

1 SMD Terminal Blocks with Push-Buttons

Pin Spacing 4 mm

2060 Series

118



- SMD terminal blocks with CAGE CLAMP®S connection and push-buttons
- A total height of only 4.5mm helps reduce shadowing in LED applications
- Available in tape-and-reel packaging for automated assembly

Technical data:

Pin Spacing	4 mm 0.157 in		
Rating per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	63 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	9 A	9 A	9 A
Approvals per	UL 1977		
Rated voltage, 1-pole	600 V		
Rated voltage for 2 poles and more	250 V		
Nominal current UL	9 A		

Conductor data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 0.75 mm ²
Conductor size: fine-stranded	0.2 - 0.75 mm ²
AWG	24 - 18
Strip length	6 - 7 mm / 0.24 - 0.28 in
Conductor entry angle	0° to PCB

Material data:

Material group	I
Insulating material	Glass fiber-reinforced polyphthalamide (PPA-GF)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Copper alloy
Contact plating	tin-plated

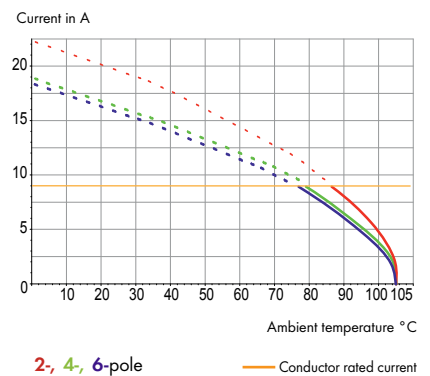
Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150µm. Stencil layout identical to pad layout.

Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1



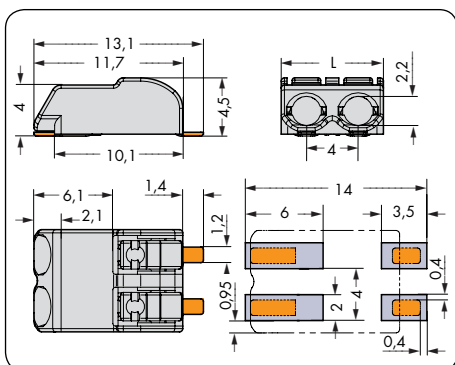
2060 Series accessories:

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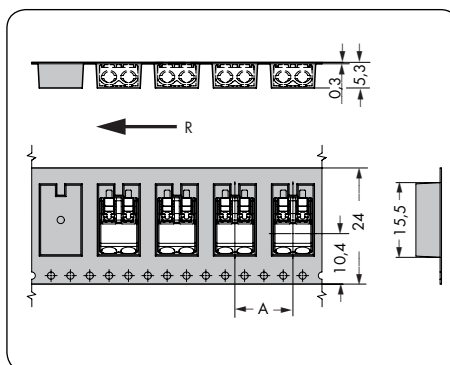
Operating tools (233-335)	527
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Pin spacing 4 mm / 0.157 in

0.2 - 0.75 mm² | AWG 24 - 18
160 V/2.5 kV/2 9 A



L = pole no. x 4 mm - 0.1 mm



R = Feed direction
A = (pole no. x 4 mm) + 4 mm



Group arrangement is possible without losing any poles.

Pole No.	Item No.	Pack. Unit/ pieces per reel
SMD terminal blocks with push-buttons in tape-and-reel packaging, light gray*		
1	2060-401/998-404	1500
2	2060-402/998-404	1000
3	2060-403/998-404	750
Reel diameter: 330 mm		



Inserting solid conductors via push-in termination.



Insert/remove fine-stranded conductors by lightly pressing on push-button (e.g., using a 233-335 operating tool or a ball point pen).

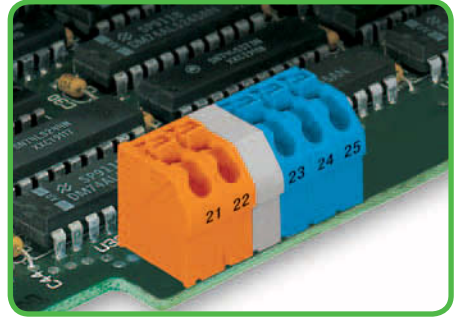
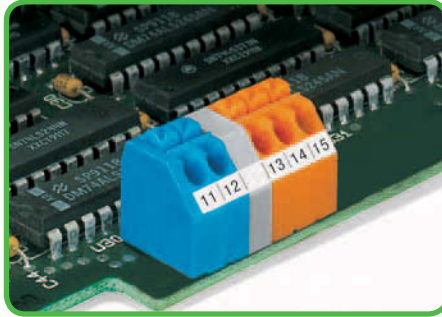
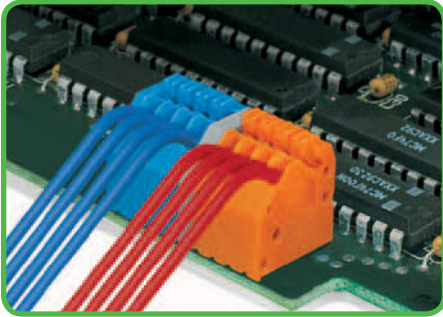


*Depending on reflow soldering temperatures and times, color deviations may occur for light gray connectors. These deviations will have no impact on functionality.

1 System Description and Handling

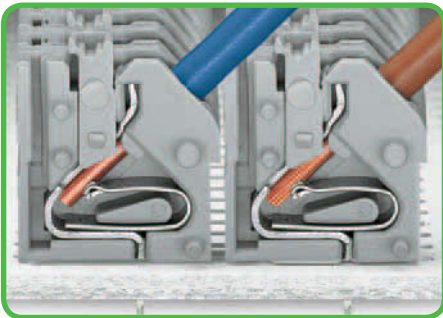
250 and 235 Series

120



Marking via self-adhesive strips or factory direct printing. Mixed-color terminal strips (with or without spacer) available upon request.

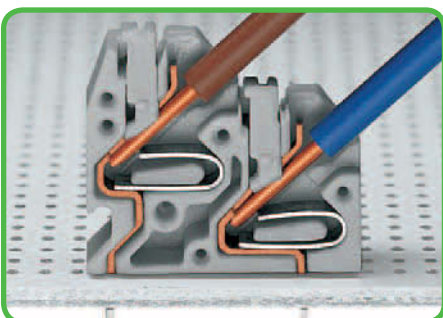
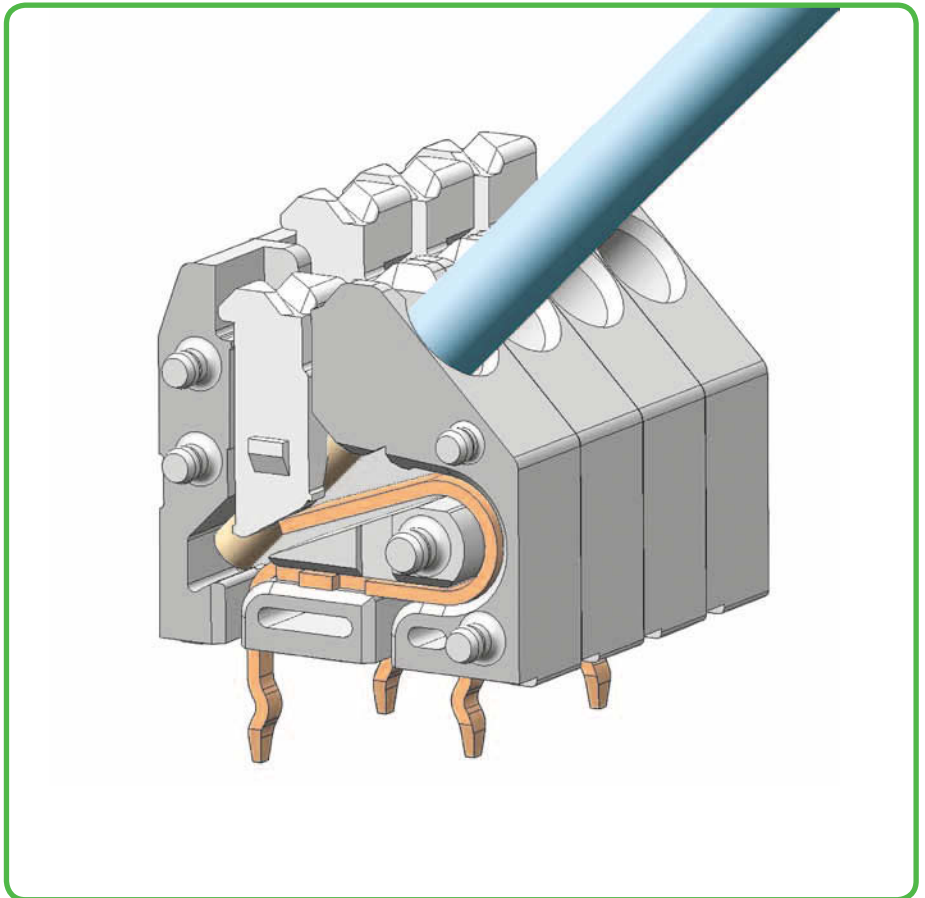
250 Series



Space-saving wiring, 250 Series – 5 mm pin spacing.



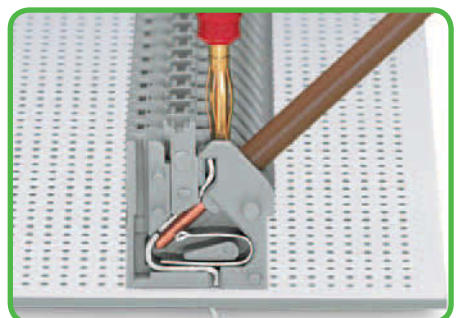
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons,
250 Series – 3.5 mm pin spacing.



Space-saving wiring. Push-in termination of solid conductors.



Testing with \varnothing 1 mm test pin, on the conductor,
250 Series – 2.5 to 3.5 mm pin spacing.



Testing with \varnothing 2 mm test plug, touch contact with current bar,
250 Series – 5 mm pin spacing.

**CAGE CLAMP[®]S for
250 and 235 Series clamps
the following copper conductors:***

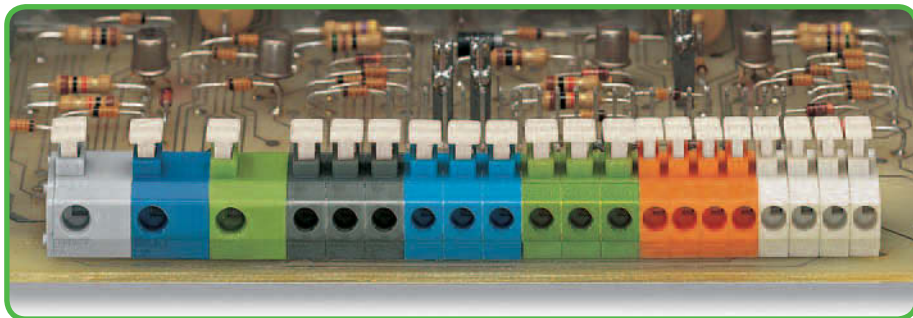


solid

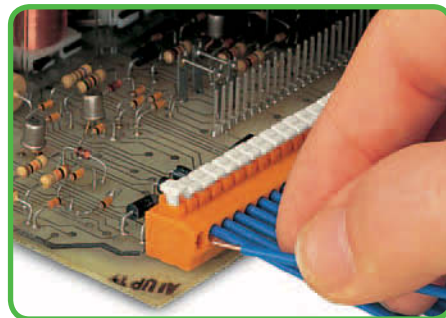


fine-stranded,
also with tinned
single strands

* For aluminum conductors, see notes in Section 11.

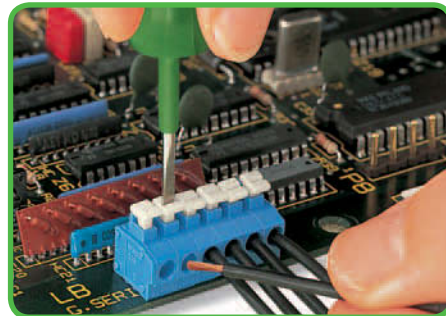
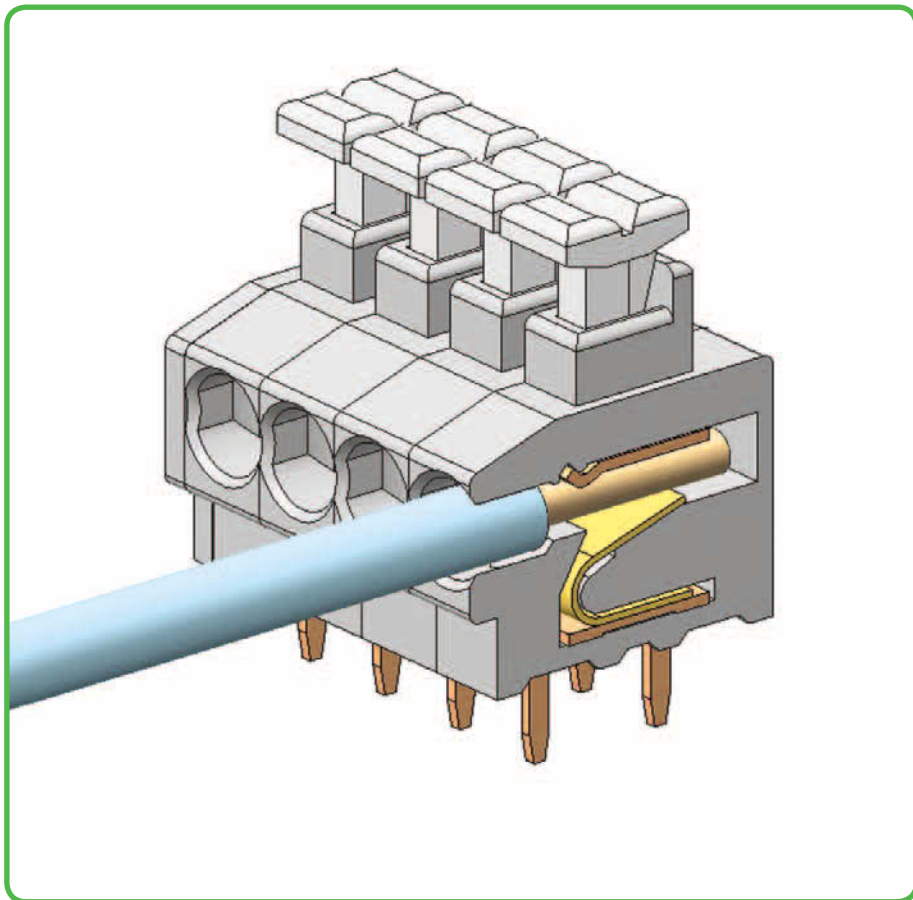


Combining 1- and 2-conductor terminal blocks, also with different housing colors and pin spacing.
 1 = Pin spacing 10/10.16 mm 3 = Pin spacing 3.81 mm 3 = Pin spacing 3.81 mm
 2 = Pin spacing 5/5.08 mm 4 = Pin spacing 3.96/4 mm 4 = Pin spacing 3.96/4 mm

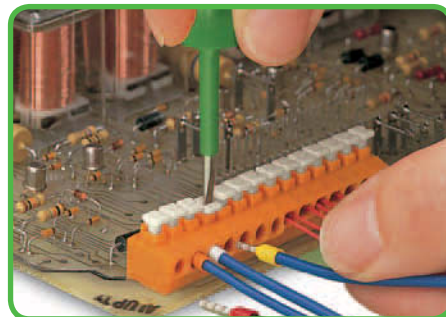


Inserting solid conductor via push-in termination.

235 Series

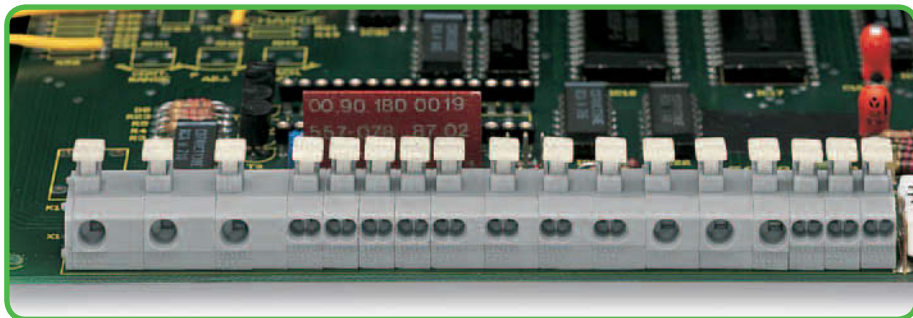


Inserting/removing fine-stranded conductor via push-button.

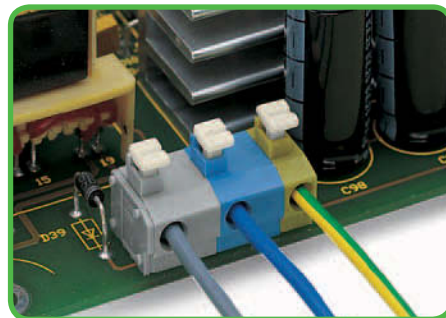


Inserting/removing ferruled fine-stranded conductor via push-button.

Formation of mixed terminal strips



Combining 1- and 2-conductor terminal blocks with different pin spacing.



Application example: Power supply terminal strip.



fine-stranded, tip-bonded

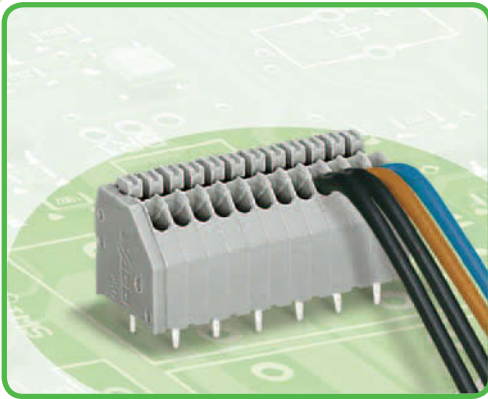


fine-stranded with ferrules (gas-tight crimped)



fine-stranded with pin-end connector (gas-tight crimped)

PCB Terminal Strips with Push-Buttons 0.5 mm² Pin Spacing 2.5 mm, 2.54 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips with spacers also available upon request

Technical data:

Pin Spacing	2.5 mm 0.098 in			2.54 mm 0.1 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	4 A	4 A	4 A	4 A	4 A	4 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	2 A	-	2 A	2 A	-	2 A

Conductor and solder pin data:

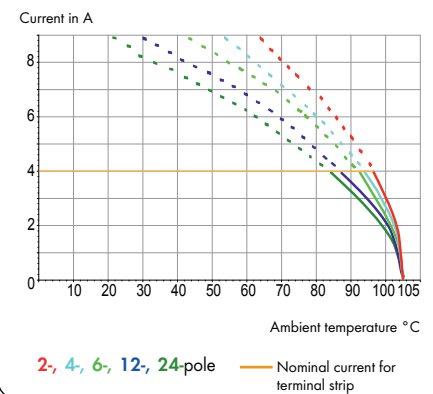
Connection technology	CAGE CLAMP®S
Conductor size: solid	0.14 - 0.5 mm ² (Ø 0.4 - 0.8 mm)
Conductor size: fine-stranded	0.2 - 0.5 mm ²
AWG	24 - 20 (26 "sol.")
Strip length	8.5 - 9.5 mm / 0.32 - 0.36 in
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1.1 ^{-0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Copper alloy
Contact plating	Copper

Current-Carrying Capacity Curve

Pin spacing: 2.5 mm / Conductor size: 0.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1



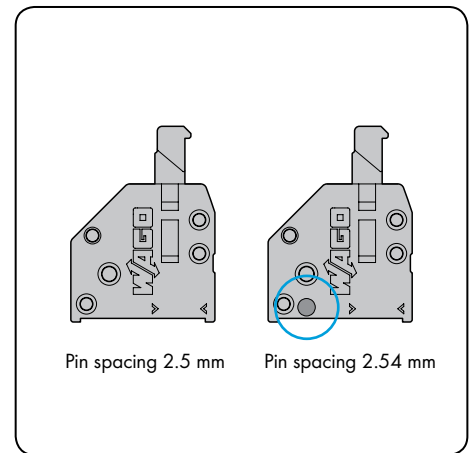
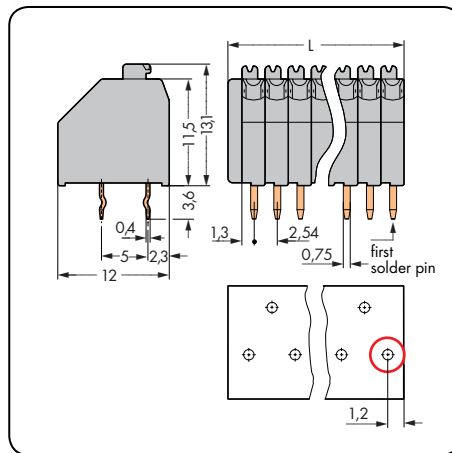
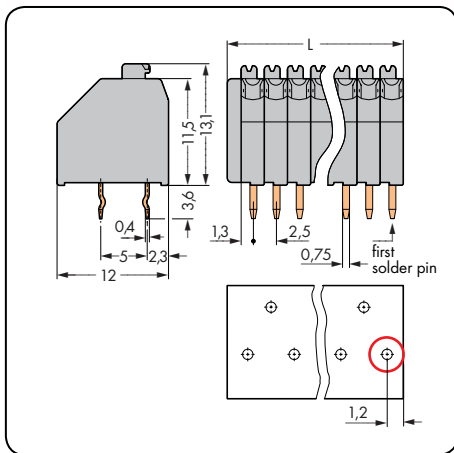
250 Series accessories:

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PCB Terminal Strips with Push-Buttons 0.5 mm²

Pin spacing 2.5 mm / 0.098 in		Pin spacing 2.54 mm / 0.1 in	
0.2 – 0.5 mm ²	AWG 24 – 20	0.2 – 0.5 mm ²	AWG 24 – 20
160 V/2.5 kV/2 4 A	300 V/5 A	160 V/2.5 kV/2 4 A	300 V/5 A

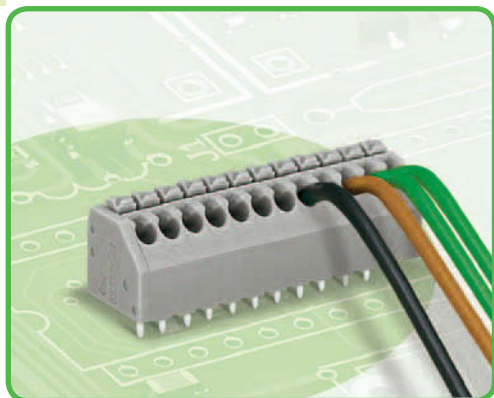


L = (pole no. x pin spacing) + 1.5 mm
 ○ first solder pin, right front side

A groove at the back of the terminal strip helps differentiate between the two pin spacings.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Terminal strip with push-buttons, 1 staggered solder pin/pole, gray			Terminal strip with push-buttons, 1 staggered solder pin/pole, gray			Item no. suffixes for colored terminal strips:		
2	250-402	720 (4 x 180)	2	250-1402	720 (4 x 180)	● black	..... /000-004	
3	250-403	520 (4 x 130)	3	250-1403	520 (4 x 130)	● red	..... /000-005	
4	250-404	400 (4 x 100)	4	250-1404	400 (4 x 100)	● blue	..... /000-006	
5	250-405	340 (4 x 85)	5	250-1405	340 (4 x 85)	○ light gray	..... /000-009	
6	250-406	280 (4 x 70)	6	250-1406	280 (4 x 70)	● orange	..... /000-012	
7	250-407	240 (4 x 60)	7	250-1407	240 (4 x 60)	● green	..... /000-023	
8	250-408	220 (4 x 55)	8	250-1408	200 (4 x 50)	● violet	..... /000-024	
9	250-409	200 (4 x 50)	9	250-1409	180 (4 x 45)	○ white	..... /000-050	
10	250-410	180 (4 x 45)	10	250-1410	160 (4 x 40)	Ordering example:		
11	250-411	160 (4 x 40)	11	250-1411	160 (4 x 40)	Terminal strip, 2.5 mm pin spacing		
12	250-412	140 (4 x 35)	12	250-1412	140 (4 x 35)	8-pole, orange: 250-480/000-012		
13	250-413	140 (4 x 35)	13	250-1413	120 (4 x 30)	(Production and prices depend on quantity required)		
14	250-414	120 (4 x 30)	14	250-1414	120 (4 x 30)			
15	250-415	120 (4 x 30)	15	250-1415	120 (4 x 30)			
16	250-416	100 (4 x 25)	16	250-1416	100 (4 x 25)			
17	250-417	100 (4 x 25)	17	250-1417	100 (4 x 25)			
18	250-418	80 (4 x 20)	18	250-1418	100 (4 x 25)			
19	250-419	80 (4 x 20)	19	250-1419	80 (4 x 20)			
20	250-420	80 (4 x 20)	20	250-1420	80 (4 x 20)			
21	250-421	80 (4 x 20)	21	250-1421	80 (4 x 20)			
22	250-422	80 (4 x 20)	22	250-1422	80 (4 x 20)			
23	250-423	80 (4 x 20)	23	250-1423	60 (4 x 15)			
24	250-424	60 (4 x 15)	24	250-1424	60 (4 x 15)			

PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 3.5 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips with spacers also available upon request

Technical data:

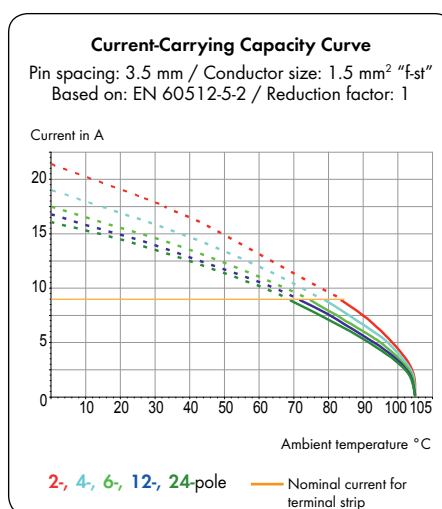
Pin Spacing	1 solder pin/pole, front 3.5 mm / 0.138 in			1 solder pin/pole, staggered 3.5 mm / 0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	250 V	320 V	630 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	8 A	8 A	8 A	8 A	8 A	8 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.25 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1 mm ² (with uninsulated ferrule)
AWG	24 - 16
Strip length	8.5 - 9.5 mm / 0.32 - 0.36 in
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Copper alloy
Contact plating	Copper



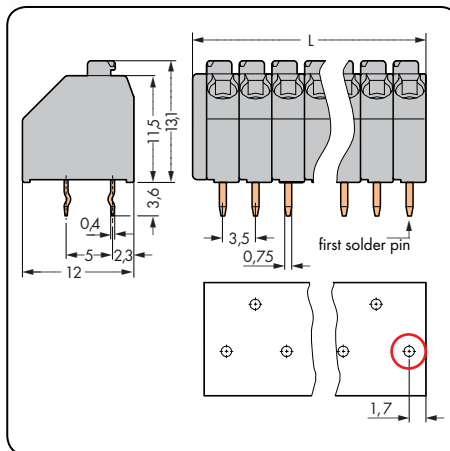
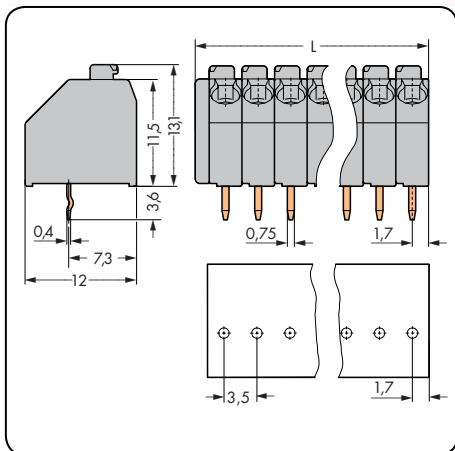
250 Series accessories:

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PCB Terminal Strips with Push-Buttons 1.5 mm²

1 solder pin/pole, in-line Pin spacing 3.5 mm / 0.138 in		1 solder pin/pole, staggered Pin spacing 3.5 mm / 0.138 in		Item no. suffixes for colored terminal strips
0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16	
160 V/2.5 kV/2 8 A	300 V/5 A	320 V/4 kV/2 8 A	300 V/5 A	



L = (pole no. x pin spacing) + 1.5 mm
 ○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Terminal strip with push-buttons, 1 in-line solder pin/pole, gray			Terminal strip with push-buttons, 1 staggered solder pin/pole, gray			Item no. suffixes for colored terminal strips:		
2	250-102	560 (4 x 140)	2	250-202	560 (4 x 140)	● yellow	..... /000-002	
3	250-103	400 (4 x 100)	3	250-203	400 (4 x 100)	● light blue	..... /000-003	
4	250-104	300 (4 x 75)	4	250-204	300 (4 x 75)	● black	..... /000-004	
5	250-105	240 (4 x 60)	5	250-205	240 (4 x 60)	● red	..... /000-005	
6	250-106	200 (4 x 50)	6	250-206	200 (4 x 50)	● blue	..... /000-006	
7	250-107	180 (4 x 45)	7	250-207	180 (4 x 45)	● light gray	..... /000-009	
8	250-108	160 (4 x 40)	8	250-208	160 (4 x 40)	● orange	..... /000-012	
9	250-109	140 (4 x 35)	9	250-209	140 (4 x 35)	● brown	..... /000-014	
10	250-110	120 (4 x 30)	10	250-210	120 (4 x 30)	● light green	..... /000-017	
11	250-111	120 (4 x 30)	11	250-211	120 (4 x 30)	● green	..... /000-023	
12	250-112	100 (4 x 25)	12	250-212	100 (4 x 25)	● violet	..... /000-024	
13	250-113	100 (4 x 25)	13	250-213	100 (4 x 25)	● white	..... /000-050	
14	250-114	80 (4 x 20)	14	250-214	80 (4 x 20)	● pink	..... /000-051	
15	250-115	80 (4 x 20)	15	250-215	80 (4 x 20)			
16	250-116	80 (4 x 20)	16	250-216	80 (4 x 20)			
17	250-117	80 (4 x 20)	17	250-217	80 (4 x 20)			
18	250-118	60 (4 x 15)	18	250-218	60 (4 x 15)			
19	250-119	60 (4 x 15)	19	250-219	60 (4 x 15)			
20	250-120	60 (4 x 15)	20	250-220	60 (4 x 15)			
21	250-121	60 (4 x 15)	21	250-221	60 (4 x 15)			
22	250-122	60 (4 x 15)	22	250-222	60 (4 x 15)			
23	250-123	60 (4 x 15)	23	250-223	60 (4 x 15)			
24	250-124	40 (4 x 10)	24	250-224	40 (4 x 10)			
						Ordering example: Terminal strip, 3.5 mm pin spacing 8-pole, orange: 250-108/000-012		
						(Production and prices depend on quantity required)		

PCB Terminal Strips with Push-Buttons 0.5 mm² and 1.5 mm², THR (Through-Hole Reflow*)

Pin Spacing 2.5 mm, 3.5 mm

250 Series



- Cost-effective integration of high-temperature resistant THR terminal strips into SMT reflow soldering processes
- Versions with suction pads are available in tape-and-reel packaging for automated assembly
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

Technical data:

Pin Spacing	2.5 mm 0.098 in			3.5 mm 0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	250 V	320 V	630 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	4 A	4 A	4 A	8 A	8 A	8 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	2 A	-	2 A	10 A	-	10 A

Conductor and solder pin data for 2.5 mm version:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.14 - 0.5 mm ² (Ø 0.4 - 0.8 mm)
Conductor size: fine-stranded	0.2 - 0.5 mm ²
AWG	24 - 20 (26 "sol.")
Strip length	8.5 - 9.5 mm / 0.32 - 0.36 in
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: metal-plated hole diameter	1 ^{+0.1} mm

Conductor and solder pin data for 3.5 mm version:

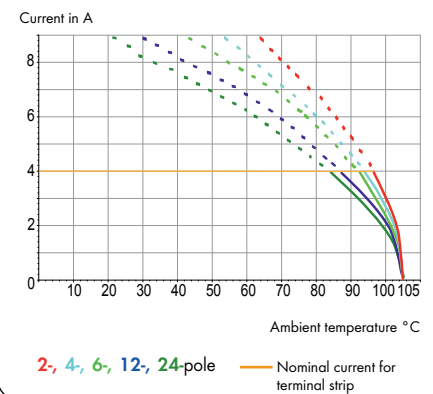
Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.25 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1 mm ² (with uninsulated ferrule)
AWG	24 - 16
Strip length	8.5 - 9.5 mm / 0.32 - 0.36 in
Conductor entry angle	45° to PCB
Solder pin: length/width	2.4 mm / 0.4 x 0.75 mm
Solder pin: metal-plated hole diameter	1 ^{+0.1} mm

Material data:

Material group	III a
Insulating material	Nylon 4.6 (PA 4.6)
Flammability rating per UL 94	V2
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Copper alloy
Contact plating	Copper

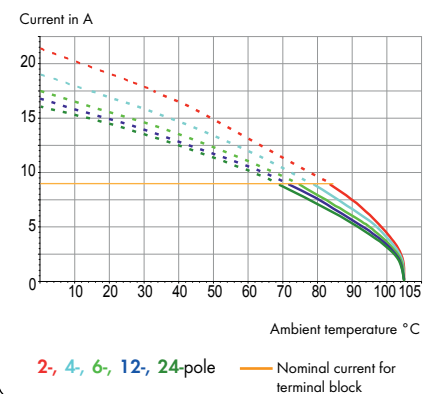
Current-Carrying Capacity Curve

Pin spacing: 2.5 mm / Conductor size: 0.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1



Current-Carrying Capacity Curve

Pin spacing: 3.5 mm / Conductor size: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1



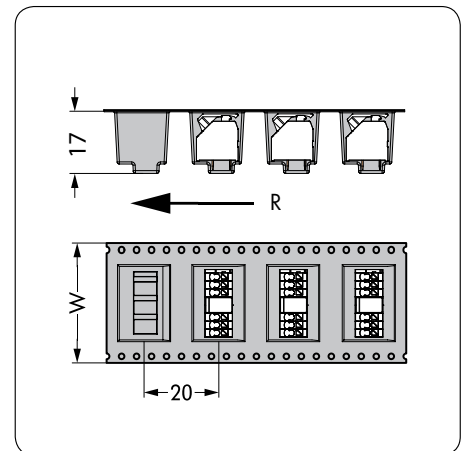
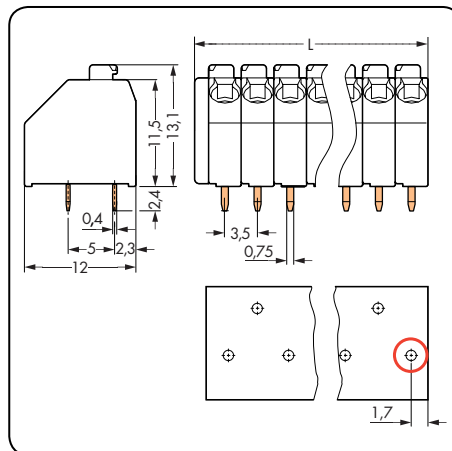
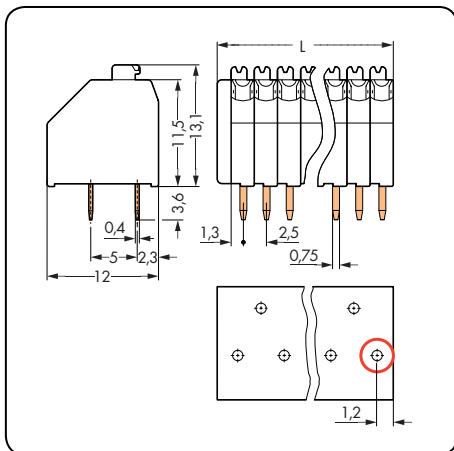
250 Series accessories:

Page:

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PCB Terminal Strips with Push-Buttons 0.5 mm² and 1.5 mm², THR

Pin spacing 2.5 mm / 0.098 in 0.2 – 0.5 mm ² AWG 24 – 20 160 V/2.5 kV/2 4 A 300 V/5 A		Pin spacing 3.5 mm / 0.138 in 0.2 – 1.5 mm ² AWG 24 – 16 320 V/4 kV/2 8 A 300 V/5 A		Terminal strips in tape-and-reel packaging, 3.5 mm pin spacing
---	--	---	--	---

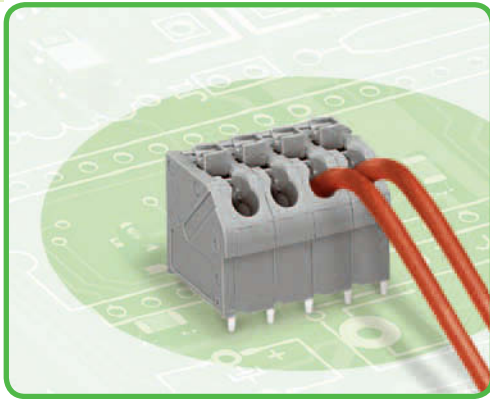


L = (pole no. x pin spacing) + 1.5 mm
 Ⓞ first solder pin, right front side

W = Tape width
 R = Feed direction

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
Terminal strip with push-buttons, 1 staggered solder pin/pole, black			Terminal strip with push-buttons, 1 staggered solder pin/pole, black			Terminal strips with additional suction pads, in tape-and-reel packaging acc. to IEC 60286-3, 3.5 mm pin spacing		
						(mm)		
2	250-402/350-604	720 (4 x 180)	2	250-202/353-604	560 (4 x 140)	2	250-202/353-604/997-404	24
3	250-403/350-604	520 (4 x 130)	3	250-203/353-604	400 (4 x 100)	3	250-203/353-604/997-404	24
4	250-404/350-604	400 (4 x 100)	4	250-204/353-604	300 (4 x 75)	4	250-204/353-604/997-405	32
5	250-405/350-604	340 (4 x 85)	5	250-205/353-604	240 (4 x 60)	5	250-205/353-604/997-405	32
6	250-406/350-604	280 (4 x 70)	6	250-206/353-604	200 (4 x 50)	6	250-206/353-604/997-406	44
7	250-407/350-604	240 (4 x 60)	7	250-207/353-604	180 (4 x 45)	7	250-207/353-604/997-406	44
8	250-408/350-604	220 (4 x 55)	8	250-208/353-604	160 (4 x 40)	8	250-208/353-604/997-406	44
						Reel diameter: 330 mm, 160 pieces per reel		

PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 5 mm, 7.5 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

Technical data:

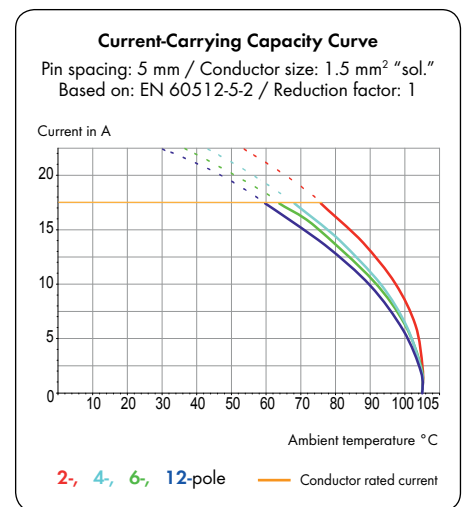
Pin Spacing	5 mm 0.197 in			7.5 mm 0.295 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	IEC/EN 60664-1			IEC/EN 60664-1		
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	500 V	630 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV
Nominal current	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	2 A	-	2 A	2 A	-	2 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.5 - 1.5 mm ²
Conductor size: fine-stranded	0.5 mm ² (I max. 2 A)
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 4 A)
Conductor size: fine-stranded	0.5 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.5 - 1 mm ² (with uninsulated ferrule)
AWG	20 - 16 (20 - 14 "sol.")
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	45° to PCB
Solder pin: length/width	4 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.2 ^{-0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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

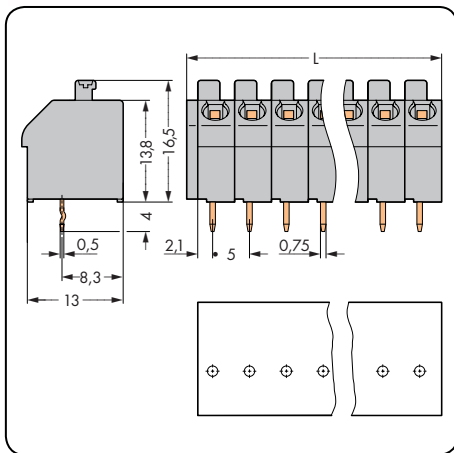


250 Series accessories:

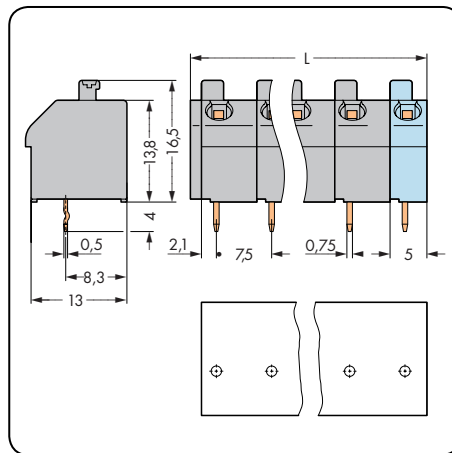
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Pin spacing 5 mm / 0.197 in		Pin spacing 7.5 mm / 0.295 in	
0.5 - 1.5 mm ²	AWG 20 - 16	0.5 - 1.5 mm ²	AWG 20 - 16
320 V/4 kV/2 17.5 A	300 V/2 A	630 V/6 kV/2 17.5 A	300 V/2 A



$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



$$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons, 1 in-line solder pin/pole, gray			Terminal strip with push-buttons, 1 in-line solder pin/pole, gray		
2	250-502	400 (4 x 100)	2	250-602	340 (4 x 85)
3	250-503	280 (4 x 70)	3	250-603	200 (4 x 50)
4	250-504	220 (4 x 55)	4	250-604	160 (4 x 40)
5	250-505	180 (4 x 45)	5	250-605	120 (4 x 30)
6	250-506	140 (4 x 35)	6	250-606	100 (4 x 25)
7	250-507	120 (4 x 30)	7	250-607	80 (4 x 20)
8	250-508	100 (4 x 25)	8	250-608	80 (4 x 20)
9	250-509	100 (4 x 25)	9	250-609	60 (4 x 15)
10	250-510	80 (4 x 20)	10	250-610	60 (4 x 15)
11	250-511	80 (4 x 20)	11	250-611	40 (4 x 10)
12	250-512	60 (4 x 15)	12	250-612	40 (4 x 10)
13	250-513	60 (4 x 15)			
14	250-514	60 (4 x 15)			
15	250-515	60 (4 x 15)			
16	250-516	40 (4 x 10)			

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● yellow	... /000-002	Ordering example: Terminal strip, 5 mm pin spacing 8-pole, orange: 250-508/000-012
● red	... /000-005	
● blue	... /000-006	
○ light gray	... /000-009	
● orange	... /000-012	
● brown	... /000-014	
● light green	... /000-017	
○ white	... /000-050	

Double-Deck PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 5 mm 250 Series



- Space-saving, double-deck terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

Technical data:

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

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.5 - 1.5 mm ²
Conductor size: fine-stranded	0.5 mm ² (I max. 2 A)
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 4 A)
Conductor size: fine-stranded	0.5 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.5 - 1 mm ² (with uninsulated ferrule)
AWG	20 - 16 (20 - 14 "sol.")
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	45° to PCB
Solder pin: length/width	4 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.2 ^{-0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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

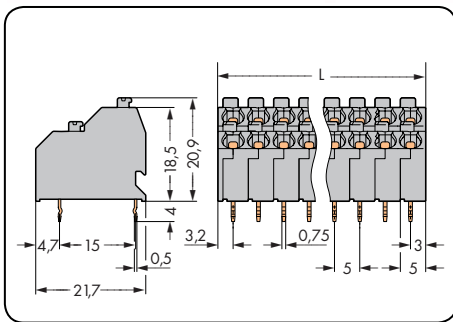
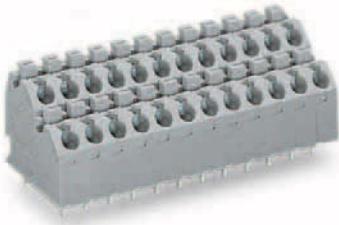
250 Series accessories:

Page:

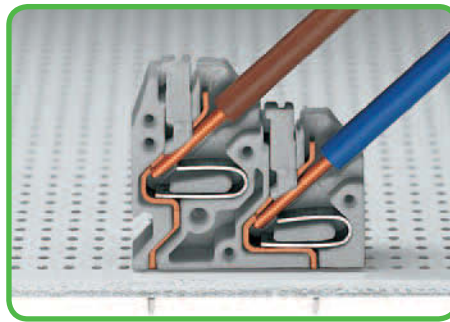
Marking accessories	540 - 543
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Test plug	538

Pin spacing 5 mm / 0.197 in

0.5 - 1.5 mm ²	AWG 20 - 16
320 V/4 kV/2 10 A	300 V/10 A

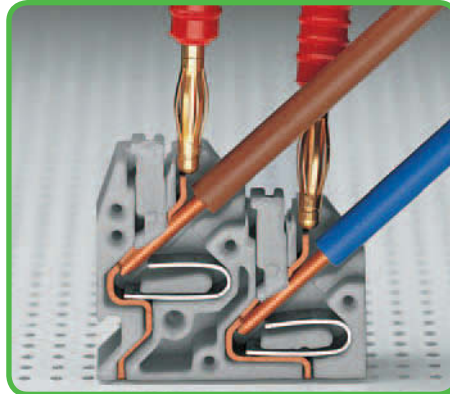


$L = (\text{pole no.} \times \text{pin spacing}) + 1.2 \text{ mm}$



Space-saving wiring
Inserting solid conductors via push-in termination.

Pole No.	Item No.	Pack. Unit
Double-deck terminal strip with push-buttons, 2 in-line solder pin/pole, gray		
2 x 2	250-702	264 (4 x 66)
3 x 2	250-703	180 (4 x 45)
4 x 2	250-704	132 (4 x 33)
6 x 2	250-706	84 (4 x 21)
8 x 2	250-708	72 (4 x 18)
10 x 2	250-710	48 (4 x 12)
12 x 2	250-712	48 (4 x 12)
16 x 2	250-716	36 (4 x 9)
24 x 2	250-724	24 (4 x 6)

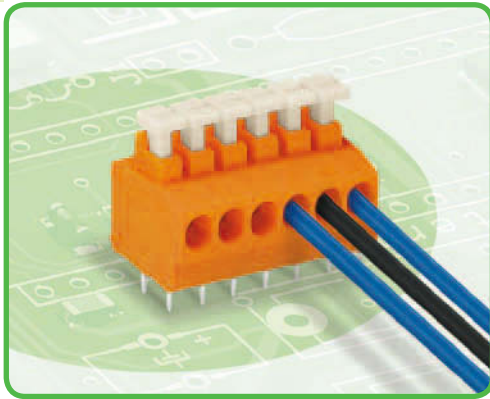


Testing with Ø 2 mm test plug, touch contact with current bar.

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● blue /000-006	Ordering example: Double-deck terminal strip with push-buttons and test slots for test plugs, 5 mm pin spacing 8 x 2-pole, orange: 250-708/000-012
● orange /000-012	

Modular PCB Terminal Blocks and Strips with Push-Buttons 1.5 mm² Pin Spacing 3.81 mm 235 Series



- Terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- For 235 Series without push-buttons, see page 151

Technical data:

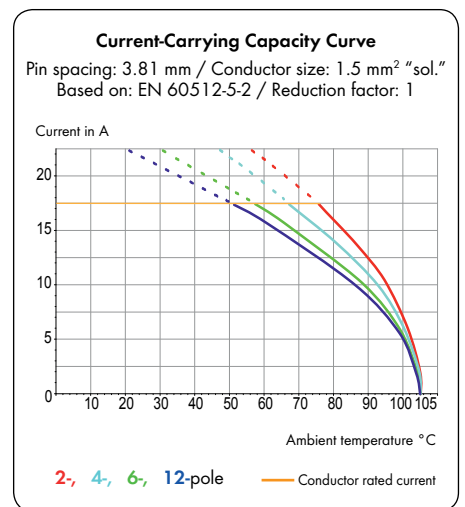
Pin Spacing	3.81 mm 0.15 in		
Rating per	IEC/EN 60664-1		
Overtension category	III	III	II
Pollution degree	3	2	2
Rated voltage	200 V	320 V	500 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA		
Use group UL1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	10 A	-	10 A
Nominal current CSA	10 A	-	-

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.5 - 1.5 mm ²
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 4 A)
Conductor size: fine-stranded	0.25 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1 mm ² (with uninsulated ferrule)
AWG	20 - 16
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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



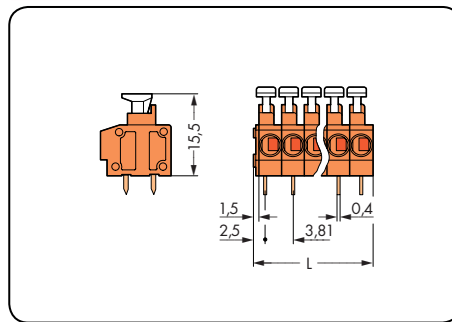
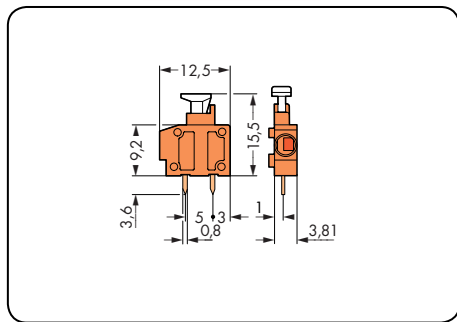
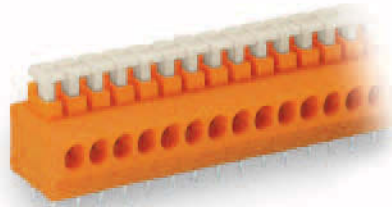
235 Series accessories:

Page:

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Modular PCB Terminal Blocks and Strips with Push-Buttons 1.5 mm²


Modular terminal blocks Pin spacing 3.81 mm / 0.15 in		Terminal strips Pin spacing 3.81 mm / 0.15 in	
0.5 - 1.5 mm ²	AWG 20 - 16	0.5 - 1.5 mm ²	AWG 20 - 16
320 V/4 kV/2 17.5 A	300 V/10 A	320 V/4 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

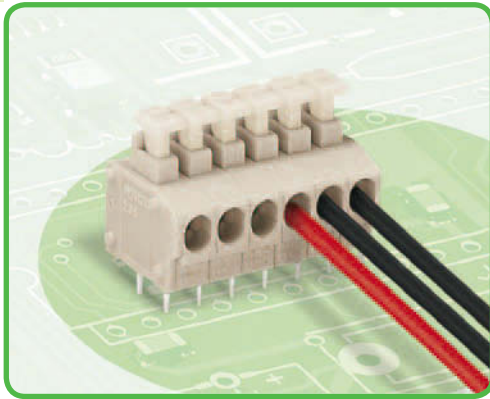
Color	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Modular terminal block with push-button, 2 solder pins/pole			Terminal strip with push-buttons, 2 solder pins/pole, orange			Item no. suffixes for colored terminal strips:		
orange	235-101	800 (8 x 100)	2	235-102	520 (4 x 130)	yellow	...../000-002	
red	235-770	800 (8 x 100)	3	235-103	360 (4 x 90)	black	...../000-004	
gray	235-771	800 (8 x 100)	4	235-104	280 (4 x 70)	red	...../000-005	
dark gray	235-772	800 (8 x 100)	5	235-105	220 (4 x 55)	blue	...../000-006	
blue	235-774	800 (8 x 100)	6	235-106	180 (4 x 45)	gray	...../000-007	
white	235-775	800 (8 x 100)	7	235-107	160 (4 x 40)	dark gray	...../000-008	
yellow	235-776	800 (8 x 100)	8	235-108	140 (4 x 35)	light green	...../000-017	
light green	235-777	800 (8 x 100)	9	235-109	120 (4 x 30)	white	...../000-050	
black	235-778	800 (8 x 100)	10	235-110	120 (4 x 30)			
			12	235-112	100 (4 x 25)	Ordering example:		
			16	235-116	60 (4 x 15)	Terminal strip, 3.81 mm pin spacing		
			24	235-124	40 (4 x 10)	8-pole, gray: 235-108/000-007		
			36	235-136	20 (4 x 5)	(Production and prices depend on quantity required)		
			48	235-148	20 (4 x 5)			

Accessories	Item No.	Pack. Unit
Spacer for doubling the pin spacing, orange		
	235-316	100

End plates for modular terminal blocks, 235 Series, snap-on type, 1 mm/0.039 in thick	Color	Item No.	Pack. Unit
	orange	235-600	100
	red	235-800	100
	gray	235-100	100
	dark gray	235-200	100
	blue	235-400	100
	white	235-850	100
	yellow	235-550	100
	light green	235-700	100
black	235-500	100	

Please contact factory for other lengths, colors, mixed-color terminal strips, or direct marking.

Modular PCB Terminal Blocks and Strips with Push-Buttons 1.5 mm² Pin Spacing 3.96/4 mm 235 Series



- Terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart

Technical data:

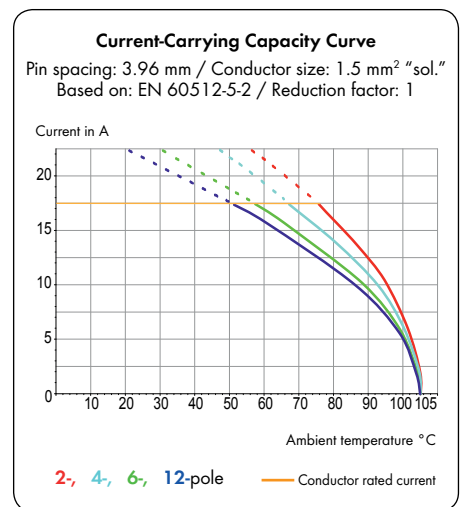
Pin Spacing	3.96/4 mm 0.156 in		
Rating per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	200 V	320 V	500 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA		
Use group UL1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	10 A	-	10 A
Nominal current CSA	10 A	-	-

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.5 - 1.5 mm ²
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 4 A)
Conductor size: fine-stranded	0.25 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1 mm ² (with uninsulated ferrule)
AWG	20 - 16
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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



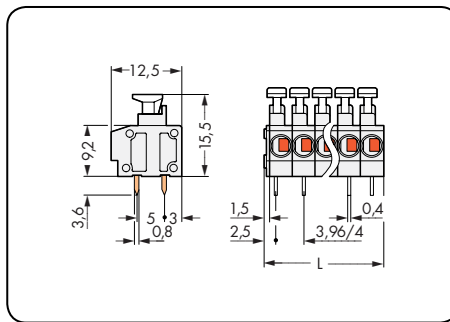
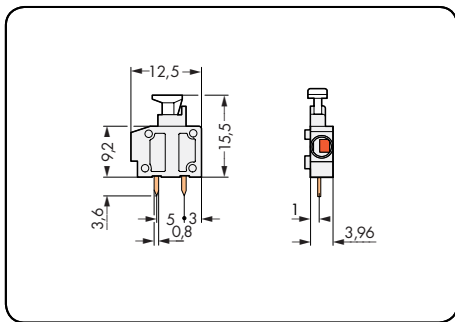
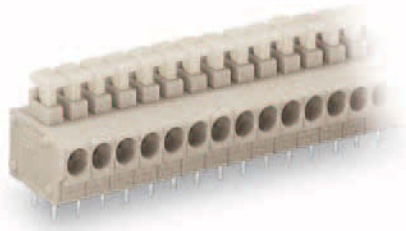
235 Series accessories:

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Modular PCB Terminal Blocks and Strips with Push-Buttons 1.5 mm²

Pin spacing 3.96/4 mm / 0.156 in		Pin spacing 3.96/4 mm / 0.156 in	
0.5 - 1.5 mm ² 320 V/4 kV/2 17.5 A	AWG 20 - 16 300 V/10 A	0.5 - 1.5 mm ² 320 V/4 kV/2 17.5 A	AWG 20 - 16 300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

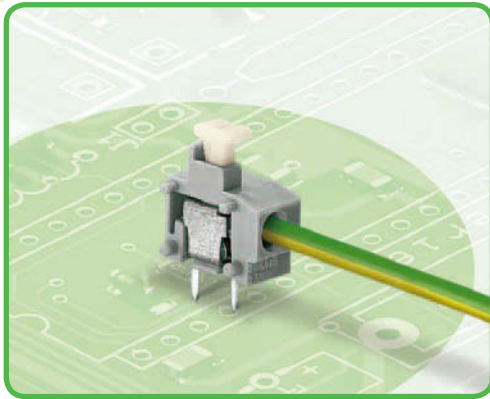
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Modular terminal block with push-button, 2 solder pins/pole			Terminal strip with push-buttons, 2 solder pins/pole, light gray		
○ light gray	235-201	800 (8 x 100)	2	235-202	500 (4 x 125)
● red	235-780	800 (8 x 100)	3	235-203	360 (4 x 90)
● gray	235-781	800 (8 x 100)	4	235-204	280 (4 x 70)
● dark gray	235-782	800 (8 x 100)	5	235-205	220 (4 x 55)
● black	235-788	800 (8 x 100)	6	235-206	180 (4 x 45)
			7	235-207	160 (4 x 40)
			8	235-208	140 (4 x 35)
			9	235-209	120 (4 x 30)
			10	235-210	100 (4 x 25)
			12	235-212	80 (4 x 20)
			16	235-216	60 (4 x 15)
			24	235-224	40 (4 x 10)
			36	235-236	20 (4 x 5)
			48	235-248	20 (4 x 5)

End plates for modular terminal blocks with push-buttons, 235 Series, snap-on type, 1 mm/0.039 in thick		Color	Item No.	Pack. Unit
		● gray	235-100	100
		● dark gray	235-200	100
		○ light gray	235-300	100
		● black	235-500	100
		● red	235-800	100

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● black	.../000-004	Ordering example: Terminal strip, 3.96 mm pin spacing 8-pole, gray: 235-208/000-007
● red	.../000-005	
● gray	.../000-007	
● dark gray	.../000-008	

Modular PCB Terminal Blocks with Push-Buttons 1.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Modular terminal blocks with push-buttons for custom terminal strip assemblies
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slot can be found at www.wago.com
- For 235 Series without push-buttons, see page 153

Technical data:

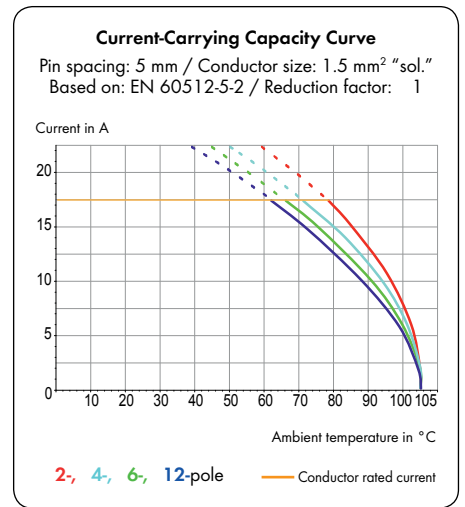
Pin Spacing	5/5.08 mm 0.2 in			7.5/7.62 mm 0.3 in			10/10.16 mm 0.4 in		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	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	15 A	-	-	15 A	-	-	15 A	-	-

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.25 - 0.5 mm ² (I max. 2 A)
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 6 A)
Conductor size: fine-stranded	0.25 - 0.75 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 0.75 mm ² (with uninsulated ferrule)
AWG	20 - 14
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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

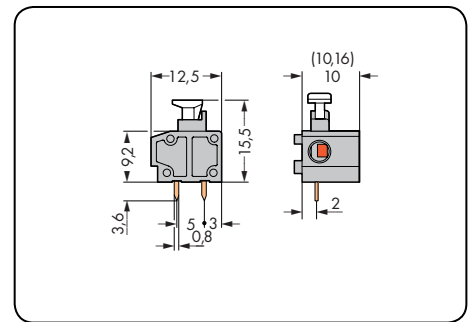
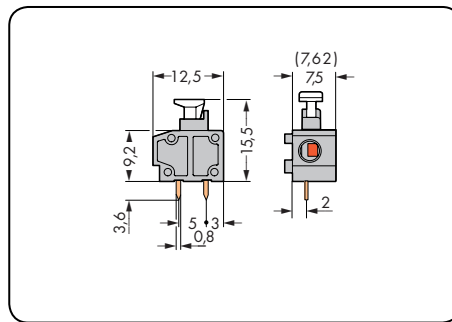
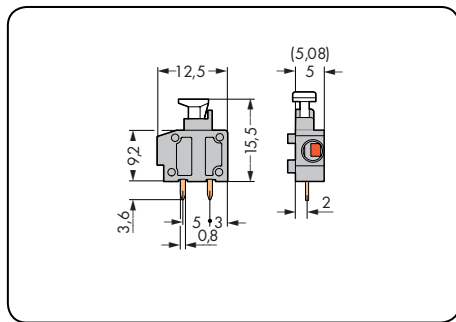


235 Series accessories:


Page:

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Pin spacing 5/5.08 mm / 0.2 in		Pin spacing 7.5/7.62 mm / 0.3 in		Pin spacing 10/10.16 mm / 0.4 in	
0.5 - 1.5 mm ² 320 V/4 kV/2 17.5 A	AWG 20 - 14 300 V/10 A	0.5 - 1.5 mm ² 630 V/6 kV/2 17.5 A	AWG 20 - 14 300 V/10 A	0.5 - 1.5 mm ² 1000 V/8 kV/2 17.5 A	AWG 20 - 14 300 V/10 A



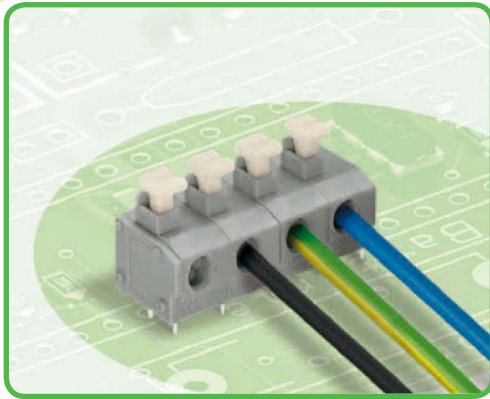
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Modular terminal block with push-button, 2 solder pins/pole			Modular terminal block with push-button, 2 solder pins/pole			Modular terminal block with push-button, 2 solder pins/pole		
gray	235-401/331-000	800 (8 x 100)	gray	235-501/331-000	600 (6 x 100)	gray	235-801/331-000	400 (4 x 100)
red	235-740/331-000	800 (8 x 100)	dark gray	235-752/331-000	600 (6 x 100)	dark gray	235-762/331-000	400 (4 x 100)
yellow	235-741/331-000	800 (8 x 100)	light gray	235-753/331-000	600 (6 x 100)	light gray	235-763/331-000	400 (4 x 100)
dark gray	235-742/331-000	800 (8 x 100)	blue	235-754/331-000	600 (6 x 100)	blue	235-764/331-000	400 (4 x 100)
light gray	235-743/331-000	800 (8 x 100)	white	235-755/331-000	600 (6 x 100)	white	235-765/331-000	400 (4 x 100)
blue	235-744/331-000	800 (8 x 100)	orange	235-756/331-000	600 (6 x 100)	orange	235-766/331-000	400 (4 x 100)
white	235-745/331-000	800 (8 x 100)	light green	235-757/331-000	600 (6 x 100)	light green	235-767/331-000	400 (4 x 100)
orange	235-746/331-000	800 (8 x 100)	black	235-758/331-000	600 (6 x 100)	black	235-768/331-000	400 (4 x 100)
light green	235-747/331-000	800 (8 x 100)						
black	235-748/331-000	800 (8 x 100)						
violet	235-749/331-000	800 (8 x 100)						
			① Suitable for Ex i applications			① Suitable for Ex i applications		

Accessories	Item No.	Pack. Unit
Spacer for modular terminal blocks for doubling the pin spacing, gray		
	235-701	100

End plates for modular terminal blocks, 235 Series, snap-on type, 1 mm/0.039 in thick		
Color	Item No.	Pack. Unit
gray	235-100	100
dark gray	235-200	100
light gray	235-300	100
blue	235-400	100
black	235-500	100
yellow	235-550	100
orange	235-600	100
violet	235-650	100
light green	235-700	100
red	235-800	100
white	235-850	100

For other colors, please contact factory.

PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slots can be found at www.wago.com
- For 235 Series without push-buttons, see page 155

Technical data:

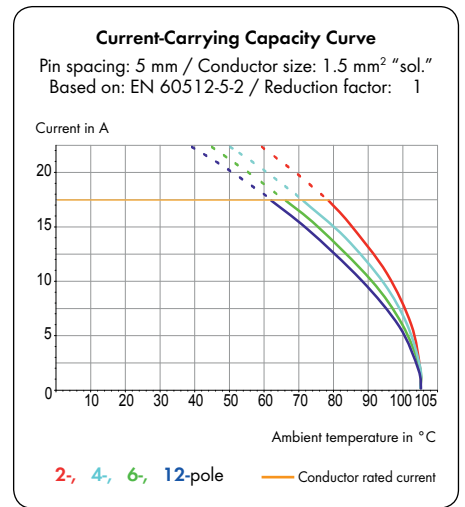
Pin Spacing	5/5.08 mm 0.2 in			7.5/7.62 mm 0.3 in			10/10.16 mm 0.4 in		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	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	15 A	-	-	15 A	-	-	15 A	-	-

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.25 - 0.5 mm ² (I max. 2 A)
Conductor size: fine-stranded	0.75 - 1.5 mm ² (I max. 6 A)
Conductor size: fine-stranded	0.25 - 0.75 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 0.75 mm ² (with uninsulated ferrule)
AWG	20 - 14
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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



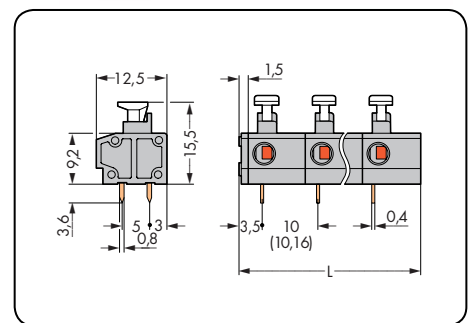
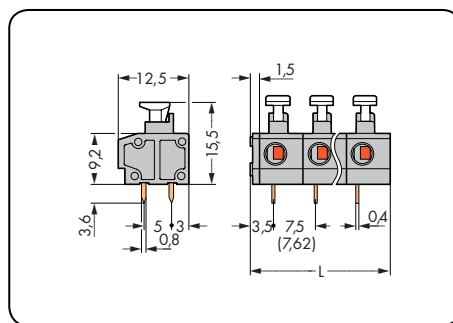
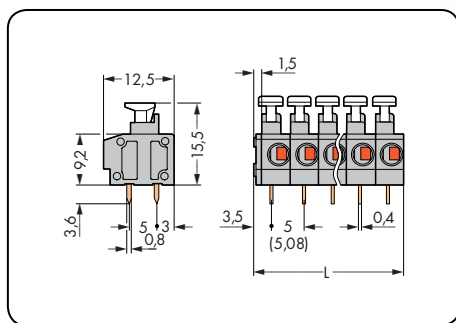
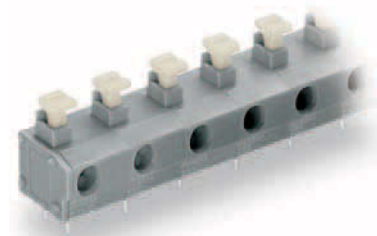
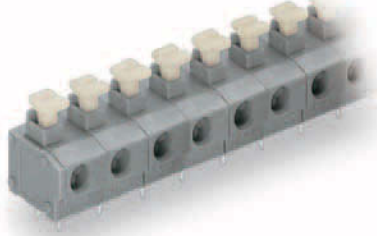
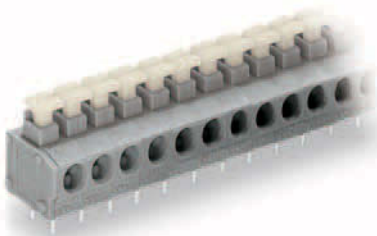
235 Series accessories:

Page:

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PCB Terminal Strips with Push-Buttons 1.5 mm²

Pin spacing 5/5.08 mm / 0.2 in		Pin spacing 7.5/7.62 mm / 0.3 in		Pin spacing 10/10.16 mm / 0.4 in	
0.5 – 1.5 mm ²	AWG 20 – 14	0.5 – 1.5 mm ²	AWG 20 – 14	0.5 – 1.5 mm ²	AWG 20 – 14
320 V/4 kV/2 17.5 A	300 V/10 A	630 V/6 kV/2 17.5 A	300 V/10 A	1000 V/8 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons, 2 solder pins/pole, gray			Terminal strip with push-buttons, 2 solder pins/pole, gray			Terminal strip with push-buttons, 2 solder pins/pole, gray		
2	235-402/331-000	420 (4 x 105)	2	235-502/331-000	280 (4 x 70)	2	235-802/331-000	220 (4 x 55)
3	235-403/331-000	280 (4 x 70)	3	235-503/331-000	200 (4 x 50)	3	235-803/331-000	140 (4 x 35)
4	235-404/331-000	220 (4 x 55)	4	235-504/331-000	140 (4 x 35)	4	235-804/331-000	120 (4 x 30)
5	235-405/331-000	180 (4 x 45)	5	235-505/331-000	120 (4 x 30)	5	235-805/331-000	80 (4 x 20)
6	235-406/331-000	140 (4 x 35)	6	235-506/331-000	100 (4 x 25)	6	235-806/331-000	80 (4 x 20)
7	235-407/331-000	120 (4 x 30)	7	235-507/331-000	80 (4 x 20)	7	235-807/331-000	60 (4 x 15)
8	235-408/331-000	100 (4 x 25)	8	235-508/331-000	60 (4 x 15)	8	235-808/331-000	40 (4 x 10)
9	235-409/331-000	100 (4 x 25)	9	235-509/331-000	60 (4 x 15)	9	235-809/331-000	40 (4 x 10)
10	235-410/331-000	80 (4 x 20)	10	235-510/331-000	60 (4 x 15)	10	235-810/331-000	40 (4 x 10)
12	235-412/331-000	60 (4 x 15)	12	235-512/331-000	40 (4 x 10)	12	235-812/331-000	40 (4 x 10)
16	235-416/331-000	60 (4 x 15)	16	235-516/331-000	40 (4 x 10)	16	235-816/331-000	20 (4 x 5)
24	235-424/331-000	40 (4 x 10)	24	235-524/331-000	20 (4 x 5)	24	235-824/331-000	20 (4 x 5)
36	235-436/331-000	20 (4 x 5)						
48	235-448/331-000	20 (4 x 5)						

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● yellow	...-.../331-002	Ordering example: Terminal strip with push-buttons, 5/5.08 mm pin spacing 12-pole, orange: 235-412/331-012
● black	...-.../331-004	
● red	...-.../331-005	
● blue	...-.../331-006	
● dark gray	...-.../331-008	
● light gray	...-.../331-009	
● orange	...-.../331-012	
● light green	...-.../331-017	
● violet	...-.../331-024	
● white	...-.../331-050	
●	Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)	

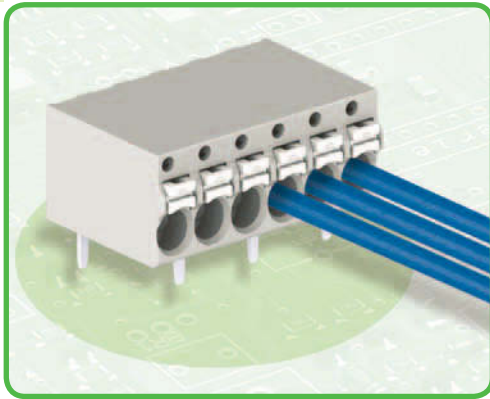


1 PCB Terminal Strips with Push-Buttons

Pin Spacing 3.5 mm

2081 Series

140



- Compact terminal strips with push-buttons
- Simple, push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Versions available with staggered solder pins for higher voltages
- Straight and angled versions for convenient wiring in both vertical and horizontal directions

Technical data:

Pin Spacing	Solder pins in line 3.5 mm / 0.138 in			Solder pins staggered 3.5 mm / 0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	III	III	II	III	III	II
Overvoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	250 V	320 V	630 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA*			UL/CSA*		
Use group UL 1059	B	C	D	B	C	D
Rated voltage						
Nominal current UL						
Nominal current CSA						

Conductor and solder pin data:

Connection technology	CAGE CLAMP [®] S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.75 mm ² (with insulated ferrule)
Conductor size: fine-stranded	1.0 mm ² (with uninsulated ferrule)
AWG	24 - 16
Strip length	8 - 9 mm
Conductor entry angle	90° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1.0 ^{+0.1} mm

Material data:

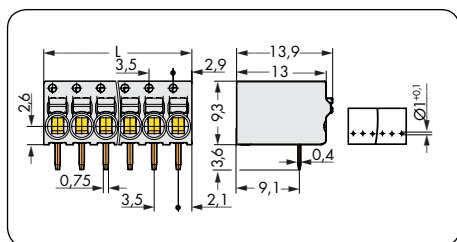
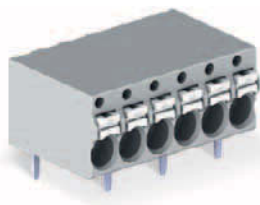
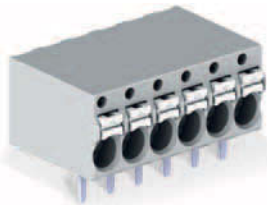
Material group	I
Insulating material	Glass fiber-reinforced polyamide 6.6 (PA 6.6 GF)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated

2081 Series accessories:

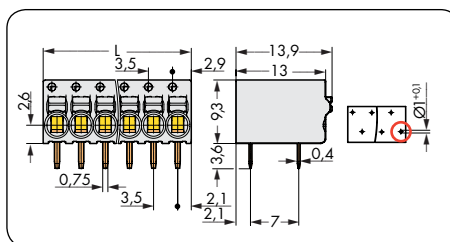
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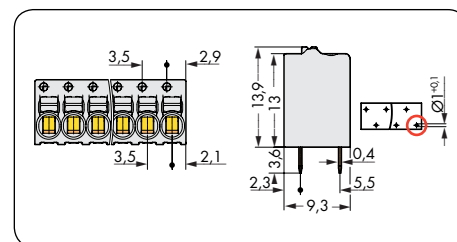
With angled, in-line solder pins Pin spacing 3.5 mm / 0.138 in		With angled, staggered solder pins Pin spacing 3.5 mm / 0.138 in		With straight, staggered solder pins Pin spacing 3.5 mm / 0.138 in	
0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16
160 V/2.5 kV/2	17.5 A	320 V/4 kV/2	17.5 A	320 V/4 kV/2	17.5 A



$L = (\text{pole no.} \times \text{pin spacing}) + 0.7 \text{ mm}$



○ first solder pin, right front side



○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons, with angled, in-line solder pins, gray			Terminal strip with push-buttons, with angled, staggered solder pins, gray			Terminal strip with push-buttons, with straight, staggered solder pins, gray		
2	2081-1202		2	2081-1222		2	2081-1122	
3	2081-1203		3	2081-1223		3	2081-1123	
4	2081-1204		4	2081-1224		4	2081-1124	
5	2081-1205		5	2081-1225		5	2081-1125	
6	2081-1206		6	2081-1226		6	2081-1126	
8	2081-1208		8	2081-1228		8	2081-1128	
12	2081-1212		12	2081-1232		12	2081-1132	

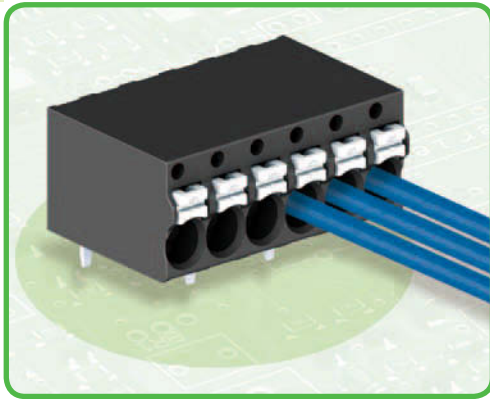


Testing with Ø 1 mm test pin.

PCB Terminal Strips with Push-Buttons, THR (Through-Hole Reflow*)

Pin Spacing 3.5 mm

2081 Series



- Integration of high-temperature resistant THR terminal strips into SMT reflow soldering processes
- Tape-and-reel packaging for automated assembly available upon request
- Simple, push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Versions available with staggered solder pins for higher voltages

Technical data:

Pin Spacing	Solder pins in line 3.5 mm / 0.138 in			Solder pins staggered 3.5 mm / 0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	III	III	II	III	III	II
Overvoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	250 V	320 V	630 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA**			UL/CSA**		
Use group UL 1059	B	C	D	B	C	D
Rated voltage						
Nominal current UL						
Nominal current CSA						

Conductor and solder pin data:

Connection technology	CAGE CLAMP [®] S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.75 mm ² (with insulated ferrule)
Conductor size: fine-stranded	1.0 mm ² (with uninsulated ferrule)
AWG	24 - 16
Strip length	8 - 9 mm
Conductor entry angle	90° to PCB
Solder pin: length/width	2.4 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1.0 ^{+0.1} mm

Material data:

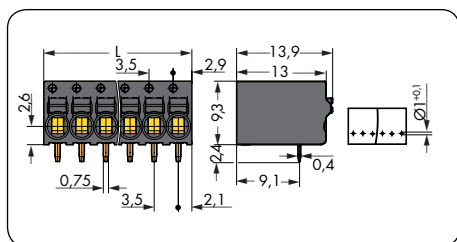
Material group	I
Insulating material	Glass fiber-reinforced polyphthalamide (PPA-GF)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{cu})
Contact plating	tin-plated

2081 Series accessories:

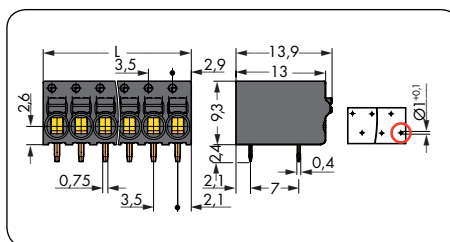
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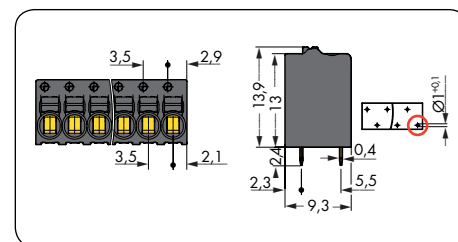
With angled, in-line solder pins Pin spacing 3.5 mm / 0.138 in		With angled, staggered solder pins Pin spacing 3.5 mm / 0.138 in		With straight, staggered solder pins Pin spacing 3.5 mm / 0.138 in	
0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16
160 V/2.5 kV/2	17.5 A	320 V/4 kV/2	17.5 A	320 V/4 kV/2	17.5 A



L = (pole no. x pin spacing) + 0.7 mm



○ first solder pin, right front side



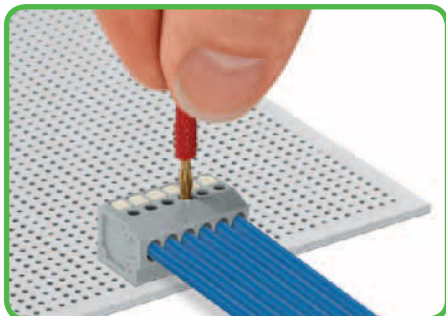
○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons, with angled, in-line solder pins, black			Terminal strip with push-buttons, with angled, staggered solder pins, black			Terminal strip with push-buttons, with straight, staggered solder pins, black		
2	2081-1202/200-604		2	2081-1222/200-604		2	2081-1122/200-604	
3	2081-1203/200-604		3	2081-1223/200-604		3	2081-1123/200-604	
4	2081-1204/200-604		4	2081-1224/200-604		4	2081-1124/200-604	
5	2081-1205/200-604		5	2081-1225/200-604		5	2081-1125/200-604	
6	2081-1206/200-604		6	2081-1226/200-604		6	2081-1126/200-604	
8	2081-1208/200-604		8	2081-1228/200-604		8	2081-1128/200-604	
12	2081-1212/200-604		12	2081-1232/200-604		12	2081-1132/200-604	

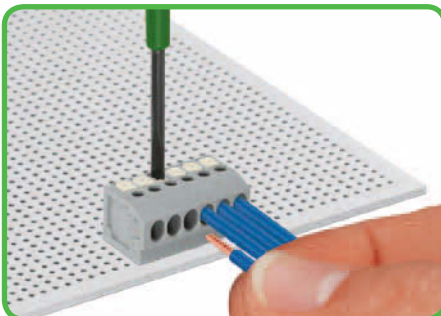


Testing with Ø 1 mm test pin.

Description and Handling 804 and 805 Series



Testing with \varnothing 2 mm test plug, tip contact with current bar.



Inserting solid conductors by simply pushing them in. Inserting and removing fine-stranded conductors via push-buttons.



Mixed-color terminal strips available upon request.



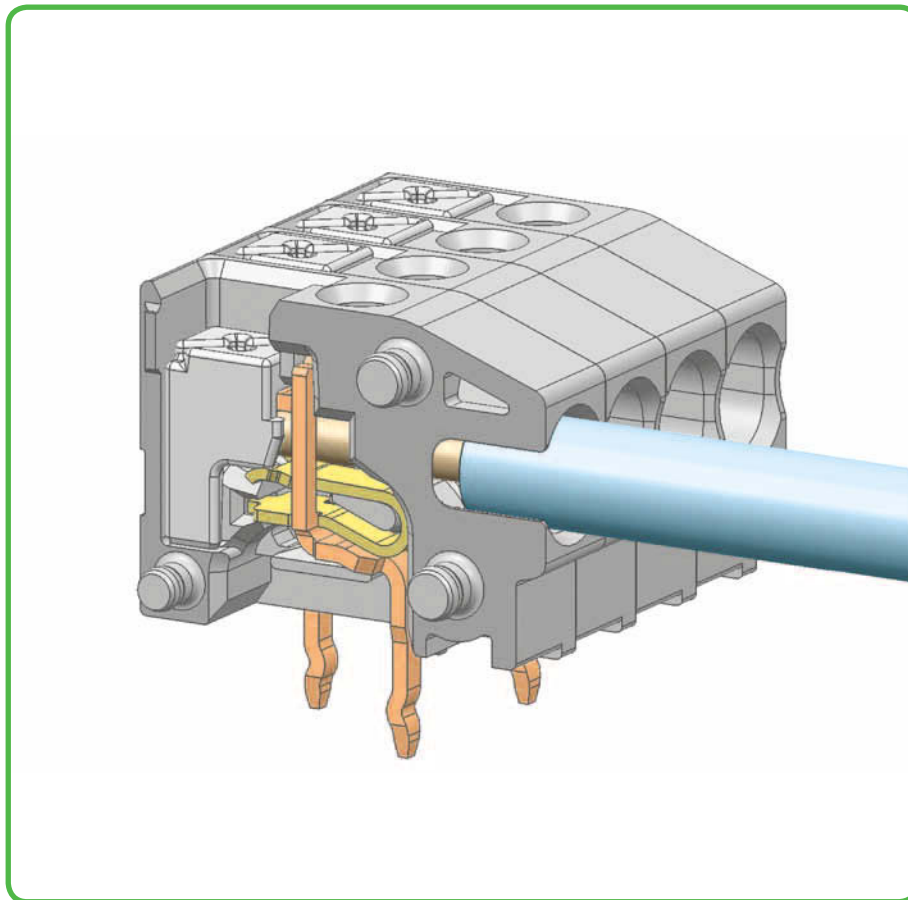
Terminal strips with spacers and enlarged conductor entry (5 mm pin spacing) upon request.

Internal commoning



The 805 Series terminal strips provide "internal commoning" to meet requirements for not routing the ground (earth) conductor over the board. This enables custom terminal strips to be commoned and marked at the factory upon request.

805 Series



CAGE CLAMP®S clamps the following copper conductors:*

solid

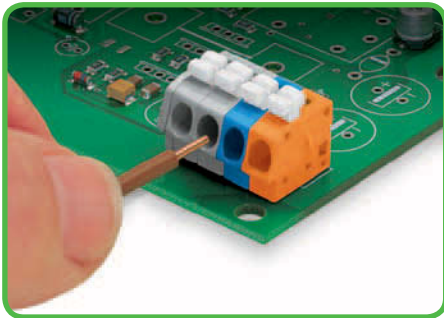


stranded

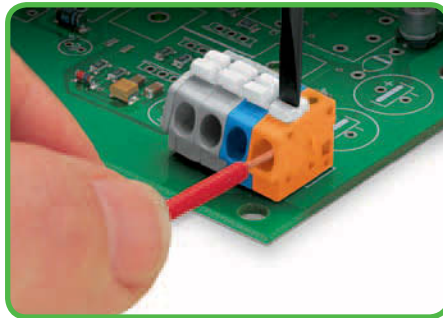


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 11.

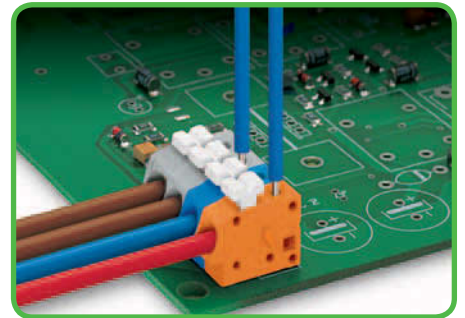


Inserting solid conductor: Simply push in conductor until it hits backstop.



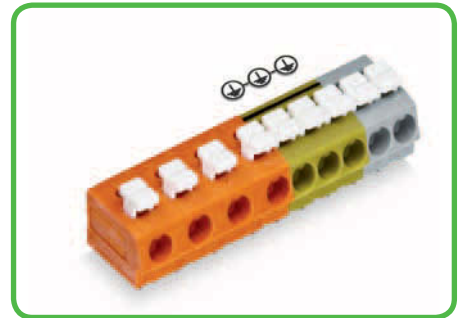
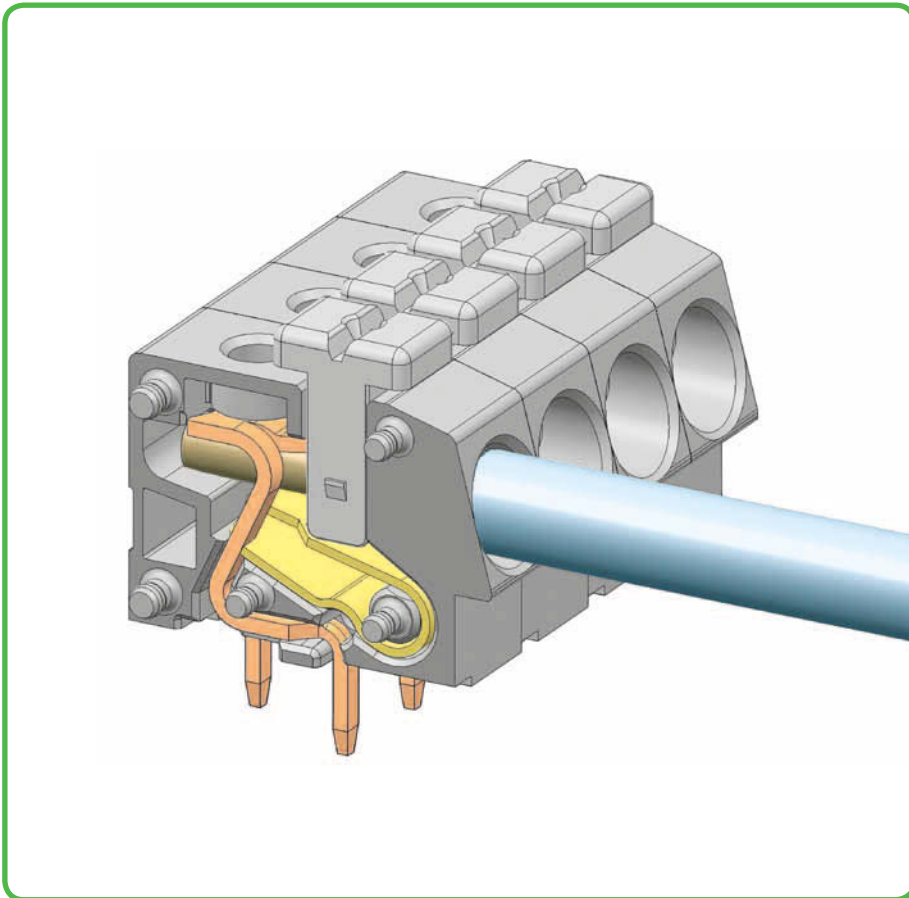
Inserting/removing fine-stranded conductor: Open clamping unit via push-button and insert stripped conductor until it hits backstop.

Testing



Testing with Ø 1 mm test pin, tip contact with current bar.

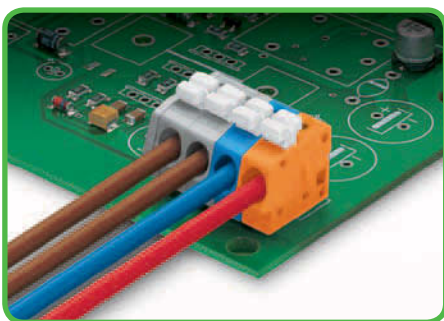
804 Series



The 804 Series terminal strips provide "internal commoning" to meet requirements for not routing the ground (earth) conductor over the board. This enables custom terminal strips to be commoned and marked at the factory upon request.

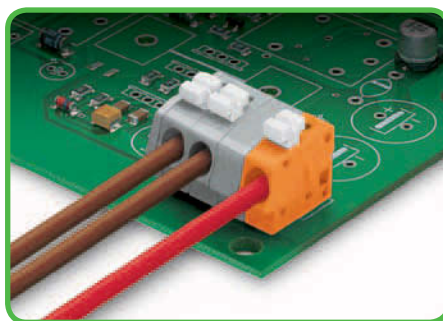


Colors



Mixed-color terminal strips available upon request.

Spacers



Terminal strips with spacers upon request.

Marking



Marking via self-adhesive marker trips or factory direct printing.



fine-stranded, tip-bonded

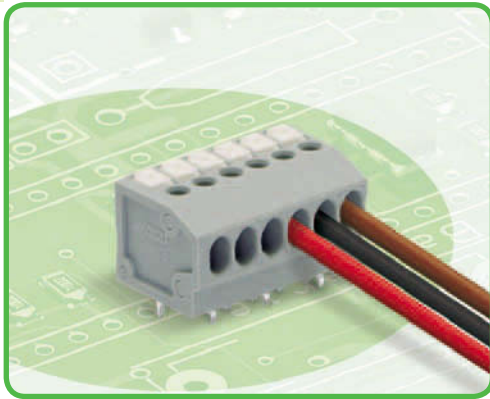


fine-stranded with crimped ferrules (gas-tight)



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

PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 3.5 mm 805 Series



- Terminal strips with push-button actuated CAGE CLAMP®S
- Push-in termination of solid and ferruled, fine-stranded conductors
- Push-buttons that close flush with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation
- Versions with/without test slots and spacers
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

Technical data:

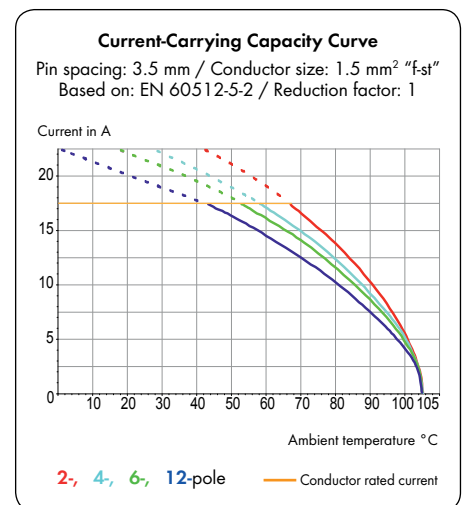
Pin Spacing	3.5 mm 0.138 in		
Rating per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	17.5 A	17.5 A	17.5 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	150 V	300 V
Nominal current UL	10 A	10 A	10 A
Nominal current CSA	-	-	-

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.2 - 1.5 mm ²
Conductor size: fine-stranded	0.25 - 1 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 1 mm ² (with uninsulated ferrule)
AWG	24 - 16
Strip length	9 - 10 mm / 0.35 - 0.39 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.2 mm / 0.75 x 0.75 mm
Solder pin: drilled hole diameter	1.1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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

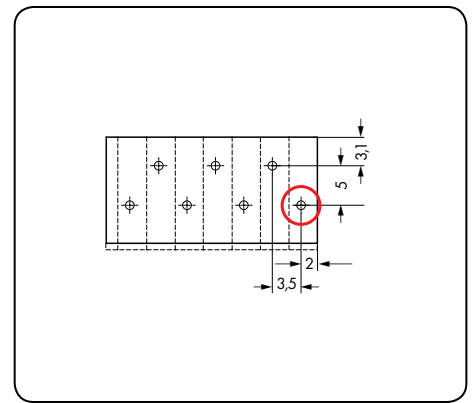
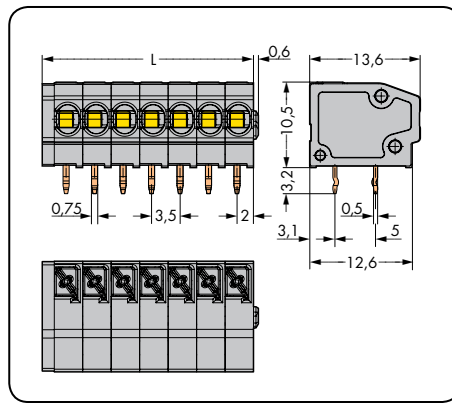
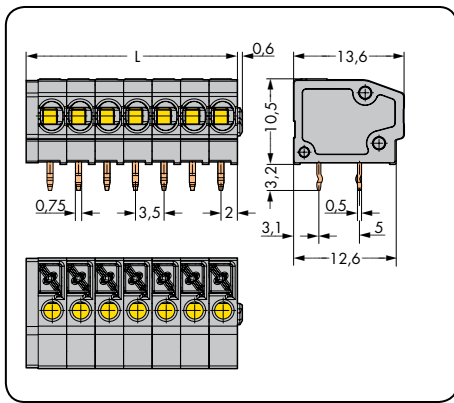


805 Series accessories:

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Test plugs	538

With test slots Pin spacing 3.5 mm / 0.138 in		Pin spacing 3.5 mm / 0.138 in	
0.2 - 1.5 mm ²	AWG 24 - 16	0.2 - 1.5 mm ²	AWG 24 - 16
320 V/4 kV/2 17.5 A	300 V/10 A	320 V/4 kV/2 17.5 A	300 V/10 A



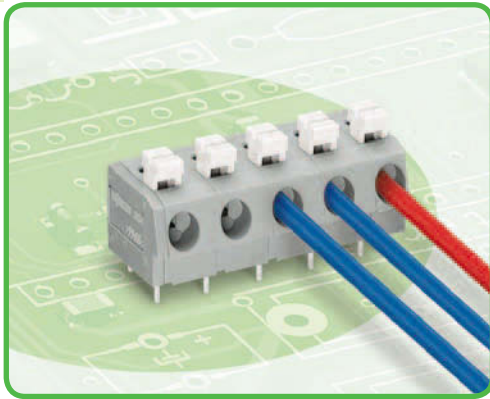
L = (pole no. x pin spacing) + 1.5 mm
 ○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons and test slots for Ø 2 mm test plug, gray			Terminal strip with push-buttons, gray		
2	805-102	600 (4 x 150)	2	805-302	600 (4 x 150)
3	805-103	420 (4 x 105)	3	805-303	420 (4 x 105)
4	805-104	300 (4 x 75)	4	805-304	300 (4 x 75)
5	805-105	260 (4 x 65)	5	805-305	260 (4 x 65)
6	805-106	220 (4 x 55)	6	805-306	220 (4 x 55)
7	805-107	180 (4 x 45)	7	805-307	180 (4 x 45)
8	805-108	160 (4 x 40)	8	805-308	160 (4 x 40)
9	805-109	140 (4 x 35)	9	805-309	140 (4 x 35)
10	805-110	120 (4 x 30)	10	805-310	120 (4 x 30)
11	805-111	100 (4 x 25)	11	805-311	100 (4 x 25)
12	805-112	100 (4 x 25)	12	805-312	100 (4 x 25)
13	805-113	100 (4 x 25)	13	805-313	100 (4 x 25)
14	805-114	100 (4 x 25)	14	805-314	100 (4 x 25)
15	805-115	80 (4 x 20)	15	805-315	80 (4 x 20)
16	805-116	80 (4 x 20)	16	805-316	80 (4 x 20)
17	805-117	80 (4 x 20)	17	805-317	80 (4 x 20)
18	805-118	60 (4 x 15)	18	805-318	60 (4 x 15)
19	805-119	60 (4 x 15)	19	805-319	60 (4 x 15)
20	805-120	60 (4 x 15)	20	805-320	60 (4 x 15)
21	805-121	60 (4 x 15)	21	805-321	60 (4 x 15)
22	805-122	60 (4 x 15)	22	805-322	60 (4 x 15)
23	805-123	60 (4 x 15)	23	805-323	60 (4 x 15)
24	805-124	40 (4 x 10)	24	805-324	40 (4 x 10)

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● blue	.../000-006	Ordering example:
● orange	.../000-012	Terminal strip, 3.5 mm pin spacing, 6-pole, blue: 805-106/000-006

PCB Terminal Strips with Push-Buttons 2.5 mm² Pin Spacing 5 mm, 7.5 mm 804 Series



- Terminal strips with push-button actuated CAGE CLAMP®S
- Push-in termination of solid and ferruled, fine-stranded conductors
- A large conductor entry accommodates conductors with a cross section up to AWG 12 with an insulation diameter up to 4.2 mm
- Terminal strips with spacers to increase pin spacing
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

Technical data:

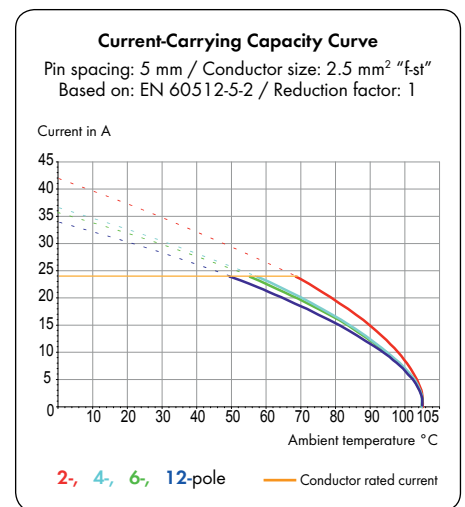
Pin Spacing	5 mm 0.197 in			7.5 mm 0.295 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	IEC/EN 60664-1			IEC/EN 60664-1		
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	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	10 A	-	10 A	10 A	-	10 A

Conductor and solder pin data:

Connection technology	CAGE CLAMP®S
Conductor size: solid	0.25 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 2.5 mm ²
Conductor size: fine-stranded	0.25 - 1.5 mm ² (with insulated ferrule)
Conductor size: fine-stranded	0.25 - 2.5 mm ² (with uninsulated ferrule)
AWG	22 - 12
Strip length	10 - 11 mm / 0.39 - 0.43 in
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.8 x 0.6 mm
Solder pin: drilled hole diameter	1.1 ^{+0.1} mm

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
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

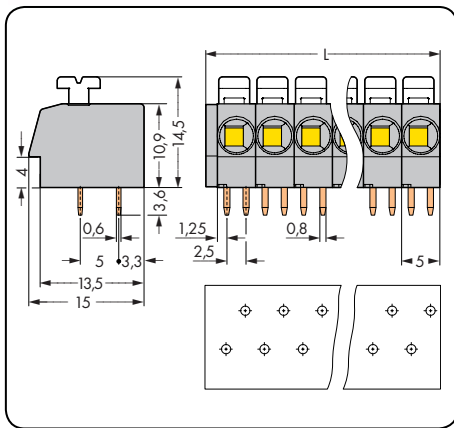


804 Series accessories:

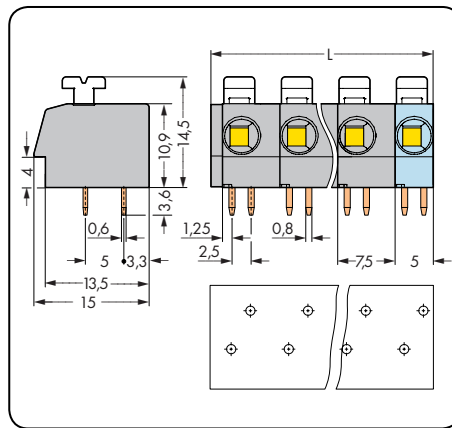
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Pin spacing 5 mm / 0.197 in		Pin spacing 7.5 mm / 0.295 in	
0.25 - 2.5 mm ²	AWG 20 - 12	0.25 - 2.5 mm ²	AWG 20 - 12
320 V/4 kV/2 24 A	300 V/10 A	320 V/4 kV/2 24 A	300 V/10 A



$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



$$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with push-buttons			Terminal strip with push-buttons		
2 solder pins/pole, staggered, gray			2 solder pins/pole, staggered, gray		
2	804-102	420 (4 x 105)	2	804-302	340 (4 x 85)
3	804-103	300 (4 x 74)	3	804-303	220 (4 x 55)
4	804-104	220 (4 x 55)	4	804-304	160 (4 x 40)
5	804-105	180 (4 x 45)	5	804-305	120 (4 x 30)
6	804-106	140 (4 x 35)	6	804-306	100 (4 x 25)
7	804-107	120 (4 x 30)	7	804-307	80 (4 x 20)
8	804-108	100 (4 x 25)	8	804-308	80 (4 x 20)
9	804-109	100 (4 x 25)	9	804-309	60 (4 x 15)
10	804-110	80 (4 x 20)	10	804-310	60 (4 x 15)
11	804-111	80 (4 x 20)	11	804-311	60 (4 x 15)
12	804-112	80 (4 x 20)	12	804-312	40 (4 x 10)
13	804-113	60 (4 x 15)			
14	804-114	60 (4 x 15)			
15	804-115	60 (4 x 15)			
16	804-116	60 (4 x 15)			

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● red/000-005	Ordering example: Terminal strip, 5 mm pin spacing 8-pole, orange: 804-108/000-012
● blue	...../000-006
● orange	...../000-012
● light green	...../000-017
● pink	...../000-051
●	Suitable for Ex i applications	