

High-Voltage
Automotive Interconnection

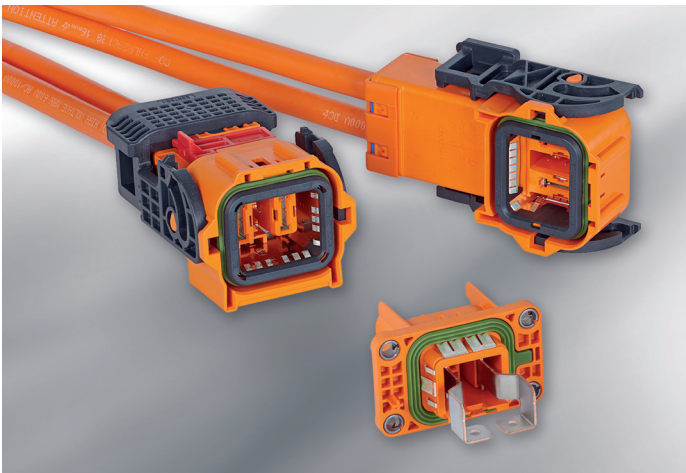
**AMP+ HVA 1200
INTERCONNECTION
SYSTEM**



High-Voltage Automotive Interconnection

AMP+ HVA 1200 INTERCONNECTION SYSTEM

AMP+ HVA 1200 HV Connection System represents a significant addition to TE Connectivity's (TE's) range of high-voltage (HV) connectors for hybrid and all-electric vehicles.



With the new AMP+ HVA 1200 HV connection system (HVA 1200) automotive manufacturers benefit from a high-performance interconnection system for their next-generation vehicles. With a voltage rating of up to 1,000 V DC and a current carrying capability of 100 A at 85°C the HVA 1200 connector system is specifically designed to ensure a safe and reliable connection between the charging interface, the on-board charger and the battery.

The system features a header and two plugs for both straight and right angle connector applications. At its core a newly designed PCON 12 high-power terminal supports a total wire range from 5.0 to 16.0 mm² respectively 10.0 to 16.0 mm² according to LV216-2.

For maximum flexibility the single header can be mated with 90- as well as 180-degree plugs. In addition, the system features an integrated HV interlock completed by the critical built-in touch-safety according to IEC 60529 IP2XB and UL-finger standards.

Product highlights

- Voltage level up to 1,000 VDC
- Current carry capability up to 100 A at 85°C
- Compact packaging for current class 2 and 3
- Temperature range -40°C to 125°C
- 360° shielding
- Water tightness mated IP6K9K; IP67
- Touch safety acc. to IEC 60529 IP2XB and UL-finger standards
- 90- and 180-degree plug versions available
- Single header mates 90- and 180-degree plugs
- Flammability protection V0
- Optional HVIL

Typical applications

Charging interface / on-board charger / battery interconnection:

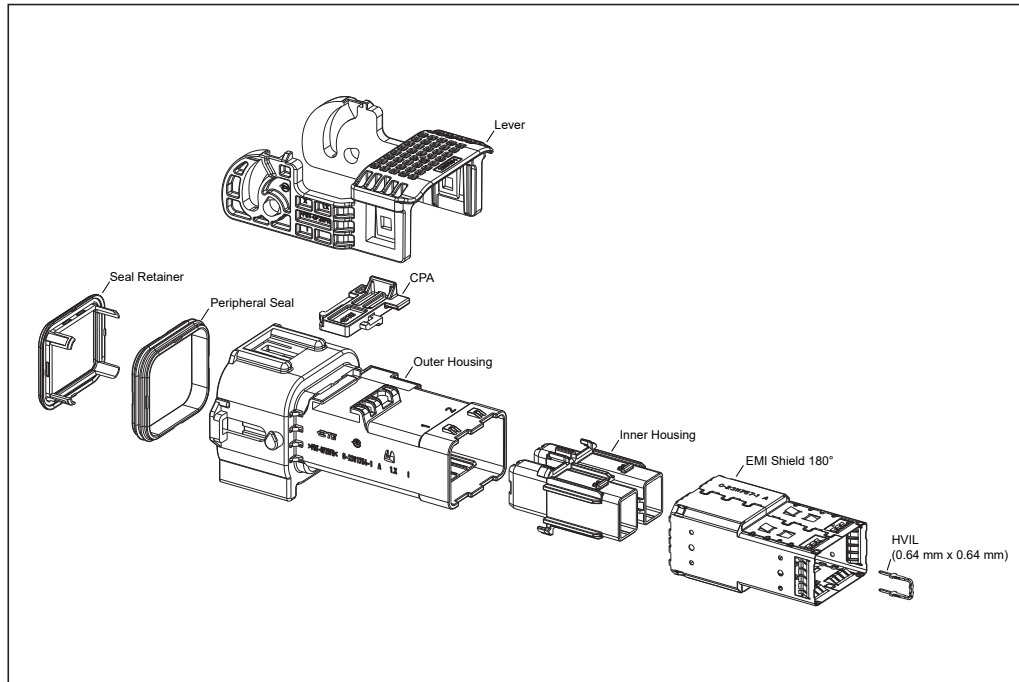
- Hybrid vehicles
- All-electric and fuel-cell vehicles

For more information, visit our websites for Hybrid & Electric Mobility Solutions and Next-Generation Mobility High Voltage Connectivity Solutions:

[te.com/hems](https://www.te.com/hems) | [te.com/next-gen-mobility](https://www.te.com/next-gen-mobility)



AMP+ HVA 1200 2phi – 180° Plug



Refer to application specification: 114-94518

Technical Features

Pin Number:

2 (+2 HVIL)

Contact System:

PCON 12 terminal

Conductor Cross-sections:

10.0 mm² – 16.0 mm²
from LV216-2

Voltage Range:

1000 V DC

Operation Temperature:

-40 °C up to 125 °C

Current Carrying Capacity:

100 A at 85 °C ambient temp.
on 16.0 mm²

IP Rating:

Mated IP6K9K; IP67

Shielding:

360°

HVIL:

Bridged in the connector

CPA:

Yes

Fire Classification:

V0

Product Specification:

108-94749

Application Specification:

114-94518

AMP+ HVA 1200 2phi – 180° Plug

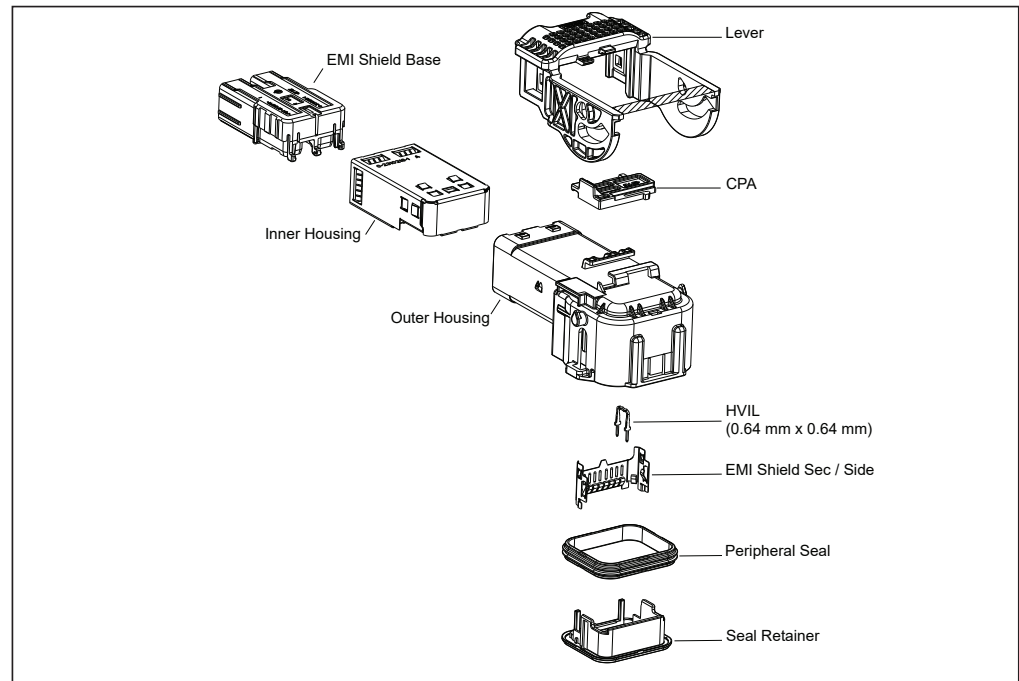
Version (Cable Dimension)	Coding	With CPA	Order Information
10 mm ² (on request)	tbd		Please refer to Application Specification: Contact Product Management via TE.com.
	A		
	B		
	C		
16 mm ²			
	D		



AMP+ HVA 1200 2phi – 90° Plug

Technical Features

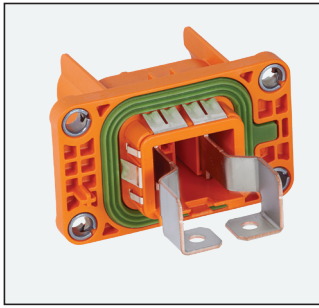
- Pin Number:**
2 (+2 HVIL)
- Contact System:**
PCON 12 terminal
- Conductor Cross-sections:**
10.0 mm² – 16.0 mm²
from LV216-2
- Voltage Range:**
1000 V DC
- Operation Temperature:**
-40 °C up to 125 °C
- Current Carrying Capacity:**
100 A at 85 °C ambient temp.
on 16.0 mm²
- IP Rating:**
Mated IP6K9K; IP67
- Shielding:**
360°
- HVIL:**
Bridged in the connector
- CPA:**
Yes
- Fire Classification:**
V0
- Product Specification:**
108-94749
- Application Specification:**
114-94518



Refer to application specification: 114-94518

AMP+ HVA 1200 2phi – 90° Plug

Version (Cable Dimension)	Coding	With CPA	Order Information
10 mm ² (on request)	tbd		Please refer to Application Specification: Contact Product Management via TE.com.
16 mm ²	A		
	B		
	C		
	D		



AMP+ HVA 1200 2phi – Header

Technical Features

Pin Number:

2 (+2 HVIL)

Contact System:

PCON 12 terminal

Voltage Range:

1000 V DC

Operation Temperature:

-40 °C up to 125 °C

Current Carrying Capacity:

100 A at 85 °C ambient temp.
on 16.0 mm²

IP Rating:

Mated IP6K9K; IP67

Shielding:

360°

HVIL:

Bridged in the connector

Fire Classification:

V0

Product Group Drawing:

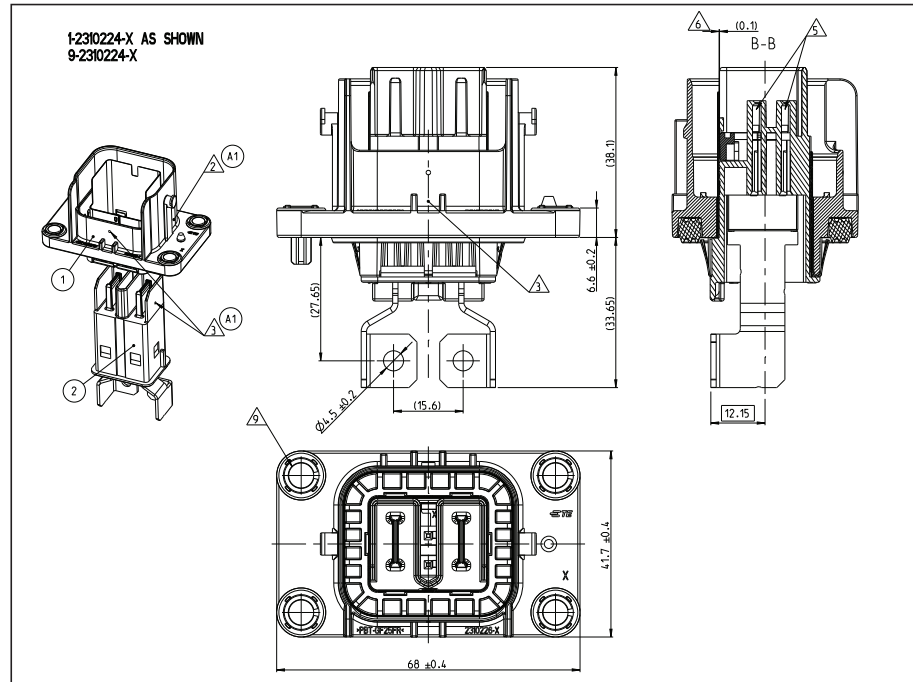
2310224

Product Specification:

108-94749

Application Specification:

114-94515



Drawing 2310224

AMP+ HVA 1200 2phi – Header

Version (Cable Dimension)	Coding	With CPA	Order Information
AMP+ HVA 1200 2phi – Header			Refer to Product Group Drawings on TE.com: Type 2310224 in search bar.

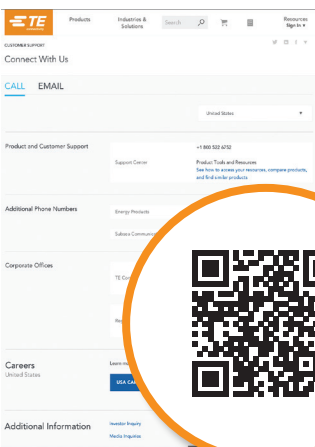
TE CONNECTIVITY ONLINE

[TE.com](https://www.te.com) offers an enhanced digital experience, with more than 250,000 parts profiled. The site has deep, rich product data and easier access to tools and services. Other offerings include improved search and navigation and knowledge and idea sharing.

HYBRID & ELECTRIC MOBILITY SOLUTIONS

For more information on TE's High Voltage Interconnection Systems and Hybrid and Electric Mobility Solutions please visit:

<https://www.te.com/usa-en/industries/hybrid-electric-mobility/product-index-hems.html>



PRODUCT INFORMATION

Search for a specific product by category, part number or document number.

[www.TE.com](https://www.te.com)

STAY CONNECTED

You can rely on TE's **Product Information Center** Team to answer your general or technical questions. For direct contact, visit:

www.TE.com/support-center

TE Connectivity Germany GmbH

Ampèrestrasse 12-14
64625 Bensheim | Germany

Product Information Center:
+49 (0)6251 133-1999

© 2020 TE Connectivity.
All rights reserved.

AMP+, TE, TE Connectivity and TE connectivity (logo) are trademarks.

TE Connectivity's only obligations are those stated in TE's General Terms and Conditions of Business (www.te.com/aboutus/tandc.asp). TE expressly disclaims any implied warranty regarding the information contained herein, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

1-1773979-8 | Revision 03-2020