

MCON, RECEPTACLE AND TAB



MCON Interconnection System

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Terminals & Splices > Automotive Terminals

MCON is a series of contact systems commonly used for electrical and electronic applications for passenger cars and commercial vehicles. The contact design meets standardized blade sizes and interface requirements of the automotive industry.



Automotive Terminal Termination Method: **Crimp**

TAB AND RECEPTACLE CONTACTS

MCON

MCON is a series of contact systems commonly used for electrical and electronic applications for passenger cars and commercial vehicles. The contact design meets standardized blade sizes and interface requirements of the automotive industry.

Except the miniaturized MCON 0.50 contact system, all contacts follow the two-piece contact design strategy to separate the electrical from the mechanical performance.

The MCON contact series is available for sealed and unsealed applications. For a fast and economic termination process, TE Application Tooling is offering a vast portfolio of application equipment.

BENEFITS

MCON

- High performance copper alloy
- Redundant contact point technology for higher reliability
- High vibration level support to meet future requirements
- Overstress protection of the contact springs
- Contact box with polarization and secondary locking feature*
- Protected locking lance**
- Sealed and unsealed version
- -40 °C up to 150 °C temperature range***
- 3 directional secondary locking access

* MCON 0.50, MCON 1.2, MCON 2.8 and MCON 6.3 - same level for locking lance and secondary feature

** Except clean body version

*** -40 °C to 180 °C with innovative surface technology available

Manufacturing Process (English)

View a recent discussion on TE's common manufacturing process for automotive terminals.

Features

Product Type Features

Receptacle Style

180°

Sealable	No, Yes
Primary Locking Feature	Clean Body, Integrated in Housing, Locking Lance
Automotive Terminal Wire Type	Copper
Insulated	Yes

Body Features

Automotive Terminal Seal Type	Family Seal or Unsealed, Single Wire Seal (SWS)
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Contact Features

Typical Current Rating (A)	1, 3, 4, 7, 8.75, 10, 11.75, 12, 13.4, 15, 16, 20, 25, 34, 36, 45, 80
Crimp Type	F-Crimp
Terminal & Splice Type	Receptacle, Tab
Mating Tab Width (mm)	.5, 1.2, 2.8, 6.3, 9.5
Mating Tab Width (in)	.019, .02, .047, .11, .248, .374
Mating Tab Thickness (mm)	.4, .6, .62, .63, .64, .8
Mating Tab Thickness (in)	.015, .016, .023, .024, .025, .031
Automotive Terminal Interface Plating	Gold (Au), Silver (Ag), Tin (Sn)
Contact Termination Area Plating Material	Silver (Ag), Tin (Sn)

Termination Features

Automotive Terminal Termination Method	Crimp
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Dimensions

Wire Size (AWG)	13 - 11, 13 - 12, 16 - 18, 18 - 16, 20, 22, 22 - 24, 24 - 22, 24 - 26
Wire Size (mm ²)	.13, .13 - .17, .13 - .22, .2 - .3, .2 - .35, .22 - .35, .25 - .35, .35, .5, .5 - .75, .75 - 1, 1 - 1.5, 1 - 2.5, 1.5 - 2.5, 2.5 - 4, 4 - 6, 16
Wire Size Search (mm ²)	.13, .15, .17, .2, .22, .25, .3, .35, .4, .5, .6, .75, .85, 1, 1.25, 1.3, 1.5, 2, 2.5, 3, 3.3, 4, 5, 6, 16
Wire Size Search (AWG)	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28
Tab Length (mm)	7.3, 11.8, 25, 25.6
Tab Length (in)	.287, .464, .98, 1
Wire Insulation Diameter (mm)	.85 - 1.05, .85 - 1.1, .85 - 1.2, .95 - 1.2, 1.1 - 1.3, 1.1 - 1.4, 1.1 - 1.6, 1.1 - 1.75, 1.15 - 1.4, 1.3 - 1.9, 1.4 - 1.6, 1.4 - 1.7, 1.4 - 1.9, 1.45 -

	1.9, 1.45 - 2.1, 1.55 - 2.1, 1.6 - 2.4, 1.7 - 2.1, 1.9 - 2.4, 1.9 - 3, 2.2 - 3, 2.6, 2.7 - 3.7, 3.4 - 3.7, 7.5 - 8.1
Wire Insulation Diameter (in)	.03 - .043, .033 - .041, .033 - .047, .037 - .047, .039 - .051, .039 - .063, .043 - .055, .043 - .063, .043 - .069, .045 - .055, .05 - .07, .051 - .074, .051 - .075, .055 - .063, .055 - .067, .055 - .075, .057 - .083, .063 - .094, .067 - .083, .075 - .094, .075 - .118, .087 - .118, .102, .106 - .145, .134 - .146

Usage Conditions

Operating Temperature (Max) (°C)	80, 85, 90, 100, 105, 110, 120, 125, 130, 140, 145, 150, 155, 170
Operating Temperature (Max) (°F)	176, 185, 194, 212, 221, 230, 248, 257, 266, 284, 293, 302, 311, 338
Operating Temperature Range (°C)	-40 - 105, -40 - 125, -40 - 125, -40 - 130, -40 - 150, -40 - 170
Operating Temperature Range (°F)	-40 - 221, -40 - 257, -40 - 257, -40 - 266, -40 - 302, -40 - 338

Industry Standards

Agency/Standard	IEC 664/664A (DIN VDE 0110), LV214, USCAR, USCAR-21
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Packaging Features

Packaging Method	Box, Carton, Reel
Packaging Quantity	1, 10000, 150, 1500, 17000, 1800, 2000, 2500, 3000, 3500, 4500, 550, 6000, 6500, 7000, 8000, 9000

Other

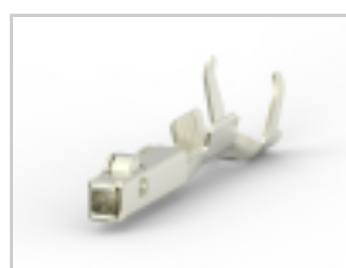
Customer Preferred Contact	No
Terminal Transmits	0 - 24 A (Low Power), 25 - 40 A (Power), 41 - 100 A (High Power)

Reference Number

TE Internal Number	CAT-M4595-T273
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SEE PRODUCTS ON NEXT PAGE

Products (1 of 5)

MCON 1.2, TERMINAL, SWS,
CBMCON 1.2, TERMINAL, SWS,
CBMCON 1.2, TERMINAL, SWS,
CB

MCON 1.2 LL REC SWS AG

TE Part #	2321537-1	2321537-2	2321537-3	1452668-3
Terminal & Splice Type	Receptacle	Receptacle	Receptacle	Receptacle
Mating Tab Width	1.2 mm	1.2 mm	1.2 mm	1.2 mm
Mating Tab Thickness	.6 mm	.6 mm	.6 mm	.6 mm
Terminal Transmits	0 - 24 A (Low Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)
Wire Size	.75 - 1 mm ²	20 AWG	22 AWG	20 AWG
Sealable	Yes	Yes	Yes	Yes
Automotive Terminal Seal Type	Single Wire Seal (SWS)	Single Wire Seal (SWS)	Single Wire Seal (SWS)	
Wire Size Search	.75 mm ² , .85 mm ² , 1 mm ²	.5 mm ²	.35 mm ²	.5 mm ² , .6 mm ² , .75 mm ²
Primary Locking Feature	Clean Body, Integrated in Housing	Clean Body, Integrated in Housing	Clean Body, Integrated in Housing	Locking Lance
Automotive Terminal Interface Plating	Silver (Ag)	Silver (Ag)	Silver (Ag)	Silver (Ag)
Operating Temperature (Max)	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C
Automotive Terminal Wire Type	Copper	Copper	Copper	Copper
Tab Length				
Insulated				
Operating Temperature Range	-40 - 125 °C, -40 - 125 °C	-40 - 125 °C, -40 - 125 °C	-40 - 125 °C, -40 - 125 °C	-40 - 150 °C
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53 /EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Series	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System

***EU RoHS Directive 2011/65/EU**

These products comply with the substance restrictions of the Restriction on Hazardous Substances Directive 2011/65/EU (RoHS2). The RoHS2 Directive requires that certain electrical and electronic equipment products do not contain mercury, cadmium, hexavalent chromium, PBB, PBDE, lead, DEHP, BBP, DBP and DIBP above defined thresholds. Products indicated as 'Compliant' do not contain any of these substances above the prohibition thresholds. Finished electrical and electronic equipment products will be CE marked as required by the Directive. Components may not be CE marked.

****EU ELV Directive 2000/53/EC**

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Products (2 of 5)



MCON 1.2 CB TAB STC AG

MCON 2.8 TERMINAL - LL

MCON 1.2 LL REC SRC AU

MCON 6.3 CB, CONTACT

TE Part #	1718350-3	1719840-3	7-1452659-2	2177771-3
Terminal & Splice Type	Tab	Receptacle	Receptacle	Receptacle
Mating Tab Width	1.2 mm	2.8 mm	1.2 mm	6.3 mm
Mating Tab Thickness	.6 mm	.6 mm	.6 mm	.8 mm
Terminal Transmits	0 - 24 A (Low Power)	25 - 40 A (Power)	0 - 24 A (Low Power)	25 - 40 A (Power)
Wire Size	20 AWG	1 - 2.5 mm ²	16 - 18 AWG	4 - 6 mm ²
Sealable	No	No	No	No
Automotive Terminal Seal Type				
Wire Size Search	.5 mm ² , .6 mm ² , .75 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ² , 2 mm ² , 2.5 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	4 mm ² , 5 mm ² , 6 mm ²
Primary Locking Feature	Clean Body	Locking Lance	Locking Lance	Clean Body
Automotive Terminal Interface Plating	Silver (Ag)	Silver (Ag)	Gold (Au)	Silver (Ag)
Operating Temperature (Max)	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C
Automotive Terminal Wire Type	Copper	Copper	Copper	Copper
Tab Length				
Insulated				
Operating Temperature Range	-40 - 150 °C	-40 - 150 °C	-40 - 150 °C	-40 - 150 °C
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53 /EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Series	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System

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Products (3 of 5)



	MCON 1.2 CB TAB STC AU	MCON 2.8 TERMINAL - LL	MCON 1.2 CB REC SWS SN	MCON 1.2 LL TAB SWS AU
TE Part #	1718350-2	1718475-1	1418850-1	1718758-2
Terminal & Splice Type	Tab	Receptacle	Receptacle	Tab
Mating Tab Width	1.2 mm	2.8 mm	1.2 mm	1.2 mm
Mating Tab Thickness	.6 mm	.8 mm	.6 mm	.6 mm
Terminal Transmits	0 - 24 A (Low Power)	25 - 40 A (Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)
Wire Size	20 AWG	13 - 12 AWG	16 - 18 AWG	24 - 22 AWG
Sealable	No	No	Yes	Yes
Automotive Terminal Seal Type				Single Wire Seal (SWS)
Wire Size Search	.5 mm ² , .6 mm ² , .75 mm ²	3 mm ² , 4 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	.3 mm ² , .35 mm ²
Primary Locking Feature	Clean Body	Locking Lance	Clean Body	Locking Lance
Automotive Terminal Interface Plating	Gold (Au)	Tin (Sn)	Tin (Sn)	Gold (Au)
Operating Temperature (Max)	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C
Automotive Terminal Wire Type	Copper	Copper	Copper	Copper
Tab Length				
Insulated				
Operating Temperature Range	-40 - 150 °C	-40 - 130 °C	-40 - 130 °C	-40 - 150 °C
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53 /EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Series	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System

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Products (4 of 5)



MCON 1.2 CB REC SRC AU

MCON 2.8 TERMINAL - LL

MCON 1.2 LL TAB STC AG

TAB 1.2X0.6,SWS; 0,08-0,15
SQMM

TE Part #	1452503-2	1563935-1	1418762-3	2141868-3
Terminal & Splice Type	Receptacle	Receptacle	Tab	Tab
Mating Tab Width	1.2 mm	2.8 mm	1.2 mm	1.2 mm
Mating Tab Thickness	.6 mm	.8 mm	.6 mm	.6 mm
Terminal Transmits	0 - 24 A (Low Power)	25 - 40 A (Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)
Wire Size	1 - 1.5 mm ²	.5 mm ²	18 - 16 AWG	.13 - .17 mm ²
Sealable	No	Yes	No	Yes
Automotive Terminal Seal Type				Single Wire Seal (SWS)
Wire Size Search	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	.5 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	.13 mm ² , .17 mm ² , .2 mm ² , . 22 mm ²
Primary Locking Feature	Clean Body	Locking Lance	Locking Lance	Locking Lance
Automotive Terminal Interface Plating	Gold (Au)	Tin (Sn)	Silver (Ag)	Silver (Ag)
Operating Temperature (Max)	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 ° C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 ° C, 130 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 ° C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 ° C, 130 °C, 140 °C, 145 °C, 150 °C
Automotive Terminal Wire Type	Copper	Copper	Copper	Copper
Tab Length				
Insulated				
Operating Temperature Range	-40 - 150 °C	-40 - 130 °C	-40 - 150 °C	-40 - 150 °C
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53 /EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Series	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System

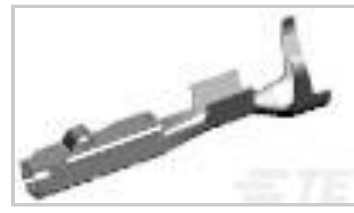
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Products (5 of 5)



	MCON 1.2 CB REC SWS AU	MCON 1.2 LL TAB SWS SN	MCON 1.2 LL REC SRC AG	MCON 1.2 CB REC SWS AU
TE Part #	1670146-2	1718762-1	7-1452659-3	1418850-2
Terminal & Splice Type	Receptacle	Tab	Receptacle	Receptacle
Mating Tab Width	1.2 mm	1.2 mm	1.2 mm	1.2 mm
Mating Tab Thickness	.6 mm	.6 mm	.6 mm	.6 mm
Terminal Transmits	0 - 24 A (Low Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)	0 - 24 A (Low Power)
Wire Size	20 AWG	18 - 16 AWG	16 - 18 AWG	16 - 18 AWG
Sealable	Yes	Yes	No	Yes
Automotive Terminal Seal Type				
Wire Size Search	.5 mm ² , .6 mm ² , .75 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²	1 mm ² , 1.25 mm ² , 1.3 mm ² , 1.5 mm ²
Primary Locking Feature	Clean Body	Locking Lance	Locking Lance	Clean Body
Automotive Terminal Interface Plating	Gold (Au)	Tin (Sn)	Silver (Ag)	Gold (Au)
Operating Temperature (Max)	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C	80 °C, 85 °C, 90 °C, 100 °C, 105 °C, 110 °C, 120 °C, 125 °C, 130 °C, 140 °C, 145 °C, 150 °C
Automotive Terminal Wire Type	Copper	Copper	Copper	Copper
Tab Length				
Insulated				
Operating Temperature Range	-40 - 150 °C	-40 - 130 °C	-40 - 150 °C	-40 - 150 °C
EU RoHS Directive 2011/65/EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Series	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System	MCON Interconnection System

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Related Materials

Catalog Section

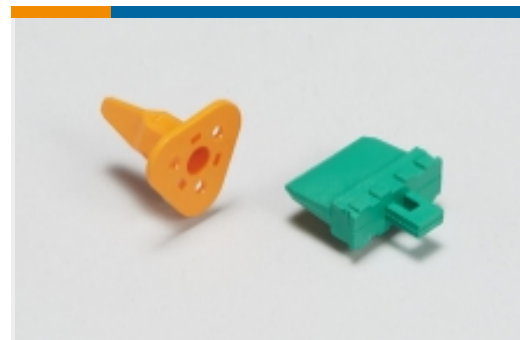
MCON Interconnection System

English

Also in the Series | MCON Interconnection System



Automotive Connector Caps & Covers
(24)



Automotive Connector Locks &
Position Assurance(11)



Automotive Headers(5)



Automotive Housings(288)



Automotive Seals & Cavity Plugs(4)



Automotive Terminals(114)



Insertion & Extraction Tools(34)



Other Automotive Connector
Accessories(6)