



AMPHENOL PCD



# EXCEL | MATE

## HVSL Series

Ref. No: HVSL-ALL-0824

[www.amphenolpcd.com.cn](http://www.amphenolpcd.com.cn)

HIGHPOWER @ AMPHENOL  
TRUSTED GLOBALLY



When high-performance and increased safety are required in HEV, Amphenol PCD's **EXCEL | MATE** connectors fulfill the challenge.

HVSL Series is designed for various HEV applications, including power and signal interconnect solutions. Different versions are available, from 1 position to 6 positions and a rated current from 20A to 450A.

Product	HVSL 1400	HVSL 1200	HVSLP 1200	HVSL 1000	HVSLP 1000	HVSL F180	HVSL 800	HVSLP 800	HVPC 800	HVSL 800	HVSL 8003	HVSL 600	HVSL 600	HVSL 630	HVSL 633	HVSL 635B	HVSL 280	HVSL 282	HVSL 362	HVSL 364	HVSL 365	HVSL 366
Position	2	2	2	1, 2, 3	2	2	2, 3	2	2	2	2	2, 3	1	2	3	5	3	2	2	3, 4	5	6
Rated Voltage	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	690V	1000V	1000V	1000V	1000V	1000V	1000V
Rated Current	450A	350A	400A	250A	250A	270A	180A	200A	180A	180A	180A	120A	120A	40A	40A	40A	32A	32A	95A	80A	40A	40A
HVIL	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Shielding	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Shell	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Metal	Metal	Metal	Metal	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
IP67,IP6K9K	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Touch-Proof IP2XB	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Cable size mm <sup>2</sup>	70 to 120	70 to 95	70 to 95	25 to 70	50 to 70	25 to 70	25 to 50	16 to 50	35 to 50	25 to 50	25 to 50	16 to 25 6/8AWG	25	4 to 6	2.5 to 6	2.5 to 6	2.5 to 4	2.5 to 4	6 to 16	2.5 to 16	2.5 to 6	2.5 to 6
Cable type shielded wire	I	I	I	I	I	I	I	I	I	I	I	I	I	M	I	M	M	I/M	I	I	I	I

Cable type shielded wire  
**I:** Individually / **M:** Multicore

# Excel|Mate Eco (HVSL 630)

## Excel|Mate Eco (HVSL630)



### HVSL630

**HVSL630** is a 2 position connector with a current carrying capacity from 23 to 40A and 4 to 6mm<sup>2</sup> crimping cable.

Specially designed for DC-DC, air-conditioner, and others HEV devices' equipment.

### KEY FEATURES

Integrated internal HVIL

Current rating up to 40A@ ambient temperature 70°C

Two-stage, tool or thumb activated latching

No tool required to unmate

Sealing, IP67, IP6K9K (mated)

Touch-proof, IP2XB

Multiple coding positions

CPA available

### MECHANICAL

Durability	≥ 50 mating cycles
Wire range	4 to 6 mm <sup>2</sup> shielded cable
Insertion and extraction force	< 100N
Connection type	Crimping
Latching style	Two stage, finger actuated
HVIL	Integrated
CPA	Available

### ELECTRICAL

Rated voltage	1000V DC
Rated current	40A Max @ ambient temperature 70°C
Insulator resistance	> 100MΩ
Dielectric withstand voltage	3000V AC
Shielding	360° from wire to device

### ENVIRONMENTAL

Sealing	IP67, IP6K9K (mated)
Touch-proof	IP2XB
Temperature range	-40°C to 125°C

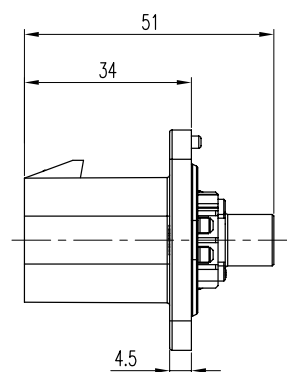
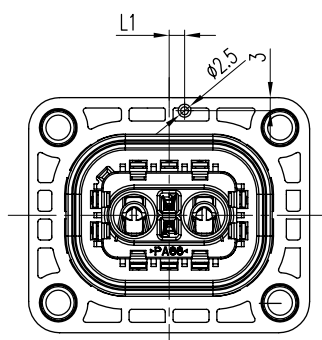
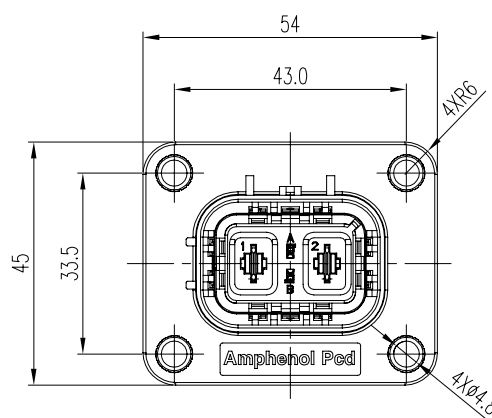
### STANDARDS

USCAR-2	
USCAR-37	
LV-215	
RoHS	

### MATERIAL

Terminals	Copper/copper alloy with tin plating
Housing	PA66 + GF

RECEPTACLE



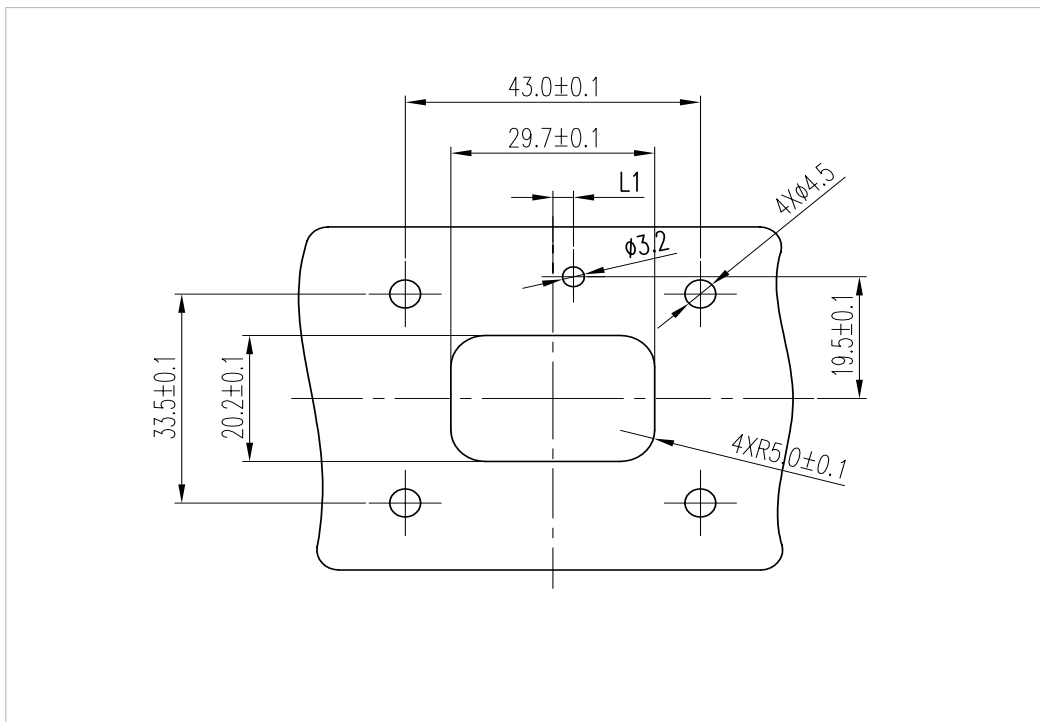
CONTACTS

All connectors do not include contacts. Please order them separately (ref: P/N below)

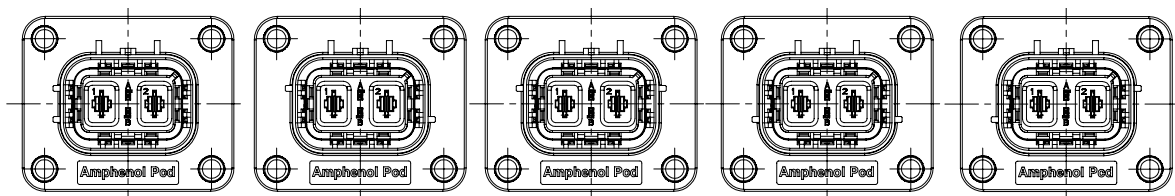
Pin contact: crimping	HVIL CONTACTS
P/N: C310003622S	P/N: C310003613S
4 to 6mm <sup>2</sup> unshielded wire	0.5mm <sup>2</sup> unshielded wire

PANEL MOUNTING DIMENSION

CODING	A	B	C	D	E
L1 (Panel mount)	0	-3	-6	3	6

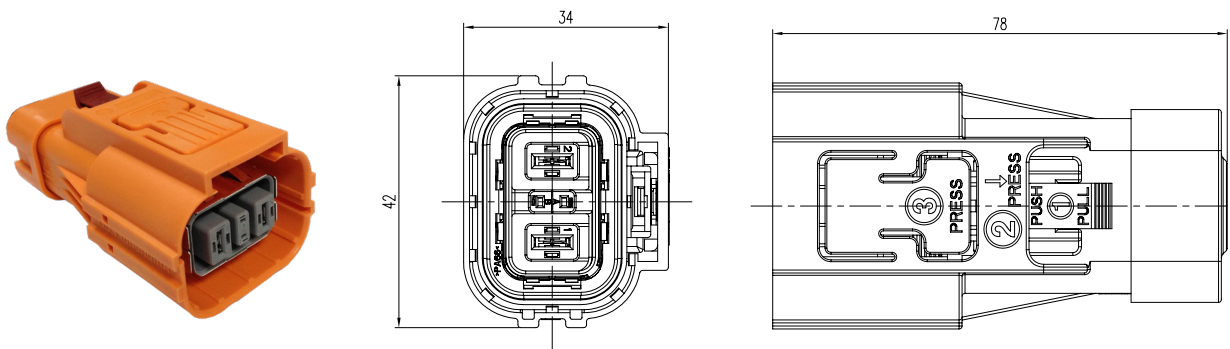


INSERT ORIENTATIONS



	Coding A	Coding B	Coding C	Coding D	Coding E
P/N	HVSL630 02 2 A	HVSL630 02 2 B	HVSL630 02 2 C	HVSL630 02 2 D	HVSL630 02 2 E

PLUG

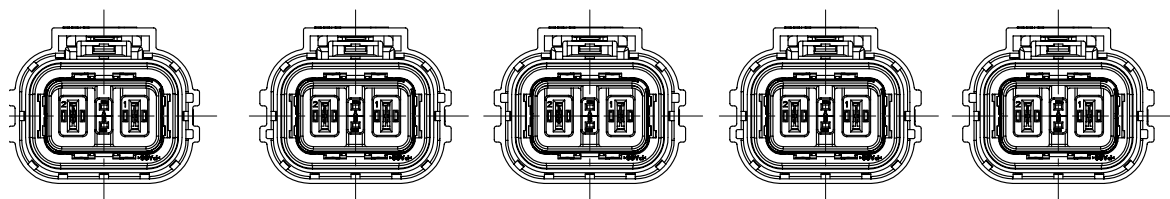


CONTACTS

All connectors do not include contacts. Please order them separately (ref: P/N below)

Socket contact	Socket signal contact (HVIL)
P/N: C310003623S	P/N: C310003614S
4 to 6mm <sup>2</sup> shielded wire	0.5mm <sup>2</sup> unshielded wire

INSERT ORIENTATIONS



	Coding A	Coding B	Coding C	Coding D	Coding E
P/N	HVSL630 06 2 A	HVSL630 06 2 B	HVSL630 06 2 C	HVSL630 06 2 D	HVSL630 06 2 E

# HOW TO ORDER (HVSL 630)

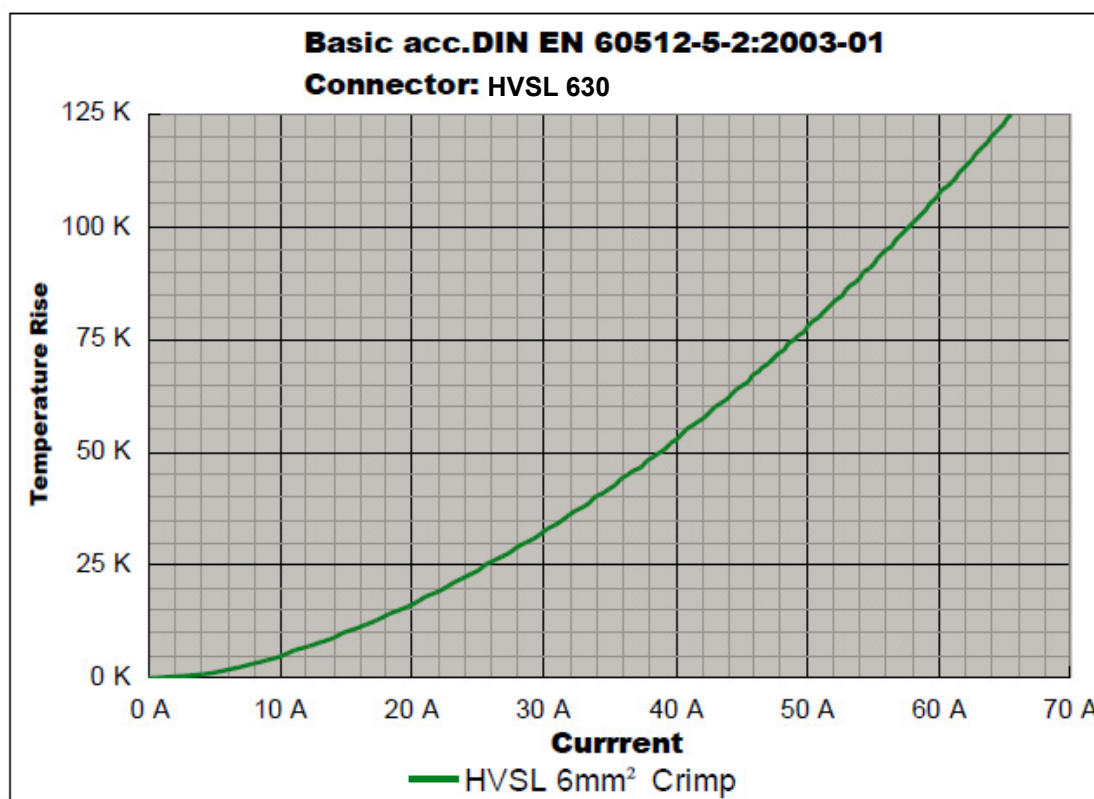
## HOW TO ORDER: PLUG

	HVSL630	06	2	A	0	04	10
<b>Product type:</b>	<b>06:</b> Straight plug						
<b>Position:</b>	<b>2:</b> 2 positions						
<b>Coding / Alternate position:</b>	<b>A:</b> Coding A <b>B:</b> Coding B <b>C:</b> Coding C <b>D:</b> Coding D <b>E:</b> Coding E						
<b>HVIL:</b>	<b>0:</b> Without interlock <b>1:</b> With interlock						
<b>Cable size:</b>	<b>04:</b> 4mm <sup>2</sup> <b>06:</b> 6mm <sup>2</sup>						
<b>Cable OD:</b>	<b>10:</b> 10 ± 0.5mm <b>11:</b> 11 ± 0.5mm <b>12:</b> 12 ± 0.5mm <b>13:</b> 13 +0/-0.5mm						

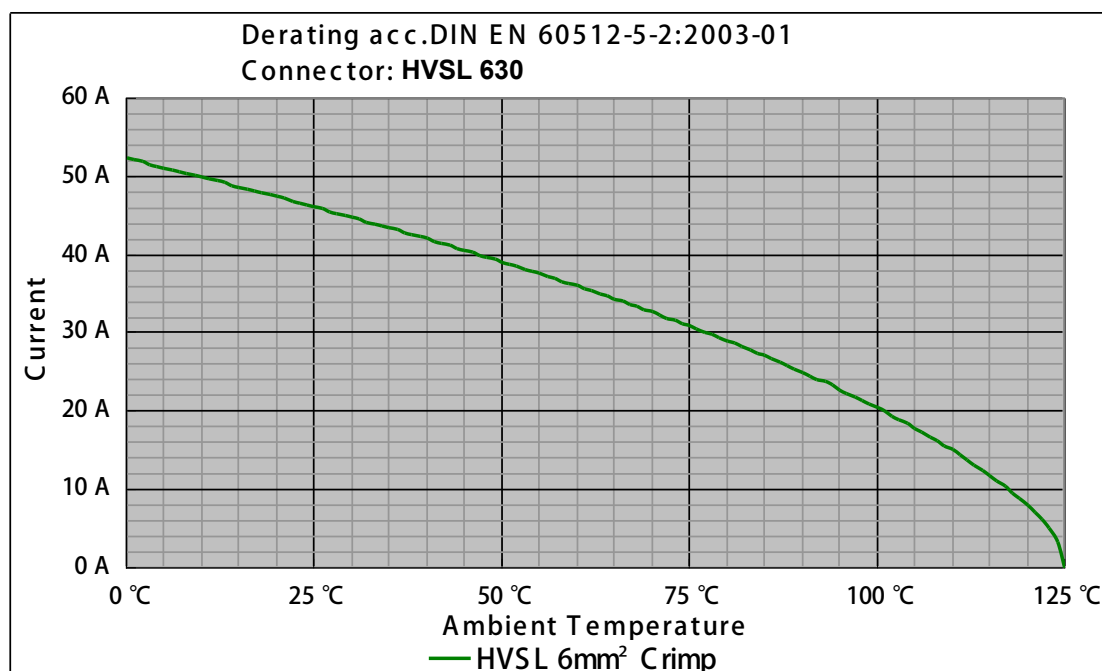
## HOW TO ORDER: RECEPTACLE

	HVSL630	02	2	A	0	04
<b>Product type:</b>	<b>02:</b> Box mounted receptacle					
<b>Position:</b>	<b>2:</b> 2 positions					
<b>Coding / Alternate position:</b>	<b>A:</b> Coding A <b>B:</b> Coding B <b>C:</b> Coding C <b>D:</b> Coding D <b>E:</b> Coding E					
<b>HVIL:</b>	<b>0:</b> Without interlock <b>1:</b> With interlock					
<b>Power contact:</b>	<b>04:</b> 4mm <sup>2</sup> <b>06:</b> 6mm <sup>2</sup>					

HVSL 630 | Temperature Rise



HVSL 630 | Derating Curve



Remark: tests carried out on the complete connector.



Amphenol PCD Shenzhen

Building C  
Dagang Industrial Zone  
Guangming District  
Shenzhen 518132  
China

Tel.: +86 755-8173-8000  
Fax: +86 755-8173-8180  
Email: [inquiry@amphenolpcd.com.cn](mailto:inquiry@amphenolpcd.com.cn)

[www.amphenolpcd.com.cn](http://www.amphenolpcd.com.cn)

Notes:

Amphenol PCD Shenzhen has made every effort to ensure that the information contained in this catalog is accurate at the time of publication. Specifications or information stated in this publication are subject to change without notice.

Amphenol PCD Shenzhen reserves the right to clarify this catalog.