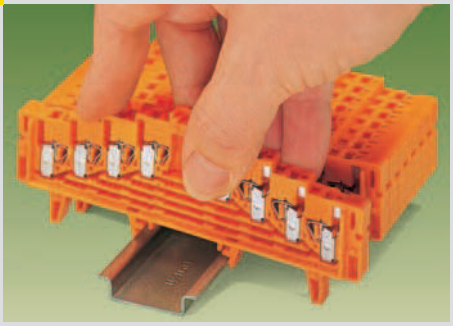
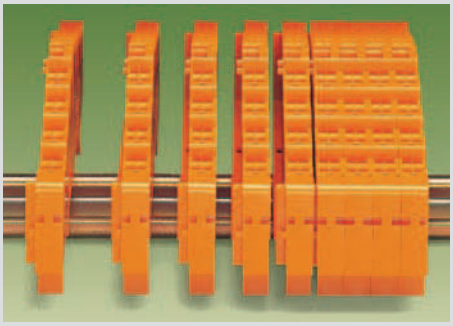
Terminal Blocks for Matrix Patching and Same Potential Terminal Blocks with CAGE CLAMP® connection, Series 727 . . .

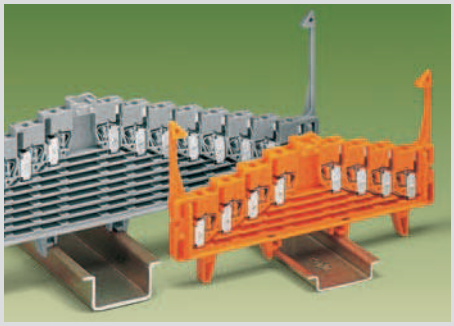
Assembly



Snap individual 4- or 8-level terminal blocks onto the carrier rail . . .

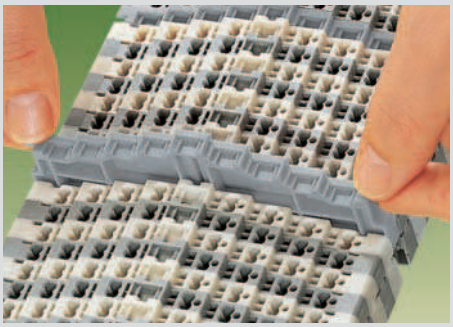


. . . and engage

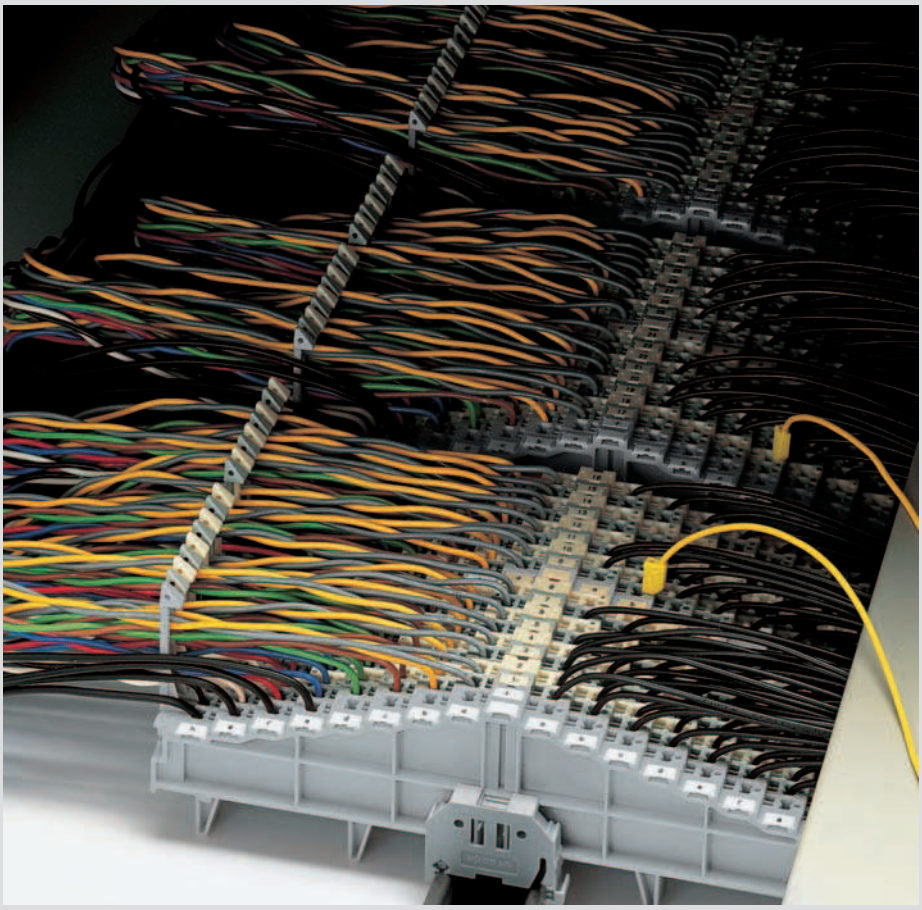


Terminal blocks for DIN 35 x 7.5 mm or DIN 35 x 15 mm high are available

Assembly / Removal



Grip end plate at both sides and
– push down (assembly)
– pull up (removal)

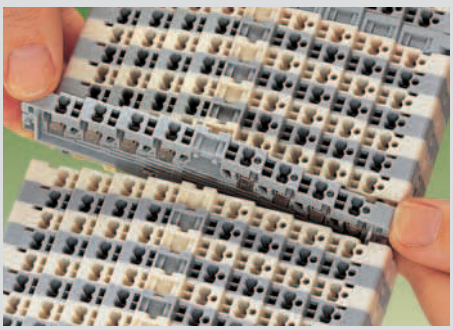


Removal



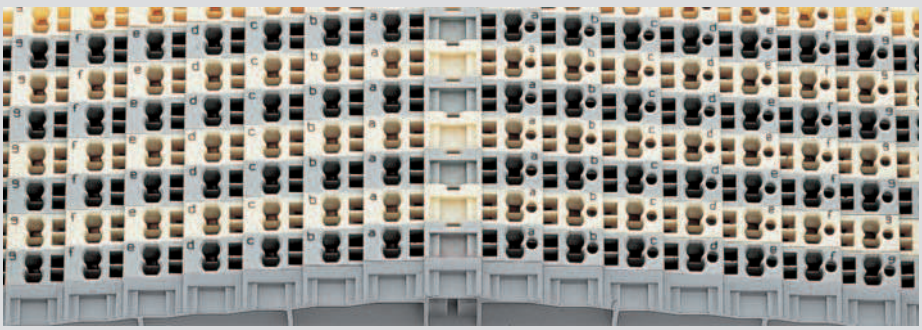
Open the assembly by laterally sliding a block using a screwdriver (2.5 x 0.4) mm . . .

Removal



. . . move terminal block laterally and remove from the rail with a levering action

Marking



Marking of clamping units by direct printing



CAGE CLAMP® connects the following copper wires: *

solid



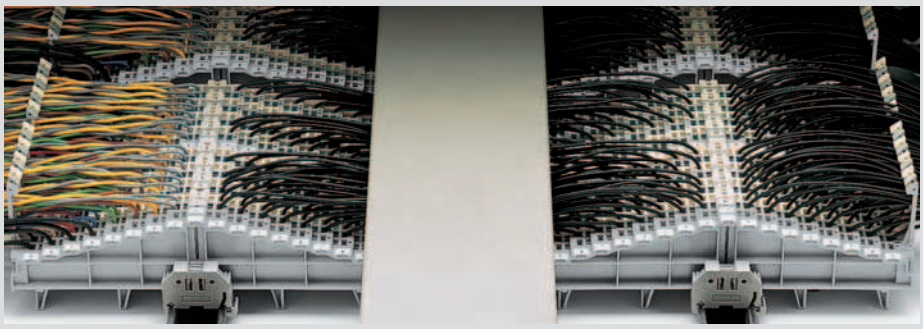
stranded



fine stranded, also with tinned single strands

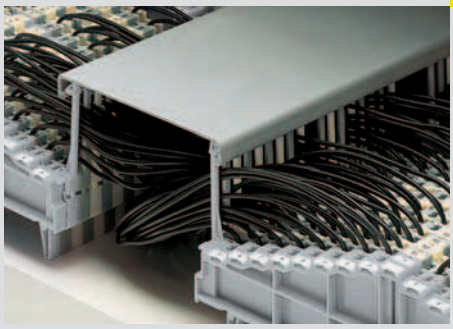
* For aluminum wire see notes in section 15!

Matrix patching assembly



Example left: Main cables fed through locking clips on the field side
right: Control cables fed between locking clips
center: Wiring of the patching sides

Wiring space

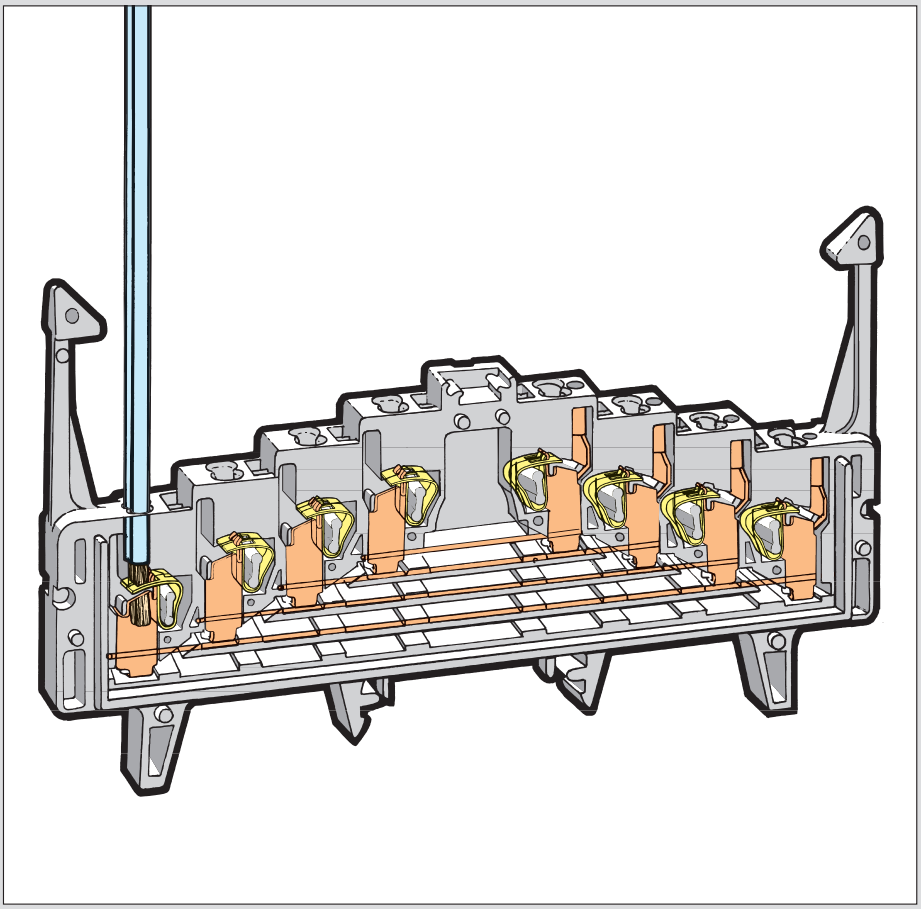


When using terminal blocks with locking clips the wiring space between the terminal strips can be covered with a wiring duct cover*.
(*for suitable suppliers – please contact factory)

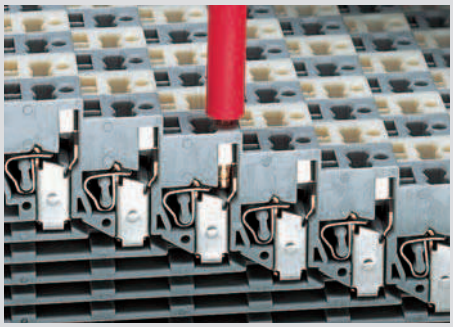
CAGE CLAMP® connection



Connection/removal of conductors using a screwdriver (2.5 x 0.4) mm

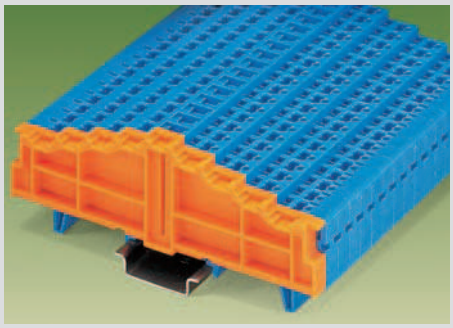


Testing



Special test contact for test plug 2.3 mm/0.091 in Ø

Ex i versions



Blue terminal blocks for matrix patching are suitable for Ex i applications



Marking of coordinates with the WMB Multi marking system or WSB Quick marking system



fine-stranded wire – tip bonded



fine-stranded wire with crimped ferrule ❶



fine-stranded wire with crimped pin terminal

❶ Max. cross section for uninsulated ferrules 1 mm²/AWG 18, for insulated ferrules 0.75 mm²/AWG 20.

4-Level Terminal Blocks for Matrix Patching 1.5 mm² / AWG 16, Series 727

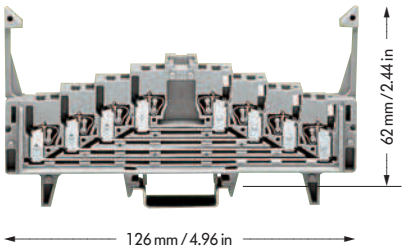
	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 12 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 12 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A
	Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in		Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in	
	*		*	

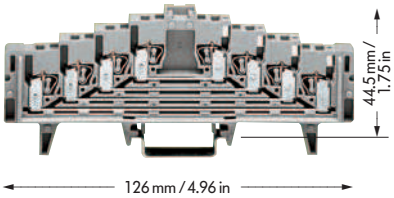
	Ex i** application
❶ 250 V 4 kV 3	60 V = peak value /\ table 4, EN 50020

(see also section 15)

❷ 4 x pairs of contacts on each level

③ Suitable for Ex i applications

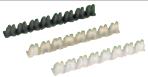




Description		Item No.	Item No.	Pack.-unit pcs		Item No.	Item No.	Pack.-unit pcs
4-level terminal block for matrix patching ❷,	**with**	for	for		**without**	for	for	
for DIN 35 rail	**locking clips**	DIN 35 x 7.5	DIN 35 x 15		**locking clips**	DIN 35 x 7.5	DIN 35 x 15	
acc. to EN 60715	grey	**727-219** ❹	**727-229** ❹	50	grey	**727-220** ❹	**727-230** ❹	50
	white	**727-221** ❹	**727-231** ❹	50	white	**727-222** ❹	**727-232** ❹	50
	blue	③ **727-223** ❹	**727-233** ❹	50	blue	③ **727-224** ❹	**727-234** ❹	50

Accessories

Appropriate marking system **WMB/WSB** (see section 14)

	**4-level end plate,** without printing	7.62 mm / 0.3 in thick			7.62 mm / 0.3 in thick			
		orange	**727-217**	25	orange	**727-217**		25
	**4-level end plate,** numeric printing	7.62 mm / 0.3 in thick 0-1-2-3--3-2-1-0			7.62 mm / 0.3 in thick 0-1-2-3--3-2-1-0			
		orange	**727-205**	25	orange	**727-205**		25
	**4-level end plate,** alphanumeric printing	7.62 mm / 0.3 in thick a-b-c-d--d-c-b-a			7.62 mm / 0.3 in thick a-b-c-d--d-c-b-a			
		orange	**727-206**	25	orange	**727-206**		25
	**4-level end plate,** numeric printing	7.62 mm / 0.3 in thick 3-2-1-0--0-1-2-3			7.62 mm / 0.3 in thick 3-2-1-0--0-1-2-3			
		orange	**727-207**	25	orange	**727-207**		25
	**4-level end plate,** alphanumeric printing	7.62 mm / 0.3 in thick d-c-b-a--a-b-c-d			7.62 mm / 0.3 in thick d-c-b-a--a-b-c-d			
		orange	**727-208**	25	orange	**727-208**		25
	**Wire harness support,** see also page 11.19	grey	**249-109**	50	grey	**249-109**		50
	**WSB Double marker carrier,** for I/O markings in the terminal block center	4 mm / 0.157 in wide	**209-128**	200 (2 x 100)	4 mm / 0.157 in wide	**209-128**		200 (2 x 100)
	**Screwless end stop**	6 mm / 0.236 in wide	**249-116**	100 (4 x 25)	6 mm / 0.236 in wide	**249-116**		100 (4 x 25)
		10 mm / 0.394 in wide	**249-117**	50 (2 x 25)	10 mm / 0.394 in wide	**249-117**		50 (2 x 25)
	**Test plug,** 2.3 mm / 0.091 in Ø with cable 500 mm / 1'7.7"	yellow	**210-137**	50 (5 x 10)	yellow	**210-137**		50 (5 x 10)
	**Reducing test plug,** from 4 mm / 0.157 in Ø socket to 2.3 mm / 0.091 in Ø plug	red	**210-297**	100 (4 x 25)	red	**210-297**		100 (4 x 25)
	**Wire commoning chain,** insulated, 6 A, 32 connections, 0.5 mm², max. 50 V	grey	**709-107**	1	grey	**709-107**		1
	**Insulation stop,** 8 pcs/strip							
	0.08–0.14 mm² "f-st"/0.08–0.2 mm² "s"	white	**727-197**	200 (8 x 25)	white	**727-197**		200 (8 x 25)
	0.14–0.25 mm² "f-st"/0.25 mm² "s"	light grey	**727-198**	200 (8 x 25)	light grey	**727-198**		200 (8 x 25)
	0.25–0.5 mm² "s + f-st"	dark grey	**727-199**	200 (8 x 25)	dark grey	**727-199**		200 (8 x 25)

❹ **Additional item no. for terminal blocks with marking**	0-1-2-3--3-2-1-0	...-.../**021-000**
	a-b-c-d--d-c-b-a	...-.../**022-000**
	3-2-1-0--0-1-2-3	...-.../**023-000**
	d-c-b-a--a-b-c-d	...-.../**024-000**

* For further approvals with corresponding ratings see section 15.

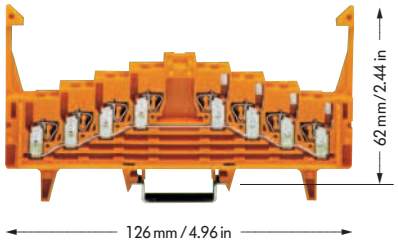
** if approved by the works expert

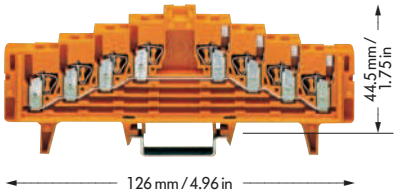
4-Level Same Potential Terminal Blocks 1.5 mm² / AWG 16, Series 727

	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 18 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 18 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A
	Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in		Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in	
	*		*	

❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(see also section 15)

❷ All clamping units are connected to the same current bar





Description		Item No.	Item No.	Pack.-unit pcs		Item No.	Item No.	Pack.-unit pcs
4-level same potential terminal block ❷,	**with**	for	for		**without**	for	for	
for DIN 35 rail	**locking clips**	DIN 35 x 7.5	DIN 35 x 15		**locking clips**	DIN 35 x 7.5	DIN 35 x 15	
acc. to EN 60715	orange	**727-225** ❸	**727-235** ❸	50	orange	**727-226** ❸	**727-236** ❸	50
	light grey	**727-227** ❸	**727-237** ❸	50	light grey	**727-228** ❸	**727-238** ❸	50

Accessories

Appropriate marking system **WMB/WSB** (see section 14)

	4-level end plate, without printing	7.62 mm / 0.3 in thick			7.62 mm / 0.3 in thick			
		orange	**727-217**	25	orange	**727-217**		25
	4-level end plate, numeric printing	7.62 mm / 0.3 in thick 0-1-2-3--3-2-1-0			7.62 mm / 0.3 in thick 0-1-2-3--3-2-1-0			
		orange	**727-205**	25	orange	**727-205**		25
	4-level end plate, alphanumeric printing	7.62 mm / 0.3 in thick a-b-c-d--d-c-b-a			7.62 mm / 0.3 in thick a-b-c-d--d-c-b-a			
		orange	**727-206**	25	orange	**727-206**		25
	4-level end plate, numeric printing	7.62 mm / 0.3 in thick 3-2-1-0--0-1-2-3			7.62 mm / 0.3 in thick 3-2-1-0--0-1-2-3			
		orange	**727-207**	25	orange	**727-207**		25
	4-level end plate, alphanumeric printing	7.62 mm / 0.3 in thick d-c-b-a--a-b-c-d			7.62 mm / 0.3 in thick d-c-b-a--a-b-c-d			
		orange	**727-208**	25	orange	**727-208**		25
	Wire harness support, see also page 11.19	grey	**249-109**	50	grey	**249-109**		50
	WSB Double marker carrier, for I/O markings in the terminal block center	4 mm / 0.157 in wide	**209-128**	200 (2 x 100)	4 mm / 0.157 in wide	**209-128**		200 (2 x 100)
	Screwless end stop	6 mm / 0.236 in wide	**249-116**	100 (4 x 25)	6 mm / 0.236 in wide	**249-116**		100 (4 x 25)
		10 mm / 0.394 in wide	**249-117**	50 (2 x 25)	10 mm / 0.394 in wide	**249-117**		50 (2 x 25)
	Test plug, 2.3 mm / 0.091 in Ø with cable 500 mm / 1'7.7"	yellow	**210-137**	50 (5 x 10)	yellow	**210-137**		50 (5 x 10)
	Reducing test plug, from 4 mm / 0.157 in Ø socket to 2.3 mm / 0.091 in Ø plug	red	**210-297**	100 (4 x 25)	red	**210-297**		100 (4 x 25)
	Wire commoning chain, insulated, 6 A, 32 connections, 0.5 mm², max. 50 V	grey	**709-107**	1	grey	**709-107**		1
	Insulation stop, 8 pcs / strip							
	0.08–0.14 mm² "f-st" / 0.08–0.2 mm² "s"	white	**727-197**	200 (8 x 25)	white	**727-197**		200 (8 x 25)
	0.14–0.25 mm² "f-st" / 0.25 mm² "s"	light grey	**727-198**	200 (8 x 25)	light grey	**727-198**		200 (8 x 25)
	0.25–0.5 mm² "s + f-st"	dark grey	**727-199**	200 (8 x 25)	dark grey	**727-199**		200 (8 x 25)

❸ **Additional item no. for terminal blocks with marking**	0-1-2-3--3-2-1-0	...-.../**021-000**
	a-b-c-d--d-c-b-a	...-.../**022-000**
	3-2-1-0--0-1-2-3	...-.../**023-000**
	d-c-b-a--a-b-c-d	...-.../**024-000**

* For further approvals with corresponding ratings see section 15.

8-Level Terminal Blocks for Matrix Patching 1.5 mm² / AWG 16, Series 727

	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 12 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A	2 x 0.08 – 1.5 mm² / 250 V/4 kV/3 ❶ / 12 A	2 x AWG 28 – 16 / 300 V, 10 A / 300 V, 10 A
	Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in		Terminal block width 7.62 mm / 0.3 in 8 – 10 mm / 0.35 in	
	*		*	

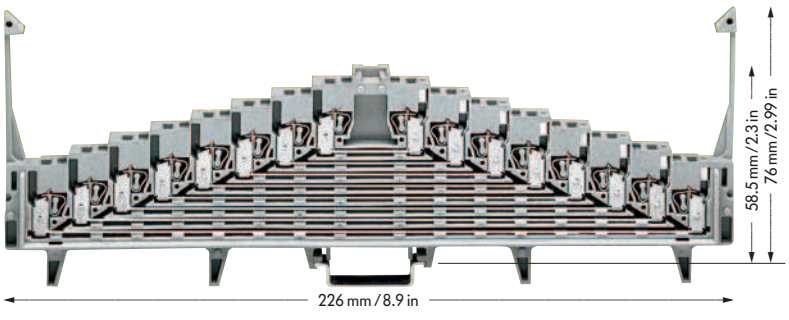
Note: Only combine terminal blocks and end plates that are colored **grey/white/light grey** or **orange/blue!**

	Ex i** application
❶ 250 V 4 kV 3	60 V = peak value ∧ table 4, EN 50020

(see also section 15)

❷ 8 x pairs of contacts on each level

❸ Suitable for Ex i applications



Description		Item No.	Item No.	Pack.-unit pcs		Item No.	Item No.	Pack.-unit pcs
8-level terminal block for matrix patching ❷,	**with**	for	for		**without**	for	for	
for DIN 35 rail	**locking clips**	DIN 35 x 7.5	DIN 35 x 15		**locking clips**	DIN 35 x 7.5	DIN 35 x 15	
acc. to EN 60715	grey	**727-119** ❹	**727-129** ❹	25	grey	**727-120** ❹	**727-130** ❹	25
	white	**727-121** ❹	**727-131** ❹	25	white	**727-122** ❹	**727-132** ❹	25
	blue	❸ **727-123** ❹	**727-133** ❹	25	blue	❸ **727-124** ❹	**727-134** ❹	25

Accessories

Appropriate marking system **WMB/WSB** (see section 14)

	8-level end plate,		orange	grey	blue	white	light grey	
		7.62 mm / 0.3 in thick						
	without printing		**727-117**	**727-113**	**727-114**	**727-115**	**727-116**	25
		7.62 mm / 0.3 in thick						
	numeric printing	0-1-2-3-4-5-6-7--7-6-5-4-3-2-1-0						
			727-105	**727-155**	**727-159**	**727-163**	**727-167**	25
		7.62 mm / 0.3 in thick						
	alphanumeric printing	a-b-c-d-e-f-g-h--h-g-f-e-d-c-b-a						
			727-106	**727-156**	**727-160**	**727-164**	**727-168**	25
		7.62 mm / 0.3 in thick						
	numeric printing	7-6-5-4-3-2-1-0--0-1-2-3-4-5-6-7						
			727-107	**727-157**	**727-161**	**727-165**	**727-169**	25
		7.62 mm / 0.3 in thick						
	alphanumeric printing	h-g-f-e-d-c-b-a--a-b-c-d-e-f-g-h						
			727-108	**727-158**	**727-162**	**727-166**	**727-170**	25
	Wire harness support,							
	see also page 11.19	grey	**249-109**		50	grey	**249-109**	50
	WSB Double marker carrier,	4 mm / 0.157 in wide				4 mm / 0.157 in wide		
	for I/O markings		**209-128**		200 (2 x 100)		**209-128**	200 (2 x 100)
	in the terminal block center							
	WSB Quick marking system,		**209-933** to		5 cards		**209-933** bis	5 cards
	for I/O markings		**209-992**		5 cards		**209-992**	5 cards
	in the terminal block center	see section 8				see section 8		
	Screwless							
	end stop	6 mm / 0.236 in wide		**249-116**	100 (4 x 25)	6 mm / 0.236 in wide	**249-116**	100 (4 x 25)
		10 mm / 0.394 in wide		**249-117**	50 (2 x 25)	10 mm / 0.394 in wide	**249-117**	50 (2 x 25)
	Test plug, 2.3 mm / 0.091 in Ø							
	with cable 500 mm / 1'7.7"	yellow	**210-137**		50 (5 x 10)	yellow	**210-137**	50 (5 x 10)
	Reducing test plug,							
	from 4 mm / 0.157 in Ø socket	red	**210-297**		100 (4 x 25)	red	**210-297**	100 (4 x 25)
	to 2.3 mm / 0.091 in Ø plug							
	Wire commoning chain,							
	insulated, 6 A, 32 connections,	grey	**709-107**		1	grey	**709-107**	1
	0.5 mm², max. 50 V							
	Insulation stop,							
	see right page							

❹ **Additional item no. for terminal blocks with marking**	0-1-2-3-4-5-6-7--7-6-5-4-3-2-1-0	...-.../**001-000**
	a-b-c-d-e-f-g-h--h-g-f-e-d-c-b-a	...-.../**002-000**
	7-6-5-4-3-2-1-0--0-1-2-3-4-5-6-7	...-.../**003-000**
	h-g-f-e-d-c-b-a--a-b-c-d-e-f-g-h	...-.../**004-000**

* For further approvals with corresponding ratings see section 15. ** if approved by the works expert