

### **Spring Cage Fuse Terminal Blocks ST**

Spring cage fuse terminal blocks from Phoenix Contact satisfy two important tasks of electrical connection systems. Firstly, they act as carriers for fuses and secondly, they assume the task of potential distribution. The universal ST bridge shaft makes continuous bridging possible between ST feed-through terminal blocks and ST fuse terminal blocks.

ST 4-HESI can be used for the 5 x 20 mm fuse format, which is a standard in electrical engineering. It is also available with a light indicator for signaling a triggered fuse.

ST 4-HESI  $(6,3 \times 32)$  is characterized by the double bridge shaft located in the same position as in the entire ST series.

This opens up all options for power distribution. To make it practical to use, test connections are provided on both sides of the standardized (6.3 x 32 mm) fuse inserts. Terminal blocks with a light indicator are available to signal the triggering of a fuse.

The large-surface labeling option on the fuse lever enables fast identification of the fused circuits.

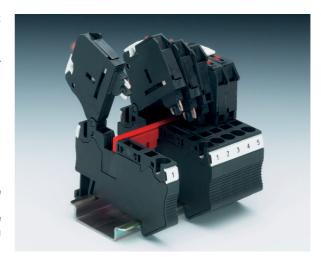
Flat-type fuses in accordance with ISO/DIS 8820/ DIN 72581-3 or alternatively the TCP thermal miniature circuit breaker can be used as the fuse element in the ST 4-FSI/C fuse terminal block. Terminal blocks with a light indicator are available for quick error diagnosis "at a glance". A wide range of potential distribution options can be implemented using the ST bridge shaft which is integrated in this terminal block.

#### Attention:

The cartridge fuse holders should be selected according to the maximum power dissipation (self-heating) of the cartridge fuse inserts. The thermal conditions in closed fuse holders should be checked according to the application and installation.

#### **Higher ambient temperatures**

are an additional strain on fuse inserts. In applications of this kind, the shift of the rated current should be taken into consideration accordingly.



# Spring Cage Fuse Terminal Block ST 4-HESI (5 x 20)

(IEC)	rigid	flexible		ı	U
[mm <sup>2</sup> ]	solid	stranded	AWG	[A]	[V]
DIN VDE 0611					
with fuse	0.08-6	0.08-4	28-10	1)	1)
as disconnect te	rm.bl.0.08-6	0.08-4	28-10	6.3	250
1) see table belo	w (the current i	e datarmina	hy the f	1100 110	(ha:



Technical data		Туре	Order No.	<u>Pcs.</u> Pkt.
Fuse terminal block, for mounting on  for cartridge fuse inserts 5 x 20 mm	terminal width 6.2	ST 4-HESI (5 x 20)	30 36 36 9	50
(1) <b>Plug-in bridge</b> , for cross-connections in the terminal center 4-pos. 5-pos. 10-pos. 20-pos.	du dubu	FBS 4-6 FBS 5-6 FBS 10-6	32 A 30 30 33 6 32 A 30 30 24 2 32 A 30 30 25 5 32 A 30 30 34 9 32 A 30 30 27 1 32 A 30 30 36 5	50 50 50 50 10
(2) Partition plate, for visual and electrical separation of terminal groups, 2 mm thick		ATP-ST 4	30 30 72 1	50
(3) Screwdriver, for actuating the tension spring		SZF 1 - 0,6 x 3,5	12 04 51 7	10
(4) Zack strip, flat, for labeling the center and outer marker grooves white		ZBF 6:UNPRINTED	08 08 71 0	10
(5) Zack strip, 10-section, for labeling on the white fuse lever		ZB 5:UNPRINTED	10 50 00 4	10
Dimensions				
Width / length	[mm]		6.2 / 61.5	
Height (NS 35/7,5 / NS 35/15)	[mm]		62.5 / 70	
Technical data in accordance with IEC/ DIN	VDE			
Fuse type ISO/DIS 8820/DIN 72 581-3 / dimen	sions -/ [mm]		G / 5 x 20	
Max. power dissipation				
at 23 °C based on E DIN VDE 0611-6: 2001-04	4 [W]		1)	
Rated surge voltage / contamination class	[kV] / –		4/3	
Surge voltage category / insulation material gro	oup -/-		III / I	
Connection capacity				
Stranded with ferrule with plastic sleeve	[mm <sup>2</sup> ]		0.25 - 4	
Stranded with ferrule without plastic sleeve	[mm <sup>2</sup> ]		0.25 - 4	
Stranded with TWIN ferrule with plastic sleeve	[mm <sup>2</sup> ]		0.5 - 1	
Stripping length	[mm]		10	
Internal cylindrical gauge (IEC 60 947-1)		-	A 4	
Insulating material			PA	
Inflammability class in acc. with UL 94			V0	
Approval data (UL and CSA/CUL)				
Nominal voltage / current / conductor sizes	UL: [V] / [A] / AWG		-	
CSA/	CUL: [V] / [A] / AWG		_	

## Cartridge fuse terminal blocks based on E DIN VDE 0611-6: 2001-04

Max. power dissipation at 23°C (based on E DIN VDE 0611-6:2001-04)

Terminal block type	U	Overload protection		Short-circuit pr	otection only
	[V]	Single Interconnected		Single	Interconnected
ST 4-HESI (5 x 20)	250	2.5 W	1.6 W	4.0 W	2.5 W

### **Spring Cage Fuse Terminal Blocks** with Light Indicator ST 4-HESILED and **ST 4-HESILA (5 x 20)**

(IEC) [mm <sup>2</sup> ]	rigid solid	flexible stranded	AWG	I [A]	U [V]	
DIN VDE 0611						
with fuse	0.08-6	0.08-4	28-10	1)	1)	
as disconnect term	.bl.0.08-6	0.08-4	28-10	6.3	250	

see table below (the current is determined by the fuse used, the voltage by the light indicator selected)
 If the fuse is defective, the downstream circuit is not off load.



Technical data			Туре		Order No.	<u>Pcs.</u> Pkt.
Fuse terminal block <sup>2</sup> ), for mou for cartridge fuse inserts 5 x 20 light indicator for:						
15 - 30 V AC/DC, 30 - 60 V AC/DC, 110 - 250 V AC/DC,	3.5 - 8.1 mA 0.8 - 2.0 mA 0.5 - 1.0 mA	terminal width 6.2 terminal width 6.2 terminal width 6.2	ST 4-HESILED 24 ST 4-HESILED 60 ST 4-HESILA 250		30 36 54 7 30 36 55 0 30 36 56 3	50 50 50
(1) <b>Plug-in bridge,</b> for cross-connections in the terminal center	2-pos. 3-pos. 4-pos. 5-pos. 10-pos. 20-pos.		FBS 2-6 FBS 3-6 FBS 4-6 FBS 5-6 FBS 10-6 FBS 20-6	I <sub>max</sub> : 32 A 32 A 32 A 32 A 32 A 32 A 32 A	30 30 33 6 30 30 24 2 30 30 25 5 30 30 34 9 30 30 27 1 30 30 36 5	50 50 50 50 10
(2) <b>Partition plate</b> , for visual and electrical separation of terminal groups, 2 mm thick		<b>1</b>	ATP-ST 4		30 30 72 1	50
(3) <b>Screwdriver</b> , for actuating the tension spring			SZF 1 - 0,6 x 3,5		12 04 51 7	10
(4) <b>Zack strip,</b> flat, for labeling to center and outer marker groove			ZBF 6:UNPRINTED		08 08 71 0	10
(5) <b>Zack strip,</b> 10-section, for labeling on the fuse lever	white		ZB 5:UNPRINTED		10 50 00 4	10
Dimensions						
Width / length		[mm]			/ 61.5	
Height (NS 35/7,5 / NS 35/15)		[mm]		62.	.5 / 70	
Technical data in accordance						
Fuse type ISO/DIS 8820/DIN 72	2 581-3 / almen	sions –/ [mm]		G/	5 x 20	
Max. power dissipation at 23 °C based on E DIN VDE 0	0611 6: 0001 04	TVA/T			1)	
Rated surge voltage / contamina		[W] [kV] / –			1) 4 / 3	
Surge voltage category / insulat		<u> </u>			#/3   /	
Connection capacity	ion material gre	/ир /		·		
Stranded with ferrule with plastic	c sleeve	[mm <sup>2</sup> ]	-	0 :	25 - 4	
Stranded with ferrule without pla		[mm <sup>2</sup> ]			25 - 4	
Stranded with TWIN ferrule with		[mm <sup>2</sup> ]	-	0.	.5 - 1	
Stripping length		[mm]			10	
Internal cylindrical gauge (IEC	60 947-1)				A 4	
Insulating material	-				PA	
Inflammability class in acc. with	UL 94		-		V0	
Approval data (UL and CSA/C	UL)					
Nominal voltage / current / cond	luctor sizes	UL: [V] / [A] / AWG			-	
	CSA/0	CUL: [V] / [A] / AWG			-	

#### Cartridge fuse terminal blocks based on E DIN VDE 0611-6: 2001-04

Max. power dissipation at 23°C (based on E DIN VDE 0611-6:2001-04)

Terminal block type	U	Overload	protection	Short-circuit p	rotection only
	[V]	Single Interconnected		Single	Interconnected
ST 4-HESI	250	2.5 W	1.6 W	4.0 W	2.5 W

# Spring Cage Fuse Terminal Block ST 4-HESI (6,3 x 32)

(IEC)	rigid	flexible		- 1	U	
[mm <sup>2</sup> ]	solid	stranded	AWG	[A]	[V]	
IEC 60 947-7-3	0.08-6	0.08-4	28-10	10*	400*	
* Current and volta	ne are dete	rmined by th	e fuse us	ed		



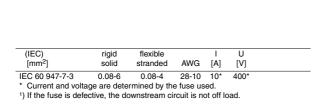
Technical data			Туре	Order No.	<u>Pcs.</u> Pkt.
Fuse terminal block, for mounting for cartridge fuse inserts 6.3 x 32 r		nal width 8.2	ST 4-HESI (6,3 x 32)	30 36 38 5	50
(1) Plug-in bridge, for	2-pos.		FBS 2-8 I <sub>max</sub> : 32 A	30 30 28 4	10
cross-connections in the	3-pos.		FBS 3-8 32 A	30 30 29 7	10
terminal center	4-pos. 5-pos.		FBS 4-8 32 A FBS 5-8 32 A	30 30 30 7 30 30 31 0	10 10
	10-pos.		FBS 10-8 32 A	30 30 32 3	10
(2) <b>Partition plate,</b> for visual and electrical separation of terminal groups, 2 mm thick			ATP-QTC TWIN	32 06 21 2	50
(3) Adapter bridge, for connecting ST 4-HESI (6,3 x 32) to an ST 4, S			RB ST 6-(2,5/4)	30 30 86 0	50
(4) <b>Screwdriver</b> , for actuating the tension spring	<b>§</b>		SZF 1 - 0,6 x 3,5	12 04 51 7	10
(5) <b>Zack strip</b> , flat, for labeling the center and outer marker grooves	white		ZBF 8:UNPRINTED	08 08 78 1	10
(6) <b>Zack strip,</b> 10-section, for labeling on the fuse lever	white		ZB 6:UNPRINTED	10 51 00 3	10
Dimensions		•			
Width / length		[mm]	8.2	2 / 76.5	
Height (NS 35/7,5 / NS 35/15)		[mm]	69	76.5	
Technical data in accordance wi	th IEC/ DIN VDE				
Fuse type ISO/DIS 8820/DIN 72 5	81-3 / dimensions	-/[mm]	G	6 x 32	
Maximum current with single arrar	gement	[A]		10	
Max. power dissipation					
at 23 °C based on E DIN VDE 061	1-6: 2001-04	[W]	se	e table	
Rated surge voltage / contamination	on class	[kV] / –		6/3	
Surge voltage category / insulatior	n material group	-/-		III / I	
Connection capacity					
Stranded with ferrule with plastic s		[mm <sup>2</sup> ]		25 - 4	
Stranded with ferrule without plast		[mm <sup>2</sup> ]	0.	25 - 4	
Stranded with TWIN ferrule with pl	astic sleeve	[mm <sup>2</sup> ]	0	.5 - 1	
Stripping length		[mm]		10	
nternal cylindrical gauge (IEC 6	0 947-1)			A 4	
Insulating material				PA	
Inflammability class in acc. with UI	_ 94			V0	
Approval data (UL and CSA/CUL	.)				
Nominal voltage / current / conduc	tor sizes UL: [V]	] / [A] / AWG	applied for	600 / 10 / 24-10	
	CSA/CUL: [V]	] / [A] / AWG	applied for	600 / 10 / 24-10	

## Cartridge fuse terminal blocks based on E DIN VDE 0611-6: 2001-04

Max. power dissipation at 23°C (based on E DIN VDE 0611-6:2001-04)

Terminal block type	U	Overload protection		Short-circuit p	I <sub>max.</sub>	
	[V]	Single	Interconnected	Single	Interconnected	[A]
ST 4-HESI (6,3 x 32)	400	1.6 W	1.6 W	4.0 W	2.5 W	10

### Spring Cage Fuse Terminal Block ST 4-HESILED and ST 4-HESILA (6,3 x 32)





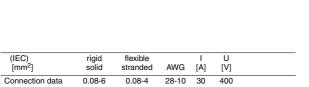
Technical data			Туре	Order No.	<u>Pcs.</u> Pkt.
Fuse terminal block¹), for mo for cartridge fuse inserts 6 x 32 light indicator for: 15 - 30 V AC/DC, 110 - 250 V AC/DC,		terminal width 8.2 terminal width 8.2	ST 4-HESILED 24 (6,3 x 32) ST 4-HESILA 250 (6,3 x 32)	30 38 76 5 30 38 77 8	50 50
(1) <b>Plug-in bridge</b> , for cross-connections in the terminal center	2-pos. 3-pos. 4-pos. 5-pos. 10-pos.	du villa	FBS 2-8 I <sub>max</sub> : 32 A FBS 3-8 32 A FBS 4-8 32 A FBS 5-8 32 A FBS 10-8 32 A	30 30 28 4 30 30 29 7 30 30 30 7 30 30 31 0 30 30 32 3	10 10 10 10 10
(2) <b>Partition plate,</b> for visual and electrical separatior of terminal groups, 2 mm thick	1	· ·	ATP-QTC TWIN	32 06 21 2	50
(3) <b>Adapter bridge</b> , for connect ST 4-HESI (6,3 x 32) to an ST		C 1,5	RB ST 6-(2,5/4)	30 30 86 0	50
(4) <b>Screwdriver</b> , for actuating the tension spring			SZF 1 - 0,6 x 3,5	12 04 51 7	10
(5) <b>Zack strip,</b> flat, for labeling center and outer marker groov			ZBF 8:UNPRINTED	08 08 78 1	10
(6) <b>Zack strip</b> , 10-section, for labeling on the fuse lever	white		ZB 6:UNPRINTED	10 51 00 3	10
Dimensions		9*			
Width / length		[mm]		.2 / 76.5	
Height (NS 35/7,5 / NS 35/15)		[mm]	6	9 / 76.5	
Technical data in accordance Fuse type ISO/DIS 8820/DIN 7				/ 6 x 32	
Maximum current with single a		[A]		10	
Max. power dissipation	mangoment	[7]			
at 23 °C based on E DIN VDE	0611-6: 2001-04	[W]	Si	ee table	
Rated surge voltage / contamin	nation class	[kV] / –		6/3	
Surge voltage category / insula	ation material gro	up -/-		III / I	
Connection capacity					
Stranded with ferrule with plas		[mm <sup>2</sup> ]		).25 - 4	
Stranded with ferrule without p		[mm <sup>2</sup> ]		0.25 - 4	
Stranded with TWIN ferrule wit	h plastic sleeve	[mm <sup>2</sup> ]		0.5 - 1	
Stripping length	0.00.047.4	[mm]		10	
Internal cylindrical gauge (IE	C 60 947-1)			A 4	
Insulating material	- 111 04			PA	
Inflammability class in acc. with Approval data (UL and CSA/				V0	
Nominal voltage / current / con	<u> </u>	UL: [V] / [A] / AWG	applied for	600 / 10 / 24-10	
- rioninai voitage / current / con		UL: [V] / [A] / AWG		600 / 10 / 24-10	
	USA/	JOL. [V]/[A]/ AVVG	арріїей іог	000 / 10 / 24-10	

### Cartridge fuse terminal blocks based on E DIN VDE 0611-6: 2001-04

Max. power dissipation at 23°C (based on E DIN VDE 0611-6:2001-04)

Terminal block type	U	Overload	Overload protection		protection only	I <sub>max.</sub>
	[V]	Single	Interconnected	Single	Interconnected	[A]
ST 4-HESI (6,3 x 32)	400	1.6 W	1.6 W	4.0 W	2.5 W	10

# Spring Cage Fuse Terminal Block ST 4-FSI/C





Technical data			Туре		Order No.	<u>Pcs.</u> Pkt.
Fuse terminal block, for mounting on,	t	erminal width 8.2	ST 4-FSI/C		30 36 37 2	50
(1) <b>Insulating stop sleeve</b> , prof the insulation in the case of						
Cross section range:	0.25-0,5 mm <sup>2</sup> 0.75-1 mm <sup>2</sup>	gray black	ISH 4/0,5 ISH 4/1		30 02 88 5 30 02 89 8	50 50
(2) <b>Plug-in bridge,</b> for cross-connections in the terminal center	2-pos. 3-pos. 4-pos. 5-pos. 10-pos.	00 0000	FBS 2-8 I <sub>max</sub> FBS 3-8 FBS 4-8 FBS 5-8 FBS 10-8	x: 41 A 41 A 41 A 41 A 41 A	30 30 28 4 30 30 29 7 30 30 30 7 30 30 31 0 30 30 32 3	10 10 10 10 10
(3) <b>Test adapter</b> , for 4 mm $\varnothing$ t and 4 mm $\varnothing$ safety test plugs, making contact in the bridge s			PAI 4		30 30 92 5	10
(4) 2.3 mm Ø test plug ¹), cor metal part and red insulating s			MPS-RD		02 01 55 3	10
(5) <b>Screwdriver</b> , for actuating the tension spring			SZF 1 - 0,6 x 3,5		12 04 51 7	10
(6) <b>Zack strip</b> , flat, for labeling center and outer marker groov			ZBF 8:UNPRINTED		08 08 78 1	10
(7) <b>Zack strip,</b> 10-section, for labeling in the terminal center	white		ZB 8:UNPRINTED		10 52 00 2	10
Dimensions						
Width / length		[mm]			/ 86.5	
Height (NS 35/7,5 / NS 35/15) <b>Technical data in accordance</b>	- with IEC/ DIN VD	[mm]		43.	5 / 51	
Fuse type ISO/DIS 8820/DIN 7		<u> </u>			С	
Maximum current with single a		[A]			30	
Max. power dissipation	mangomone					
at 23 °C based on E DIN VDE	0611-6: 2001-04	[W]			1)	
Rated surge voltage / contami	nation class	[kV] / –	-	6	6/3	
Surge voltage category / insula	ation material group	-/-		I	II / I	
Connection capacity						
Stranded with ferrule with plas		[mm <sup>2</sup> ]			25 - 4	
Stranded with ferrule without p		[mm <sup>2</sup> ]			25 - 4	
Stranded with TWIN ferrule wi	th plastic sleeve	[mm <sup>2</sup> ]			5 - 1	
Stripping length	-0.00.047.4\	[mm]			10	
Internal cylindrical gauge (IE	C 60 947-1)				A 4	
Insulating material	h III 04				PA V0	
Inflammability class in acc. wit					VU	
Nominal voltage / current / cor		L: [V] / [A] / AWG	-		_	
Troninal voltage / Current / COI		L: [V] / [A] / AWG				
-	20.100	[1] [1] [1] [1] [1]				

## **Spring Cage Fuse Terminal Blocks** with **Light Indicator** ST 4-FSI/C-LED

(IEC)	rigid	flexible		- 1	U
[mm <sup>2</sup> ]	solid	stranded	AWG	[A]	[V]
Connection data	0.08-6	0.08-4	28-10	30	400



Order No.

Pcs.

Technical data		
Fuse terminal block1), for mour	nting on,	
with light indicator for: 12 V DC,	2.0 mA	terminal width 8.2
24 V DC,	2.0 mA	terminal width 8.2
(1) Insulating stop sleeve, prev	ents unintention	nal clamping
of the insulation in the case of sr	naller cross sec	ctions
Cross section range:	0.25-0.5 mm <sup>2</sup> 0.75-1 mm <sup>2</sup>	gray black
(2) Plug-in bridge, for	2-pos.	
cross-connections	3-pos.	
in the terminal center	4-pos. 5-pos.	
	10-pos.	
(3) Test adapter, for 4 mm Ø tes	<u> </u>	
and 4 mm $\varnothing$ safety test plugs,		
making contact in the bridge sha		
(4) 2.3 mm Ø test plug 1), consi	sting of	
metal part and red insulating sle	eve	
(5) Screwdriver, for		
actuating the tension spring		
		earthman—4
(6) Zack strip, flat, for labeling the		1
center and outer marker grooves	white	
/ <del>///                                   </del>		
(7) <b>Zack strip</b> , 10-section, for labeling in the terminal center	white	
iabeling in the terminal center	wille	
Dimensions		~
Width / length		[mm]
Height (NS 35/7.5 / NS 35/15)	[mm]	
Technical data in accordance	with IEC/ DIN V	
Fuse type ISO/DIS 8820/DIN 72	581-3	_
Maximum current with single arra	angement	[A]
Max. power dissipation		
at 23 °C based on E DIN VDE 0	611-6: 2001-04	[W]
Rated surge voltage / contamina	[kV] / –	
Surge voltage category / insulati	on material gro	up -/-
Connection capacity		
Stranded with ferrule with plastic	[mm <sup>2</sup> ]	
Stranded with ferrule without pla	[mm <sup>2</sup> ]	
Stranded with TWIN ferrule with	[mm <sup>2</sup> ]	
Stripping length		[mm]
Internal cylindrical gauge (IEC	60 947-1)	
Insulating material		
Inflammability class in acc. with	UL 94	
Approval data (UL and CSA/CI	JL)	
Nominal voltage / current / condi		UL: [V] / [A] / AWG
	CSA/C	CUL: [V] / [A] / AWG
1) If the fuer is defeative, the day		in not off load

Туре	Order No.	Pkt.
ST 4-FSI/C-LED 12	30 36 49 5	50
ST 4-FSI/C-LED 24	30 36 50 5	50
ISH 4/0,5	30 02 88 5	50
ISH 4/1	30 02 89 8	50
FBS 2-8 I <sub>max</sub> : 41 A	30 30 28 4	10
FBS 3-8 41 A FBS 4-8 41 A		10 10
FBS 5-8 41 A		10
FBS 10-8 41 A		10
PAI 4	30 30 92 5	10
MPS-RD	02 01 55 3	10
SZF 1 - 0,6 x 3,5	12 04 51 7	10
ZBF 8:UNPRINTED	08 08 78 1	10
ZB 8:UNPRINTED	10 52 00 2	10
	3.2 / 86.5	
	43.5 / 51	
	C	
	30	
	2)	
	6/3	
	III / I	
	0.25 - 4	
	0.25 - 4	
	0.5 - 1	
	A 4	
	PA	
	V0	
	_	
	_	(
		5

<sup>1)</sup> If the fuse is defective, the downstream circuit is not off load. 2) On request.