M

Physical Dimension

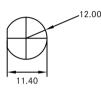
└ VTC | PT



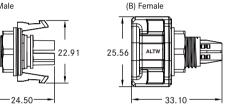


SMC | Receptacle

Panel Cut-Out



Connector Dimension

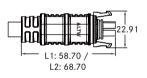


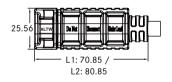
* Maximum Panel Thickness: 4.0mm

Unit: mm

$rightarrow SMC \mid$ Overolded with Cable

(A) Male





(B) Female

Unit: mm



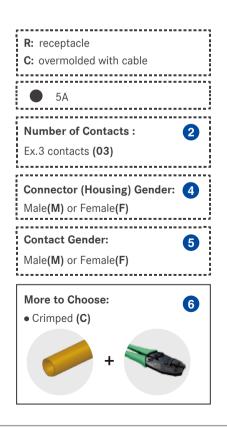
Contact Configuration

→ VTC | T-Junction

| \square | VTC (Output) | | | | | | |
|-----------|--------------|-----|----|-----|--|--|--|
| | 3 | Pin | 4F | Pin | | | |
| | US | EU | US | EU | | | |
| 10# | | | • | | | | |
| 12# | • | | • | | | | |
| 14# | • | | • | | | | |
| 4.0mm | | • | | | | | |
| 2.5mm | | | | | | | |

→ VTC I SMC

| \square | SPS (Input) | | | | | |
|------------|-------------------|-----|--|--|--|--|
| | 5A | | | | | |
| | MM or FF MF or FM | | | | | |
| 3 Contacts | | RC | | | | |
| 4 Contacts | | R C | | | | |

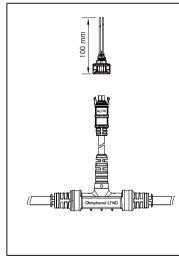


Find Our Standard Products

→ VTC (PT) and SMC (Overmolded with Cable)

| | SMC : Overmold | led with cable | | | | | |
|--------------|----------------------------------|---|------------|---|-------------------------|---|--|
| ~ | | Cable type 10 AMP (Code) | | Contacts | 2 | Female Connector (F) Male Contacts (M) | |
| | US (UL TC-ER cable) | TCER 18# cable (T) | | 03,04 | SF | PS- 2 AFMM-LL7T* | |
| | EU | HAR 0.75 mm ² cable (D) | 5A(SPS) | 03 | SP | SPS-03AFMM-LL7 | |
| ALTW | (TUV 2pfg1940 cable) | 1940 0.75 mm ² cable (E) | | | | | |
| | | | | | | | |
| 1. (| (PT) Trunk Cable with Receptacle | | | | | | |
| | | Wire Size 3 | Contacts 2 | T-Junction Pitch | Number of T-Junction | | |
| | US (UL TCER cable) | 10# (30A) (10) 12# (20A) (12) 14# (15A) (14) | 03,04 | 1.05M (105) | | PT- 2 3 4 -00- 6 | |
| | EU (TUV 2pfg1940 cable) | 4mm² (4A /4B) (25A) | 03 | 1.7M (170) 2.05M (205) | 075 | | |
| | | 2.5mm² (2A) (17A) | | | 075 | PT-3- 34 -00- 6 | |
| | | | | | *Refe | er to page 15-5 for ordering | |

→ VTC (PA) and SMC (Receptacle)



| Male Co | onnector (F) ontacts (M) | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| SPS- 2 RF | | | | | | | | |
| _ | FMC-LC7001 | | | | | | | |
| SPS- 2 RF | RFMC-LC7002 | | | | | | | |
| (PA) Trunk Cable Overmolded With Cable | | | | | | | | |
| Cable Length ble type 5 | P/N | | | | | | | |
| 18#with SMC Conr 18#without Conn. 16#without Conn. 14#without Conn. | PA- 234 56 | | | | | | | |
| 0.75mm ² with SMC Conn. 0.75mm ² without Cor | PA-3 3 4 | | | | | | | |
| | Cable Length ble type 5 18#with SMC Conr 18#without Conn. 14#without Conn. 0.75mr²with SMC Conn. | | | | | | | |

SMC > In-line SMC →

| • Female Cont • Safety Lock | Male Connector (Housing) Female Contacts Safety Lock (Unlock tool needed) Unlock tool ULT-SSMC-01 | | Overmolded with Cable | | | | |
|--------------------------------|--|--|---|---|--|--|--|
| | Contacts 2 | Cable type 10 | Male Connector (M) Female Contacts (F) | Female Connector (F) Male Contacts (M) | | | |
| | 03,04 | (T) TCEK 18# Cable (US) | SPS- 2 AMFM-LL7T <u>XX</u> * | SPS-2 AFMM-LL7T <u>XX</u> * | | | |
| 5A(SPS) | | (D) HAR 0.75mm ² Cable (EU) | | | | | |
| | 03 | (E)1940 0.75mm² Cable (EU) | SPS-03AMFM-LL7 10 XX* | SPS-03AFMM-LL7 10 XX* | | | |
| | | | | *XX: Choose the cable length from $01 \sim 99m$ | | | |

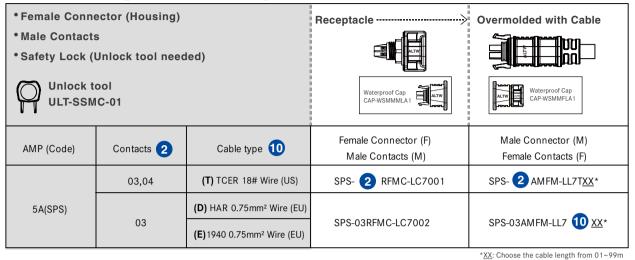
rightarrow SMC > Receptacle and Mating Pair

| Male Connector (Housing) Female Contacts Safety Lock (Unlock tool needed) Unlock tool ULT-SSMC-01 | | | Receptacle | Overmolded with Cable |
|---|------------|---------------------------------------|---|---|
| AMP (Code) | Contacts 2 | Cable type 1 | Male Connector (M) Female Contacts (F) | Female Connector (F) Male Contacts (M) |
| | 03,04 | (T) TCER 18# Wire (US) | SPS- 2 RMFC-LC7001 | SPS- 2 AFMM-LL7T <u>XX</u> * |
| 5A(SPS) | | (D) HAR 0.75mm ² Wire (EU) | 000 0001/50 / 07000 | |
| | 03 | (E) 940 0.75mm² Wire (EU) | SPS-03RMFC-LC7002 | SPS-03AFMM-LL7 10 XX* |

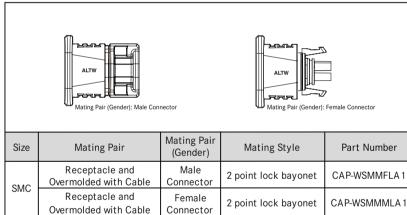
*XX: Choose the cable length from $01 \sim 99m$

Unmated or Mated

SMC > Receptacle and Mating Pair



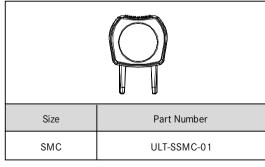
↘ Accessories > Waterproof Cap



\square Accessories > End-Cap

| | · · · · · · · · · · · · · · · · · · · | | | | | |
|-----------------------------|---------------------------------------|--|--|--|--|--|
| | | | | | | |
| Cable OD. | Part Number | | | | | |
| 16~12mm / 0.62~0.47 inch | CAP-WTCASMA1 | | | | | |
| 12~10mm / 0.47~0.39 inch | CAP-WTCASMA2 | | | | | |
| 10~08mm 039~0.31 inch | CAP-WTCASMA3 | | | | | |

∆ Accessories > Tool



[Note] Design and specification are subject to change without notice.



Ordering Information | BMC

| • | | | | | | | | | | |
|--|-----------------------|--------|---|---|---|----|----|---|---|---|
| | | 1-2 | 3 | 4 | 5 | 6- | -7 | 8 | 9 | |
| Specification (SPB) Solar Power For Big MC (17A: UL US Market ; 19A: TUV EU N | Market ; 20A: Upon re | quest) | | | | | | | | |
| Number of Contacts (3) 3 Contacts | (4) 4 Contacts | | | | | | | | | |
| Connector Body (Style) > Overmolded with Cable (A) With Strain Relief | | | | | | | | | | |
| Connector Housing Gender (M) Male (Plug) | (F) Female (Sock | et) | | | | | | | | |
| Contact Gender (M) Male | (F) Female | | | | | | | | | |
| Assemble Style Overmolded with Cable (M) Overmolded with Cable | | | | | | | | | | |
| Mating Style (L) 2 Points Lock (Push & Pull) (With Unlocking Tool) | | | | | | | | | | |
| Backshell <u>> Overmolded with Cable</u> (L) Straight | | | | | | | | | | |
| Waterproof Rating (7) IP 67 | | | | | | | | | | |
| More Information ≥ For Overmolded with Cable (□)+(■) : Cable Type + Cable Leng EX. (C01) = EU Cable For HAR 4mm | , | | | | | | | | | 1 |
| | | h | | | | | | | | |

 (□): Cable Type
 (□): Cable Length

 (R) UL Cable For TCER 12# Cable
 From 1M to 99M

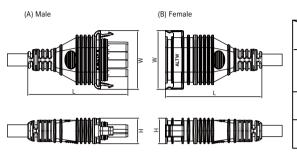
 (C) EU Cable For HAR 4mm² Cable
 EX. (01) = 1M

 (L) EU Cable For 1940 4mm² Cable
 EX. (01) = 1M

15-11 Amphenol LTW Technology Co., Ltd.

Physical Dimension

\square BMC | Overolded with Cable



| | L | | V | V | Н | | |
|---------------------|--------------|----------|--------|------|------|----------|--|
| Connector Gender | (B) | (A) | (B) | (A) | (B) | (A) | |
| 17A (SPB) | 94.95 | 98.5 | 58.0 | 58.0 | 25.0 | 25.0 | |
| 19A (SPB) | 94.95 | 98.5 | 58.0 | 58.0 | 25.0 | 25.0 | |
| [Note] 17A: Comp | lv to UL sta | ndard fo | or USA | | | Unit: mm | |

[Note] 17A: Comply to UL standard for USA

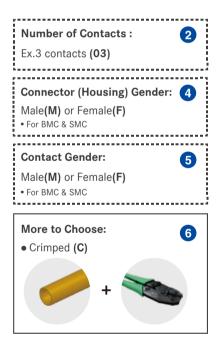
19A: Comply to TUV standard for Europe 20A: Upon request

Contact Configuration

→ BMC

| \square | SPB (Oytput) | | | | | |
|------------|--------------|----------|----------|----------|--|--|
| | 1 | 7A | 19 | PA | | |
| | MM or FF | MM or FF | MM or FF | MM or FF | | |
| 3 Contacts | ·•• | | | (*, *) | | |
| 4 Contacts | ·••• | | | | | |

[Note] 17A: Comply to UL standard for USA 19A: Comply to TUV standard for Europe 20A: Upon request



[Note] Design and specification are subject to change without notice.

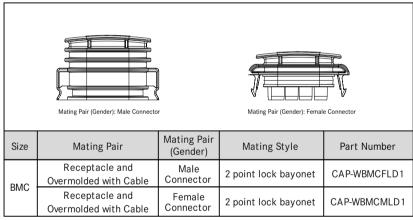
IP 67.68 9 Unmated or Mated

Find Our Standard Products

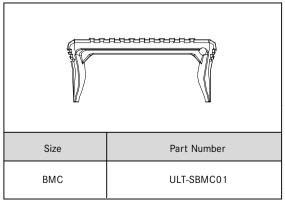
rightarrow BMC > Receptacle and Mating Pair

| Male Connector (Housing) Female Contacts Safety Lock (Unlock tool needed) Unlock tool ULT-SBMC01 | | | Receptacle | Overmolded with Cable |
|---|------------|--------------------------------------|---|---|
| AMP (Code) | Contacts 2 | Cable type 1 | Male Connector (M) Female Contacts (F) | Female Connector (F) Male Contacts (M) |
| 17A(SPB) | 03,04 | R-TCER 12# cable (US) | SPB- 2 AMFM-LL7R <u>XX</u> * | SPB- 2 AFMM-LL7R <u>XX</u> * |
| 19A(SPB) | 03 | C-HAR 4.0 mm ² cable (EU) | SPB-03AMFM-LL7 10 XX* | SPB-03AFMM-LL7 10 XX* |
| 17A(SFD) | 03 | L-1940 4.0 mm² cable (EU) | | |

↘ Accessories > Waterproof Cap



∆ Accessories > Tool



[Note] Design and specification are subject to change without notice.

15-13 Amphenol LTW Technology Co., Ltd.

*XX: Choose the cable length from 01~99m

Memo

| |
|-------------------------------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| •••••• |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| - 1. AAI |
| |
| |
| |
| Scan to visit our website |

Amphenol LTW Technology Co., Ltd. (Headquarter)

9F., No.657-12, Zhongzheng Rd., Xinzhuang Dist., New Taipei City 242, Taiwan Telephone: +886-2-29085626 Fax: +886-2-29029787 www.amphenolltw.com

Shulin plant, Taiwan

No.10, Shutan St., Shulin Dist., New Taipei City 238, Taiwan

Kunshan plant, China

No. 62 Da Tung Road, Peng Lang Street, Kunshan City , Jiangsu Province, China Telephone: +86-512-5761-0501 Fax: : +86-512-5761-0515

For further information, please contact :

Sales & Marketing Department | Email : sales@ltw-tech.com



Scan to visit our website