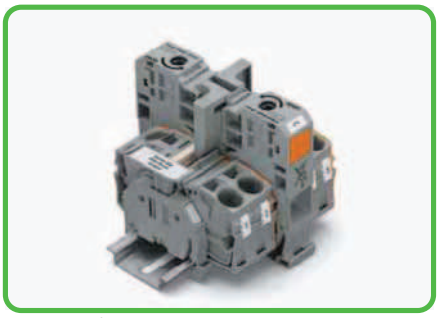
– Simply Jumpered –
Commoning via Step-Down Jumpers and Push-In Type Jumper Bars

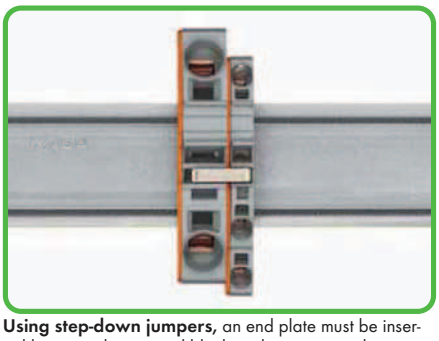


Commoning from 35 mm²/AWG 2
POWER CAGE CLAMP terminal blocks
to 10/16 mm² (AWG 8/10) TOPJOB®S terminal blocks

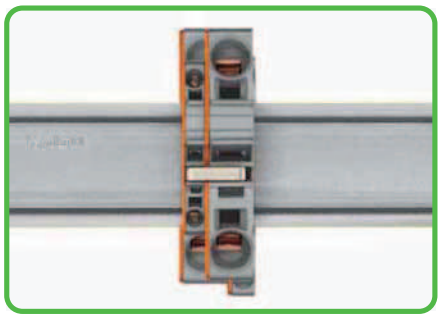
Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, in the same way as all other push-in jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard push-in type jumper bars.

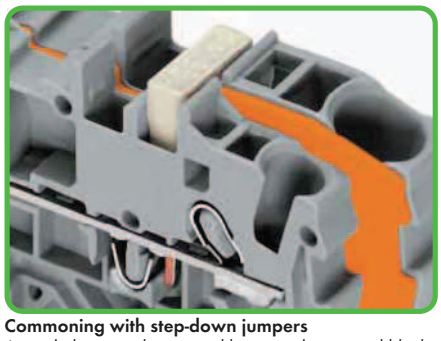
In this case, pay attention that:
The total current flowing does not exceed the rating of the step-down jumper.



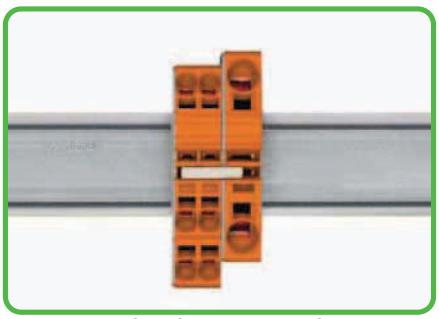
Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.



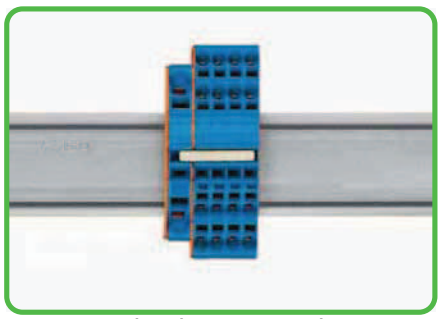
Step-down jumper 2016-499 commons 16/10 mm² (AWG 16/8) terminal blocks with 10/6/4/2.5 mm² (AWG 8/10/12/14) terminal blocks.
Step-down jumper 2006-499 commons 6/4 mm² (AWG 10/12) terminal blocks with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks.



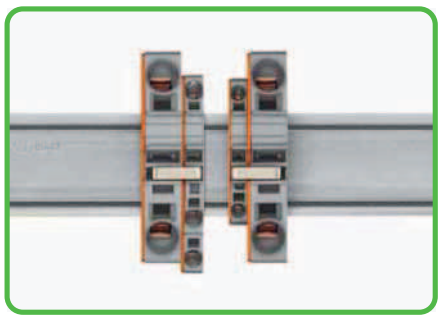
Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2006-499 commons 16/10 mm² (AWG 16/8) terminal blocks with 10/6/4/2.5 mm² (AWG 8/10/12/14) terminal blocks. Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.



Commoning with push-in type jumper bars
Commoning via open terminal side with end plate allows jumpering over two cross section sizes for 16 mm²/AWG 6 and 10 mm²/AWG 8 and one cross section size for 6/4/2.5 mm² (AWG 10/12/14); e.g., from 16 mm²/AWG 6 to 6 mm²/AWG10 (see illustration above) or from 10 mm²/AWG 8 to 4 mm²/AWG 12.



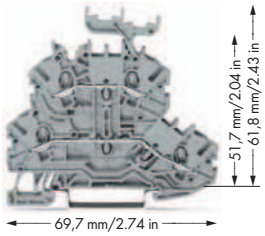
Commoning with push-in type jumper bars
Commoning via closed terminal side with end plate allows jumpering over two cross section sizes; e.g., from 16 mm²/AWG 6 to 6 mm²/AWG 10 or from 6 mm²/AWG 10 to 2.5 mm²/AWG 14 (see illustration above).

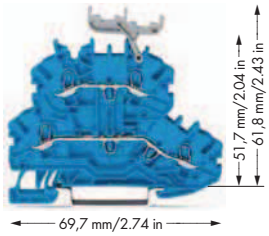


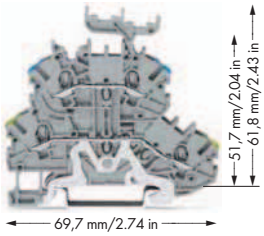
Note:
The total current flowing shall not exceed the rating of the step-down jumper/push-in type jumper bar.

TOPJOB®S
Double-Deck Terminal Blocks 1 (1.5) mm²
2000 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A (18 A) Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❸	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A (18 A) Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❸	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A (18 A) Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❸



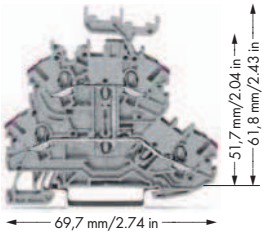


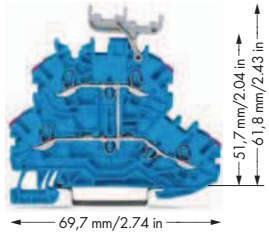


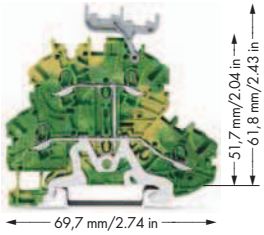
	Item No.	Pack. Unit
Through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2000-2231**	50
N/L	**2000-2232**	50
L/N	**2000-2233**	50
Through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2000-2201**	50
N/L	**2000-2202**	50
L/N	**2000-2203**	50

	Item No.	Pack. Unit
Through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2000-2234**	50
Through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2000-2204**	50

	Item No.	Pack. Unit
Ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2000-2247**	50
PE/L	**2000-2257**	50
Ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2000-2217**	50
PE/L	**2000-2227**	50







	Item No.	Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2000-2238**	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2000-2208**	50

	Item No.	Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2000-2239**	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2000-2209**	50

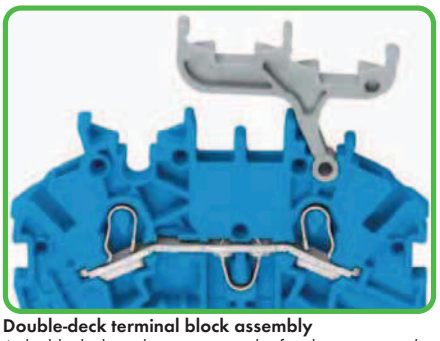
	Item No.	Pack. Unit
4-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2000-2237**	50
4-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2000-2207**	50

For list of approvals and user guide, see pages 634 to 637.

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.



Double-deck terminal block assembly
A double-deck marker carrier can be fitted retrospectively to double-deck terminal blocks without marker carrier.

2000 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 0.7 mm thick



orange	**2000-2292**	25
gray	**2000-2291**	25

Push-in type jumper bar, insulated,



I_N 14 A,
light gray

2-way	**2000-402**	200 (8x25)
3-way	**2000-403**	200 (8x25)
4-way	**2000-404**	200 (8x25)
5-way	**2000-405**	100 (4x25)
6-way	**2000-406**	100 (4x25)
7-way	**2000-407**	100 (4x25)
8-way	**2000-408**	100 (4x25)
9-way	**2000-409**	100 (4x25)
10-way	**2000-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 14 A,
light gray

from 1 to 3	**2000-433**	200 (8x25)
from 1 to 4	**2000-434**	200 (8x25)
from 1 to 5	**2000-435**	100 (4x25)
from 1 to 6	**2000-436**	100 (4x25)
from 1 to 7	**2000-437**	100 (4x25)
from 1 to 8	**2000-438**	100 (4x25)
from 1 to 9	**2000-439**	100 (4x25)
from 1 to 10	**2000-440**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2000-115**	100 (4x25)

Double-deck marker carrier,



pivoting

gray	**2000-121**	50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card,
for 3.5 mm terminal block width

plain	**793-3501**	5

Marking strip, plain,



11 mm wide,
50 m roll

white	**2009-110**	1

Test plug adapter,



for test plug 4 mm Ø

gray	**2009-174**	100 (4x25)

Banana plug,



for socket 4 mm Ø,
color mixed

	215-111	50

Testing tap,



for max. 2.5 mm²

gray	**2009-182**	100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø

red	**210-136**	50

Test plug,

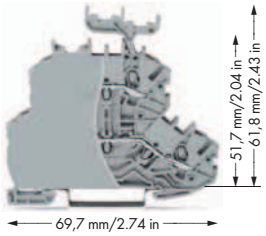


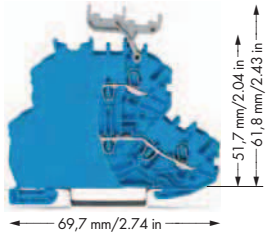
with 500 mm cable,
2.3 mm Ø

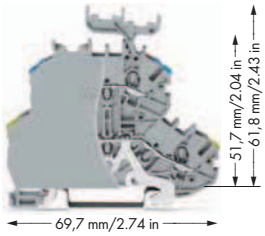
yellow	**210-137**	50

TOPJOB®S
Double-Deck Terminal Blocks 1 (1.5) mm²
2000 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 **800 V/8 kV/3 ❷** **I_N 13.5 A (18 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **800 V/8 kV/3 ❷** **I_N 13.5 A (18 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **800 V/8 kV/3 ❷** **I_N 13.5 A (18 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**



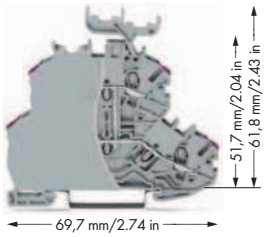


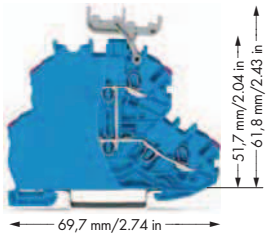


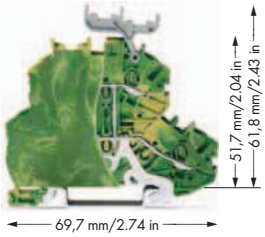
Item No.		Pack. Unit
Through/through terminal block, with end plate, with marker carrier, gray housing		
L/L	**2000-2231/099-000**	50
N/L	**2000-2232/099-000**	50
L/N	**2000-2233/099-000**	50
Through/through terminal block, with end plate, without marker carrier, gray housing		
L/L	**2000-2201/099-000**	50
N/L	**2000-2202/099-000**	50
L/N	**2000-2203/099-000**	50

Item No.		Pack. Unit
Through/through terminal block, with end plate, with marker carrier, blue housing		
N/N	**2000-2234/099-000**	50
Through/through terminal block, with end plate, without marker carrier, blue housing		
N/N	**2000-2204/099-000**	50

Item No.		Pack. Unit
Ground conductor/through terminal block, with end plate, with marker carrier, gray housing		
PE/N	**2000-2247/099-000**	50
PE/L	**2000-2257/099-000**	50
Ground conductor/through terminal block, with end plate, without marker carrier, gray housing		
PE/N	**2000-2217/099-000**	50
PE/L	**2000-2227/099-000**	50







Item No.		Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2000-2238/099-000**	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2000-2208/099-000**	50

Item No.		Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2000-2239/099-000**	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2000-2209/099-000**	50

Item No.		Pack. Unit
4-conductor ground terminal block, with end plate, with marker carrier, internal commoning, green-yellow housing		
PE	**2000-2237/099-000**	50
4-conductor ground terminal block, with end plate, without marker carrier, internal commoning, green-yellow housing		
PE	**2000-2207/099-000**	50

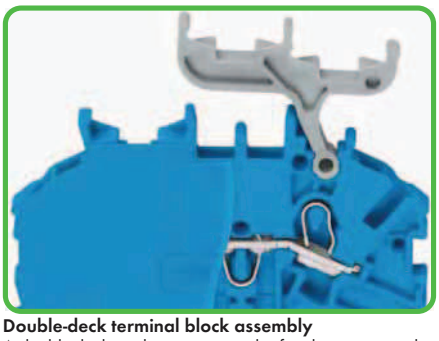
For list of approvals and user guide, see pages 634 to 637.

Accessories for Double-Deck Terminal Blocks

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.



Double-deck terminal block assembly
A double-deck marker carrier can be fitted retrospectively to double-deck terminal blocks without marker carrier.

2000 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 0.7 mm thick

orange	**2000-2292**	25
gray	**2000-2291**	25

Push-in type jumper bar, insulated,
I_N 18 A,
light gray

2-way	**2001-402**	200 (8x25)
3-way	**2001-403**	200 (8x25)
4-way	**2001-404**	200 (8x25)
5-way	**2001-405**	100 (4x25)
6-way	**2001-406**	100 (4x25)
7-way	**2001-407**	100 (4x25)
8-way	**2001-408**	100 (4x25)
9-way	**2001-409**	100 (4x25)
10-way	**2001-410**	100 (4x25)

Push-in type jumper bar, insulated,
I_N 18 A,
light gray

from 1 to 3	**2001-433**	200 (8x25)
from 1 to 4	**2001-434**	200 (8x25)
from 1 to 5	**2001-435**	100 (4x25)
from 1 to 6	**2001-436**	100 (4x25)
from 1 to 7	**2001-437**	100 (4x25)
from 1 to 8	**2001-438**	100 (4x25)
from 1 to 9	**2001-439**	100 (4x25)
from 1 to 10	**2001-440**	100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2001-115**	100 (4x25)

Double-deck marker carrier,
pivoting

gray	**2000-121**	50 (2x25)

Marking strip, plain,
11 mm wide,
50 m roll

white	**2009-110**	1

Test plug adapter,
for test plug 4 mm Ø

gray	**2009-174**	100 (4x25)

Testing tap,
for max. 2.5 mm²

gray	**2009-182**	100 (4x25)

Banana plug,
for socket 4 mm Ø,
color mixed

	215-111	50

Test plug,
with 500 mm cable,
2 mm Ø

red	**210-136**	50

Test plug,
with 500 mm cable,
2.3 mm Ø

yellow	**210-137**	50

WMB Inline, plain,
stretchable 4 - 4.2 mm,
2,000 WMB markers, 4 mm, on roll

white	**2009-114**	1

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 4 - 4.2 mm

plain	**793-4501**	5

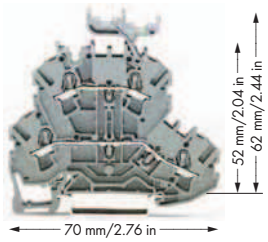
WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 4 - 4.2 mm

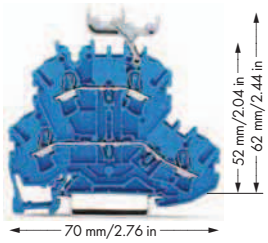
yellow	**793-4501/000-002**	
red	**793-4501/000-005**	
blue	**793-4501/000-006**	
gray	**793-4501/000-007**	
orange	**793-4501/000-012**	
light green	**793-4501/000-017**	
green	**793-4501/000-023**	
violet	**793-4501/000-024**	

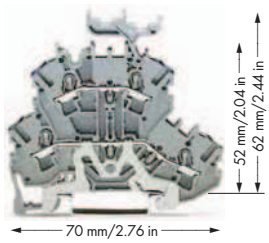
5

TOPJOB®S
Double-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ 500 V/6 kV/3 ❷ I_N 24 A (28 A)	AWG 22 - 12 300 V, 20 A 600 V, 20 A	0.25 - 2.5 (4) mm² ❶ 500 V/6 kV/3 ❷ I_N 24 A (28 A)	AWG 22 - 12 300 V, 20 A 600 V, 20 A	0.25 - 2.5 (4) mm² ❶ 500 V/6 kV/3 ❷ I_N 24 A (28 A)	AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸		Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸		Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	



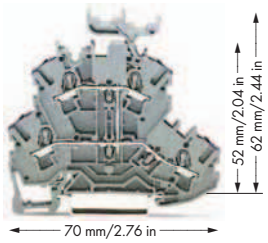


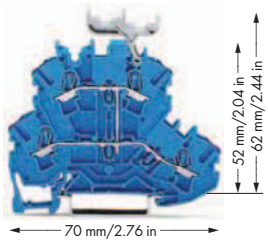


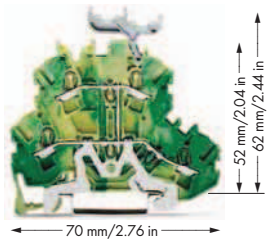
Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2002-2231** ❺	50
N/L	**2002-2232** ❺	50
L/N	**2002-2233** ❺	50
Through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2002-2201** ❺	50
N/L	**2002-2202** ❺	50
L/N	**2002-2203** ❺	50
Other terminal blocks with the same profile:		
Diode	**2002-2211/1000-410** Page 124	
LED	**2002-2221/1000-434** Page 124	

Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2002-2234** ❹ ❺	50
Through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2002-2204** ❹ ❺	50

Item No.		Pack. Unit
Ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2002-2247** ❺	50
PE/L	**2002-2257** ❺	50
Ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2002-2217** ❺	50
PE/L	**2002-2227** ❺	50







Item No.		Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2002-2238** ❺	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2002-2208** ❺	50

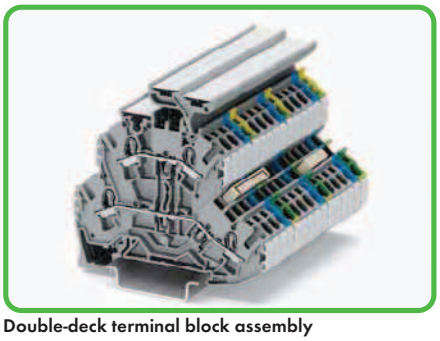
Item No.		Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2002-2239** ❹ ❺	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2002-2209** ❹ ❺	50

Item No.		Pack. Unit
4-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2237** ❺	50
4-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2207** ❺	50

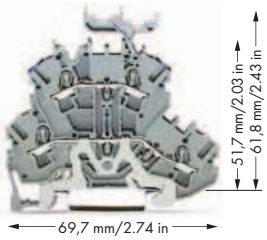
For list of approvals and user guide, see pages 634 to 637.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
500 V/6 kV/3 ❷
I_N 24 A (28 A)

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



Double-deck terminal block assembly



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

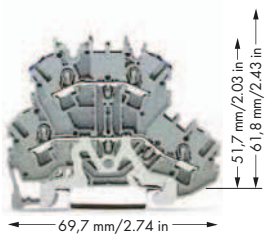
❺ Suitable for Ex e II applications
440 V, 20 A
Jumper 18 A
(also see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 52
Colored push-in type jumper bars, page 139
Vertical jumper, page 142

	Item No.	Pack. Unit
Shield conductor/through terminal block,		
with marker carrier,		
gray housing		
Shield/N	**2002-2248**	50
Shield/L	**2002-2258**	50



The ground conductor or shield terminal blocks have a contact foot in the bottom level, automatically establishing direct contact to the carrier rail.
The flexible double-deck marker carrier, which is placed above the wiring levels, can be pushed aside during the wiring or commoning operation. The marker carrier has two levels for two different WMB markers relating to the two decks of the terminal blocks.
With a terminal block width of only 5.2mm an effective width of only 2.6mm for terminal blocks of same or different potentials can be realized for conductor sizes from 0.25 mm² to 4 mm² (22-12 AWG).
For protection against external interfering signals, an increasing number of shielded control cables are being used.
Shield terminal blocks for front-entry are suitable for connecting the cable braid. Like ground conductor terminal blocks for front-entry, they are equipped with a grounding foot for direct electrical connection to the rail, however they differ significantly by their white insulated housing. Shield terminal blocks can be directly mounted beside signal-conductor terminal blocks and provide excellent deflection of interfering signals.



	Item No.	Pack. Unit
Shield conductor/through terminal block,		
without marker carrier,		
gray housing		
Shield/N	**2002-2218**	50
Shield/L	**2002-2228**	50

2002 Series Accessories

Appropriate marking system (see Section 13)

End and intermediate plate, 0.8 mm thick			
	orange	**2002-2292**	100 (4x25)
	gray	**2002-2291**	100 (4x25)
Ex e/Ex i separator, orange,			
❻	3 mm thick		
	125.5 mm	**209-192**	50 (2x25)
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❻	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Double-deck vertical jumper, insulated,			
❻	I_N 24 A		
	light gray	**2002-492**	100 (4x25)