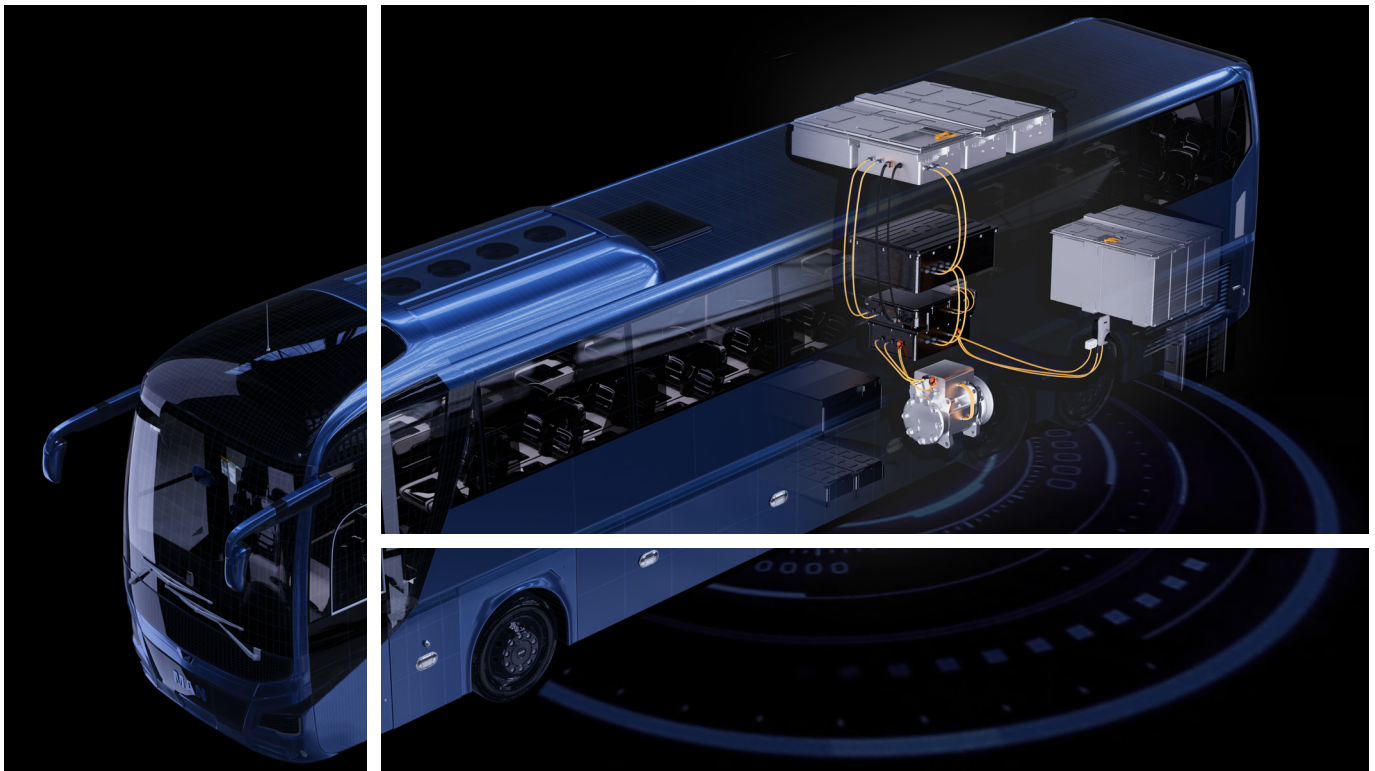


POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

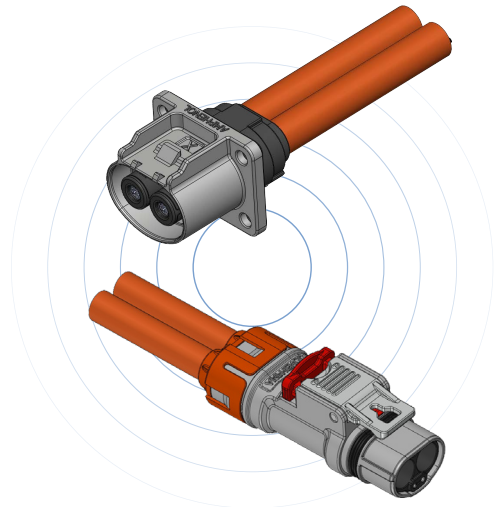
60A Product Catalog

2025.Nov Rev A



PLP 60A Series

Powerlok™ Plus 60A Series



Amphenol PowerLok™ (PLP) 60A series connector is designed for High-voltage/low-medium current modules, including Battery, PDU, A/C Compressor, DC/DC, PTC, E-Engine, Oil pump, etc.

The PLP 60A connector has small panel foot print(Same as G1). Built to withstand harsh environments, it delivers excellent IP67, IP68(1m, 48h) and IP6K9K for dust and water-proof, along with robust vibration resistance. The connector ensures stable and low shield contact resistance, providing reliable EMI protection. Accommodates cable size from 2.5mm² to 10mm² and is compatible with Powerlink, H+S, TFC cable brands.

Key Features

Dimension

Electric

- Rated voltage: 1500V
- Rated current: 25A @ 2.5mm² 40A @ 4mm²
45A @ 6mm² 60A @ 10mm²
- Insulation resistance: 1000MΩ
- Dielectric withstanding voltage: 8000V DC
- Shielding performance: LV215@≤9mΩ

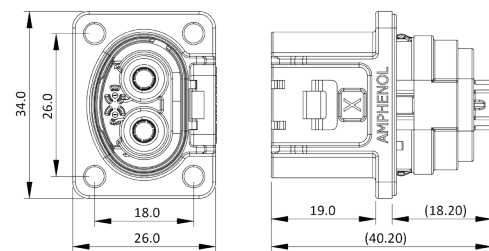
Environmental

- Operating temperature: -40~+140°C
- Inflammability: V0
- IP degree: IP67, IP68(1m,48H), IPXXB, IP69K
- High-temperature storage: 1008H
- Neutral salt spray: 1080H

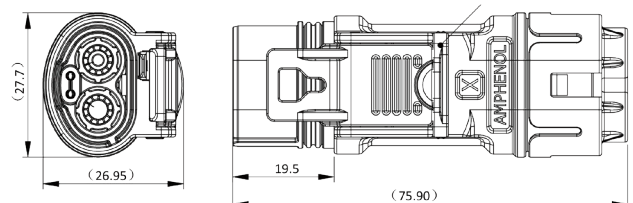
Mechanical

- Positions: 2
- Keys: 4
- Mating cycle: 100
- Vibration: ISO 16750-3 Profile 7 & Profile 9
- Wire Range: 2.5mm²/4mm²/6mm²/10mm²
- Connection method: Crimping
- CPA meet LV214

Receptacle 180°



Plug



Product features highlight

- ☉ Same installation panel foot print as G1 (X, Y, U, V keys)
- ☉ Stronger interlocking system - ISO 16750-3 Profile 7 & Profile 9
- ☉ IP67, IP68(1m, 48h), IP6K9K waterproof protection
- ☉ Stable and smaller shielding contact resistance
- ☉ Compatible with different cables (POWERLINK/TFC/H+S)
- ☉ Panel key available

Recommended Cable Size & Current Rating

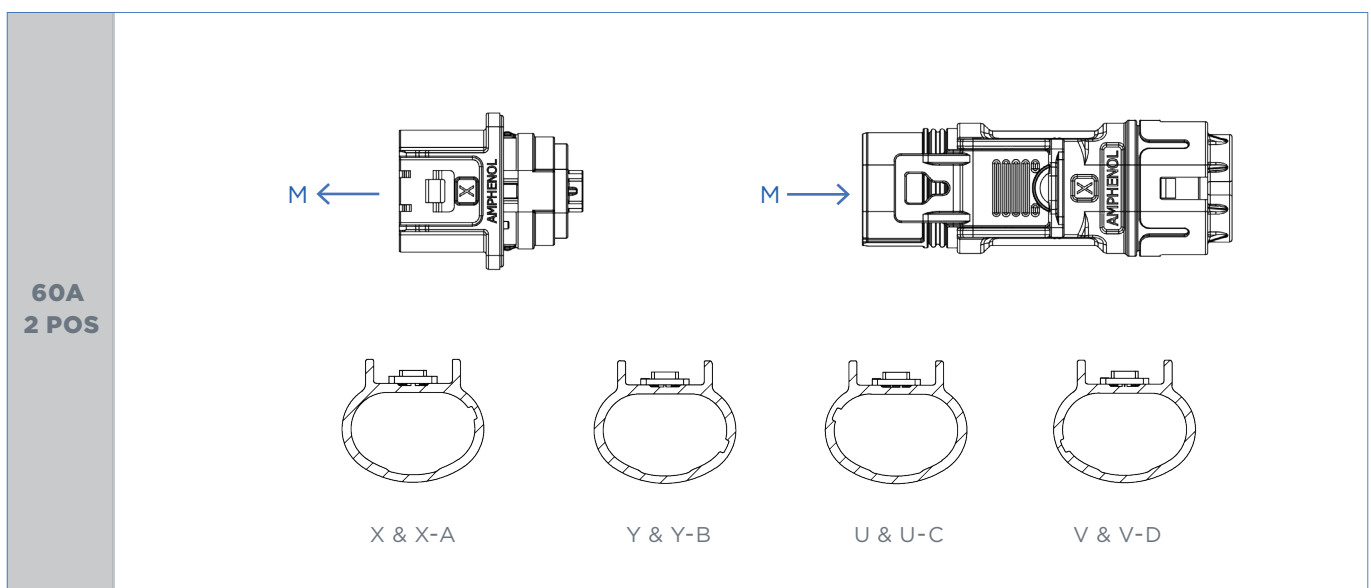
Series	Accepted Cable Size	Current Rating
60A Series	2.5mm ²	25A
	4mm ²	40A
	6mm ²	45A
	10mm ²	60A

*Customization is allowed if above sizes are not what you need.

Key Map

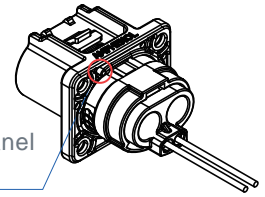
2 POS 60A				
Key	X & X-A	Y & Y-B	U & U-C	V & V-D
Color	Orange	Black	Yellow	Green

*CPA(Connector position assurance) color for keying identification



Application

- Power Battery System - PDU / PACK
- Drive System - PEU / MCU / inverter / XinOne
- Charging System - DC Charging



Ordering Information

Receptacle

Product Type	Connector Type	Mating Type	Keying	Current & HVIL	Cable Size (mm ²)	Current Rating		
Powerlok™ Plus	C082	2 POS Receptacle	G Ganged	X ⁽¹⁾ Orange	60	60 Series W/O HVIL Max 60A@10mm ²	2.5	25A
				Y Black			4	40A
				U Yellow			6	45A
				V Green				
				X-A ⁽²⁾ Orange	61	60 Series With HVIL Max 60A@10mm ²	6	45A
				Y-B Black			10	60A
				U-C Yellow				
				V-D Green				

⁽¹⁾ X, Y, U, V: Without panel key, compatible with G1

⁽²⁾ X-A, X-B, X-C, X-D: With panel key, incompatible with G1

Plug

Product Type	Connector Type	Mating Type	Keying	Current & HVIL	Cable Size (mm ²)	Current Rating		
Powerlok™ Plus	C182	2 POS Plug	G Ganged	X Orange	60	60 Series W/O HVIL Max 60A@10mm ²	2.5	25A
				Y Black			4	40A
				U Yellow	61	60 Series With HVIL Max 60A@10mm ²	6	45A
				V Green			10	60A

CONTACT US

Website www.tpil.com www.amphenol-gec.com

Amphenol HPI
High Power Industrial

Canada - North America

Winnipeg, Manitoba, Canada

Tel: +1 204 697 2222

Email: sales@tpil.com

Add: 2110 Notre Dame Ave,
Winnipeg, MB, R3H 0K1, Canada

EMEA

Pécs, Hungary

Tel: +36-30-528-7432

Email: csaba.szokol@amphenol-asip.com

Add: H-7673 Cserkút, Batvölgyi út 3.

China - APAC

Changzhou, China

Tel: +86 519-8981 9713

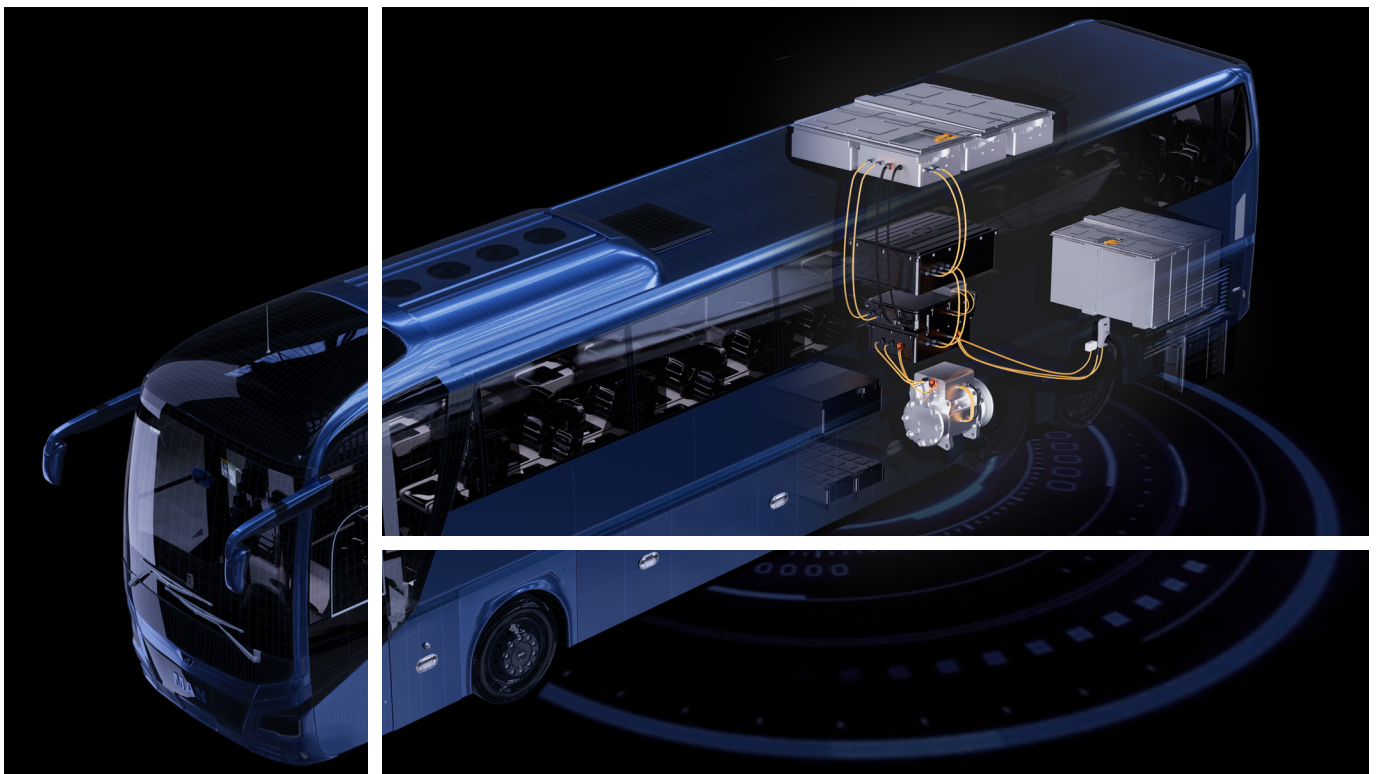
Email: sales@amphenol-gec.com

Add: No.11 Fengxiang Road,
New District, Changzhou, Jiangsu, China

POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

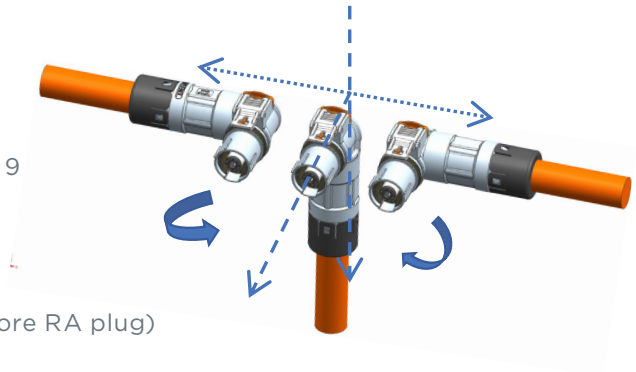
300A Product Catalog

2025.Nov Rev A



Product features highlight

- ☉ Same installation panel foot print as G1 (X, Y, U, V, W, T keys)
- ☉ Stronger interlocking system - ISO 16750-3 Profile 7 & Profile 9
- ☉ IP67, IP68(1m, 48h), IP6K9K waterproof protection
- ☉ Stable and smaller shielding contact resistance
- ☉ Orientation of connector tail can be rotated 90° (for single-core RA plug)
- ☉ Compatible with multi-brand cables (Powerlink/TFC/H+S)
- ☉ Panel key available



Recommended Cable Size & Current Rating

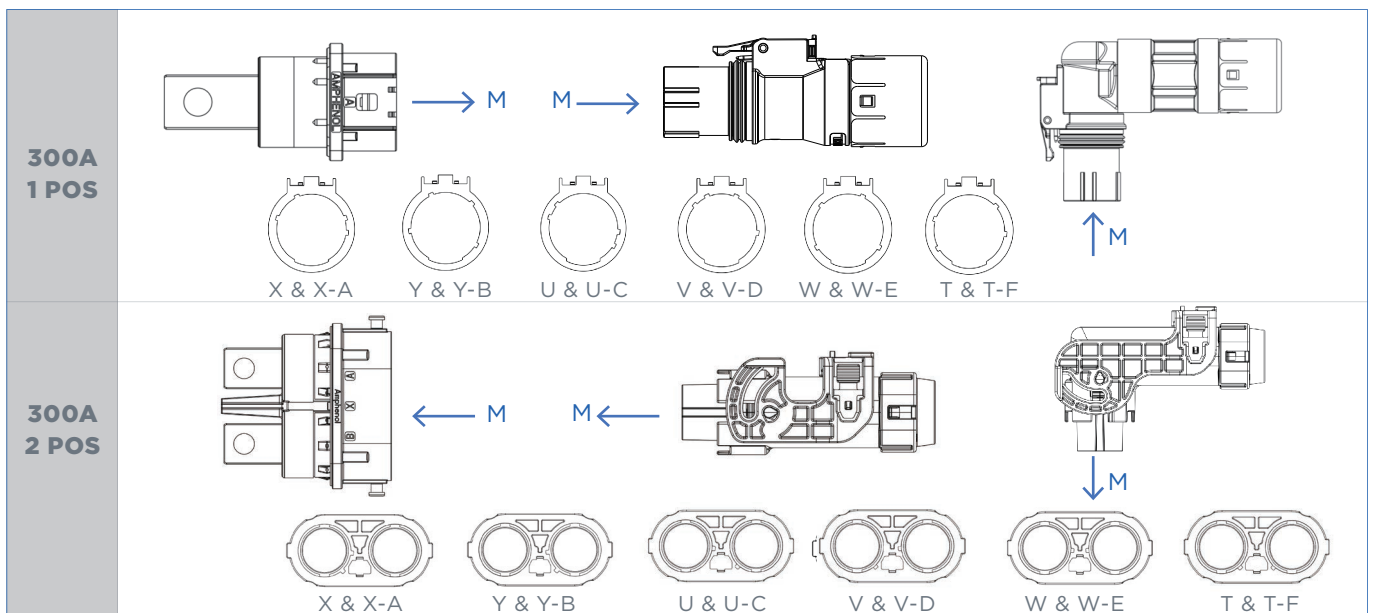
Series	Accepted Cable Size	Current Rating
300A Series	35mm ²	180A
	50mm ²	250A
	70mm ²	300A
	95mm ²	350A

*Customization is allowed if above sizes are not what you need.

Key Map

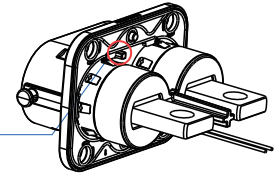
1 & 2 POS 300A						
Key	X & X-A	Y & Y-B	U & U-C	V & V-D	W & W-E	T & T-F
Color	Orange	Black	Yellow	Green	Red	Blue

*CPA(Connector position assurance) color for keying identification



Application

- ☉ Power Battery System - PDU / PACK
- ☉ Drive System - PEU / MCU / inverter / XinOne
- ☉ Charging System - DC Charging



Ordering Information

Fool-proofing posts on the receptacle panel
Please refer to 2D drawing for details.

1 POS Receptacle

PLP	-	C00	X	-	301	-	10	D10			
Product Type	Connector Type		Keying			Current & HVIL		Termination Type	Termination Size		
Powerlok™ Plus	C00	1 POS Receptacle	X	X-A ⁽¹⁾	Orange	300	300 Series W/O HVIL	10	180 degree Busbar Lug	M	Screw Hole
			Y	Y-B	Black						
			U	U-C	Yellow						
			V	V-D	Green	301	300 Series With HVIL				
			W	W-E	Red						
			T	T-F	Blue						

1 POS Plug

PLP	-	C18	X	-	301	-	70	-	S ⁽²⁾
Product Type	Connector Type		Keying		Current & HVIL		Cable Size (mm ²)	Current Rating	
Powerlok™ Plus	C18	1 POS Plug	X	Orange	300	300 Series 350Amax@95mm ² W/O HVIL	35	180A	
			Y	Black			50	250A	
			U	Yellow			70	300A	
			V	Green			35-S	180A	
			W	Red			50-S	250A	
			T	Blue			70-S	300A	
			301	300 Series 350Amax@95mm ² With HVIL	95-S	350A			
					35-5	180A			
					50-5	250A			
					70-5	300A			
					95-5	350A			
					95-5	350A			

⁽¹⁾ X, Y, U, V, W, T: Without panel key, compatible with G1
X-A, Y-B, U-C, V-D, W-E, T-F: With panel key, incompatible with G1

⁽²⁾ W/O -S: Powerlink cable
-S: LV216 cable
-5: Huber + Suhner cable (Coming soon)
(Please contact the sales team for detailed cable specifications.)

Ordering Information

2 POS Receptacle

PLP
-
C082
G
X
-
301
-
10
D10

Product Type	Connector Type	Mating Type	Keying			Current & HVIL		Termination Type	Termination Size				
Powerlok™ Plus	C082	2 POS Receptacle	G	Ganged	X	X-A	Orange	300	300 Series W/O HVIL	10	180 degree Busbar Lug	M	Screw Hole
					Y	Y-B	Black						
					U	U-C	Yellow						
					V	V-D	Green	301	300 Series With HVIL			D	Through Hole
					W	W-E	Red						
					T	T-F	Blue					PM	Punch Nut

2 POS Plug

PLP
-
C182
G
X
-
301
-
70
-
S⁽²⁾

Product Type	Connector Type	Mating Type	Keying		Current & HVIL		Cable Size (mm ²)	Current Rating		
Powerlok™ Plus	C182	2 POS Plug	G	Ganged	X	Orange	300	300 Series 320Amax@95mm ² W/O HVIL	35-S	150A
					Y	Black			50-S	230A
					U	Yellow			70-S	280A
					V	Green	301	300 Series 320Amax@95mm ² With HVIL	35-5	150A
					W	Red			50-5	230A
					T	Blue			70-5	280A
						95-5	320A			

⁽¹⁾ X, Y, U, V, W, T: Without panel key, compatible with G1
 X-A, Y-B, U-C, V-D, W-E, T-F: With panel key, incompatible with G1

⁽²⁾ -S: LV216 cable
 -5: Huber + Suhner cable(Coming soon)
 (Please contact the sales team for detailed cable specifications.)

CONTACT US

Website | www.tpil.com | www.amphenol-gec.com

☎ **Canada - North America**
 Winnipeg, Manitoba, Canada
Tel: +1 204 697 2222
Email: sales@tpil.com
Add: 2110 Notre Dame Ave,
 Winnipeg, MB, R3H 0K1, Canada

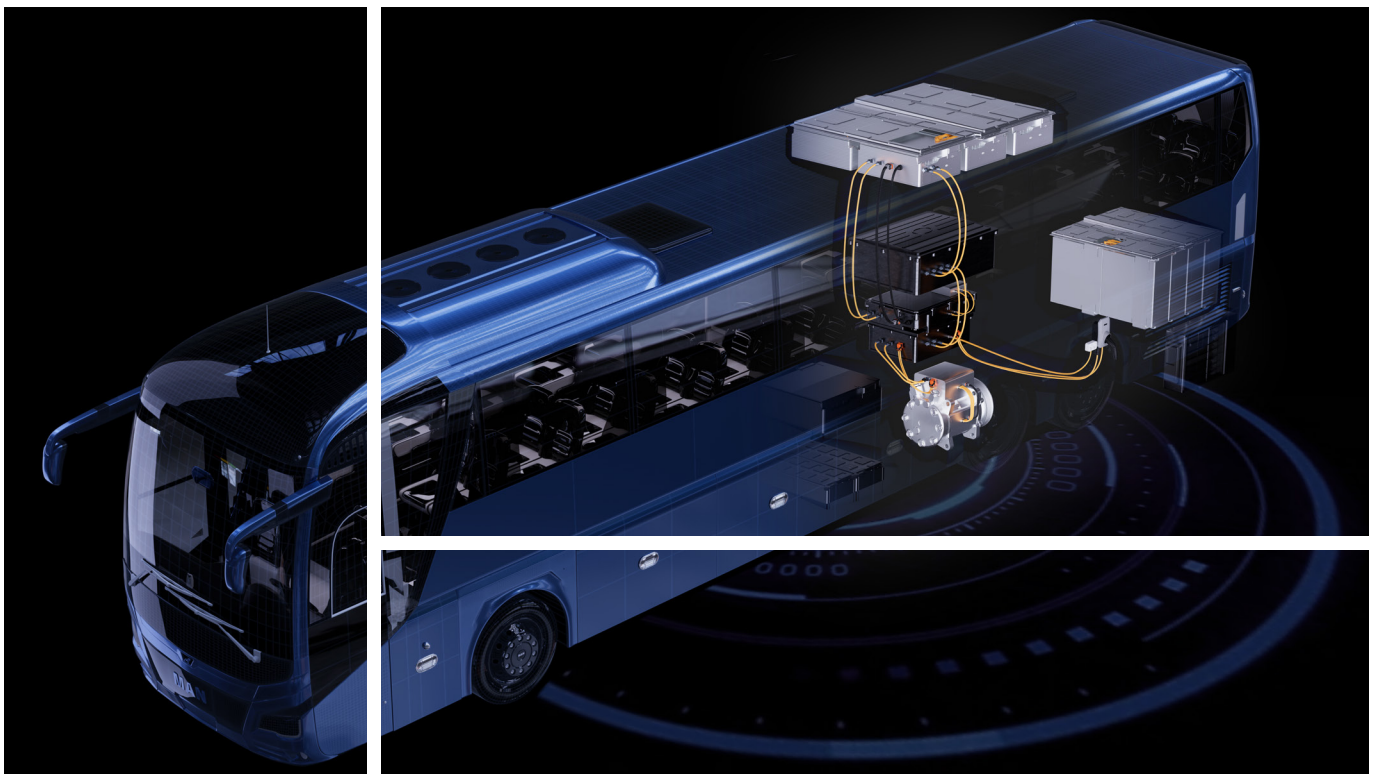
☎ **EMEA**
 Pécs, Hungary
Tel: +36-30-528-7432
Email: csaba.szokol@amphenol-asip.com
Add: H-7673 Cserkút, Batvölgyi út 3.

☎ **China - APAC**
 Changzhou, China
Tel: +86 519-8981 9713
Email: sales@amphenol-gec.com
Add: No.11 Fengxiang Road,
 New District, Changzhou, Jiangsu, China

POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

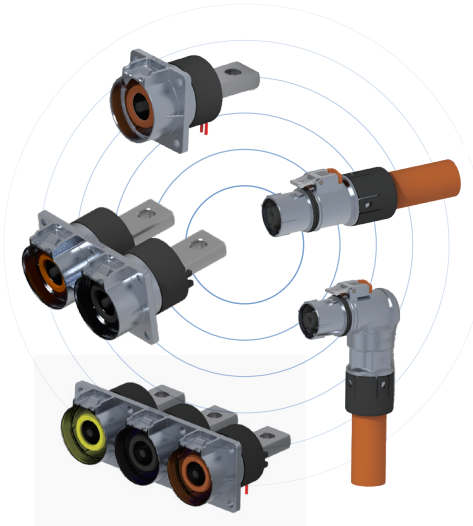
500A Product Catalog

2025.Nov Rev A



PLP 500A Series

Powerlok™ Plus 500A Series



POWERLOK™ PLUS(PLP) 500A series is a low cost, compact, metal-shell interconnect solution utilizing RADSOK® contact technology for EV and Hybrid transportation application. Up to 1500V ranging from 250A-500A with HVIL, 360°shielding, environmental sealing, keying, touch safe, straight and right angle configurations, Flame-retardant. Accommodates cable size from 50mm² to 150mm².

POWERLOK™ PLUS 500A series connectors are engineered for diverse applications as its wide power range coverage, including electric power-trains of automotive, trucks, bus, ship, forklift, bicycle, agricultural and construction machines, and off-road vehicles.

Key Features

Dimension

Electric

- ☉ Rated voltage: 1500V
- ☉ Rated current: 250A @ 50mm² 300A @ 70mm²
350A @ 95mm² 400A @ 120mm²
500A @ 150mm²
- ☉ Insulation resistance: 1000MΩ
- ☉ Dielectric withstanding voltage: 8000V DC
- ☉ Shielding performance: LV215@≤9mΩ

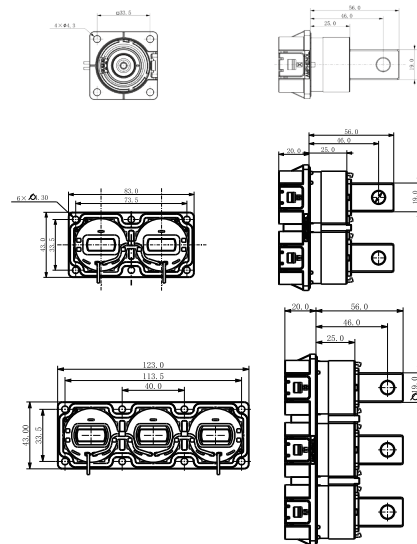
Environmental

- ☉ Operating temperature: -40~+140°C
- ☉ Inflammability: V0
- ☉ IP degree: IP67, IP68(1m,48H), IPXXB, IP69K
- ☉ High-temperature storage: 1008H
- ☉ Neutral salt spray: 1080H

Mechanical

- ☉ Positions: 1,2,3
- ☉ Keys: 6
- ☉ Mating cycle: 100
- ☉ Vibration: ISO 16750-3 Profile 7 & Profile 9
- ☉ Wire Range: 150mm²/120mm²/95mm²
- ☉ Connection method: Crimping
- ☉ CPA meet LV214

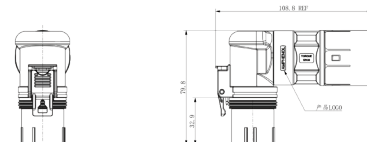
Receptacle



Plug 180°

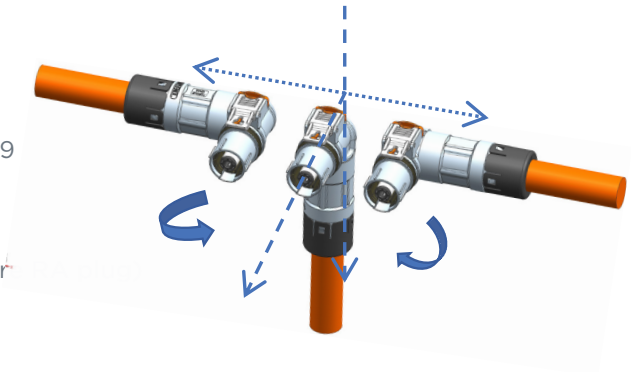


Plug 90°



Product features highlight

- ☉ Same installation panel size as G1 (X, Y, U, V, W, T keys)
- ☉ Stronger interlocking system - ISO 16750-3 Profile 7 & Profile 9
- ☉ IP67, IP68(1m, 48h), IP6K9K waterproof protection
- ☉ Stable and smaller shielding contact resistance
- ☉ Orientation of connector tail can be rotated 90°(for single-core)
- ☉ Compatible with multi-brand cables (Powerlink/TFC/H+S)
- ☉ Straight and RA connectors can be hybrid mated.
- ☉ Panel key available



Recommended Cable Size & Current Rating

Series	Accepted Cable Size	Current Rating
500A Series	50mm ²	250A
	70mm ²	300A
	95mm ²	350A
	120mm ²	400A
	150mm ²	500A

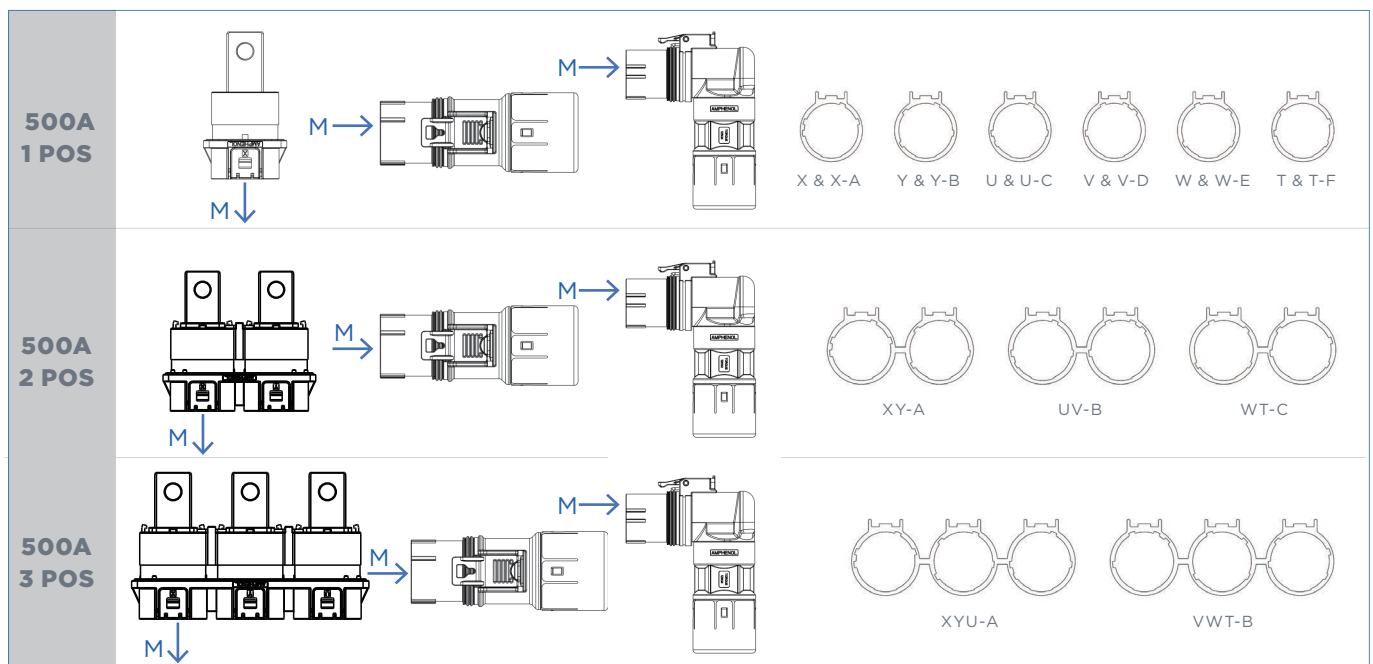
*Customization is allowed if above sizes are not what you need.

Key Map

1 POS 500A						
Key	X & X-A	Y & Y-B	U & U-C	V & V-D	W & W-E	T & T-F
Color	Orange	Black	Yellow	Green	Red	Blue
2 POS 500A				3 POS 500A		
Key	XY-A	UV-B	WT-C	PN-D ⁽¹⁾	XYU-A	VWT-B
Color	Orange & Black	Yellow & Green	Red & Blue	Red & Black	Orange & Black & Yellow	Green & Red & Blue

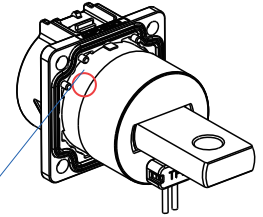
⁽¹⁾ PN-D Panel Key: Coming soon

*CPA(Connector position assurance) color for keying identification



Application

- ☉ Power Battery System - PDU / PACK
- ☉ Drive System - PEU / MCU / inverter / XinOne
- ☉ Charging System - DC Charging



Fool-proofing posts on the receptacle panel
Please refer to 2D drawing for details.

Ordering Information

Receptacle

PLP - C00 X - 501 - 10 M8

Product Type	Connector Type	Keying	Current & HVIL	Termination Type	Termination Size
Powerlok™ Plus	C00 1 POS Receptacle	X X-A ⁽¹⁾ Orange	500 500 Series W/O HVIL	10 180 degree Busbar Lug	M Screw Hole
		Y Y-B Black			
		U U-C Yellow			
		V V-D Green			
		W W-E Red			
		T T-F Blue			
	C002 2 POS Receptacle	XY-A Orange&Black	501 500 Series With HVIL		D Through Hole
		UV-B Yellow&Green			
		WT-C Red&Blue			
		PN-D ⁽²⁾ Red&Black			
	C003 3 POS Receptacle	XYU-A Orange&Black&Yellow			
		VWT-B Green&Red&Blue			

⁽¹⁾ X, Y, U, V, W, T: Without panel key, compatible with G1
X-A, Y-B, U-C, V-D, W-E, T-F: With panel key, incompatible with G1

⁽²⁾ PN-D Panel Key: Coming soon

Plug

PLP - C18 X - 501 - 70 - S⁽³⁾

Product Type	Connector Type	Keying	Current & HVIL	Cable Size (mm ²)	Current Rating
Powerlok™ Plus	C18 1 POS Plug	X Orange	500 500 Series 500Amax@150mm ² W/O HVIL	50	250A
				70	300A
				95	350A
				120	400A
				150	500A
				50-S	250A
		501 500 Series 500Amax@150mm ² With HVIL	70-S	300A	
			95-S	350A	
			120-S	400A	
			50-5	250A	
			70-5	300A	
			95-5	350A	
			120-5	400A	
			150-5	500A	

⁽³⁾ W/O -S: Powerlink cable (Please contact the sales team for detailed cable specifications.)
-S: LV216 cable
-5: Huber + Suhner cable (Coming soon)

CONTACT US

☉ Website | www.tpil.com | www.amphenol-gec.com |

☉ Winnipeg, Manitoba, Canada

Tel: +1 204 697 2222
Email: sales@tpil.com
Add: 2110 Notre Dame Ave,
Winnipeg, MB, R3H 0K1, Canada

☉ Pécs, Hungary

Tel: +36-30-528-7432
Email: csaba.szokol@amphenol-asip.com
Add: H-7673 Cserkút, Batvölgyi út 3.

☉ Changzhou, China

Tel: +86 519-8981 9713
Email: sales@amphenol-gec.com
Add: No.11 Fengxiang Road,
New District, Changzhou, Jiangsu, China