

# Multi-position printed circuit termination blocks for through hole reflow applications

With the modern SMT solder technology, proven housing profiles from the printed circuit terminal block range from Phoenix Contact are today also used in the reflow process without any further geometric adaptions. The high-temperature resistant printed circuit terminal blocks have solder pins from the standard range and, compared to surface connections with SMD components, achieve high mechanical stability in combination with through-contacted holes. To cope with the variety of applications, five different types for the pitches 3.5 or 3.81 mm and 5 or 5.08 mm for connection cross sections up to 4 mm<sup>2</sup> are available.

For automatic mounting, customer-specific tapes with free areas for grippers, for example, or packaging in tube magazines are possible.

High-temperature resistant printed circuit terminal blocks are available as 2 to 3-position versions. Higher numbers of positions can be supplied on request.



#### COMBICON Select The COMBICON search engine with CAD downloading

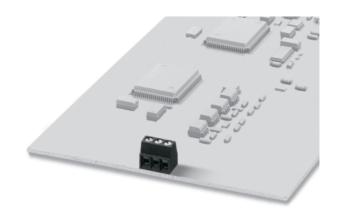


COMBICON Select – the printed circuit board connection software supports your workflow from the PCB and housing layout to the ordering process with:

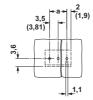
- -Systematic and fast selection of products
- –Universal Internet aided engineering with extensive CAD downloading
- -Easy-to-use e-shopping functions.

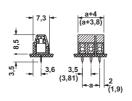
http://select.phoenixcontact.com

#### MKDS 1/... HT BK 3.5 or 3.81 mm Pitch

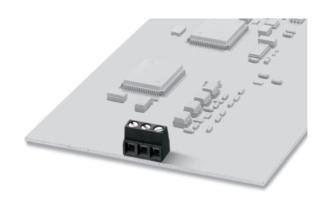


Description	Number of positions	Dim. a [mm]	Туре		Order No.	Pcs./Pkt.
Printed circuit screw termination blocks,	0	0.5	MKDO 4/0 0 5 UT DK		40.05.00.7	50
3,5 mm pitch, color: black	2 3	3.5 7	MKDS 1/2-3,5 HT BK MKDS 1/3-3,5 HT BK		19 85 80 7 19 84 95 0	50
Printed circuit screw termination blocks,						
3.81 mm pitch, color: black	2 3	3.81 7.62	MKDS 1/2-3,81 HT BK MKDS 1/3-3,81 HT BK		19 85 82 3 19 85 83 6	50
(1) Screwdriver, blade: 0.4 x 2.5 x 75 mm, length: 160 mm		165 <u>-</u> 1	SZS-0,4 x 2,5		12 05 03 7	10
(2) Marker card, with 14 pcs., 10-section marker strips, white, self-adhesive, for 140 terminal blocks			SK 3,5/2,8 or SK 3,81/2,8 (see COMBICON catalog)			
Technical data						
Dimensions				description	on	
Pitch		[mm]	;	3.5 / 3.81		
Hole diameter		[mm]		1.1		
Pin dimensions	[m	m]x[mm]		0.5 x 0.9		
Technical data in accordance with IEC/ DIN VI	DE					
Insulating material group		_				
Surge voltage category / contamination class		-/-	III/3	III/2	11/2	
Rated voltage		[V]	63	200	200	
Rated surge voltage		[kV]	2.5	2.5	2.5	
Nominal current / cross section  Maximum load current / cross section		[A]/[mm²]		10 / 1 12 / 1.5		
Connection capacity		[A]/[mm <sup>2</sup> ]		12 / 1.5		
Solid / stranded / conductor sizes	[mm²]/[m	m21/A\A/G	0.14 - 1.5	/014 1	/06 16	
Stranded with ferrule without / with plastic sleeve	[11111-]/[111	[mm²]		/ 0.14 - 1 5 / 0.25 - 0		
Multiple connection (2 conductors with same	cross section		0.23	7 0.25 - 0	7.5	
Solid / stranded	J. J. J. J. J. J. L.	[mm²]	0 14 -	0.5 / 0.14	- 0.2	
Stranded with ferrules without plastic sleeve		[mm <sup>2</sup> ]	0.11	_		
Stranded with TWIN ferrule with plastic sleeve		[mm²]		_		
Stripping length		[mm]		5		
Internal cylindrical gauge (IEC 60 947-1)				_		
Thread		_		M 2		
Torque			0	.22 - 0.25		
Insulating material				PA		
Inflammability class in acc. with UL 94				V0		

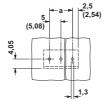


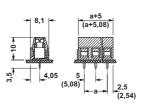


## MKDSN 1,5/...HT BK 5.0 or 5.08 mm Pitch

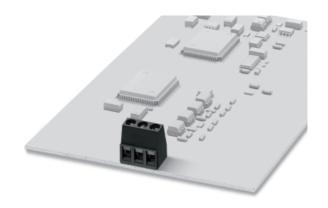


Description	Number of positions	Dim. a [mm]	Туре		Order No.	Pcs./Pkt.
Printed circuit screw termination blocks, 5.0 mm pitch, color: black	2	5	MKDSN 1.5/2 HT BK		19 85 84 9	50
5.5 mm pitch, color. black	3	10	MKDSN 1,5/3 HT BK		19 85 85 2	30
Printed circuit screw termination blocks,						
5.08 mm pitch, color: black	2 3	5.08 10.16	MKDSN 1,5/2-5,08 HT BK MKDSN 1,5/3-5,08 HT BK		19 85 86 5 19 85 87 8	50
(1) Screwdriver,		10.10			13 03 07 0	
blade: 0.6 x 3.5 x 100 mm, length: 180 mm			SZS 0,6 x 3,5		12 05 05 3	10
(2) Marker card, with 12 pcs., 10-section marker strips, white, self-adhesive, for 120 terminal blocks			SK 5/3,8 or SK 5,08/3,8 (see COMBICON catalog)			
Technical data						
Dimensions				descriptio	n	
Pitch		[mm]	ŧ.	5 / 5.08		
Hole diameter		[mm]		1.3		
Pin dimensions		nm]x[mm]		0.5 x 1		
Technical data in accordance with IEC/ DIN VI	)E					
Insulating material group		_/_	III / 3	I III / 2	II / 2	
Surge voltage category / contamination class Rated voltage		_/_ [V]	200	320	320	
Rated voltage		[V] [kV]	4	4	4	
Nominal current / cross section		[A]/[mm²]	· · · · · · · · · · · · · · · · · · ·	3.5 / 1.5	7	
Maximum load current / cross section		[A]/[mm²]		3.5 / 1.5		
Connection capacity		[, .]· []	·	0.07 1.0		
Solid / stranded / conductor sizes	[mm <sup>2</sup> ]/[m	m²1/AWG	0.14 - 1.5 /	0.14 - 1.5	/ 26 - 16	
Stranded with ferrule without / with plastic sleeve		[mm <sup>2</sup> ]	0.25 - 1	.0 / 0.25 -	1.5	
Multiple connection (2 conductors with same		on)				
Solid / stranded		[mm <sup>2</sup> ]	0.14 - 0.	75 / 0.14 -	0.75	
Stranded with ferrules without plastic sleeve		[mm <sup>2</sup> ]	0	.25 - 0.5		
Stranded with TWIN ferrule with plastic sleeve		[mm <sup>2</sup> ]		0.5 - 1		
Stripping length		[mm]		6		
Internal cylindrical gauge (IEC 60 947-1)		_		A 1		
Thread				М 3		
Torque				0.5 - 0.6		
Insulating material				PA		
Inflammability class in acc. with UL 94				V0		

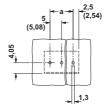


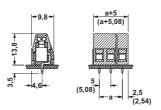


# MKDS 1,5/...HT BK 5.0 or 5.08 mm Pitch

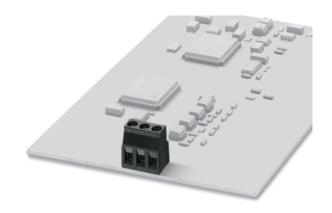


Description	Number of positions	Dim. a [mm]	Туре		Order No.	Pcs./Pkt.
Printed circuit screw termination blocks, 5.0 mm pitch, color: black	2 3	5 10	MKDS 1,5/2 HT BK MKDS 1,5/3 HT BK		19 85 88 1 19 85 89 4	50
Printed circuit screw termination blocks, 5.08 mm pitch, color: black	2 3	5.08 10.16	MKDS 1,5/2-5,08 HT BK MKDS 1,5/3-5,08 HT BK		19 85 90 4 19 85 91 7	50
(1) Screwdriver, blade: 0.6 x 3.5 x 100 mm, length: 180 mm		_	SZS 0,6 x 3,5		12 05 05 3	10
(2) <b>Marker card</b> , with 12 pcs., 10-section marker strips, white, self-adhesive, for 120 terminal blocks			SK 5/3,8 or SK 5,08/3,8 (see COMBICON catalog)			
Technical data						
Dimensions Pitch Hole diameter		[mm] [mm]	S	ee descriptio 5 / 5.08 1.3	on	
Pin dimensions Technical data in accordance with IEC/ DIN V		nm]x[mm]		0.9 x 0.9		
Insulating material group	DE					
Surge voltage category / contamination class		_/_	III/3	III / 2	II / 2	
Rated voltage		_/_ [V]	200	320	320	
Rated surge voltage		[kV]	4	4	4	
Nominal current / cross section		[A]/[mm <sup>2</sup> ]	•	17.5 / 1.5		
Maximum load current / cross section		[A]/[mm <sup>2</sup> ]		24 / 2.5		
Connection capacity						
Solid / stranded / conductor sizes	[mm <sup>2</sup> ]/[m	m <sup>2</sup> ]/AWG	0.14 - 2.	5 / 0.14 - 1.5	/ 26 - 14	
Stranded with ferrule without / with plastic sleeve		[mm <sup>2</sup> ]	0.25	- 1.5 / 0.25	- 1.5	
Multiple connection (2 conductors with same	e cross section	•				
Solid / stranded		[mm <sup>2</sup> ]	0.14	1 - 1 / 0.14 -	0.75	
Stranded with ferrules without plastic sleeve		[mm <sup>2</sup> ]		0.25 - 0.5		
Stranded with TWIN ferrule with plastic sleeve		[mm <sup>2</sup> ]		0.5 - 1		
Stripping length		[mm]		7		
Internal cylindrical gauge (IEC 60 947-1)				A 1		
Thread				M 3		
Torque				0.5 - 0.6		
Insulating material				PA		
Inflammability class in acc. with UL 94				V0		

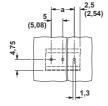


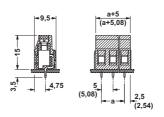


## MKDSN 2,5/...HT BK 5.0 or 5.08 mm Pitch

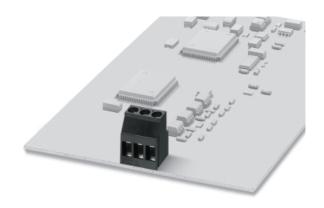


Description	Number of	Dim.	Туре		Order No.	Pcs./Pkt.
	positions	[mm]				
Printed circuit screw termination blocks,						
5.0 mm pitch, color: black	2	5	MKDSN 2,5/2 HT BK		19 85 92 0	50
	3	10	MKDSN 2,5/3 HT BK		19 85 93 3	
Printed circuit screw termination blocks,						
5.08 mm pitch, color: black	2 3	5.08 10.16	MKDSN 2,5/2-5,08 HT BK MKDSN 2,5/3-5,08 HT BK		19 85 94 6 19 85 95 9	50
(1) Screwdriver,						
blade: 0.6 x 3.5 x 100 mm, length: 180 mm		-	SZS 0,6 x 3,5		12 05 05 3	10
(2) Marker card, with 12 pcs.,			-			
10-section marker strips, white, self-adhesive, for 120 terminal blocks			SK 5/3,8 or SK 5,08/3,8 (see COMBICON catalog)			
Technical data						
Dimensions				see description	on	
Pitch		[mm]		5 / 5.08		
Hole diameter		[mm]		1.3		
Pin dimensions		nm]x[mm]		0.8 x 0.9		
Technical data in accordance with IEC/ DIN V	DE					
Insulating material group		_		I		
Surge voltage category / contamination class		-/-	III/3	III/2	II / 2	
Rated voltage		[V]	200	320	320	
Rated surge voltage		[kV]	4	4	4	
Nominal current / cross section		[A]/[mm <sup>2</sup> ]		16 / 2.5		
Maximum load current / cross section		[A]/[mm <sup>2</sup> ]		16 / 2.5		
Connection capacity						
Solid / stranded / conductor sizes	[mm²]/[m	m²]/AWG	0.2 - 2	5 / 0.2 - 2.5	/ 24 - 14	
Stranded with ferrule without / with plastic sleeve		[mm <sup>2</sup> ]	0.29	5 - 2.5 / 0.25	- 2.5	
Multiple connection (2 conductors with same	cross section	on)				
Solid / stranded		[mm <sup>2</sup> ]	0.2	- 0.75 / 0.2 -	0.75	
Stranded with ferrules without plastic sleeve		[mm <sup>2</sup> ]		0.25 - 0.75		
Stranded with TWIN ferrule with plastic sleeve		[mm <sup>2</sup> ]		0.5 - 1.5		
Stripping length		[mm]		6.5		
Internal cylindrical gauge (IEC 60 947-1)				A 3		
Thread		_		М 3		
Torque				0.5 - 0.6		
Insulating material				PA		
Inflammability class in acc. with UL 94				V0		





#### MKDS 3/... HT BK 5.0 or 5.08 mm Pitch

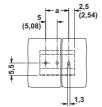


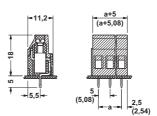
Order No.

Pcs./Pkt.

		Dim.
Description	Number of	а
	positions	[mm]
Printed circuit screw termination blocks,		
5.0 mm pitch, color: black	2	5
	3	10
Printed circuit screw termination blocks,		
5.08 mm pitch, color: black	2	5.08
•	3	10.16
(1) Screwdriver,		
blade: 0.6 x 3.5 x 100 mm, length: 180 mm		
, , , , , , , , , , , , , , , , , , ,		
(2) Marker card, with 12 pcs.,		
10-section marker strips, white,		
self-adhesive, for 120 terminal blocks		
Technical data		
Dimensions		
Pitch		[mm]
Hole diameter		[mm]
Pin dimensions	ſm	m]x[mm]
Technical data in accordance with IEC/ DIN \		iii]x[iiiiii]
Insulating material group		_
Surge voltage category / contamination class		-/-
Rated voltage		[V]
Rated surge voltage		[kV]
Nominal current / cross section	1	A]/[mm²]
Maximum load current / cross section		A]/[mm²]
Connection capacity		- 1.[1
Solid / stranded / conductor sizes	[mm²]/[mr	n²1/AWG
Stranded with ferrule without / with plastic sleev		[mm²]
Multiple connection (2 conductors with same		
Solid / stranded		[mm²]
Stranded with ferrules without plastic sleeve		[mm²]
Stranded with TWIN ferrule with plastic sleeve		[mm²]
Stripping length		[mm]
Internal cylindrical gauge (IEC 60 947-1)		
Thread		
Torque		
Insulating material		
Inflammability class in acc. with UL 94		

MKDS 3/2 HT BK MKDS 3/3 HT BK		19 85 96 2 19 85 97 5	50		
MKDS 3/2-5,08 HT BK MKDS 3/3-5,08 HT BK		19 85 98 8 19 85 99 1	50		
SZS 0,6 x 3,5		12 05 05 3	10		
SK 5/3,8 or SK 5,08/3,8 (see COMBICON catalog)					
	see description	on			
•	5 / 5.08	011			
	1.3				
	0.9 x 0.9				
III/3	I III / 2	II / 2			
200	320	320			
4	4	4			
	24 / 2.5				
	28 / 4				
02-	4 / 0.2 - 2.5 /	24 -12			
	5 - 2.5 / 0.25				
0.	2 - 1.5 / 0.2 -				
0.25 - 0.75					
0.5 - 1.5 7					
/ A 3					
M 3					
	0.5 - 0.6				
	PA				
	V0				





Туре