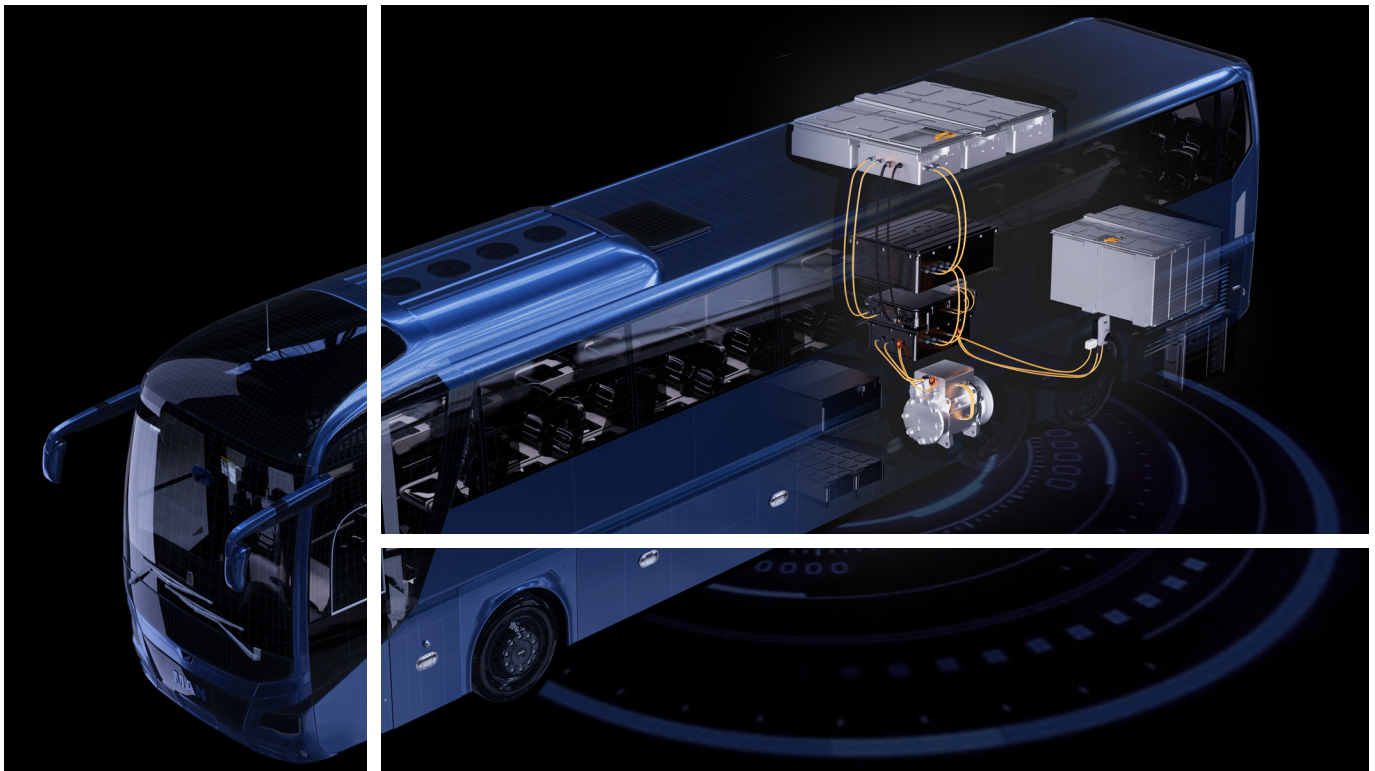


POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

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

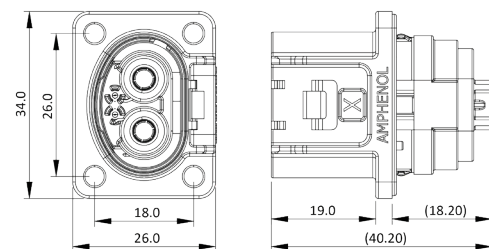
Environmental

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

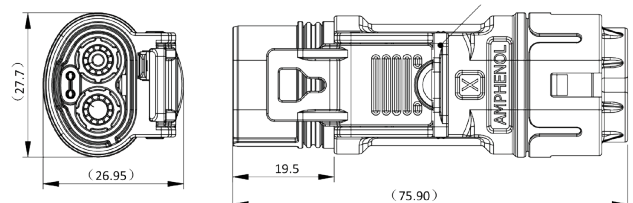
Mechanical

- 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

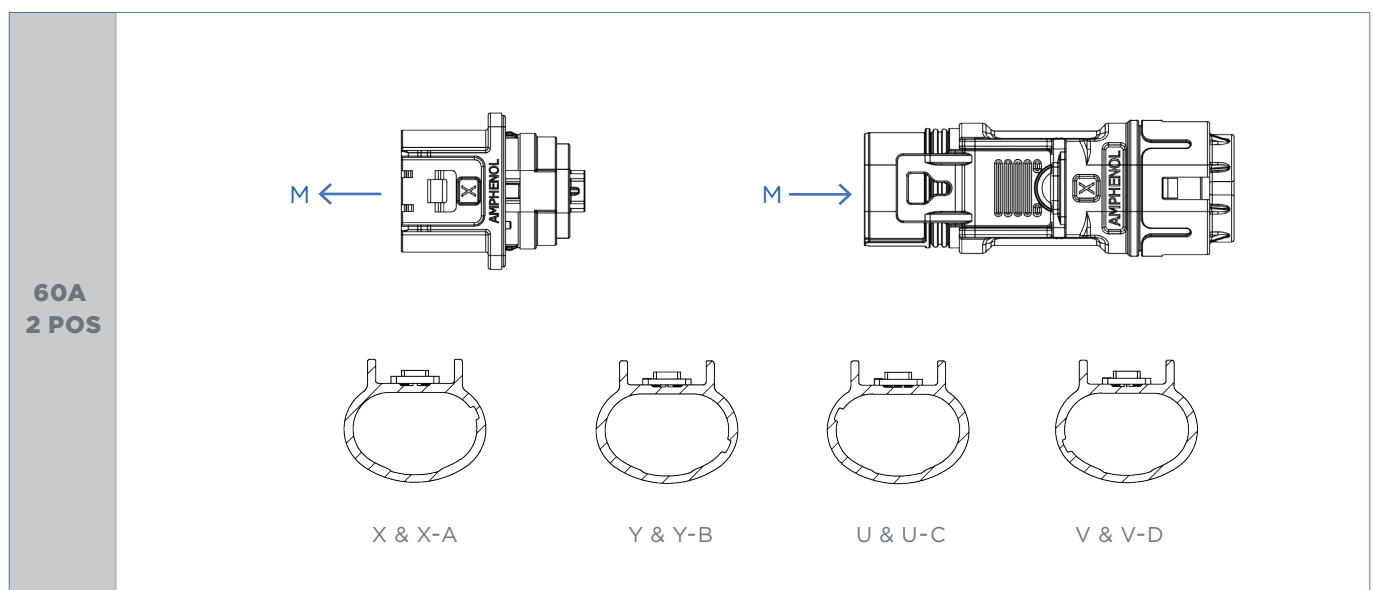
Series	Accepted Cable Size	Current Rating
60A Series	2.5mm ²	25A
	4mm ²	40A
	6mm ²	45A
	10mm ²	60A

*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



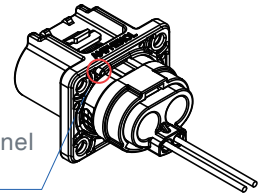
Application

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

Ordering Information

Receptacle

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



PLP	—	C082	G	X	—	61	—	10			
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					
					U	Yellow				4	40A
					V	Green					
					X-A ⁽²⁾	Orange	61	60 Series With HVIL Max 60A@10mm ²	6	45A	
					Y-B	Black					
					U-C	Yellow				10	60A
					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

PLP	—	C182	G	X	—	61	—	10		
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

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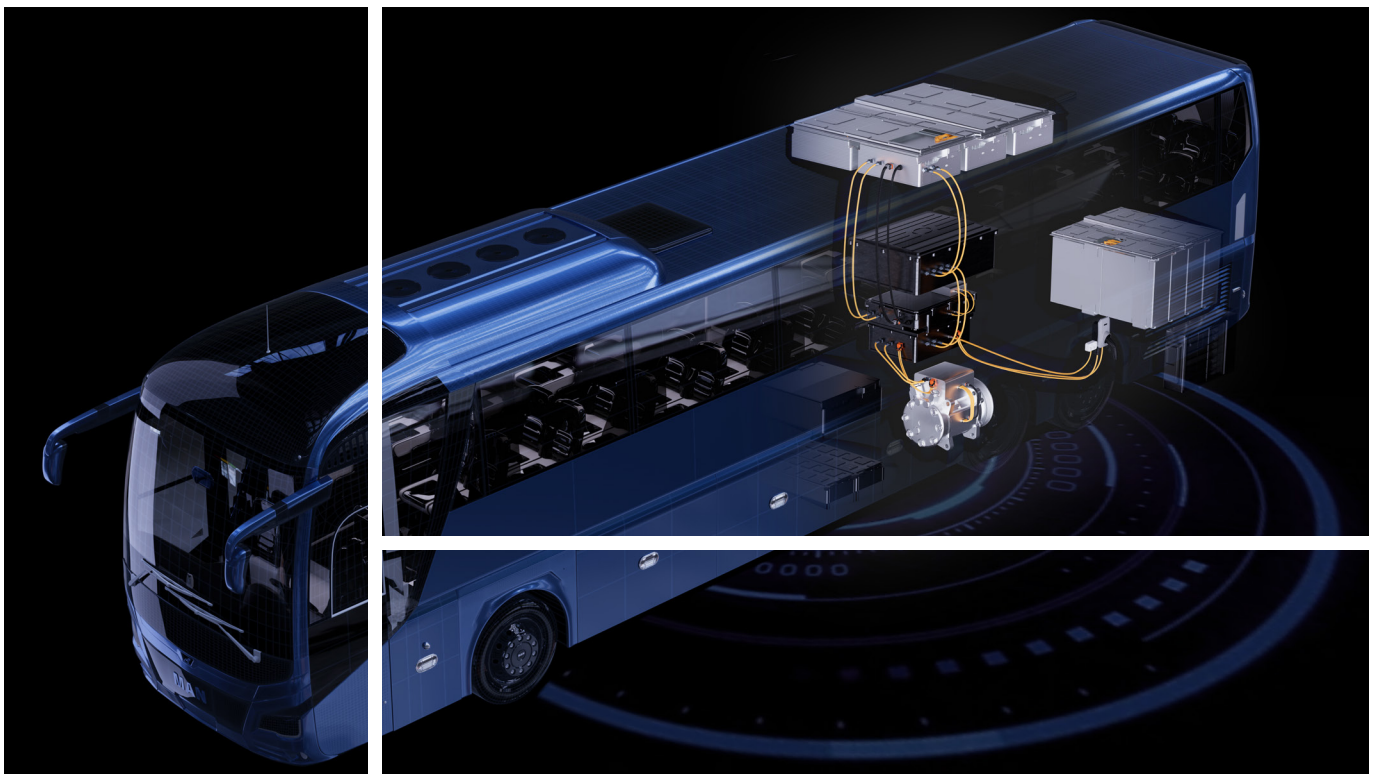
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POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

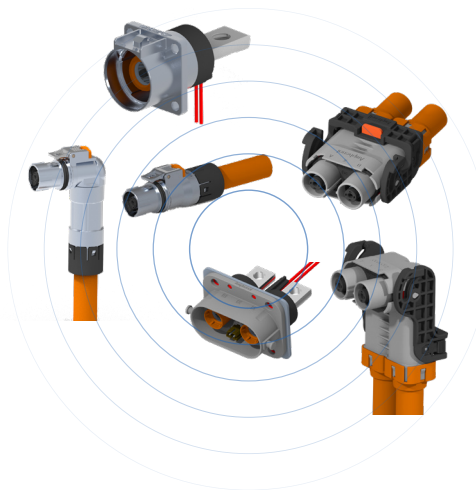
300A Product Catalog

2025.Nov Rev A



PLP 300A Series

Powerlok™ Plus 300A Series



POWERLOK™ PLUS (PLP) 300A 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 180A-350A with HVIL, 360° shielding, environmental sealing, keying, touch safe, straight and right angle configurations, Flame-retardant. Accommodates cable size from 35mm² to 95mm².

POWERLOK™ PLUS 300A series connectors are engineered for diverse applications as its wide power range coverage, including electric powertrains of automotive, trucks, bus, ship, forklift, bicycle, agricultural and construction machines, and off-road vehicles.

Key Features

Dimension

Electric

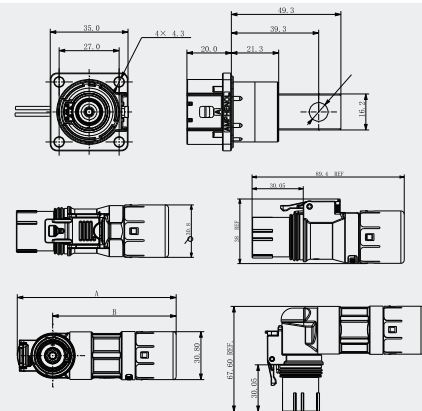
- ⊖ Rated voltage: 1500V
- ⊖ Rated current: 180A @35mm² 250A @50mm²
 300A @70mm² 350A @95mm²
- ⊖ Insulation resistance: 1000MΩ
- ⊖ Dielectric withstanding voltage: 8000V DC
- ⊖ Shielding performance: LV215@≤9mΩ

Environmental

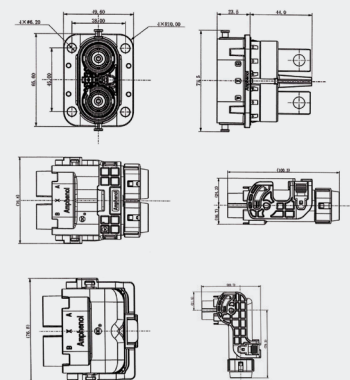
- ☉ Operating temperature: -40~+140℃
- ☉ Inflammability: V0
- ☉ IP degree: IP67, IP68(1m,48H), IPXXB, IP69K
- ☉ High-temperature storage: 1008H
- ☉ Neutral salt spray: 1080H

Mechanical

- Positions: 1, 2
- Keys: 6
- Mating cycle: 100
- Vibration: ISO 16750-3 Profile 7 & Profile 9
- Wire Range: 95mm²/70mm²/50mm²/35mm²
- Connection method: Crimping
- CPA meet LV214



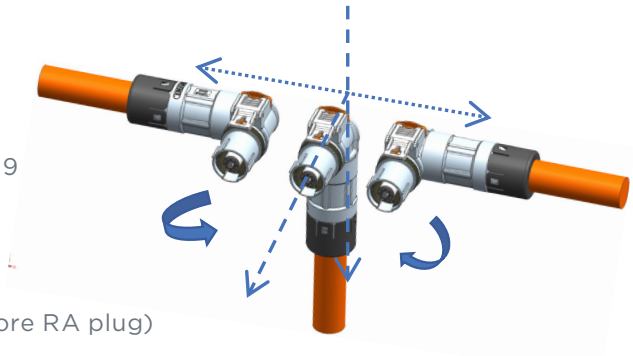
1 pos Receptacle & Plug



2 pos Receptacle & Plug

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

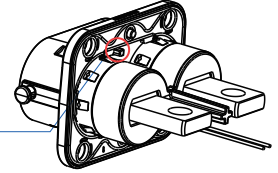
300A 1 POS						
	X & X-A	Y & Y-B	U & U-C	V & V-D	W & W-E	T & T-F
300A 2 POS						
	X & X-A	Y & Y-B	U & U-C	V & V-D	W & W-E	T & T-F

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			D	Through Hole
			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	301	300 Series 350Amax@95mm ² With HVIL	70-S	300A	
							95-S	350A	
							35-5	180A	
							50-5	250A	
							70-5	300A	
							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 ⁽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			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			95-S	320A
					W	Red	301	300 Series 320Amax@95mm ² With HVIL	35-5	150A
					T	Blue			50-5	230A
									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.)

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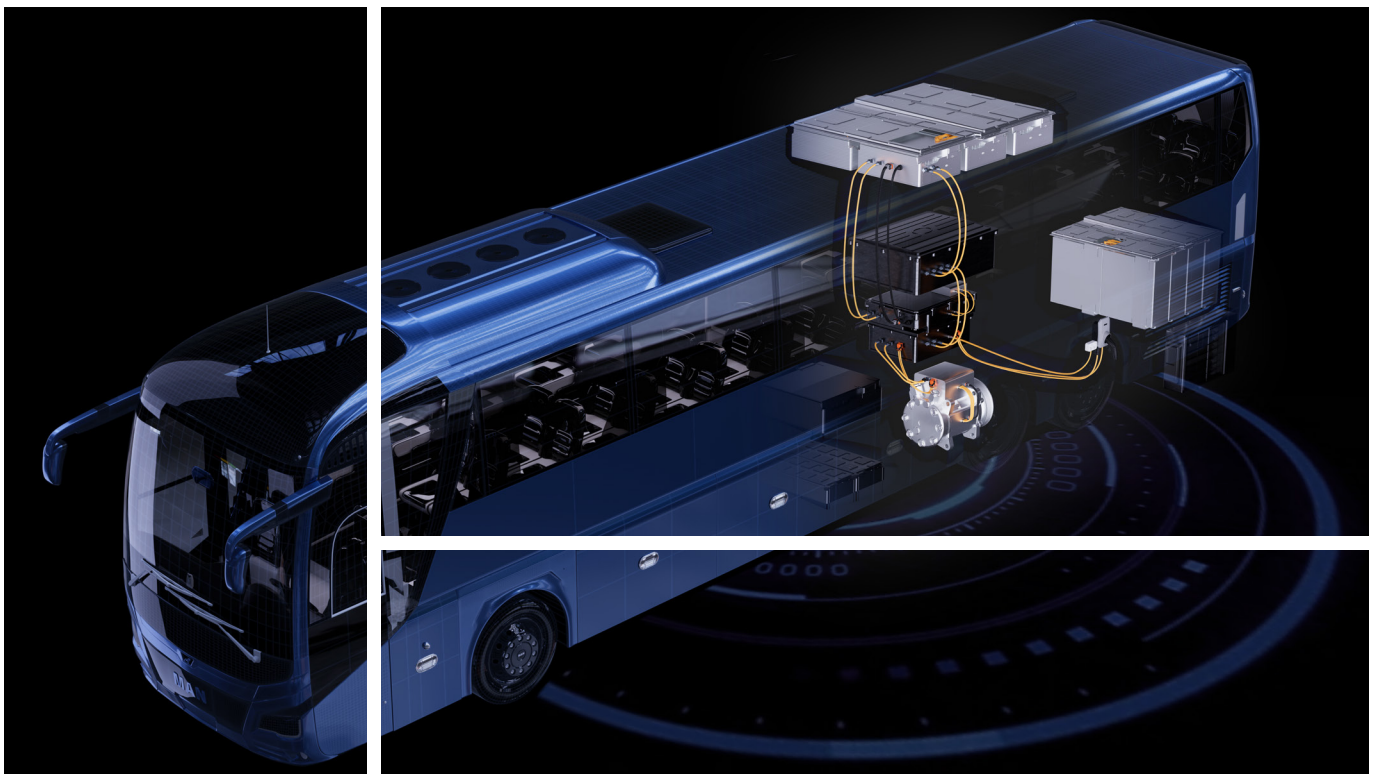
Email: sales@amphenol-gec.com

Add: No.11 Fengxiang Road,
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POWERLOK™ PLUS CONNECTOR EV & HYBRID TRANSPORTATION SOLUTIONS

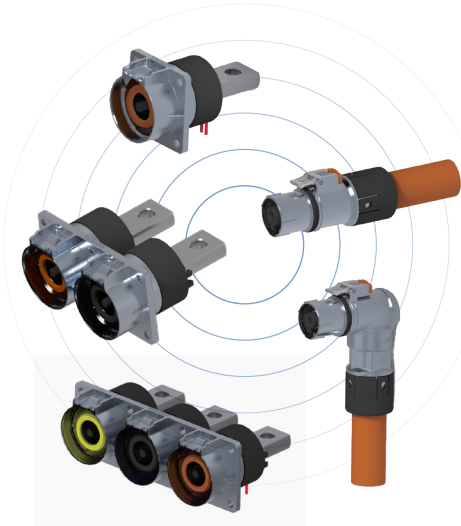
500A Product Catalog

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

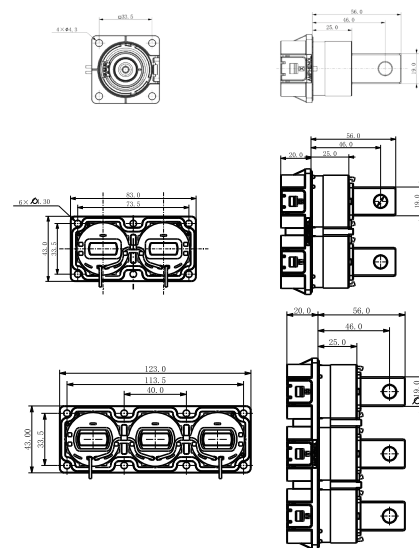
Environmental

- Operating temperature: -40~+140℃
- 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

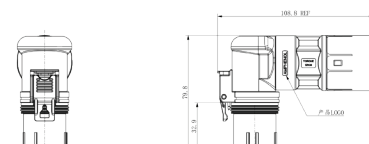
Receptacle



Plug 180°

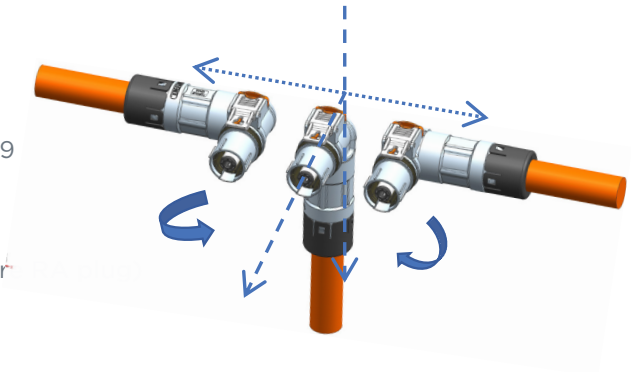


Plug 90°



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	50mm²	250A
	70mm²	300A
	95mm²	350A
	120mm²	400A
	150mm²	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

500A 1 POS		X & X-A Y & Y-B U & U-C V & V-D W & W-E T & T-F
500A 2 POS		XY-A UV-B WT-C
500A 3 POS		XYU-A VWT-B

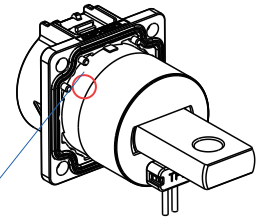
Application

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

Ordering Information

Receptacle

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



PLP	—	COO	X	—	501	—	10	M8
Product Type	Connector Type		Keying		Current & HVIL		Termination Type	Termination Size
Powerlok™ Plus	COO	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				
	CO02	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				
	CO03	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		
				Y			Black	70	300A	
								95	350A	
			120					400A		
			U	Yellow			150	500A		
							50-S	250A		
					70-S	300A				
			V	Green	95-S	350A				
					120-S	400A				
					50-5	250A				
			W	Red	70-5	300A				
					95-5	350A				
					120-5	400A				
			T	Blue	501	500 Series 500Amax@150mm ² With HVIL	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)

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