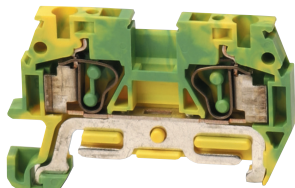**DIN**nectors®

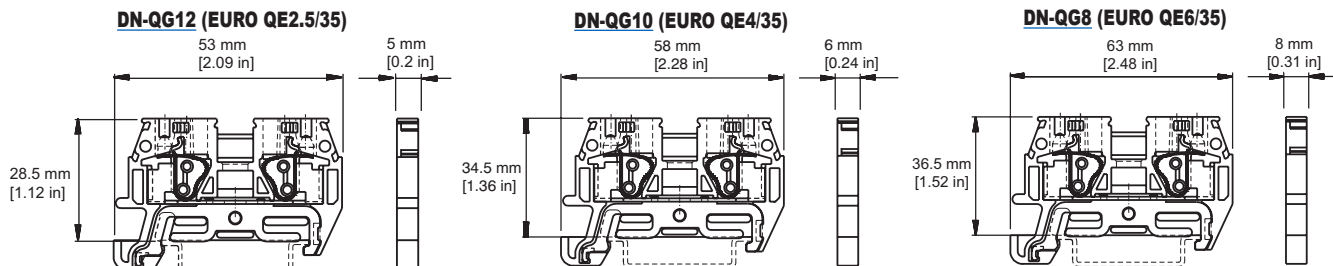# Screwless Ground Terminal Blocks

DN-QG12
(Euro QE2.5/35)

Ground terminal blocks are used to mechanically and electrically connect wires to the DIN rail by means of a conducting clamping foot. In this way, the DIN rail can function as a ground bus bar.

Ground blocks are molded in green and yellow per international standards and are 35mm DIN-rail mountable.

Ordering Information

	Part Number	Qty	Price	Part Number	Qty	Price	Part Number	Qty	Price
Green/Yellow Block	DN-QG12	10	$32.00	DN-QG10	10	$33.50	DN-QG8	10	$41.00

Technical Specifications

Stripping Length	12mm [0.47 in]	15mm [0.59 in]	18mm [0.71 in]
Density	200/m [60 pcs/ft]	166/m [50 pcs/ft]	125/m [38 pcs/ft]
UL Approval	24-12 AWG	24-10 AWG	22-8 AWG
VDE Approval	2.5 mm²	4mm²	6mm²
Operating Temperature	Ambient air temperature: -20 to 105°C [-4 to 221°F] / Relative humidity: 50% max at 40°C [104°F]; 90% max at 20°C [68°F]		
SCCR Rating	10kA per Table SB4.1, 2009, UL 508A, Maximum short circuit current rating for unmarked components		
CE Conformity	CE (EN 60947-1 / EN 60947-7-2)		
Agency File #	UL E179129		

Accessories

	Part Number	Qty	Price	Part Number	Qty	Price	Part Number	Qty	Price
End Cover	DN-QEC12	50	$21.50	DN-QEC10	50	$21.50	DN-QEC8	50	$25.50
	DN-QEC12MN	10	$5.25	DN-QEC10MN	10	$5.25	DN-QEC8MN	10	$5.75
35mm DIN Rail	DN-R35S1	10	$39.00	DN-R35S1	10	$39.00	DN-R35S1	10	$39.00
	DN-R35S1-2	2	$11.00	DN-R35S1-2	2	$11.00	DN-R35S1-2	2	$11.00
End Brackets	DN-EB35	50	$67.00	DN-EB35	50	$67.00	DN-EB35	50	$67.00
	DN-EB35MN	20	$31.50	DN-EB35MN	20	$31.50	DN-EB35MN	20	$31.50
	DN-EB35-A	50	$47.50	DN-EB35-A	50	$47.50	DN-EB35-A	50	$47.50
	DN-EB35-A-10	10	$12.00	DN-EB35-A-10	10	$12.00	DN-EB35-A-10	10	$12.00
	DN-QEB35	50	$42.50	DN-QEB35	50	$42.50	DN-QEB35	50	$42.50
	DN-QEB35-10	10	$11.50	DN-QEB35-10	10	$11.50	DN-QEB35-10	10	$11.50
Angled Support Bracket	DN-ASB1	50	$107.00	DN-ASB1	50	$107.00	DN-ASB1	50	$107.00
Marking Tags	DN-QL Series	500	various	DN-QL Series	500	various	DN-QL Series	500	various

Note: For more information on accessories, see the DINnector**s Accessories section of this chapter.**

DN-QG12 (EURO QE2.5/35)

53 mm [2.09 in]   5 mm [0.2 in]   28.5 mm [1.12 in]

DN-QG10 (EURO QE4/35)

58 mm [2.28 in]   6 mm [0.24 in]   34.5 mm [1.36 in]

DN-QG8 (EURO QE6/35)

63 mm [2.48 in]   8 mm [0.31 in]   36.5 mm [1.52 in]

DINnectors® **Screwless Ground Terminal Blocks**

DN-QG12-1-2
(EURO QME3-2.5/35)

Ordering Information						
	Part Number	*Qty*	*Price*	*Part Number*	*Qty*	*Price*
Green/Yellow Block	**DN-QG12-1-2**	10	$56.00	**DN-QG12-2-2**	10	$64.00
Technical Specifications						
Stripping Length	12mm [0.47 in]			12mm [0.47 in]		
Density	200/m [60 pcs/ft]			200/m [60 pcs/ft]		
UL Approval	24-12 AWG			24-12 AWG		
VDE Approval	2.5 mm²			2.5 mm²		
Operating Temperature	Ambient air temperature: -20 to 105°C [-4 to 221°F] Relative humidity: 50% max at 40°C [104°F]; 90% max at 20°C [68°F]					
SCCR Rating	10kA per Table SB4.1, 2009, UL 508A, Maximum short circuit current rating for unmarked components					
CE Conformity	CE (EN 60947-1 / EN 60947-7-2)					
Agency File #	UL E179129					
Accessories						
End Cover	**DN-QEC12-1-2**	25	$15.00	**DN-QEC12-2-2**	25	$16.50
35mm DIN Rail	**DN-R35S1**	10	$39.00	**DN-R35S1**	10	$39.00
	DN-R35S1-2	2	$11.00	**DN-R35S1-2**	2	$11.00
End Brackets	**DN-EB35**	50	$67.00	**DN-EB35**	50	$67.00
	DN-EB35MN	20	$31.50	**DN-EB35MN**	20	$31.50
	DN-EB35-A	50	$47.50	**DN-EB35-A**	50	$47.50
	DN-EB35-A-10	10	$12.00	**DN-EB35-A-10**	10	$12.00
	DN-QEB35	50	$42.50	**DN-QEB35**	50	$42.50
	DN-QEB35-10	10	$11.50	**DN-QEB35-10**	10	$11.50
Angled Support Bracket	**DN-ASB1**	50	$107.00	**DN-ASB1**	50	$107.00
Marking Tags	DN-QL-Series	500	various	DN-QL Series	500	various

Note: For more information of accessories, see the DIN*nector***s Accessories section of this chapter.**

DN-QG12-1-2 (EURO QME3-2.5/35)

68.5 mm [2.70 in]

28.5 mm [1.12 in]

5 mm [0.2 in]

DN-QG12-2-2 (EURO QME4-2.5/35)

87.5 mm [3.44 in]

28.5 mm [1.12 in]

5 mm [0.2 in]
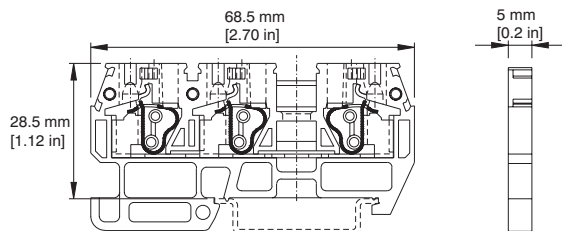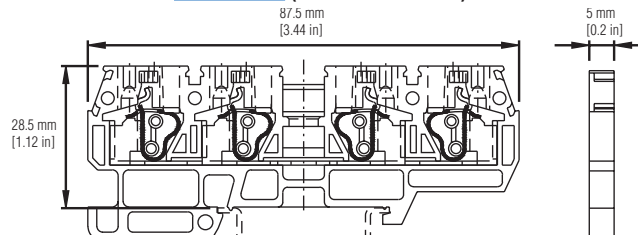
Screwless Terminal Blocks Overview

Why go screwless?

Screwless clamping technology offers several benefits:

- Speed: On average, screwless connections can be made in half the time of screw type connections, cutting installation labor costs in half.
- Ease: No need for twisting and turning screws, so screwless terminal blocks are much easier on the installer's hands and arms. Also, wiring from the top of the terminal blocks allow installers to accurately and reliably see the wire fully inserted into the spring clamp.
- Safety: Never have a problem with faulty connections from loose screws again! Meets the same UL, and IEC standards as screw-type terminal blocks.
- Maintenance-free: The screwless spring clamp conforms to the wire with constant tension, making it maintenance-free.

Are there any trade-offs of going screwless versus screw-type?

Unless you need to clamp multiple wires to the same connection point, the answer is no. If you do, then there may be a slight trade-off in requiring more panel space than with screw terminal blocks. Unlike screw terminal blocks, screwless terminal block spring-clamps are designed to clamp a single wire, only. This is why multiple versions exist like the "one-to-two" or "two-to-two." These versions allow multiple wires to be connected together via multiple spring clamps.

How does it work?

Well, it's pretty simple: Push, Insert, Release. Just push your screwdriver into the spring clamp (a rectangular shaped hole) to open the spring clamp; insert the stripped wire into the clamp a circular shaped hole), and pull out your screwdriver to release the clamp against the wire. That's it. The connection is made.
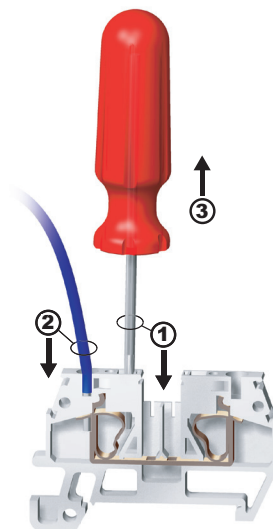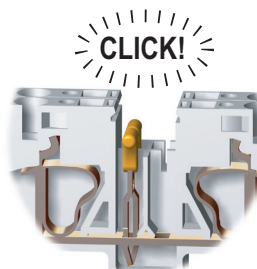
How do the jumpers work?

①

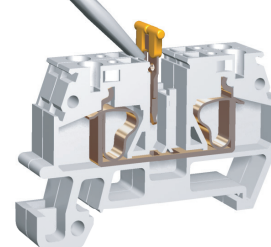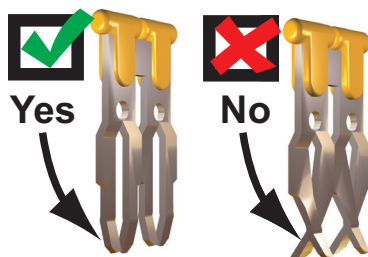Properly align jumper bar with terminal block center jumper slots.
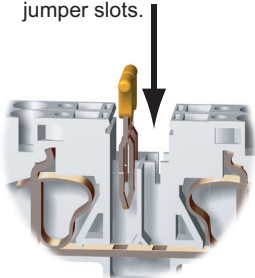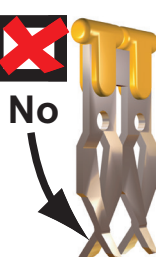
②

Push down until firmly seated.

CLICK!

Removal

Yes   **No**

Yes = Good, acceptable jumper
No = Bad, damaged jumper
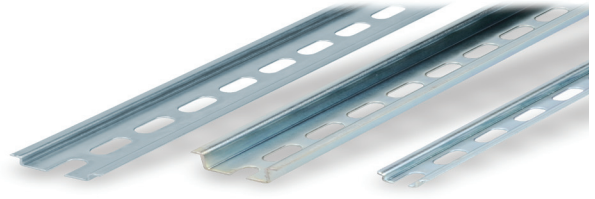
DINnectors Accessories

Steel DIN Rails Features

35mm wide
• Available in 1-meter lengths
• 7.5 mm-high rails primarily used to mount terminal blocks, relays, timers and small PLCs such as the BRX, CLICK, DirectLogic and Productivity series. 15mm-high rails for mounting larger and heavier components such as contactors and larger PLCs

15mm wide
• Available in 1-meter lengths
• DN-R15S1 exclusively for mounting mini terminal blocks such as the DN-M10-A

Steel DIN Rails Specifications									
	Part Number	**Qty**	**Price**	**Part Number**	**Qty**	**Price**	**Part Number**	**Qty**	**Price**
DIN Rail	DN-R35S1	10	$39.00	DN-R35HS1	10	$68.00	DN-R15S1	10	$36.00
	DN-R35S1-2	2	$11.00	DN-R35HS1-2	2	$16.50	DN-R15S1-2	2	$10.00
Description	DINnector DIN rail, slotted, 35mm width, 7.5mm height, 1m length, plated steel. Package of 10.			DINnector DIN rail, slotted, 35mm width, 15mm height, 1m length, plated steel. Package of 10.			DINnector DIN rail, slotted, 15mm width, 5.5mm height, 1m length, plated steel. Package of 2.		
Plating	Zinc-plated and chromated								
International Standards	EN 60715, RoHs								
Suggested Mounting Screw Type	M6			M6			M4		

Aluminum DIN Rail Features

35mm wide
• Non-anodized finish
• Zinc plating and passivation (minimum thickness 6 microns)
• Lightweight, easy to cut and deburr
• Terminal blocks only
• Maximum mounting screw #10-32 or M5
• Available in 1-meter lengths

35mm wide raised
• Non-anodized finish
• Zinc plating and passivation (minimum thickness 6 microns)
• Enables users to raise terminal blocks 2¼" above the back panel
• Terminal blocks only
• Available in 1-meter lengths
• Bushing or grommet recommended for wire access hole (example Heyco UB-875 not sold by ADC)

| Aluminum DIN Rails Specifications						
	Part Number	**Qty**	**Price**	**Part Number**	**Qty**	**Price**
DIN Rail	DN-R35SAL1	10	$60.00	DN-R35SAL2-2	2	$38.00
	DN-R35SAL1-2	2	$16.00			
Description	DINnector DIN rail, slotted, 35mm width, 10mm height, 1m length, aluminum. Package of 10.			DINnector DIN rail, slotted, 2in raised 35mm width, 7.5mm height, 1m length, aluminum. Package of 2.		
Plating	Galvanic zinc plating, non-anodized finish					
International Standards	DIN 50960, RoHs					
Suggested Mounting Screw Type	#10-32 or M5					

◼DINnectors® Accessories

DIN rail support brackets

- Angled support brackets raise and tilt mounting rails 30 degrees from mounting surface for easier wiring
- DN-ASB1 plated steel support bracket
- DN-ASB2-10 cold-rolled steel treated with galvanic zinc plating and passivation

DIN rail mounting clips

- Snap small devices not made for mounting onto 35mm DIN rails
- Zinc plated steel

| DIN Rail Support Brackets and Mounting Clips			
Part Number	Description	Qty	Price
DN-ASB1	30°angled DIN rail support bracket (M6-1.0 screws not included)	50	$107.00
DN-ASB2-10	30°angled DIN rail support bracket (M6-1.0 screws included)	10	$18.00
DN-SSB25-10	1" (25mm) DIN rail support bracket (M6-1.0 screws included)	10	$24.50
DN-SSB50-10	2" (50mm) DIN rail support bracket (M6-1.0 screws included)	10	$25.50
DN-SSB70-10	2.75" (70mm) DIN rail support bracket (M6-1.0 screws included)	10	$32.00
DN-SSB90-10	3.5" (90mm) DIN rail support bracket (M6-1.0 screws included)	10	$34.50
DN-CLIP-FM4	DIN rail mounting clip with M4 x 0.7 mm threaded hole (Screws not included)	40	$66.00
DN-CLIP-FM4-5		5	$9.50
DN-CLIP-FM5	DIN rail mounting clip with M5 x 0.8 mm threaded hole (Screws not included)	40	$66.00
DN-CLIP-FM5-5		5	$9.50

DN-ASB1

DN-ASB2-10
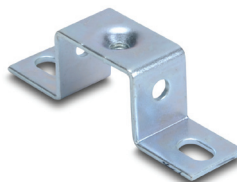
DN-SSB25-10

DN-SSB50-10

DN-SSB70-10

DN-SSB90-10

DN-CLIP-FM4
DN-CLIP-FM4-5

DN-CLIP-FM5
DN-CLIP-FM5-5

DINnectors® Accessories

DIN Rail Support Brackets and Mounting Clips

Dimensions

mm [inches]

DN-ASB1

DN-ASB2-10

DN-SSB25-10
DN-SSB50-10
DN-SSB70-10
DN-SSB90-10
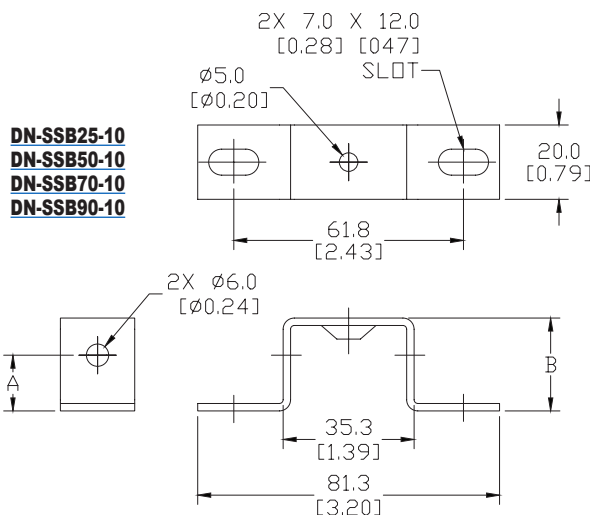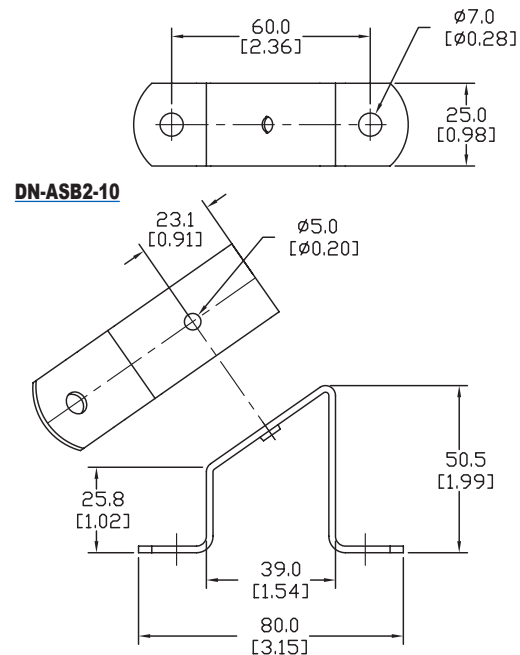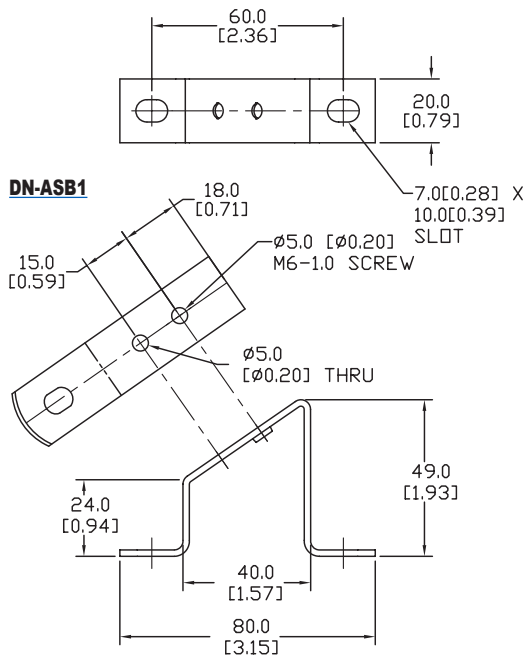
DIN Rail Support Brackets

Part Number	DIM A mm [inches]	DIM B mm [inches]
DN-SSB25-10	15.0 [0.59]	25.0 [0.98]
DN-SSB50-10	40.0 [1.58]	50.0 [1.97]
DN-SSB70-10	60.0 [2.36]	70.0 [2.76]
DN-SSB90-10	80.0 [3.15]	90.0 [3.54]

See our website: www.AutomationDirect.com for complete engineering drawings

DN-CLIP-FM4

DN-CLIP-FM5