

Standard, Feed-Through Spring Clamp Terminals

In certain applications, with smaller cross section wires, "screw-less" 4.5mm × 0.8mm for CAGE2.5, CAGE4 and CAGE6 terminals respectively spring clamp terminals are preferred.

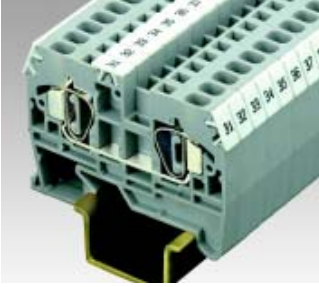
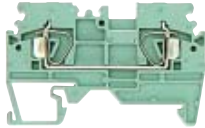
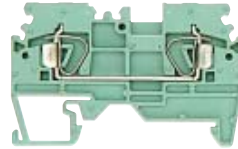


























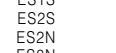
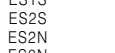


In screw clamp terminals, it is the screw clamp that holds the wire against the current bar, whereas in spring clamp terminals, the wire is held against the current bar directly by a pre-stressed spring clamp.

The pre-stressed spring clamp is opened by using an appropriate screw driver to provide access to wire through the opening in the spring clamp. The conductor is pulled against the current bar and gets clamped by the spring force when the screw driver is removed. The recommended blade size of the screw driver is 3mm × 0.6mm, 3.5mm × 0.6mm and

Spring clamp terminals have top wire entry and are suitable for mounting on DIN 35 and DIN 35-15 rails.

Insulated push-in type shorting link wire, besides providing shock protection, simplifies the task of cross connection.

The terminals have marker holding recesses to accept international "K" type markers.

	CAGE2.5			CAGE4			CAGE6					
												
Terminal Pitch	5 mm			6 mm			8 mm					
Height x Width	36 x 58 mm			42 x 65 mm			45 x 72 mm					
Connection Possibility	Stranded Wire	0.5 - 2.5 sq. mm		0.5 - 4 sq. mm	0.5 - 4 sq. mm		0.5 - 6 sq. mm	0.5 - 10 sq. mm				
	Solid Wire	0.5 - 4 sq. mm		0.5 - 6 sq. mm								
Stripping Length	9 mm			9 mm			12 mm					
Insulation Material	Polyamide 6.6			Polyamide 6.6			Polyamide 6.6					
Type of Connection	2 Spring clamp connection and 2 slots for interconnection			2 Spring clamp connection and 2 slots for interconnection			2 Spring clamp connection and 2 slots for interconnection					
Standards												
Rated Cross Section	22-14 AWG	2.5 sq. mm	22-14 AWG	22-12 AWG	4 sq. mm	22-12 AWG	22-8 AWG	6 sq. mm	22-8 AWG			
Voltage Rating	600 V	750 V	600 V	600 V	750 V	600 V	600 V	750 V	600 V			
Current Rating	20 A	24 A	20 A	25 A	32 A	25 A	50 A	41 A	50 A			
	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams			
Terminal Station	CAGE2.5	100	5.7	CAGE4	100	10	CAGE6	50	15			
End Plate		EPCAGE2.5	50	2.5		EPCAGE4	50	4.5		EPCAGE6	50	6.5
Partition Plate		PPCAGE2.5	50	3.5		PPCAGE4	50	5.5		PPCAGE6	50	7.5
Mounting Rail		DIN 35U	50 M	360		DIN 35U	50 M	360		DIN 35U	50 M	360
		DIN 35-15D	50 M	700		DIN 35-15D	50 M	700		DIN 35-15D	50 M	700
End Clamp		ES1S	50	15.3		ES1S	50	15.3		ES1S	50	15.3
		ES2S	50	15.1		ES2S	50	15.1		ES2S	50	15.1
		ES2N	50	7.4		ES2N	50	7.4		ES2N	50	7.4
		ES3N	50	4.5		ES3N	50	4.5		ES3N	50	4.5
Insulated Push-In type Shorting Link (2 way)	Consecutive	SL-PUSHIN5	100	1.2	SL-PUSHIN6	100	3	SL-PUSHIN8	100	4		
	Alternate	SL-PUSHIN5A	100	2.2	SL-PUSHIN6A	100	5	SL-PUSHIN8A	100	6		
Insulated Push-In type Shorting Link Wire		SL-PUSHIN5B	100	3	SL-PUSHIN6B	100	5	-	-	-		
Current Rating : 10A, wire length 110mm.												
Marking Tags (K Type)		KM/5	100	0.1	KM/6	100	0.1	KM/8	100	0.1		

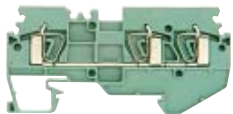
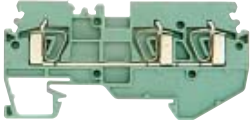
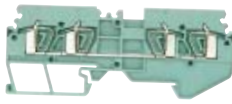
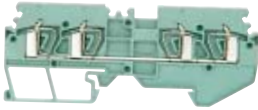
Multiple Connection, Feed-Through Spring Clamp Terminals

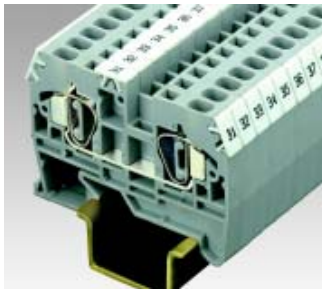
The multiple connection spring clamp terminals offer reliable solution for multiple wire connections. The terminal eliminates conventional cross connections, looping wires and reliability problems encountered when connecting two wires in one clamp.

The terminals provide multiple connection points in the terminal itself and possibility of further multiplication of connections through bridging.

The multiple connection terminal blocks can even be bridged to standard feed through spring clamp terminal blocks of same wire size.

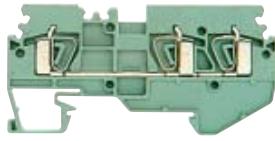
CAGE2.5 1-2 and CAGE4 1-2 feature one termination point on one side and two termination points on the other side, while CAGE2.5 2-2 and CAGE4 2-2 have two termination points on both sides. Bridging facility is at the centre of the terminals.







CAGE2.5 1-2			CAGE4 1-2			CAGE2.5 2-2			CAGE4 2-2		
											
5 mm			6 mm			5 mm			6 mm		
36 x 74 mm			42 x 84.6 mm			36 x 89.8 mm			42 x 105 mm		
0.5 - 2.5 sq. mm 0.5 - 4 sq. mm			0.5 - 4 sq. mm 0.5 - 6 sq. mm			0.5 - 2.5 sq. mm 0.5 - 4 sq. mm			0.5 - 4 sq. mm 0.5 - 6 sq. mm		
9 mm			9 mm			9 mm			9 mm		
Polyamide 6.6			Polyamide 6.6			Polyamide 6.6			Polyamide 6.6		
3 Spring clamp connections and 2 slots for interconnection			3 Spring clamp connections and 2 slots for interconnection			4 Spring clamp connections and 2 slots for interconnection			4 Spring clamp connections and 2 slots for interconnection		
CSA Standard	CE	UL cULus	CSA Standard	CE	UL cULus	CSA Standard	CE	UL cULus	CSA Standard	CE	UL cULus
22-14 AWG	2.5 sq. mm	22-14 AWG	22-12 AWG	4 sq. mm	22-12 AWG	22-14 AWG	2.5 sq. mm	22-14 AWG	22-12 AWG	4 sq. mm	22-12 AWG
600 V	750 V	600 V	600 V	750 V	600 V	600 V	750 V	600 V	600 V	750 V	600 V
20 A	24 A	20 A	25 A	32 A	25 A	20 A	24 A	20 A	25 A	32 A	25 A
Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams
CAGE2.5 1-2	100	9	CAGE4 1-2	100	15	CAGE2.5 2-2	100	12	CAGE4 2-2	100	20
EPCAGE2.5 1-2	50	2	EPCAGE4 1-2	50	3	EPCAGE2.5 2-2	50	4	EPCAGE4 2-2	50	6
PPCAGE2.5 1-2	50	3	PPCAGE4 1-2	50	4	PPCAGE2.5 2-2	50	5	PPCAGE4 2-2	50	7
DIN 35U	50 M	360	DIN 35U	50 M	360	DIN 35U	50 M	360	DIN 35U	50 M	360
DIN 35-15D	50 M	700	DIN 35-15D	50 M	700	DIN 35-15D	50 M	700	DIN 35-15D	50 M	700
ES1S	50	15.3	ES1S	50	15.3	ES1S	50	15.3	ES1S	50	15.3
ES2S	50	15.1	ES2S	50	15.1	ES2S	50	15.1	ES2S	50	15.1
ES2N	50	7.4	ES2N	50	7.4	ES2N	50	7.4	ES2N	50	7.4
ES3N	50	4.5	ES3N	50	4.5	ES3N	50	4.5	ES3N	50	4.5
SL-PUSHIN5	100	1.2	SL-PUSHIN6	100	3	SL-PUSHIN5	100	1.2	SL-PUSHIN6	100	3
SL-PUSHIN5A	100	2.2	SL-PUSHIN6A	100	5	SL-PUSHIN5A	100	2.2	SL-PUSHIN6A	100	5
SL-PUSHIN5B	100	3	SL-PUSHIN6B	100	5	SL-PUSHIN5B	100	3	SL-PUSHIN6B	100	5
KM/5	100	0.1	KM/6	100	0.1	KM/5	100	0.1	KM/6	100	0.1



CAGE6 1-2

CAGE6 2-2



Terminal Pitch	8 mm			8 mm			
Height x Width	45 x 94 mm			45 x 116 mm			
Connection Possibility	Stranded Wire Solid Wire			0.5 - 6 sq. mm 0.5 - 10 sq. mm			
Stripping Length	12 mm			12 mm			
Insulation Material	Polyamide 6.6			Polyamide 6.6			
Type of Connection	3 Spring clamp connections and 2 slots for interconnection			4 Spring clamp connections and 2 slots for interconnection			
Standards	CSA Standard	CE	UL Standard	CSA Standard	CE	UL Standard	
Rated Cross Section	22-8 AWG	0.5-6 sq. mm	22-8 AWG	22-8 AWG	0.5-6 sq. mm	22-8 AWG	
Voltage Rating	600 V	750 V	600 V	600 V	750 V	600 V	
Current Rating	50 A	41 A	50 A	50 A	41 A	50 A	
	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	
Terminal Station	CAGE6 1-2	50	5	CAGE6 2-2	100	20	
End Plate 	EPCAGE6 1-2	50	6	EPCAGE6 2-2	50	6	
Partition Plate 	PPCAGE6 1-2	50	4	PPCAGE6 2-2	50	7	
Mounting Rail 	DIN 35U DIN 35-15D	50 M 50 M	360 700	DIN 35U DIN 35-15D	50 M 50 M	360 700	
End Clamp 	ES1S ES2S ES2N ES3N	50 50 50 50	15.3 15.1 7.4 4.5	ES1S ES2S ES2N ES3N	50 50 50 50	15.3 15.1 7.4 4.5	
Insulated Push-In type Shorting Link (2 way) 	Consecutive Alternate	SL-PUSHIN8 SL-PUSHIN8A	100 100	3 5	SL-PUSHIN8 SL-PUSHIN8A	100 100	3 5
Insulated Push-In type Shorting Link Wire Current Rating : 10A, wire length 110mm. 		SL-PUSHIN8B	100	5	SL-PUSHIN8B	100	5
Marking Tags (K Type) 	KM/8	100	0.1	KM/8	100	0.1	

Spring Clamp Ground Terminals

'Screwless' Spring Clamp Ground terminal blocks are offered for quick connections and go well with other spring clamp terminal blocks. The spring clamp is operated by using a screw driver to provide an access to wire through the opening in the spring clamp. The wire is held against current bar directly by pre-stressed spring clamp. Specially designed alloy feet help in achieving very low contact resistance and vibration proof grounding.

CAGE series terminals can be mounted on DIN 35 rails along with other terminals and eliminate separate bus bar. The terminal

profile matches with the feed through terminal block of same wire size.

Special features of CAGE terminals are :

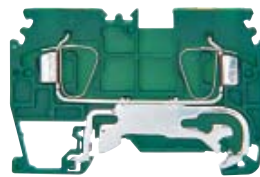
- Vibration proof grounding can be easily achieved by specially designed alloy feet
- Versatile special alloy feet to ensures very low contact resistance.
- Spring clamp to accept any type of wires.



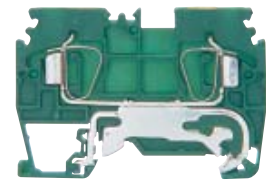
CAGEG2.5



CAGEG4



CAGEG6



Terminal Pitch	5 mm			6 mm			8 mm		
Height x Width	36 x 58 mm			42 x 65 mm			45 x 72 mm		
Connection Possibility	Flexible Stranded	0.5 to 2.5 sq.mm		0.5 to 4 sq.mm	0.5 to 6 sq.mm		0.5 to 6 sq.mm	0.5 to 10 sq.mm	
	Rigid Solid	0.5 to 4 sq.mm		0.5 to 6 sq.mm					
Stripping Length	9 mm			9 mm			12 mm		
Insulation Material	Polyamide 6.6			Polyamide 6.6			Polyamide 6.6		
Type of Connection	2 Spring clamp connection, grounding through alloy feet			2 Spring clamp connection, grounding through alloy feet			2 Spring clamp connection, grounding through alloy feet		
Approvals	CSA Standard	CE	UL Standard	CSA Standard	CE	UL Standard	CSA Standard	CE	UL Standard
Rated Cross Section	22-14 AWG	2.5 sq.mm	22-14 AWG	22-12 AWG	4 sq.mm	22-12 AWG	22-8 AWG	6 sq.mm	22-8 AWG
Current Rating	20 A	24 A		25 A	32 A		50 A	41 A	
	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams	Type Cat No.	Std. Packing in Nos.	Wt Per unit in Grams
Terminal Station	CAGEG2.5	100		CAGEG4	100		CAGEG6	50	
Mounting Rail	DIN 35U	50 M	360	DIN 35U	50 M	360	DIN 35U	50 M	360
	DIN 35-15D	50 M	700	DIN 35-15D	50 M	700	DIN 35-15D	50 M	700
Marking Tags	KM/5	100	0.16	KM/6	100	0.16	KM/8	100	0.16s

■ Spring Clamp Connection

- In spring clamp terminals the clamping action is taken over by a high quality, stainless steel pre-stressed spring.
- The pre-stressed spring is opened using a screw driver so that the wire can be inserted into the clamping space through an opening now created. Once the screw driver is removed, the conductor is pressed hard against the current bar with full spring force ensuring an effective connection.
- As the wire holding spring plays critical role in clamping, it is specially designed and tooled. It is stainless steel with special long life shape retaining properties in-built for reliability of wire termination.



- Current-carrying bars are made from electrolytic copper or alpha brass, electroplated and coated for surface protection while ensuring very low contact resistance.
- Clamping yokes and screws are zinc plated and passivated by a golden yellow chromate layer, considerably increasing corrosion resistance.
- The metal parts of terminals are housed in precision molded, almost unbreakable, self extinguishing flame retardant polyamide 6.6 material rated UL94-V2, for high dielectric strength, electrical insulation and temperature resistance (max. operating temperature 100°C). Terminals in UL94VO grade polyamide 6.6 can be offered on request.

Additional colours for the terminal block shell or housing are offered as under:

Colour	Suffix to Cat. Ref.	Suffix to Cat. Ref.	Colour
Red	RD	BG	Beige
Blue	BL	BR	Brown
Black	BK	KH	Khaki
Orange	OR	GY	Grey
Green	GN	PK	Pink
Yellow	YL		
White	WH		

Please add the colour suffix to Cat. Ref. while ordering.

Typical properties of insulation material of the shell or housing are as under:

Property	Unit	Thermoset High Grade Melamine	Engineering Thermoplastic Polyamide 6.6
Specific Gravity	--	1.5	1.2 - 1.15
Upper Limit Temperature	°C	130	100
Lower Limit Temperature	°C	- 55	- 50
Volume Resistivity	Ω cm	10 ¹¹	10 ¹²
Surface Resistivity	Ω	10 ¹⁰	10 ¹⁰
Dielectric Strength	KV/cm	100	400
Tropical Resistance	--	Good	Good
Flammability (UL 94)	Grade	V0	V2 #
Flexibility	--	--	Excellent

WIRE TERMINATION

The terminals are suitable for connection of either solid or stranded copper wires as per the gauge range specified.

It is recommended to connect only one wire of the rated cross section in a clamp. Connecting more than one wire per clamp may result in poor contact and overheating.

Stranded wires can be connected without any special preparation, but particular care should be taken when stripping the wires in order not to cut any of the strands. A good quality stripping tool, which provides fast stripping of most insulated wires without damage to the conductors is strongly recommended. With flexible cables of fine strands, the strands may be twisted between finger and thumb. Twisting should never be done with pliers. In order to improve the quality of the connection, and for all those cases where frequent removal