Description and Handling 742 Series

1



Testing and measurement of all disconnect terminal block types via Ø 2 mm or Ø 2.3 mm test plugs.



Opening knife disconnect.



Distributing potentials via 3-conductor terminal blocks.





Testing all fuse terminal block types via Ø 2 mm or Ø 2.3 mm test plugs.



CAGE CLAMP® clamps the following copper conductors:*



stranded





fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 11.

solid

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Testing all terminal block types via Ø 2 mm or Ø 2.3 mm test plugs.



For disconnect terminal blocks with removable knife disconnect, please contact factory.



Commoning with adjacent jumpers. Push jumper down until fully inserted!



fine-stranded, tip-bonded



Inserting fuse.



fine-stranded with crimped ferrules (gas-tight)



For custom terminal strips, please contact factory.



fine-stranded with crimped pin terminal (gas-tight)





Mixed-color terminal strips available upon request.



Mixed-color knife disconnect/test terminal strips available upon request.

Modular PCB Disconnect Terminal Blocks for Test and Measurement 2.5 mm² Pin Spacing 5 mm 742 Series

184



- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Power circuit disconnection via knife disconnect, e.g., for regular testing and measuring
- \bullet Test sockets on both sides of knife disconnect for 2.0 mm or \varnothing 2.3 mm test plugs
- 2- and 3-conductor terminal blocks for distributing potentials independently of PCB
- Versions with removable knife disconnects available upon request

Technical data:

Pin Spacing	1-conductor 5 mm / 0.197 in		2-conductor 5 mm / 0.197 in			3-conductor 5 mm / 0.197 in			
Rating per	IEC/	'EN 606	54-1	IEC/	EN 606	64-1	IEC/EN 60664-1		
Overvoltage category	111	Ш	Ш	Ш	111	Ш	111	Ш	П
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A	16 A	16 A	16 A	16 A	16 A	16 A
Approvals per		UL/CSA		UL/CSA		UL/CSA			
Use group UL 1059	В	С	D	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with uninsulated ferrule)
AWG	28 – 12 (12: THHN, THWN)
Strip length	8 - 9 mm / 0.31 - 0.35 in (for 1-conductor terminal blocks)
Strip length	6 - 7 mm / 0.24 - 0.28 in (for 2- and 3-conductor terminal blocks)
Conductor entry angle	60° to PCB (with 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (with 2- and 3-conductor terminal blocks)
Solder pin: length/width	4 mm / 1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material group	
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	VO
Lower/Upper temperature limit	-60°C/+105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{c.})
Contact plating	tin-plated

742 Series accessories:	Page:
Marking accessories	540 - 543
Operating tools	526 - 528
Test plugs	538

Modular PCB Disconnect Terminal Blocks for Test and Measurement 2.5 mm²

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185

1-conductor Pin spacing 5 mm / 0.197 in			ductor mm / 0.197 in	3-conductor Pin spacing 5 mm / 0.197 in		
0.08 - 2.5 mm²	AWG 28 - 12	0.08 - 2.5 mm²	AWG 28 - 12	0.08 - 2.5 mm²	AWG 28 - 12	
320 V/4 kV/2 16 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/10 A	













Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
1-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect, orange			2-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect,, orange			3-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect, orange			
gray	742-101	384 (4 x 96)	gray	742-151	200 (4 x 50)	gray	742-153	100 (2 x 50)	
Accessories	Item No.	Pack. Unit	Accessories	Item No.	Pack. Unit	Accessories	Item No.	Pack. Unit	
	End plate, snap-on type, 1.5 mm thick, gray		End plate, snap-on type, 1.5 mm thick, gray		End plate, snap-on type, 1.5 mm thick, gray				
	742-100	300 (3 x 100)		742-150	300 (3 x 100)	•	742-152	300 (3 x 100)	



Modular PCB Disconnect Terminal Blocks for Test and Measurement 2.5 mm² Pin Spacing 5.08 mm 742 Series

186



- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Power circuit disconnection via knife disconnect, e.g., for regular testing and measuring
- \bullet Test sockets on both sides of knife disconnect for 2.0 mm or \varnothing 2.3 mm test plugs
- 2- and 3-conductor terminal blocks for distributing potentials independently of PCB
- Versions with removable knife disconnects available on request

Technical data:

Pin Spacing	1-conductor 5.08 mm / 0.2 in		2-conductor 5.08 mm / 0.2 in			3-conductor 5.08 mm / 0.2 in			
Rating per	IEC/	'EN 606	54-1	IEC/	EN 606	64-1	IEC/EN 60664-1		
Overvoltage category	- 111	Ш	Ш	Ш	111	Ш	Ш	Ш	П
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A	16 A	16 A	16 A	16 A	16 A	16 A
Approvals per		UL/CSA		UL/CSA			UL/CSA		
Use group UL 1059	В	С	D	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with uninsulated ferrule)
AWG	28 – 12 (12: THHN, THWN)
Strip length	8 – 9 mm / 0.31 – 0.35 in (for 1-conductor terminal blocks)
Strip length	6 - 7 mm / 0.24 - 0.28 in (for 2- and 3-conductor terminal blocks)
Conductor entry angle	60° to PCB (with 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (with 2- and 3-conductor terminal blocks)
Solder pin: length/width	4 mm /1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material group	
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	VO
Lower/Upper temperature limit	-60°C/+105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{c.})
Contact plating	tin-plated

742 Series accessories:	Page:
Marking accessories	540 - 543
Operating tools	526 - 528
Test plugs	538

Modular PCB Disconnect Terminal Blocks for Test and Measurement 2.5 mm²

CAGE CLAMP[®] 1

1-conductor		2-con	ductor	3-conductor			
Pin spacing 5.08 mm / 0.2 in		Pin spacing 5.	08 mm / 0.2 in	Pin spacing 5.08 mm / 0.2 in			
0.08 - 2.5 mm²	AWG 28 - 12	0.08 - 2.5 mm²	AWG 28 - 12	0.08 - 2.5 mm²	AWG 28 - 12		
320 V/4 kV/2 16 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/10 A		













Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
1-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect, white			2-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect, white			3-conductor, modular disconnect terminal block for test and measurement, 2 solder pins/pole, knife disconnect, white			
orange	742-106	384 (4 × 96)		742-156	200 (4 × 50)		742-158	100 (2 × 50)	
Accessories	Item No.	Pack. Unit	Accessories	Item No.	Pack. Unit	Accessories	Item No.	Pack. Unit	
	End plate, snap-on type, 1.5 mm thick, orange			End plate, snap-on type, 1.5 mm thick, orange			End plate , snap-on type, 1.5 mm thick, orange		
	742-600	300 (3 x 100)		742-650	300 (3 x 100)		742-651	300 (3 x 100)	



Modular PCB Terminal Blocks with Potential Commoning 2.5 mm² Pin Spacing 5 mm 742 Series

188

1



- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Adjacent jumpers for multiplying and distributing potentials
- Disconnect and fuse terminal blocks can be combined to form complex function assemblies
- Test socket for Ø 2.0 mm and Ø 2.3 mm test plugs

Technical data:

Pin Spacing	1-conductor 5 mm / 0.197 in		2-conductor 5 mm / 0.197 in			
Rating per	IEC/EN 60664-1		IEC/EN 60664-1			
Overvoltage category	111	Ш	Ш	III	111	Ш
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A	16 A	16 A	16 A
Approvals per	UL/CSA		UL/CSA			
Use group UL 1059	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with uninsulated ferrule)
AWG	28 – 12 (12: THHN, THWN)
Strip length	8 – 9 mm / 0.31 – 0.35 in (for 1-conductor terminal blocks)
Strip length	6 - 7 mm / 0.24 - 0.28 in (for 2-conductor terminal blocks)
Conductor entry angle	60° to PCB (for 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (for 2-conductor terminal blocks)
Solder pin: length/width	4 mm / 1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material group	
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	VO
Lower/Upper temperature limit	-60°C/+105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{c.})
Contact plating	tin-plated

742 Series accessories:	Page:
Marking accessories	540 - 543
Operating tools	526 - 528
Test plugs	538

Modular PCB Terminal Blocks with Potential Commoning 2.5 mm²



189

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Modular PCB Terminal Blocks with Potential Commoning 2.5 mm² Pin Spacing 5.08 mm 742 Series

190

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- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Adjacent jumpers for multiplying and distributing potentials
- Disconnect and fuse terminal blocks can be combined to form complex function assemblies
- \bullet Test socket for Ø 2.0 mm and Ø 2.3 mm test plugs

Technical data:

Pin Spacing	1-conductor 5.08 mm / 0.2 in		2-conductor 5.08 mm / 0.2 in			
Rating per	IEC/EN 60664-1		IEC/EN 60664-1			
Overvoltage category	111	Ш	Ш	111	111	Ш
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A	16 A	16 A	16 A
Approvals per	UL/CSA		UL/CSA			
Use group UL 1059	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with uninsulated ferrule)
AWG	28 – 12 (12: THHN, THWN)
Strip length	8 – 9 mm / 0.31 – 0.35 in (for 1-conductor terminal blocks)
Strip length	6 - 7 mm / 0.24 - 0.28 in (for 2-conductor terminal blocks)
Conductor entry angle	60° to PCB (for 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (for 2-conductor terminal blocks)
Solder pin: length/width	4 mm / 1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	VO
Lower/Upper temperature limit	-60°C/+105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{c.})
Contact plating	tin-plated

742 Series accessories:	Page:
Marking accessories	540 - 543
Operating tools	526 - 528
Test plugs	538

Modular PCB Terminal Blocks with Potential Commoning 2.5 mm²



Modular PCB Fuse Terminal Blocks 2.5 mm² Pin Spacing 5 mm 742 Series

192



- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Quick, easy replacement of mini-automotive blade-style fuses in the event of a fault
- Test sockets on both sides of knife disconnect for Ø 2.0 mm or Ø 2.3 mm test plugs
- Protection against direct contact is required for voltages above 42 V
- 2- and 3-conductor terminal blocks for distributing potentials independent of PCB

Technical data:

Pin Spacing	1-conductor 5 mm / 0.197 in		2-conductor 5 mm / 0.197 in			3-conductor 5 mm / 0.197 in			
Rating per	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Overvoltage category	111	III	Ш	111	111	Ш	111	III	П
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current in indiv. arrangement	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A
Nominal current in block arrangement	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA		UL/CSA		UL/CSA				
Use group UL 1059	В	С	D	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 – 1.5 mm ² (with uninsulated ferrule)
AWG	28 - 12 (12: THHN, THWN)
Strip length	8 – 9 mm / 0.31 – 0.35 in (for 1-conductor terminal blocks)
Strip length	6 - 7 mm / 0.24 - 0.28 in (for 2- and 3-conductor terminal blocks)
Conductor entry angle	60° to PCB (for 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (for 2- and 3-conductor terminal blocks)
Solder pin: length/width	4 mm / 1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material data:

Material group		
Insulating material	Nylon 6.6 (PA 6.6)	
Flammability rating per UL 94	VO	
Lower/Upper temperature limit	-60°C/+105°C	
Clamping spring material	Chrome-nickel spring steel (CrNi)	
Contact material	Electrolytic copper (E _{Cu})	
Contact plating	tin-plated	

742 Series accessories:	Page:
Marking accessories	540 - 543
Operating tools	526 - 528
Test plugs	538
Automotive blade-style fuses based or	n DIN 72581-3f
Example supplier: www.littelfuse.de	

Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is max. 80% of their nominal current according to DIN 72581 part 3 (with an ambient temperature of 23 °C). Selecting the correct fuse cartridge is important for the product safety of the devices and the service life/reliability of the fuses. Fuse cartridges will only operate perfectly as protection components (rated break point) if they are properly selected and used as intended (i.e., according to the state of the technology and valid specifications, as well as data sheet characteristics), according to basic safety requirements (i.e., persons, animals and property must be protected against hazards).Depending on the application requirements (product safety), the fuse in the device to be protected must generally be tested both under normal and faulty operating conditions.

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193

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Modular PCB Fuse Terminal Blocks 2.5 mm² Pin Spacing 5.08 mm 742 Series

194



- Modular terminal blocks with screwdriver-actuated CAGE CLAMP®
- Quick, easy replacement of mini-automotive blade-style fuses in the event of a fault
- Test sockets on both sides of knife disconnect for Ø 2.0 mm or Ø 2.3 mm test plugs
- Protection against direct contact is required for voltages above 42 V
- 2 and 3-conductor terminal blocks for potential distribution independent of PCB

Technical data:

Pin Spacing	1-conductor 5.08 mm / 0.2 in		2-conductor 5.08 mm / 0.2 in			3-conductor 5.08 mm / 0.2 in			
Rating per	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Overvoltage category	111	III	Ш	111	111	Ш	111	III	Ш
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current in indiv. arrangement	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A
Nominal current in block arrangement	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	В	С	D	В	С	D	В	С	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	16 A	-	10 A	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.08 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 – 1.5 mm ² (with uninsulated ferrule)
AWG	28 – 12 (12: THHN, THWN)
Strip length	8 - 9 mm / 0.31 - 0.35 in (for 1-conductor terminal blocks)
Strip length	6 – 7 mm / 0.24 – 0.28 in (for 2- and 3-conductor terminal blocks)
Conductor entry angle	60° to PCB (for 1-conductor terminal blocks)
Conductor entry angle	90° to PCB (for 2- and 3-conductor terminal blocks)
Solder pin: length/width	4 mm / 1 x 0.8 mm
Solder pin: drilled hole diameter	1.4 ^{+ 0.05} mm

Material data:

Material group		
Insulating material	Nylon 6.6 (PA 6.6)	
Flammability rating per UL 94	VO	
Lower/Upper temperature limit	-60°C/+105°C	
Clamping spring material	Chrome-nickel spring steel (CrNi)	
Contact material	Electrolytic copper (E _{c.})	
Contact plating	tin-plated	

Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is max. 80% of their nominal current according to DIN 72581 part 3 (with an ambient temperature of 23 °C). Selecting the correct fuse cartridge is important for the product safety of the devices and the service life/reliability of the fuses. Fuse cartridges will only operate perfectly as protection components (rated break point) if they are properly selected and used as intended (i.e., according to the state of the technology and valid specifications, as well as data sheet characteristics), according to basic safety requirements (i.e., persons, animals and property must be protected against hazards).Depending on the application requirements (product safety), the fuse in the device to be protected must generally be tested both under normal and faulty operating conditions.

742 Series accessories:	Page:			
Marking accessories	540 - 543			
Operating tools	526 - 528			
Test plugs	538			
Blade-type fuse cartridges based on DIN 72581-3f				
Example supplier: www.littelfuse.de				



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