

Energy storage connector

Product Introduction

AP energy storage connector is Fast, safe and cost-effective solution for energy storage module systems in the way of using pluggable battery connectors such as Busbar Connectors or Electrical Connectors.



Product Features

- Comply with RoSH/REACH environmental requirements
- Good protection performance IP67
- Special interface for energy storage battery module
- Plug and socket easy connection, push and pull to separate
- Adopt two measures of color and key position to prevent short circuit of misinsertion
- Certification: CE and Customized according to customer needs

Technical performances

01 Mechanical Performance

Plastic shell	PA66+G/F
Sealing ring	Silicon rubber
Contact terminal	T2 Copper Alloy, Silver-plated
Mechanical life	≥500 times

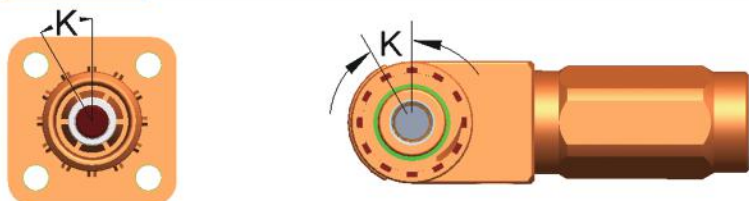
02 Environmental performance

Operating temperature	-40°C~125°C
Protection degree	IP67
Flame-retardant grades	UL94 V-0

03 Electrical performance

Rated current	5.7mm (120A), 8.0mm (200A), 10.3mm (300A)
Contact resistance	0.2mΩ Max
Insulation resistance	≥5000MΩ
Working voltage	1000V/1500V AC/DC
Withstand voltage	5200V/6800V AC/DC

Key position introduction



The product's key position K has two types: 20° and 30°; K1 represents 20°, and K2 represents 30°; The default orange product is 30° (K2), and the black product is 20° (K1)
 The operating voltage of the product with key is 1500V, and the voltage rating is 6800V
 The operating voltage of the product without key is 1000V, and the voltage rating is 5200V

AP-HVCN Energy storage connector with key identification

Copper Busbar (PB) Product Specification Threaded Hole				
Code	Type	Pin diameter(mm)	Current(A)	Copper busbar structure (Threaded Hole)
50011	AP-HVCN-PBBK1-120057M5	5.7	120	M5-5.2
50012	AP-HVCN-PBOK2-120057M5	5.7	120	M5-5.2
50021	AP-HVCN-PBBK1-200080M6	8.0	200	M6-6.0
50022	AP-HVCN-PBOK2-200080M6	8.0	200	M6-6.0
50031	AP-HVCN-PBBK1-300103M8	10.3	300	M8-8.0
50032	AP-HVCN-PBOK2-300103M8	10.3	300	M8-8.0

Copper Busbar (PB) Product Specification Waist-type Hole				
Code	Type	Pin diameter(mm)	Current(A)	Copper busbar structure (Waist-type Hole)
50111	AP-HVCN-PBBK1-120057	5.7	120	Waist hole copper busbar connection
50112	AP-HVCN-PBOK2-120057	5.7	120	
50121	AP-HVCN-PBBK1-200080	8.0	200	
50122	AP-HVCN-PBOK2-200080	8.0	200	
50131	AP-HVCN-PBBK1-300103	10.3	300	
50132	AP-HVCN-PBOK2-300103	10.3	300	

Crimp Type (PY) Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Cable (mm ²)
50211	AP-HVCN-PY16BK1-120057	5.7	120	16
50212	AP-HVCN-PY16OK2-120057	5.7	120	16
50221	AP-HVCN-PY35BK1-200080	8.0	200	35
50222	AP-HVCN-PY35OK2-200080	8.0	200	35
50231	AP-HVCN-PY70BK1-300103	10.3	300	70
50232	AP-HVCN-PY70OK2-300103	10.3	300	70
50241	AP-HVCN-PY25BK1-120057	5.7	120	25
50242	AP-HVCN-PY25OK2-120057	5.7	120	25
50251	AP-HVCN-PY50BK1-200080	8.0	200	50
50252	AP-HVCN-PY50OK2-200080	8.0	200	50
50261	AP-HVCN-PY95BK1-300103	10.3	300	95
50262	AP-HVCN-PY95OK2-300103	10.3	300	95

Threaded (PL) Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Thread MX
50311	AP-HVCN-PLBK1-120057M6	5.7	120	M6
50312	AP-HVCN-PLOK2-120057M6	5.7	120	M6
50321	AP-HVCN-PLBK1-200080M8	8.0	200	M8
50322	AP-HVCN-PLOK2-200080M8	8.0	200	M8
50331	AP-HVCN-PLBK1-300103M10	10.3	300	M10
50332	AP-HVCN-PLOK2-300103M10	10.3	300	M10

ESS Socket Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Cable (mm ²)
50411	AP-HVCN-S16BK1-120057	5.7	120	16
50412	AP-HVCN-S16OK2-120057	5.7	120	16
50421	AP-HVCN-S25BK1-120057	5.7	120	25
50422	AP-HVCN-S25OK2-120057	5.7	120	25
50431	AP-HVCN-S35BK1-200080	8.0	200	35
50432	AP-HVCN-S35OK2-200080	8.0	200	35
50441	AP-HVCN-S50BK1-200080	8.0	200	50
50442	AP-HVCN-S50OK2-200080	8.0	200	50
50451	AP-HVCN-S70BK1-300103	10.3	300	70
50452	AP-HVCN-S70OK2-300103	10.3	300	70
50461	AP-HVCN-S95BK1-300103	10.3	300	95
50462	AP-HVCN-S95OK2-300103	10.3	300	95

AP-HVCN Energy Storage Connector without key identification

Copper Busbar (PB) Product Specification Threaded hole				
Code	Type	Pin diameter(mm)	Current(A)	Copper busbar structure (Threaded Hole)
60011	AP-HVCN-PBB-120057M5	5.7	120	M5
60012	AP-HVCN-PBO-120057M5	5.7	120	M5
60021	AP-HVCN-PBB-200060M6	6.0	200	M6
60022	AP-HVCN-PBO-200060M6	6.0	200	M6
60031	AP-HVCN-PBB-300080M8	8.0	300	M8
60032	AP-HVCN-PBO-300080M8	8.0	300	M8

Copper Busbar (PB) Product Specification Waist Hole				
Code	Type	Pin diameter(mm)	Current(A)	Copper busbar structure (Waist hole)
60111	AP-HVCN-PBB-120057	5.7	120	Waist hole copper busbar connection
60112	AP-HVCN-PBO-120057	5.7	120	
60121	AP-HVCN-PBB-200080	8.0	200	
60122	AP-HVCN-PBO-200080	8.0	200	
60131	AP-HVCN-PBB-300103	10.3	300	
60132	AP-HVCN-PBB-300103	10.3	300	

Threaded (PL) Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Thread MX
60211	AP-HVCN-PLB-120057	5.7	120	M6
60212	AP-HVCN-PLO-120057	5.7	120	M6
60221	AP-HVCN-PLB-200080	8.0	200	M8
60222	AP-HVCN-PLO-200080	8.0	200	M8
60231	AP-HVCN-PLB-300103	10.3	300	M10
60232	AP-HVCN-PLO-300103	10.3	300	M10

Crimp Type (PY) Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Cables (mm ²)
60311	AP-HVCN-PY16B-120057	5.7	120	16
60312	AP-HVCN-PY16O-120057	5.7	120	16
60321	AP-HVCN-PY35B-200080	8.0	200	35
60322	AP-HVCN-PY35O-200080	8.0	200	35
60331	AP-HVCN-PY70B-3000103	10.3	300	70
60332	AP-HVCN-PY70O-3000103	10.3	300	70
60341	AP-HVCN-PY25B-120057	5.7	120	25
60342	AP-HVCN-PY25O-120057	5.7	120	25
60351	AP-HVCN-PY50B-200080	8.0	200	50
60352	AP-HVCN-PY50O-200080	8.0	200	50
603161	AP-HVCN-PY95B-3000103	10.3	300	95
603162	AP-HVCN-PY95O-3000103	10.3	300	95

Socket Product Specification				
Code	Type	Pin diameter(mm)	Current(A)	Cables (mm ²)
60411	AP-HVCN-S16B-120057	5.7	120	16
60412	AP-HVCN-S16O-120057	5.7	120	16
60421	AP-HVCN-S25B-120057	5.7	120	25
60422	AP-HVCN-S25O-120057	5.7	120	25
60431	AP-HVCN-S35B-200080	8.0	200	35
60432	AP-HVCN-S35O-200080	8.0	200	35
60441	AP-HVCN-S50B-200080	8.0	200	50
60442	AP-HVCN-S50O-200080	8.0	200	50
60451	AP-HVCN-S70B-3000103	10.3	300	70
60452	AP-HVCN-S70O-3000103	10.3	300	70
60461	AP-HVCN-S95B-3000103	10.3	300	95
60462	AP-HVCN-S95O-3000103	10.3	300	95