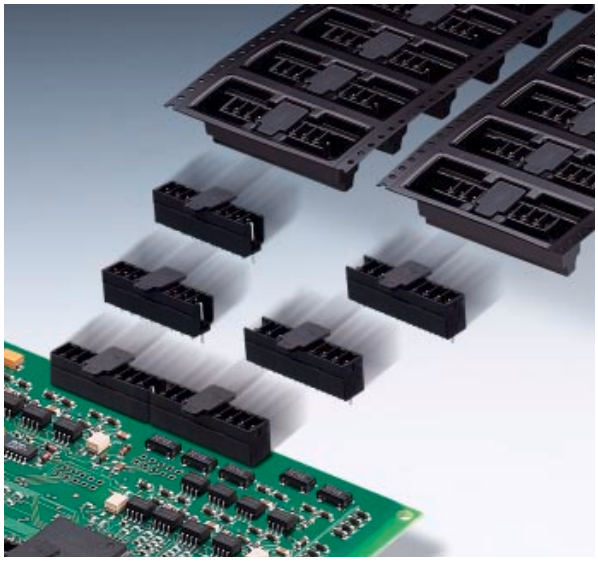
TWO IN ONE MINI COMBICON Headers for Through Hole Reflow Applications MC 1,5/…G…THT without and with Threaded Flange 3.5 or 3.81 mm Pitch

Integrating high-position single section THR pin strips in the SMD process places special demands on the tolerances of the components and mounting systems. On the packaging side, expensive tapes and feeders in special widths are also necessary.

With the “Two in One” solution for THR pin strips, it is now possible to have components with a high number of positions, i.e. 12 - 20. Packaging in accordance with today's industrial standard, particularly tape widths of 56 mm or 72 mm, remains unchanged. The same processing equipment and known requirements for the mounting process, as are already valid for pin strips with a low number of positions, facilitate integration in existing production processes.

The THR pin strip is assembled on the PCB from two segments. Each segment is packaged in a tape. The inner side panels have not been added to the segments. This makes room for the housings to be mounted and aligned without contact. After reflow soldering, one has the same properties as with single section pin strips, i.e. plugging remains as convenient as before.

The “2 in 1” THR pin strips are available in pitches of 3.5 mm and 3.81 mm with horizontal and vertical plug-in directions. Housings with a side panel or with a threaded flange and 12 to 20 positions are therefore available. Packaging as “Tape on Reel” can be supplied on request.



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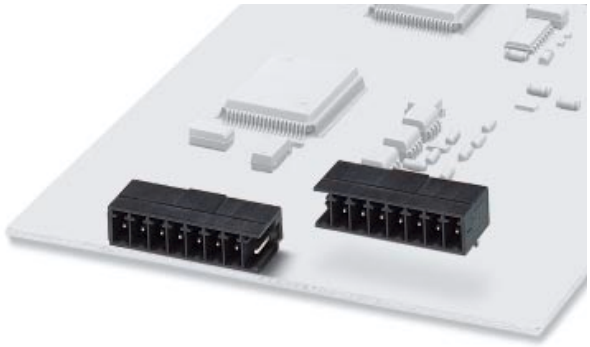
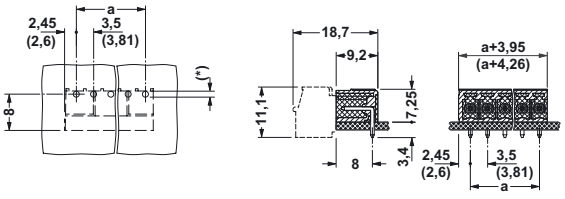
MC 1,5/…-GL(R)…THT
3.5 or 3.81 mm Pitch



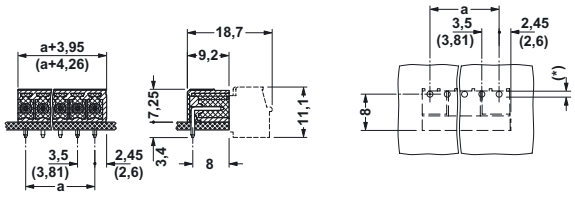
Note:
Through Hole Reflow headers for automated mounting processes can be packaged as "Tape On Reel" if requested**.**

Description	No. of pos.	Dim. a [mm]	Type	Order No.	Pcs./Pkt.
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.5 mm pitch, side panel on the left, open on one side, color: black,	6	17.5	**MC 1,5/6-GL-3,5 THT**	**19 61 63 0**	50
	7	21	**MC 1,5/7-GL-3,5 THT**	**19 61 64 3**	
	8	24.5	**MC 1,5/8-GL-3,5 THT**	**19 61 65 6**	
	9	28	**MC 1,5/9-GL-3,5 THT**	**19 61 66 9**	
	10	31.5	**MC 1,5/10-GL-3,5 THT**	**19 61 67 2**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.5 mm pitch, side panel on the right, open on one side, color: black,	6	17.5	**MC 1,5/6-GR-3,5 THT**	**19 61 70 8**	50
	7	21	**MC 1,5/7-GR-3,5 THT**	**19 61 71 1**	
	8	24.5	**MC 1,5/8-GR-3,5 THT**	**19 61 72 4**	
	9	28	**MC 1,5/9-GR-3,5 THT**	**19 61 73 7**	
	10	31.5	**MC 1,5/10-GR-3,5 THT**	**19 61 74 0**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.81 mm pitch, side panel on the left, open on one side, color: black,	6	19.05	**MC 1,5/6-GL-3,81 THT**	**19 61 35 5**	50
	7	22.86	**MC 1,5/7-GL-3,81 THT**	**19 61 36 8**	
	8	26.67	**MC 1,5/8-GL-3,81 THT**	**19 61 37 1**	
	9	30.48	**MC 1,5/9-GL-3,81 THT**	**19 61 38 4**	
	10	34.29	**MC 1,5/10-GL-3,81 THT**	**19 61 39 7**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.81 mm pitch, side panel on the right, open on one side, color: black,	6	19.05	**MC 1,5/6-GR-3,81 THT**	**19 61 42 3**	50
	7	22.86	**MC 1,5/7-GR-3,81 THT**	**19 61 43 6**	
	8	26.67	**MC 1,5/8-GR-3,81 THT**	**19 61 44 9**	
	9	30.48	**MC 1,5/9-GR-3,81 THT**	**19 61 45 2**	
	10	34.29	**MC 1,5/10-GR-3,81 THT**	**19 61 46 5**	
(1) **Coding profile,** is inserted into the groove on the header **after** reflow-soldering, made of red plastic			**CP-MSTB**	**17 34 63 4**	100
(2) **Coding profile**, is inserted into the groove on the header **before** reflow-soldering, made of high-temperature resistant beige plastic			**CP-MSTB NAT HT**	**19 54 35 9**	100
(3) **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			see description	
Pitch	[mm]		3.5 / 3.81	
Hole diameter	[mm]		*) ≤ 8-pos. = 1.3 / > 8-pos. = 1.4	
Pin dimensions	[mm]		0.8 x 0.8	
Technical data in accordance with IEC/ DIN VDE				
Insulating material group	–		IIIa	
Surge voltage category / contamination class	–/–	III / 3	III / 2	II / 2
Rated voltage	[V]	160	160	250
Rated surge voltage	[kV]	2.5	2.5	2.5
Nominal current / cross section	[A]/[mm²]		8 / –	
Maximum load current / cross section	[A]/[mm²]		8 / –	
Insulating material			PA	
Inflammability class in acc. with UL 94			V0	
Approval data (UL/CUL and CSA)				
Nominal voltage / current / conductor sizes	UL/CUL:[V]/[A]/AWG		300 / 8 / –	
	CSA: [V]/[A]/AWG		–	



MC 1,5/…-GL-THT



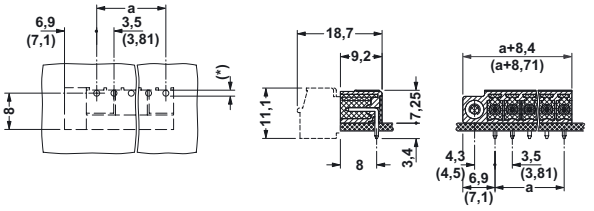
MC 1,5/…-GR-THT

MC 1,5/…-GFL(R)…THT
3.5 or 3.81 mm Pitch

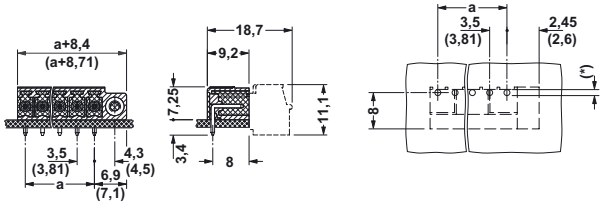
Note:
Through Hole Reflow headers for automated mounting processes can be packaged as "Tape On Reel" if requested.

Description	No. of pos.	Dim. a [mm]	Type	Order No.	Pcs./Pkt.
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.5 mm pitch, threaded flange on the left, open on one side, color: black,	6	17.5	**MC 1,5/6-GFL-3,5 THT**	**19 62 98 5**	50
	7	21	**MC 1,5/7-GFL-3,5 THT**	**19 62 99 8**	
	8	24.5	**MC 1,5/8-GFL-3,5 THT**	**19 63 00 7**	
	9	28	**MC 1,5/9-GFL-3,5 THT**	**19 61 68 5**	
	10	31.5	**MC 1,5/10-GFL-3,5 THT**	**19 61 69 8**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.5 mm pitch, threaded flange on the right, open on one side, color: black,	6	17.5	**MC 1,5/6-GFR-3,5 THT**	**19 63 01 0**	50
	7	21	**MC 1,5/7-GFR-3,5 THT**	**19 63 02 3**	
	8	24.5	**MC 1,5/8-GFR-3,5 THT**	**19 63 03 6**	
	9	28	**MC 1,5/9-GFR-3,5 THT**	**19 61 75 3**	
	10	31.5	**MC 1,5/10-GFR-3,5 THT**	**19 61 76 6**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.81 mm pitch, threaded flange on the left, open on one side, color: black,	6	19.05	**MC 1,5/6-GFL-3,81 THT**	**19 62 85 9**	50
	7	22.86	**MC 1,5/7-GFL-3,81 THT**	**19 62 86 2**	
	8	26.67	**MC 1,5/8-GFL-3,81 THT**	**19 62 87 5**	
	9	30.48	**MC 1,5/9-GFL-3,81 THT**	**19 61 40 7**	
	10	34.29	**MC 1,5/10-GFL-3,81 THT**	**19 61 41 0**	
Two-In-One header, plug-in direction horizontal to the conductor axis, 3.81 mm pitch, threaded flange on the right, open on one side, color: black,	6	19.05	**MC 1,5/6-GFR-3,81 THT**	**19 62 89 1**	50
	7	22.86	**MC 1,5/7-GFR-3,81 THT**	**19 62 90 1**	
	8	26.67	**MC 1,5/8-GFR-3,81 THT**	**19 62 91 4**	
	9	30.48	**MC 1,5/9-GFR-3,81 THT**	**19 61 47 8**	
	10	34.29	**MC 1,5/10-GFR-3,81 THT**	**19 61 48 1**	
(1) **Coding profile,** is inserted into the groove on the header **after** reflow-soldering, made of red plastic			**CP-MSTB**	**17 34 63 4**	100
(2) **Coding profile**, is inserted into the groove on the header **before** reflow-soldering, made of high-temperature resistant beige plastic			**CP-MSTB NAT HT**	**19 54 35 9**	100
(3) **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		see description		
Pitch	[mm]	3.5 / 3.81		
Hole diameter	[mm]	*) ≤ 8-pos. = 1.3 / > 8-pos. = 1.4		
Pin dimensions	[mm]	0.8 x 0.8		
Technical data in accordance with IEC/ DIN VDE				
Insulating material group	–		IIIa	
Surge voltage category / contamination class	–/–	III / 3	III / 2	II / 2
Rated voltage	[V]	160	160	250
Rated surge voltage	[kV]	2.5	2.5	2.5
Nominal current / cross section	[A]/[mm²]		8 / –	
Maximum load current / cross section	[A]/[mm²]		8 / –	
Insulating material			PA	
Inflammability class in acc. with UL 94			V0	
Approval data (UL/CUL and CSA)				
Nominal voltage / current / conductor sizes	UL/CUL:[V]/[A]/AWG		300 / 8 / –	
	CSA: [V]/[A]/AWG		–	



MC 1,5/…-GFL-THT



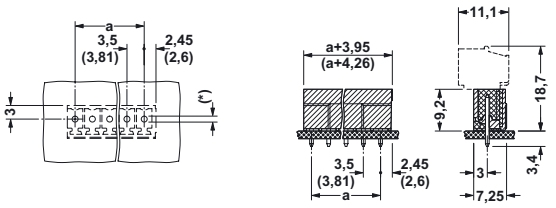
MC 1,5/…-GFR-THT

MCV 1,5/…-GL(R)…THT
3.5 or 3.81 mm Pitch

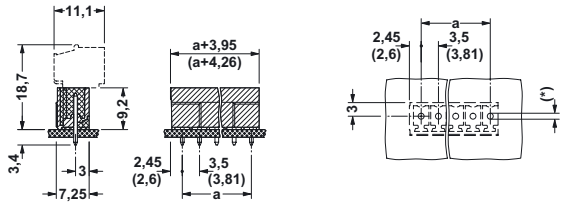
Note:
Through Hole Reflow headers for automated mounting processes can be packaged as "Tape On Reel" if requested.

Description	No. of pos.	Dim. a [mm]	Type	Order No.	Pcs./Pkt.
Two-In-One header, plug-in direction vertical to the conductor axis, 3.5 mm pitch, side panel on the left, open on one side, color: black,	6	17.5	**MCV 1,5/6-GL-3,5 THT**	**19 61 77 9**	50
	7	21	**MCV 1,5/7-GL-3,5 THT**	**19 61 78 2**	
	8	24.5	**MCV 1,5/8-GL-3,5 THT**	**19 61 79 5**	
	9	28	**MCV 1,5/9-GL-3,5 THT**	**19 61 80 5**	
	10	31.5	**MCV 1,5/10-GL-3,5 THT**	**19 61 81 8**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.5 mm pitch, side panel on the right, open on one side, color: black,	6	17.5	**MCV 1,5/6-GR-3,5 THT**	**19 61 84 7**	50
	7	21	**MCV 1,5/7-GR-3,5 THT**	**19 61 85 0**	
	8	24.5	**MCV 1,5/8-GR-3,5 THT**	**19 61 86 3**	
	9	28	**MCV 1,5/9-GR-3,5 THT**	**19 61 87 6**	
	10	31.5	**MCV 1,5/10-GR-3,5 THT**	**19 61 88 9**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.81 mm pitch, side panel on the left, open on one side, color: black,	6	19.05	**MCV 1,5/6-GL-3,81 THT**	**19 61 49 4**	50
	7	22.86	**MCV 1,5/7-GL-3,81 THT**	**19 61 50 4**	
	8	26.67	**MCV 1,5/8-GL-3,81 THT**	**19 61 51 7**	
	9	30.48	**MCV 1,5/9-GL-3,81 THT**	**19 61 52 0**	
	10	34.29	**MCV 1,5/10-GL-3,81 THT**	**19 61 53 3**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.81 mm pitch, side panel on the right, open on one side, color: black,	6	19.05	**MCV 1,5/6-GR-3,81 THT**	**19 61 56 2**	50
	7	22.86	**MCV 1,5/7-GR-3,81 THT**	**19 61 57 5**	
	8	26.67	**MCV 1,5/8-GR-3,81 THT**	**19 61 58 8**	
	9	30.48	**MCV 1,5/9-GR-3,81 THT**	**19 61 59 1**	
	10	34.29	**MCV 1,5/10-GR-3,81 THT**	**19 61 60 1**	
(1) **Coding profile,** is inserted into the groove on the header **after** reflow-soldering, made of red plastic			**CP-MSTB**	**17 34 63 4**	100
(2) **Coding profile**, is inserted into the groove on the header **before** reflow-soldering, made of high-temperature resistant beige plastic			**CP-MSTB NAT HT**	**19 54 35 9**	100
(3) **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			see description		
Pitch		[mm]	3.5 / 3.81		
Hole diameter		[mm]	*) ≤ 8-pos. = 1.3 / > 8-pos. = 1.4		
Pin dimensions		[mm]	0.8 x 0.8		
Technical data in accordance with IEC/ DIN VDE					
Insulating material group		–		IIIa	
Surge voltage category / contamination class		–/–	III / 3	III / 2	II / 2
Rated voltage		[V]	160	160	250
Rated surge voltage		[kV]	2.5	2.5	2.5
Nominal current / cross section		[A]/[mm²]		8 / –	
Maximum load current / cross section		[A]/[mm²]		8 / –	
Insulating material				PA	
Inflammability class in acc. with UL 94				V0	
Approval data (UL/CUL and CSA)					
Nominal voltage / current / conductor sizes	UL/CUL:[V]/[A]/AWG CSA: [V]/[A]/AWG			300 / 8 / – –	

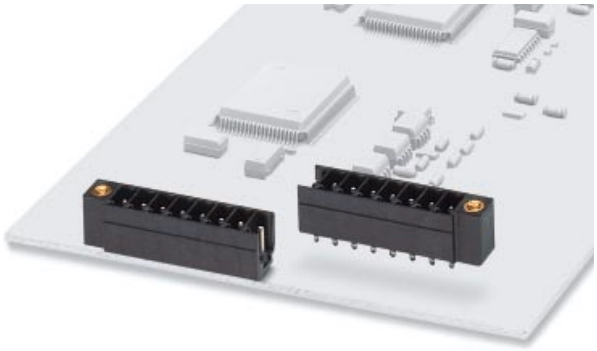


MCV 1,5/…-GL-THT



MCV 1,5/…-GR-THT

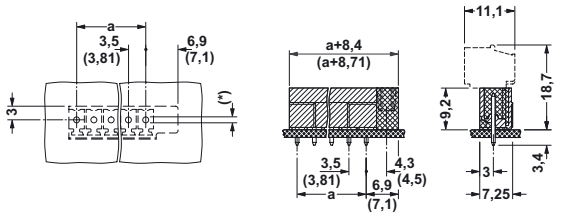
MCV 1,5/…-GFL(R)…THT
3.5 or 3.81 mm Pitch



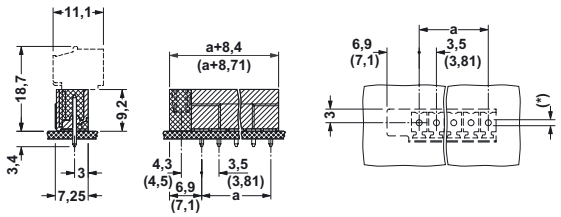
Note:
Through Hole Reflow headers for automated mounting processes can be packaged as "Tape On Reel" if requested.

Description	No. of pos.	Dim. a [mm]	Type	Order No.	Pcs./Pkt.
Two-In-One header, plug-in direction vertical to the conductor axis, 3.5 mm pitch, threaded flange on the left, open on one side, color: black,	6	17.5	**MCV 1,5/6-GFL-3,5 THT**	**19 63 04 9**	50
	7	21	**MCV 1,5/7-GFL-3,5 THT**	**19 63 05 2**	
	8	24.5	**MCV 1,5/8-GFL-3,5 THT**	**19 63 06 5**	
	9	28	**MCV 1,5/9-GFL-3,5 THT**	**19 61 82 1**	
	10	31.5	**MCV 1,5/10-GFL-3,5 THT**	**19 61 83 4**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.5 mm pitch, threaded flange on the right, open on one side, color: black,	6	17.5	**MCV 1,5/6-GFR-3,5 THT**	**19 63 07 8**	50
	7	21	**MCV 1,5/7-GFR-3,5 THT**	**19 63 08 1**	
	8	24.5	**MCV 1,5/8-GFR-3,5 THT**	**19 63 09 4**	
	9	28	**MCV 1,5/9-GFR-3,5 THT**	**19 61 89 2**	
	10	31.5	**MCV 1,5/10-GFR-3,5 THT**	**19 61 90 2**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.81 mm pitch, threaded flange on the left, open on one side, color: black,	6	19.05	**MCV 1,5/6-GFL-3,81 THT**	**19 62 92 7**	50
	7	22.86	**MCV 1,5/7-GFL-3,81 THT**	**19 62 93 0**	
	8	26.67	**MCV 1,5/8-GFL-3,81 THT**	**19 62 94 3**	
	9	30.48	**MCV 1,5/9-GFL-3,81 THT**	**19 61 54 6**	
	10	34.29	**MCV 1,5/10-GFL-3,81 THT**	**19 61 55 9**	
Two-In-One header, plug-in direction vertical to the conductor axis, 3.81 mm pitch, threaded flange on the right, open on one side, color: black,	6	19.05	**MCV 1,5/6-GFR-3,81 THT**	**19 62 95 6**	50
	7	22.86	**MCV 1,5/7-GFR-3,81 THT**	**19 62 96 9**	
	8	26.67	**MCV 1,5/8-GFR-3,81 THT**	**19 62 97 2**	
	9	30.48	**MCV 1,5/9-GFR-3,81 THT**	**19 61 61 4**	
	10	34.29	**MCV 1,5/10-GFR-3,81 THT**	**19 61 62 7**	
(1) **Coding profile,** is inserted into the groove on the header **after** reflow-soldering, made of red plastic			**CP-MSTB**	**17 34 63 4**	100
(2) **Coding profile**, is inserted into the groove on the header **before** reflow-soldering, made of high-temperature resistant beige plastic			**CP-MSTB NAT HT**	**19 54 35 9**	100
(3) **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		see description		
Pitch	[mm]	3.5 / 3.81		
Hole diameter	[mm]	*) ≤ 8-pos. = 1.3 / > 8-pos. = 1.4		
Pin dimensions	[mm]	0.8 x 0.8		
Technical data in accordance with IEC/ DIN VDE				
Insulating material group	–		IIIa	
Surge voltage category / contamination class	–/–	III / 3	III / 2	II / 2
Rated voltage	[V]	160	160	250
Rated surge voltage	[kV]	2.5	2.5	2.5
Nominal current / cross section	[A]/[mm²]		8 / –	
Maximum load current / cross section	[A]/[mm²]		8 / –	
Insulating material			PA	
Inflammability class in acc. with UL 94			V0	
Approval data (UL/CUL and CSA)				
Nominal voltage / current / conductor sizes	UL/CUL:[V]/[A]/AWG		300 / 8 / –	
	CSA: [V]/[A]/AWG		–	



MCV 1,5/…-GFL-THT



MCV 1,5/…-GFR-THT