# DINnectors<sup>®</sup> Screwless Ground Terminal



DN-QG12 (Euro QE2.5/35)

**Blocks** 

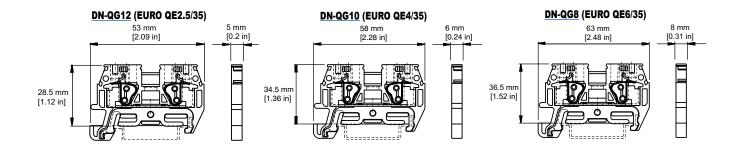


Ground terminal blocks are used to mechanically and electrically connect wires to the DIN rail by means of a conducting clamping foot. In this way, the DIN rail can function as a ground bus bar.

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    | \$35.00  | <u>DN-QG10</u>    | 10  | \$37.00  | DN-QG8              | 10  | \$45.00  |  |  |  |  |
| 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  | 5 mm² |          | 4mm <sup>2</sup>  |     |          | 6mm²                |     |          |  |  |  |  |
| <b>Operating Temperature</b> | 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   | 50    | \$23.50  | DN-QEC10          | 50  | \$23.50  | DN-QEC8             | 50  | \$28.00  |  |  |  |  |
|                              | DN-QEC12MN   | 10    | \$6.00   | DN-QEC10MN        | 10  | \$6.00   | DN-QEC8MN           | 10  | \$6.50   |  |  |  |  |
| 35mm<br>DIN Rail             | <u>DN-R35S1</u>  | 10    | \$39.00  | <u>DN-R35S1</u>   | 10  | \$39.00  | <u>DN-R35S1</u>     | 10  | \$39.00  |  |  |  |  |
|                              | <u>DN-R35S1-2</u>  | 2     | \$11.00  | <u>DN-R35S1-2</u> | 2   | \$11.00  | <u>DN-R35S1-2</u>   | 2   | \$11.00  |  |  |  |  |
| End Brackets                 | <u>DN-EB35</u>   | 50    | \$74.00  | <u>DN-EB35</u>    | 50  | \$74.00  | <u>DN-EB35</u>      | 50  | \$74.00  |  |  |  |  |
|                              | DN-EB35MN  | 20    | \$34.50  | DN-EB35MN         | 20  | \$34.50  | DN-EB35MN           | 20  | \$34.50  |  |  |  |  |
|                              | <u>DN-EB35-A</u>   | 50    | \$52.50  | <u>DN-EB35-A</u>  | 50  | \$52.50  | <u>DN-EB35-A</u>    | 50  | \$52.50  |  |  |  |  |
|                              | DN-EB35-A-10   | 10    | \$13.00  | DN-EB35-A-10      | 10  | \$13.00  | <u>DN-EB35-A-10</u> | 10  | \$13.00  |  |  |  |  |
|                              | <u>DN-QEB35</u>  | 50    | \$47.00  | <u>DN-QEB35</u>   | 50  | \$47.00  | <u>DN-QEB35</u>     | 50  | \$47.00  |  |  |  |  |
|                              | DN-QEB35-10  | 10    | \$12.50  | DN-QEB35-10       | 10  | \$12.50  | DN-QEB35-10         | 10  | \$12.50  |  |  |  |  |
| Angled Support<br>Bracket    | <u>DN-ASB1</u>   | 50    | \$107.00 | <u>DN-ASB1</u>    | 50  | \$107.00 | <u>DN-ASB1</u>      | 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 DINnectors Accessories section of this chapter.



**DIN**nectors' Screwless Ground Terminal



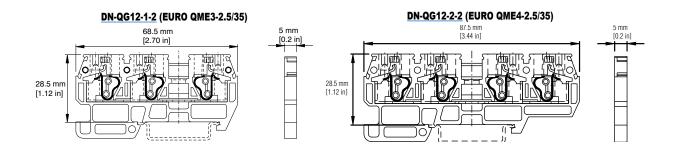
**Blocks** 



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                  | \$61.50  | DN-QG12-2-2         | 10  | \$70.00  |  |  |  |  |  |
| 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 mm <sup>2</sup> |          | 2.5 mm <sup>2</sup> |     |          |  |  |  |  |  |
| Operating<br>Temperature  | Ambient air temperature: -20 to 105°C [-4 to 221°F]<br>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,<br>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                  | \$16.50  | DN-QEC12-2-2        | 25  | \$18.00  |  |  |  |  |  |
| 35mm<br>DIN Rail          | <u>DN-R35S1</u>   | 10                  | \$39.00  | <u>DN-R35S1</u>     | 10  | \$39.00  |  |  |  |  |  |
|                           | <u>DN-R35S1-2</u>   | 2                   | \$11.00  | <u>DN-R35S1-2</u>   | 2   | \$11.00  |  |  |  |  |  |
| End Brackets              | <u>DN-EB35</u>  | 50                  | \$74.00  | <u>DN-EB35</u>      | 50  | \$74.00  |  |  |  |  |  |
|                           | DN-EB35MN   | 20                  | \$34.50  | DN-EB35MN           | 20  | \$34.50  |  |  |  |  |  |
|                           | <u>DN-EB35-A</u>  | 50                  | \$52.50  | <u>DN-EB35-A</u>    | 50  | \$52.50  |  |  |  |  |  |
|                           | DN-EB35-A-10  | 10                  | \$13.00  | DN-EB35-A-10        | 10  | \$13.00  |  |  |  |  |  |
|                           | DN-QEB35  | 50                  | \$47.00  | DN-QEB35            | 50  | \$47.00  |  |  |  |  |  |
|                           | <u>DN-QEB35-10</u>  | 10                  | \$12.50  | <u>DN-QEB35-10</u>  | 10  | \$12.50  |  |  |  |  |  |
| Angled Support<br>Bracket | <u>DN-ASB1</u>  | 50                  | \$107.00 | <u>DN-ASB1</u>      | 50  | \$107.00 |  |  |  |  |  |
| Marking Tags              | DN-QL-Series  | 500                 | various  | DN-QL Series        | 500 | various  |  |  |  |  |  |

Note: For more information of accessories, see the DINnectors Accessories section of this chapter.



# **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 screwtype terminal blocks.
- Maintenance-free: The screwless spring clamp conforms to the wire with constant tension, making it maintenance-free.

jumper slots.

#### 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."

### 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.

