

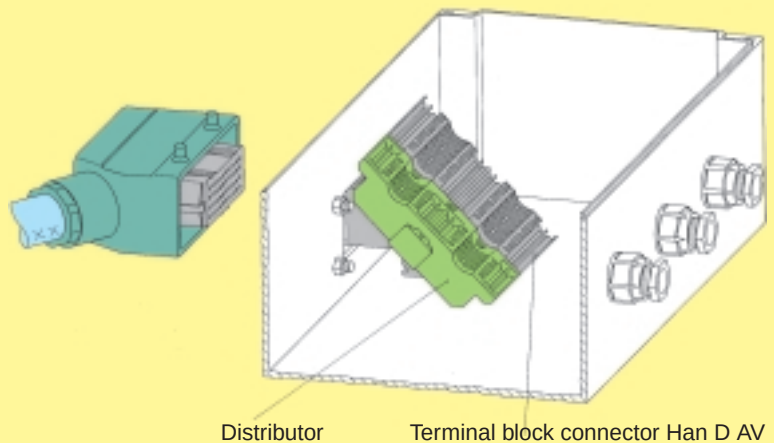
Han®-Terminal Block Connectors

Page

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Han D AV	08.10
Han D AV Distributor	08.12
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Mounting example

Terminal block connector Han D AV with mountable distributor



Distributor

Terminal block connector Han D AV

Possibilities in switch cabinet

Left or right hand mounting in the switch cabinet, therefore allows use of the same pre-prepared interface cable.

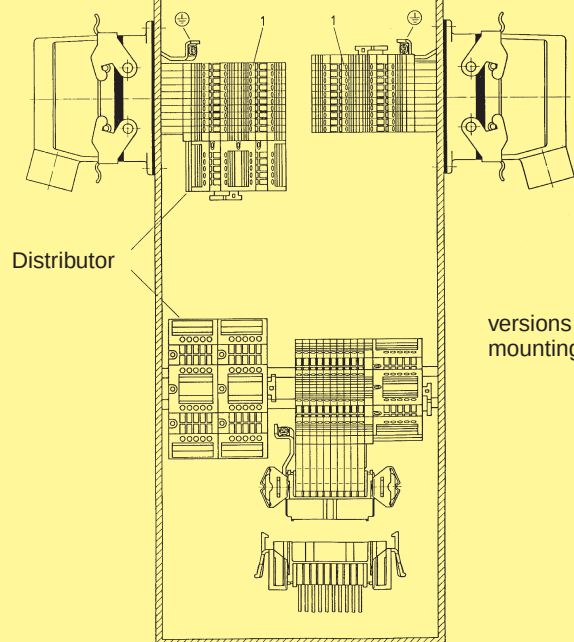
Internal use on standard rails in the switch cabinet in conjunction with Han-Snap.

Distributor lockable on standard rails or mountable at terminal block connector Han D AV

The terminal block connectors can be supplied for left hand or right hand applications. Hence the ground and connecting terminal for contact no. 1 will always be accessible from above in both types of installation.

left hand version

right hand version

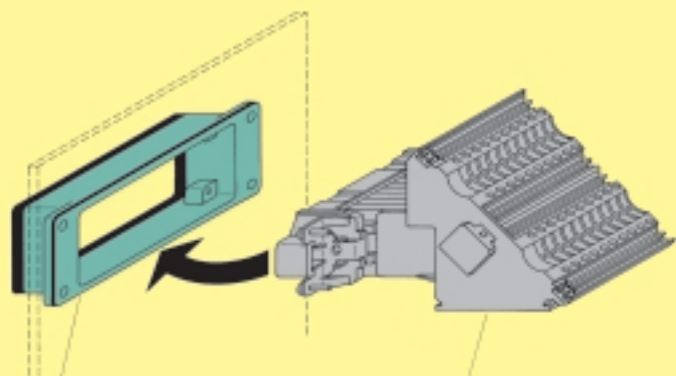


Distributor

versions for rail mounting

Assembly of terminal block connectors

Terminal block connectors can be mounted from the inside of the switch cabinet into standard bulkhead housings. Therefore pre-assembly is possible.



Standard bulkhead housing

Terminal block connector

Possibilities in switch cabinet

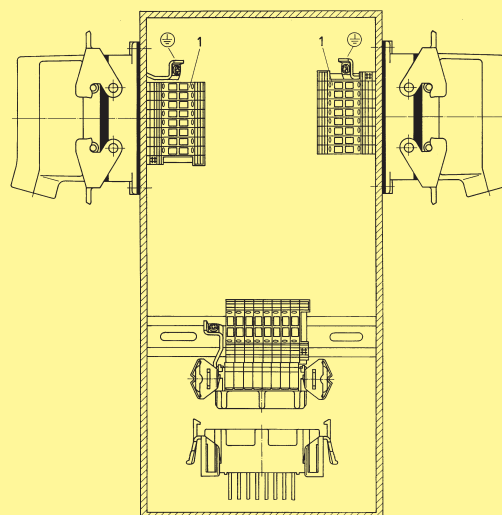
Left or right hand mounting in the switch cabinet, therefore allows use of the same pre-prepared interface cable.

Internal use on standard rails in the switch cabinet in conjunction with Han-Snap.

The terminal block connectors can be supplied for left hand or right hand applications. Hence the ground and connecting terminal for contact no. 1 will always be accessible from above in both types of installation.

left hand version

right hand version



version for rail mounting

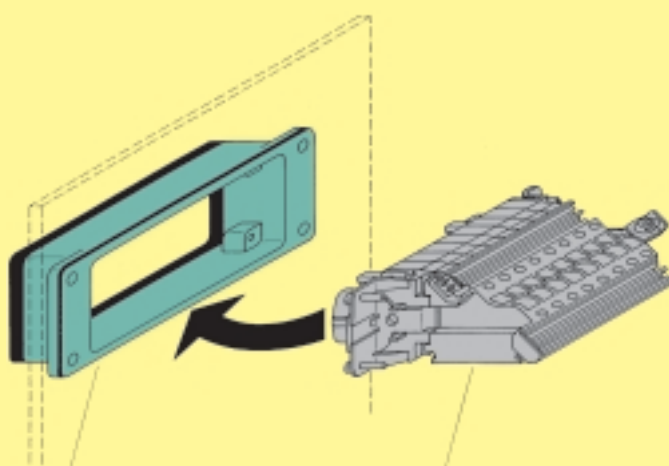
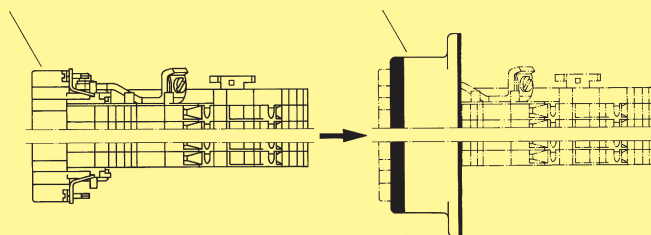
Assembly of terminal block connector

The terminal block connector is fixed in the standard bulkhead housing in the normal way.

Han E AV and Han ES AV with 16 and 24 pins can be mounted from the inside of the switch cabinet into standard bulkhead housings. Therefore pre-assembly is possible.

Male or female insert

housing (bulkhead mounting)



Standard housing (bulkhead mounting)

Terminal block connector Han E AV

Counterparts

For suitable mating inserts with screw, cage-clamp or crimp terminals, hoods and bulkhead housings please refer to the chapter 03.

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals



Inserts

Number of contacts	40, 64 + PE
Working current (see current carrying capacity)	10 A max.
Working voltage	250 V
Test voltage U_{rms}	2 kV
Pollution degree	3 (C)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Polycarbonate
Temperature range	- 40 °C ... +125 °C
Flammability acc. to UL 94	V0
Mechanical working life	
- Mating cycles	≥ 500
Working voltage acc. to UL/CSA	600 V

Contacts

Material	copper alloy
Surface	
- mating side	3 μ m Ag
- termination side	tin plated
Contact resistance	$\leq 4 \text{ m}\Omega$
Screw terminal	
- mm ²	0.2-2.5 mm ²
- AWG	24-14
- Tightening/test torque	0.5 Nm

Identification strips

Multi contour (MK)

the following identification strips may be used

- HARTING – 09 21 000 9971
- Murrplastik – KPX 5/10-5
- Weidmüller – dekafix 5
- Phoenix – 4 K – DST 5
- Phoenix – DS 5
- Phoenix – RBS 5
- Phoenix – ZB 5
- WAGO – WSB 5

Single contour (SK)

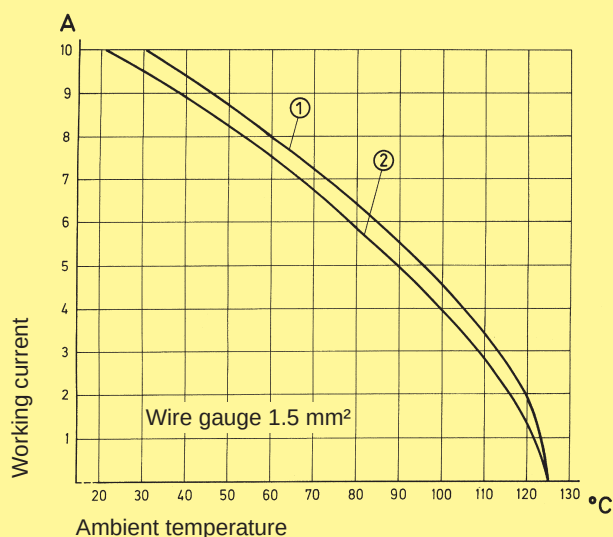
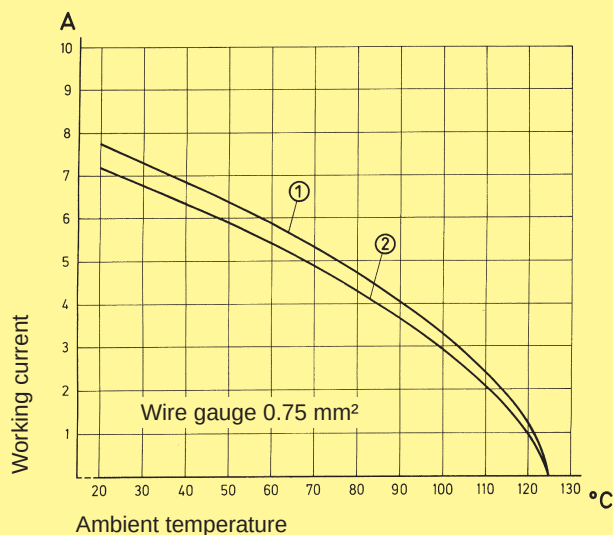
the following identification strips may be used

- Murrplastik – KWI 5/10
- Murrplastik – KWI 5/10-5
- Murrplastik – KWI 8.6-5
- Wieland – 9705 A 5/10
- WAGO – Mini - WSB

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



① Han 40 D AV

② Han 64 D AV

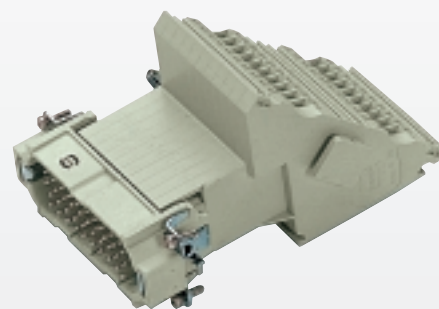
Identification

The individual terminals have the same identification as on the mating face.

In addition each circuit may be separately labelled with identification strips fitted in the adjacent slots.

Number of contacts

40, 64 +



Terminal block connectors

Identification	Number of contacts	Part No.		Drawing	Dimensions in mm
Left hand version Multi contour (MK)	40	09 21 040 4601	09 21 040 4701		
	64	09 21 064 4601	09 21 064 4701		
Left hand version Single contour (SK)	40	09 21 040 4602	09 21 040 4702		
	64	09 21 064 4602	09 21 064 4702		
Right hand version Multi contour (MK)	40	09 21 040 4611	09 21 040 4711		
	64	09 21 064 4611	09 21 064 4711		
Right hand version Single contour (SK)	40	09 21 040 4612	09 21 040 4712		
	64	09 21 064 4612	09 21 064 4712		

	a	b
Han 40 D	51	77.5
Han 64 D	81.5	104

Han
AV

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals



Distributor

Number of contacts	20, 2 x 10, 4 x 4
Working current	16 A max.
Working voltage	750 V
Test voltage U_{rms}	4 kV
Pollution degree	3 (C)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Polycarbonate
Temperature range	- 40 °C ... +125 °C
Flammability acc. to UL 94	V0
Working voltage acc. to UL/CSA	600 V

Contacts

Material	copper alloy
Surface	
- termination side	tin plated
Screw terminal	
- mm ²	0.2-2.5 mm ²
- AWG	24-14
- Tightening/test torque	0.5 Nm

Identification strips

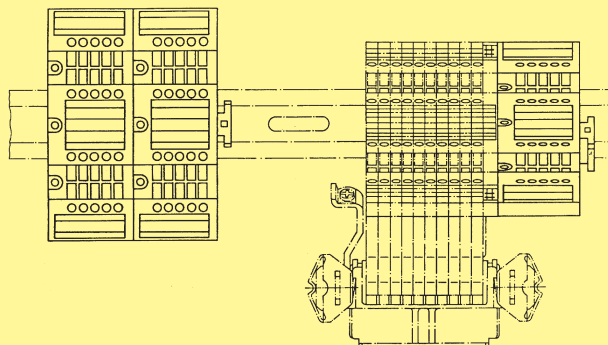
the following identification strips may be used

- HARTING – 09 21 000 9971
- Murrplastik – KPX 5/10-5
- Phoenix – 4 K – DST 5
- Phoenix – RBS 5
- Phoenix – ZB 5
- Phoenix – DS 5

Mounting example

Distributor
on standard rail

Distributor
with terminal block connector
Han D



Identification

The individual terminals have the same identification as on the mating face.

In addition each circuit may be separately labelled with identification strips fitted in the adjacent slots.

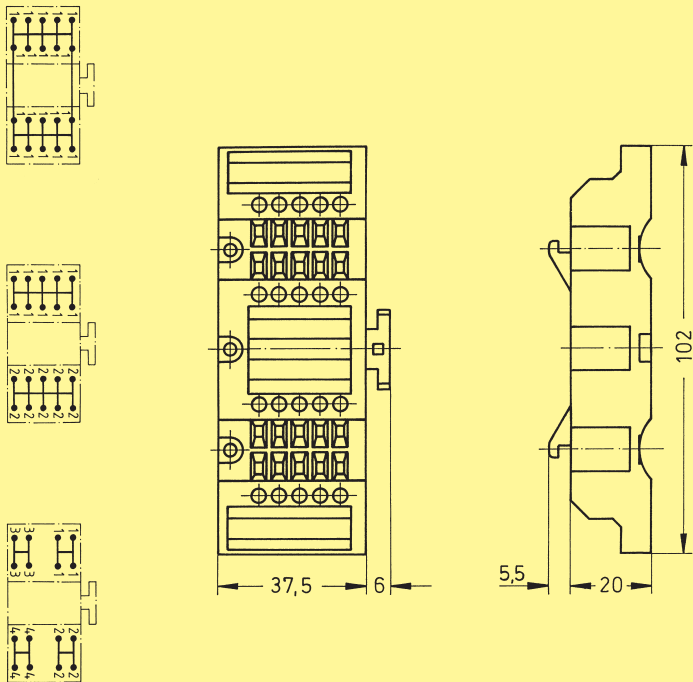
Terminals

20



Distributors

Identification	Terminals	Part No.	Drawing	Dimensions in mm
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Distributor with screw terminals	20	09 42 020 0111		
	2 x 10	09 42 020 0121		
	4 x 4	09 42 020 0131		

Optionally mountable on terminal block connectors
Han D AV

Han
AV

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals



Inserts

Number of contacts	6, 10, 16, 24, 32 (2 x 16), 48 (2 x 24) + PE
Working current (see current carrying capacity)	16 A max.
Working voltage Han E AV	400 V
Working voltage Han ES AV	500 V
Test voltage U_{rms}	3 kV
Pollution degree	3 (C)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Polycarbonate
Temperature range	-40 °C ... +125 °C
Flammability acc. to UL 94	V0
Mechanical working life	
- Mating cycles	≥ 500
Working voltage acc. to UL/CSA	600 V

Contacts

Material	copper alloy
Surface	
- mating side	3 μ m Ag
- termination side	tin plated
Contact resistance	$\leq 4 \text{ m}\Omega$
Screw terminal	
- mm ²	0.2-2.5 mm ²
- AWG	24-14
- Tightening/test torque	0.5 Nm
Cage-clamp terminal	
- Wire gauge	0.14-2.5 mm ²
- AWG	26-14

Identification strips Han E AV

Multi contour (MK)
the following identification strips may be used

- HARTING 6 x 10 – 09 33 000 9971
- Murrplastik – KPX 6 / 10
- Weidmüller – dekafix 6.5
- Phoenix – 4 K – DST 6
- Phoenix – DST 6
- WAGO – WSB

Single contour (SK)
the following identification strips may be used

- Murrplastik – KWI 6/10
- Wieland – 9705 A/6.7
- WAGO – Mini - WSB

Identification strips Han ES AV

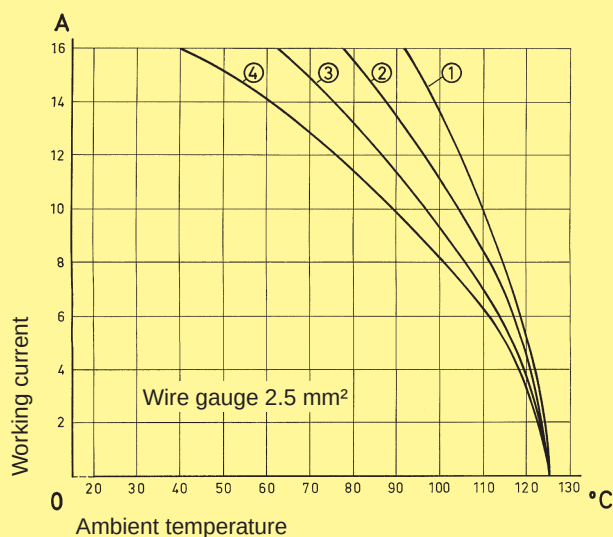
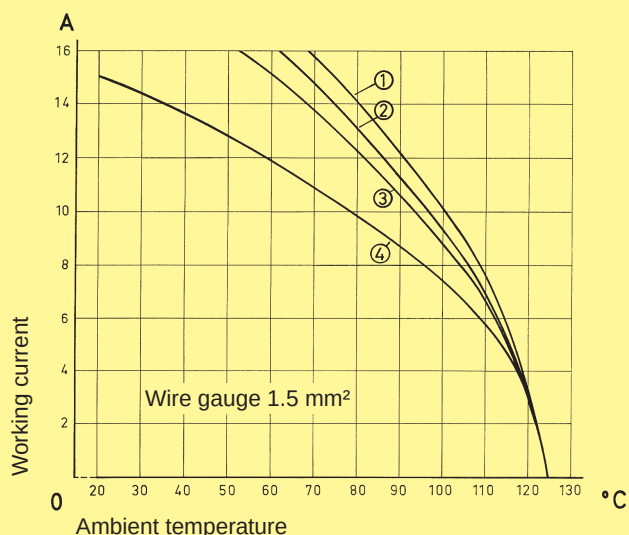
the following identification strips may be used

- HARTING – 09 33 000 9973 (6 x 15)
- Murrplastik – KWI 6/15
- Wieland – 9705 A/6.7
- WAGO – Mini - WSB

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



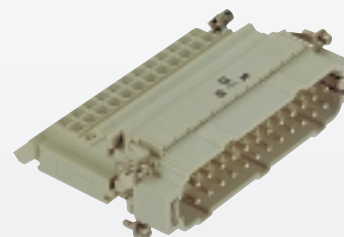
- ① Han 6 E AV/ES AV
- ② Han 10 E AV/ES AV
- ③ Han 16 E AV/ES AV
- ④ Han 24 E AV/ES AV

Identification

The individual terminals have the same identification as on the mating face.
In addition each circuit may be separately labelled with identification strips fitted in the adjacent slots.

Number of contacts

6-24 +



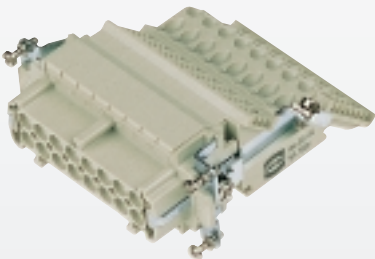
Terminal block connectors

Identification		Number of contacts	Part No.		Drawing	Dimensions in mm															
Left hand version Multi contour (MK)			Male insert	Female insert																	
	6	09 33 006 4625	09 33 006 4725																		
	10	09 33 010 4625	09 33 010 4725																		
	16	09 33 016 4625	09 33 016 4725																		
	24	09 33 024 4625	09 33 024 4725																		
Left hand version Single contour (SK)																					
	6	09 33 006 4626	09 33 006 4726																		
	10	09 33 010 4626	09 33 010 4726																		
	16	09 33 016 4626	09 33 016 4726																		
	24	09 33 024 4626	09 33 024 4726																		
Right hand version Multi contour (MK)																					
	6	09 33 006 4635	09 33 006 4735																		
	10	09 33 010 4635	09 33 010 4735																		
	16	09 33 016 4635	09 33 016 4735																		
	24	09 33 024 4635	09 33 024 4735																		
Right hand version Single contour (SK)																					
	6	09 33 006 4636	09 33 006 4736																		
	10	09 33 010 4636	09 33 010 4736																		
	16	09 33 016 4636	09 33 016 4736																		
	24	09 33 024 4636	09 33 024 4736																		
<table><tr><td></td><td>a</td><td>b</td></tr><tr><td>Han 6 E</td><td>20</td><td>44</td></tr><tr><td>Han 10 E</td><td>34</td><td>57</td></tr><tr><td>Han 16 E</td><td>54</td><td>77.5</td></tr><tr><td>Han 24 E</td><td>81</td><td>104</td></tr></table>								a	b	Han 6 E	20	44	Han 10 E	34	57	Han 16 E	54	77.5	Han 24 E	81	104
	a	b																			
Han 6 E	20	44																			
Han 10 E	34	57																			
Han 16 E	54	77.5																			
Han 24 E	81	104																			

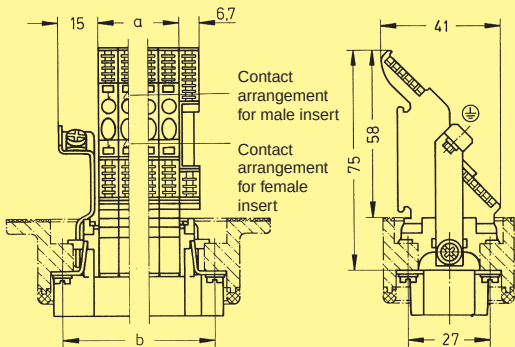
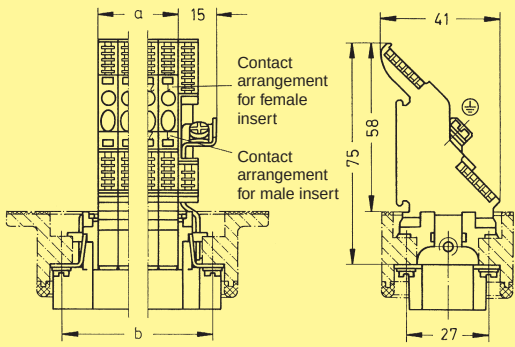
Han
AV

Number of contacts

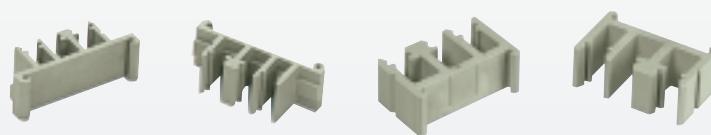
6-24 +



Terminal block connectors (cage-clamp terminal)

Identification	Number of contacts	Male insert	Female insert	Part No.	Drawing	Dimensions in mm															
Left hand version Single contour (SK)																					
	6	09 33 006 4629	09 33 006 4729																		
	10	09 33 010 4629	09 33 010 4729																		
	16	09 33 016 4629	09 33 016 4729																		
	24	09 33 024 4629	09 33 024 4729																		
					<table><tr><td></td><td>a</td><td>b</td></tr><tr><td>Han 6 E</td><td>20</td><td>44</td></tr><tr><td>Han 10 E</td><td>34</td><td>57</td></tr><tr><td>Han 16 E</td><td>54</td><td>77.5</td></tr><tr><td>Han 24 E</td><td>81</td><td>104</td></tr></table>		a	b	Han 6 E	20	44	Han 10 E	34	57	Han 16 E	54	77.5	Han 24 E	81	104	
	a	b																			
Han 6 E	20	44																			
Han 10 E	34	57																			
Han 16 E	54	77.5																			
Han 24 E	81	104																			
Right hand version Single contour (SK)																					
	6	09 33 006 4639	09 33 006 4739																		
	10	09 33 010 4639	09 33 010 4739																		
	16	09 33 016 4639	09 33 016 4739																		
	24	09 33 024 4639	09 33 024 4739																		
					<table><tr><td></td><td>a</td><td>b</td></tr><tr><td>Han 6 E</td><td>20</td><td>44</td></tr><tr><td>Han 10 E</td><td>34</td><td>57</td></tr><tr><td>Han 16 E</td><td>54</td><td>77.5</td></tr><tr><td>Han 24 E</td><td>81</td><td>104</td></tr></table>		a	b	Han 6 E	20	44	Han 10 E	34	57	Han 16 E	54	77.5	Han 24 E	81	104	
	a	b																			
Han 6 E	20	44																			
Han 10 E	34	57																			
Han 16 E	54	77.5																			
Han 24 E	81	104																			

Stock items in bold type



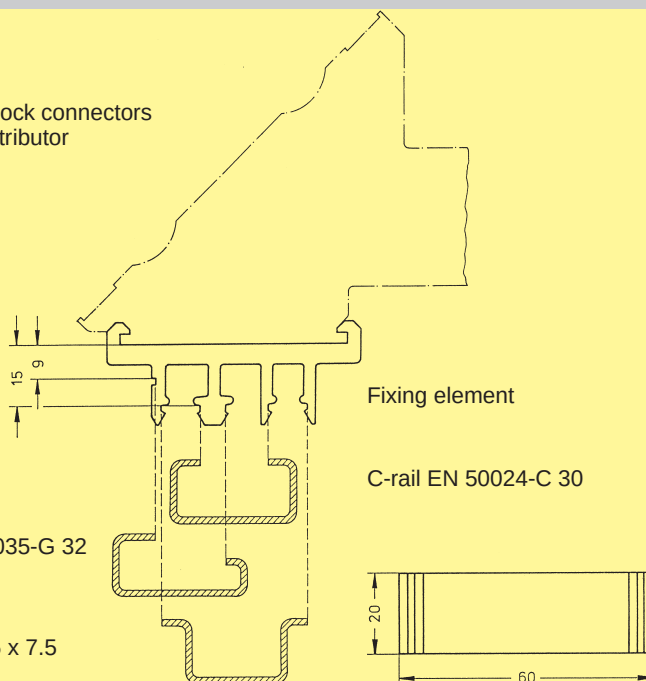
Fixing element

Identification	Part No.	Drawing	Dimensions in mm
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Fixing element
for terminal block connector
Han D and distributor

09 33 000 9928

Terminal block connectors
Han D, Distributor



Fixing element

C-rail EN 50024-C 30

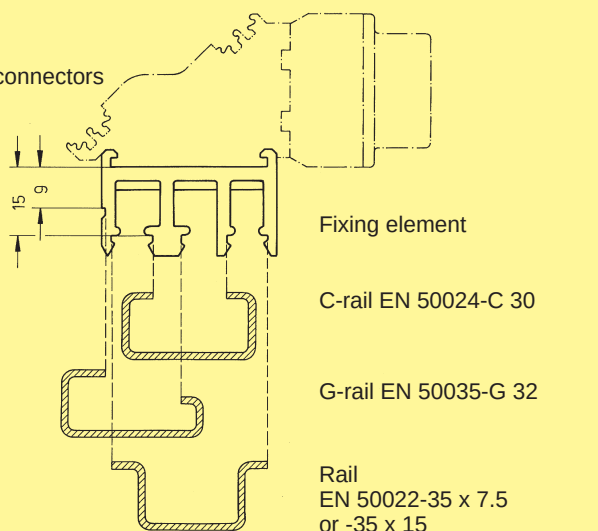
G-rail EN 50035-G 32

Rail
EN 50022-35 x 7.5
or -35 x 15

Fixing element
for terminal block connector
Han E
terminal block connector
Han ES

09 33 000 9929

Terminal block connectors
Han E



Fixing element

C-rail EN 50024-C 30

G-rail EN 50035-G 32

Rail
EN 50022-35 x 7.5
or -35 x 15

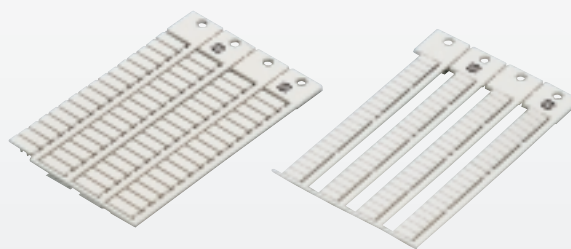
There are moulded slots at the rear of the terminal block connectors and distributors to accept the fixing elements. When used these elements, for example, can be used to secure the connectors inside the switch cabinets on standard rails.

For mounting

Terminal block connector Han E/Han ES
Han 6 E = 1 fixing element
Han 10 E, 16 E and 24 E = 2 fixing elements

Terminal block connector Han D
Han 40 D, 64 D = 2 fixing elements
Distributor = 1 fixing element

Stock items in bold type



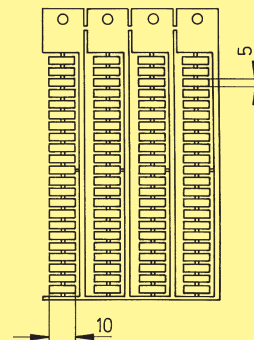
Identification	Part No.	Drawing	Dimensions in mm
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Identification strips
88 pieces in one block

5 mm width

10 mm long

09 21 000 9971

fits terminal block connector Han D AV
and distributor

Identification strips
64 pieces in one block

6 mm width

10 mm long

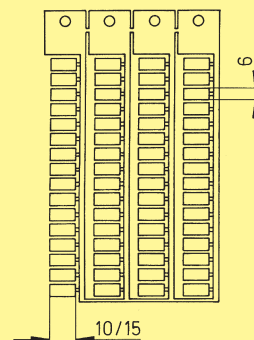
15 mm long

09 33 000 9971

fits terminal block connector Han E AV

09 33 000 9973

fits terminal block connector Han ES AV



Adapter for
E AV
to fit identification
strips (SK-contour)

- single

09 33 000 9963

– Han 6 E AV

09 33 000 9964

- Han 10 E AV

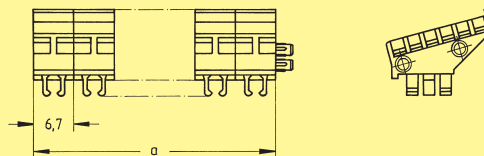
09 33 000 9965

– Han 16 E AV

09 33 000 9966

– Han 24 E AV

09 33 000 9967



	a
Han 6 E AV	26.8
Han 10 E AV	40.2
Han 16 E AV	60.3
Han 24 E AV	87.4