

# 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 x 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 ( $6.3 \times 32 \text{ mm}$ ) 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) [mm <sup>2</sup> ]	rigid solid	flexible stranded	AWG	І [А]	U [V]	
DIN VDE 0611						
with fuse	0.08-6	0.08-4	28-10	1)	1)	
as disconnect tern	n.bl.0.08-6	0.08-4	28-10	6.3	250	
1) see table below	(the current i	is determined	d by the f	use us	ed)	

#### abaical dat

Technical data			Туре		Order No.	<u>Pcs.</u> Pkt.	
<b>Fuse terminal block,</b> for mounting c for cartridge fuse inserts 5 x 20 mm	on <b>٦٢</b> ,	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	2-pos. 3-pos. 4-pos. 5-pos. 10-pos. 20-pos.	00 0000	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 10	
(2) <b>Partition plate,</b> for visual and electrical separation of terminal groups, 2 mm thick			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 the center and outer marker grooves	white		ZBF 6:UNPRINTE	Ð	08 08 71 0	10	
(5) <b>Zack strip,</b> 10-section, for labeling on the fuse lever	white	JIIIIIII	ZB 5:UNPRINTED	)	10 50 00 4	10	
Dimensions		<b>u</b> .				l	
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 V	DE					
Fuse type ISO/DIS 8820/DIN 72 581	-3 / dimensi	ons – / [mm]	G / 5 x 20				
Max. power dissipation							
at 23 °C based on E DIN VDE 0611-		[W]	1)				
Rated surge voltage / contamination		[kV] / –			4/3		
Surge voltage category / insulation n	naterial grou	ip _/_		I	11 / 1		
Connection capacity		- 0-					
Stranded with ferrule with plastic slee		[mm <sup>2</sup> ]			25 - 4		
Stranded with ferrule without plastic		[mm <sup>2</sup> ]			25 - 4		
Stranded with TWIN ferrule with plas	stic sleeve	[mm <sup>2</sup> ]			.5 - 1		
Stripping length	047 4)	[mm]			10		
Internal cylindrical gauge (IEC 60	947-1)				A 4		
Insulating material	14				PA V0		
Inflammability class in acc. with UL 9	14				VU		
Approval data (UL and CSA/CUL)	!						
Nominal voltage / current / conducto		UL: [V] / [A] / AWG			-		
	USA/U	UL: [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)

When selecting cartridge fuse inserts, please ensure that the maximum power dissipation specified below is not exceeded. Details can be obtained from the fuse suppliers.

Terminal block type	U	Overload protection		Short-circuit protection 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	 [A]	U [V]	
DIN VDE 0611						
with fuse	0.08-6	0.08-4	28-10	1)	1)	
as disconnect terr	n.bl.0.08-6	0.08-4	28-10	6.3	250	
<ol> <li>see table below light indicator se</li> </ol>		is determined	d by the f	use us	ed, the v	oltage by the

#### **Technical data**

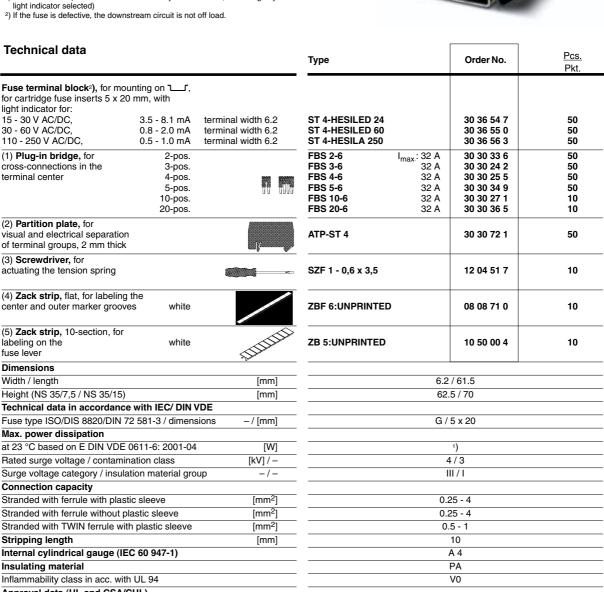
light indicator for:

30 - 60 V AC/DC,

terminal center

labeling on the

fuse lever Dimensions Width / length



#### Inflammability class in acc. with UL 94 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)

When selecting cartridge fuse inserts, please ensure that the maximum power dissipation specified below is not exceeded. Details can be obtained from the fuse suppliers.

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

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



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

#### **Technical data**

Technical data			Туре		Order No.	<u>Pcs.</u> Pkt.	
<b>Fuse terminal block</b> , for mountin for cartridge fuse inserts 6.3 x 32		nal width 8.2	ST 4-HESI (6,3 x 32)	)	30 36 38 5	50	
(1) <b>Plug-in bridge,</b> for cross-connections in the terminal center	2-pos. 3-pos. 4-pos. 5-pos. 10-pos.		FBS 2-8 FBS 3-8 FBS 4-8 FBS 5-8 FBS 10-8	I <sub>max</sub> : 32 A 32 A 32 A 32 A 32 A 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 separation of terminal groups, 2 mm thick			ATP-QTC TWIN		32 06 21 2	50	
(3) <b>Adapter bridge,</b> for connectin ST 4-HESI (6,3 x 32) to an ST 4,			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 the center and outer marker grooves	e white		ZBF 8:UNPRINTED		08 08 78 1	10	
(6) <b>Zack strip,</b> 10-section, for labeling on the fuse lever	white	JULI III	ZB 6:UNPRINTED		10 51 00 3	10	
Dimensions							
Width / length		[mm]		8.2	/ 76.5		
Height (NS 35/7,5 / NS 35/15)		[mm]	69 / 76.5				
Technical data in accordance w	vith IEC/ DIN VDE						
Fuse type ISO/DIS 8820/DIN 72 5	581-3 / dimensions	– / [mm]	G / 6 x 32				
Maximum current with single arra	ngement	[A]	10				
Max. power dissipation							
at 23 °C based on E DIN VDE 06		[W]			table		
Rated surge voltage / contaminati		[kV] / –		-	6/3		
Surge voltage category / insulatio	n material group	-/-		I	11/1		
Connection capacity							
Stranded with ferrule with plastic		[mm <sup>2</sup> ]			25 - 4		
Stranded with ferrule without plas		[mm <sup>2</sup> ]			25 - 4		
Stranded with TWIN ferrule with p	DIASTIC SIEEVE	[mm <sup>2</sup> ]		-	5 - 1 10		
Stripping length	CO 047 1)	[mm]			-		
Internal cylindrical gauge (IEC	00 94/-1)				A 4 PA		
Insulating material					V0		
Inflammability class in acc. with U					vu		
Approval data (UL and CSA/CU				applied for 0	00/10/04/10		
Nominal voltage / current / condu		'] / [A] / AWG			00 / 10 / 24-10		
	CSA/CUL: [V	]/ [A]/ AWG		applied lof 6	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)

When selecting cartridge fuse inserts, please ensure that the maximum power dissipation specified below is not exceeded. Details can be obtained from the fuse suppliers.

Terminal block type	U	Overload protection		Short-circuit	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

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



[

(IEC) [mm <sup>2</sup> ]	rigid solid	flexible stranded	AWG	ا [A]	U [V]	
IEC 60 947-7-3	0.08-6	0.08-4	28-10	10*	400*	
* Current and volt					400	

\* Current and voltage are determined by the fuse used. 1) If the fuse is defective, the downstream circuit is not off load.

### Technical data

Technical data			Туре		Order No.	<u>Pcs.</u> Pkt.
<b>Fuse terminal block</b> <sup>1</sup> ), for me for cartridge fuse inserts 6 x 3 light indicator for:						
15 - 30 V AC/DC, 110 - 250 V AC/DC,	1 - 2.5 mA 0.5 - 2.5 mA	terminal width 8.2 terminal width 8.2	ST 4-HESILED 24 ST 4-HESILA 250 (		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.	ชช ชมตร	FBS 2-8 FBS 3-8 FBS 4-8 FBS 5-8 FBS 10-8	I <sub>max</sub> : 32 A 32 A 32 A 32 A 32 A 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 separatic of terminal groups, 2 mm thic			ATP-QTC TWIN		32 06 21 2	50
(3) Adapter bridge, for connection ST 4-HESI (6,3 x 32) to an S		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 labelin center and outer marker groo			ZBF 8:UNPRINTED	)	08 08 78 1	10
(6) <b>Zack strip,</b> 10-section, for labeling on the fuse lever	white	JIIIIII	ZB 6:UNPRINTED		10 51 00 3	10
Dimensions						
Width / length	\	[mm]			/ 76.5	
Height (NS 35/7,5 / NS 35/15	,	[mm]		69	/ 76.5	
Technical data in accordance Fuse type ISO/DIS 8820/DIN				6/	6 v 22	
Maximum current with single		[A]	G / 6 x 32			
Max. power dissipation		Y				
at 23 °C based on E DIN VDE	E 0611-6: 2001-04	[W]		see	e table	
Rated surge voltage / contam	ination class	[kV] / –	6/3			
Surge voltage category / insu	lation material gro	up – / –			11/1	
Connection capacity						
Stranded with ferrule with pla		[mm <sup>2</sup> ]		•	25 - 4	
Stranded with ferrule without	•	[mm <sup>2</sup> ]			25 - 4	
Stranded with TWIN ferrule w	ith plastic sleeve	[mm <sup>2</sup> ]			5 - 1	
Stripping length	FO 00 0/7 1)	[mm]			10	
Internal cylindrical gauge (I	EC 60 947-1)				A 4	
Insulating material	ith LIL 04				PA V0	
Inflammability class in acc. w					vu	
Approval data (UL and CSA Nominal voltage / current / co	,	UL: [V] / [A] / AWG		applied for 6	600 / 10 / 24-10	
wominal voltage / current / co		UL: [V] / [A] / AWG			600 / 10 / 24-10 600 / 10 / 24-10	
	USAIC			applied 101 C	00/10/24-10	

#### 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)

When selecting cartridge fuse inserts, please ensure that the maximum power dissipation specified below is not exceeded. Details can be obtained from the fuse suppliers.

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

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



(IEC) [mm <sup>2</sup> ]	rigid solid	flexible stranded	AWG	۱ [A]	U [V]	
Connection data	0.08-6	0.08-4	28-10	30	400	

#### **Technical data** Pcs. Order No. Туре Pkt Fuse terminal block, ST 4-FSI/C 50 for mounting on L\_\_\_\_ terminal width 8.2 30 36 37 2 (1) Insulating stop sleeve, prevents unintentional clamping of the insulation in the case of smaller cross sections Cross section range: 0.25-0,5 mm<sup>2</sup> ISH 4/0,5 30 02 88 5 50 gray 0.75-1 mm<sup>2</sup> ISH 4/1 30 02 89 8 50 black (2) Plug-in bridge, for 2-pos. FBS 2-8 I<sub>max</sub>: 41 A 30 30 28 4 10 cross-connections in the 3-pos. FBS 3-8 41 A 30 30 29 7 10 41 A terminal center 4-pos. FBS 4-8 30 30 30 7 10 5-pos. FBS 5-8 41 A 30 30 31 0 10 30 30 32 3 10-pos. FBS 10-8 41 A 10 (3) Test adapter, for 4 mm Ø test plug PS and 4 mm Ø safety test plugs, PAI 4 30 30 92 5 10 making contact in the bridge shaft (4) 2.3 mm Ø test plug 1), consisting of metal part and red insulating sleeve MPS-RD 02 01 55 3 10 (5) Screwdriver, for SZF 1 - 0,6 x 3,5 12 04 51 7 10 actuating the tension spring (6) Zack strip, flat, for labeling the center and outer marker grooves white **ZBF 8:UNPRINTED** 08 08 78 1 10 (7) Zack strip, 10-section, for **ZB 8:UNPRINTED** 10 52 00 2 labeling in the terminal center white 10 Dimensions 8.2 / 86.5 Width / length [mm] Height (NS 35/7,5 / NS 35/15) 43.5 / 51 [mm] Technical data in accordance with IEC/ DIN VDE Fuse type ISO/DIS 8820/DIN 72 581-3 С Maximum current with single arrangement [A] 30 Max. power dissipation at 23 °C based on E DIN VDE 0611-6: 2001-04 [W] 1) Rated surge voltage / contamination class 6/3 [kV] / -Surge voltage category / insulation material group 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 V0 Inflammability class in acc. with UL 94 Approval data (UL and CSA/CUL) Nominal voltage / current / conductor sizes UL: [V] / [A] / AWG \_ CSA/CUL: [V] / [A] / AWG

1) On request.

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

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

#### **Technical data**

Technical data	Туре	Order No.	<u>Pcs.</u> Pkt.		
			FKL		
<b>Fuse terminal block</b> <sup>1</sup> ), for mounting on <b></b> , with light indicator for:					
12 V ĎC, 2.0 mA terminal width 8.2		30 36 49 5	50		
24 V DC, 2.0 mA terminal width 8.2	2 ST 4-FSI/C-LED 24	30 36 50 5	50		
(1) Insulating stop sleeve, prevents unintentional clamping					
of the insulation in the case of smaller cross sections Cross section range: 0.25-0.5 mm <sup>2</sup> gray		30 02 88 5	50		
Cross section range: 0.25-0.5 mm <sup>2</sup> gray 0.75-1 mm <sup>2</sup> black		30 02 89 8	50		
(2) <b>Plug-in bridge</b> , for 2-pos.	<b>FBS 2-8</b> I <sub>max</sub> : 41 A	30 30 28 4	10		
cross-connections 3-pos.	FBS 3-8 41 A	30 30 29 7	10		
in the terminal center 4-pos.	FBS 4-8 41 A	30 30 30 7	10		
6 pos.	<b>FBS 5-8</b> 41 A	30 30 31 0	10		
10-pos.	<b>FBS 10-8</b> 41 A	30 30 32 3	10		
(3) <b>Test adapter</b> , for 4 mm Ø test plug PS and 4 mm Ø safety test plugs, making contact in the bridge shaft	PAI 4	30 30 92 5	10		
(4) <b>2.3 mm ∅ test plug ¹)</b> , consisting of metal part and red insulating sleeve	MPS-RD	02 01 55 3	10		
(5) Screwdriver, 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 the center and outer marker grooves white	ZBF 8:UNPRINTED	08 08 78 1	10		
(7) Zack strip, 10-section, for labeling in the terminal center white	ZB 8:UNPRINTED	10 52 00 2	10		
Dimensions					
Width / length [mm]	1 82	/ 86.5			
Height (NS 35/7.5 / NS 35/15) [mm]	· · · · · · · · · · · · · · · · · · ·	43.5 / 51			
Technical data in accordance with IEC/ DIN VDE					
Fuse type ISO/DIS 8820/DIN 72 581-3		С			
Maximum current with single arrangement [A]	1	30			
Max. power dissipation					
at 23 °C based on E DIN VDE 0611-6: 2001-04 [W	1	2)			
Rated surge voltage / contamination class [kV] / -	-	6/3			
Surge voltage category / insulation material group - / -					
Connection capacity					
Stranded with ferrule with plastic sleeve [mm <sup>2</sup> ]	0.2	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)	·	0.5 - 1 10 A 4 PA			
Insulating material		PA			
Inflammability class in acc. with UL 94					
Approval data (UL and CSA/CUL)			©		
Nominal voltage / current / conductor sizes UL: [V] / [A] / AWG		-	ê		
CSA/CUL: [V] / [A] / AWG		@			
<ul> <li>1) If the fuse is defective, the downstream circuit is not off load.</li> <li>2) On request.</li> </ul>	·				
			TNR 5125896/15.03.03-01		
			F		