

# I-Series / IDC technology



IDC stands for Insulation Displacement Connection. Innovative, more effective, offering greater cost-savings and maximum contact reliability.

This method of connection, already tried and tested in telecommunications and electronics, is now available for industrial applications incorporated into modular terminals.

The IDC technology results in minimum work during installation but still guarantees reliable contact – and all **without special cable preparation tools, the associated time or cost.**

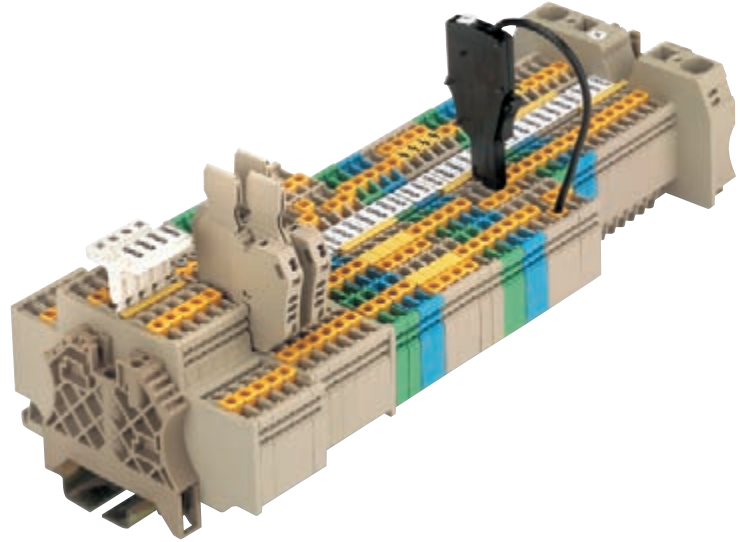
All standardised PVC-insulated conductors with cross-sections between 0.21 and 1.5 mm<sup>2</sup> (0.5 and 2.5 mm<sup>2</sup>) are suitable for this type of connection.

Users who wish to connect special conductors should consult Weidmüller first. For all up-to-date information about this

type of connection simply visit the website at **www.idc2.de**.

If it is not possible to connect a certain type of conductor, the Weidmüller hybrid

terminals, could offer the best solution. These terminals have an IDC on one side and either a screw or tension clamp connection on the other.



## Product overview

Rated cross-section	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
<b>Feed-through terminals</b>		
2 connections	•	•
3 connections	•	•
4 connections	•	•
<b>PE terminals</b>		
2 connections	•	•
3 connections	•	•
4 connections	•	•
<b>Fuse terminals</b>	•	•
<b>Disconnect terminals</b>	•	•
<b>Double level terminals</b>	•	
<b>Initiator/Actuator terminals</b>	•	
<b>Plug-in terminals</b>	•	
<b>Hybrid terminals (IDC/screw)</b>		
2 connections	•	•
3 connections	•	•
<b>Hybrid terminals (IDC/tension clamp)</b>		
2 connections	•	•
3 connections	•	
<b>Terminals with electrical components</b>	•	•

**1 The connection**

Separating the electrical and mechanical functions (galvanic isolation) results in major advantages for this type of connection, too.

- Extremely high contact reliability thanks to the extra spring (spring steel).
- Copper current bar for low through resistance..
- A wide clamping range for different cross-sections: 0.21...1.5 mm<sup>2</sup> and 0.50...2.5 mm<sup>2</sup>

**2 Plug-in cross-connections**

- 2- to 10-pole, or “endless” for custom fabrication.
- Full rated current.
- Break-out poles for bypassing alternate potentials.
- Electric shock protection (finger-proof) to German standard VBG 4.

**3 Maximum ease of use**

Insert the screwdriver as far as possible into the clamping point, press sideways, and the connection is complete!

A visible, reliable connection.

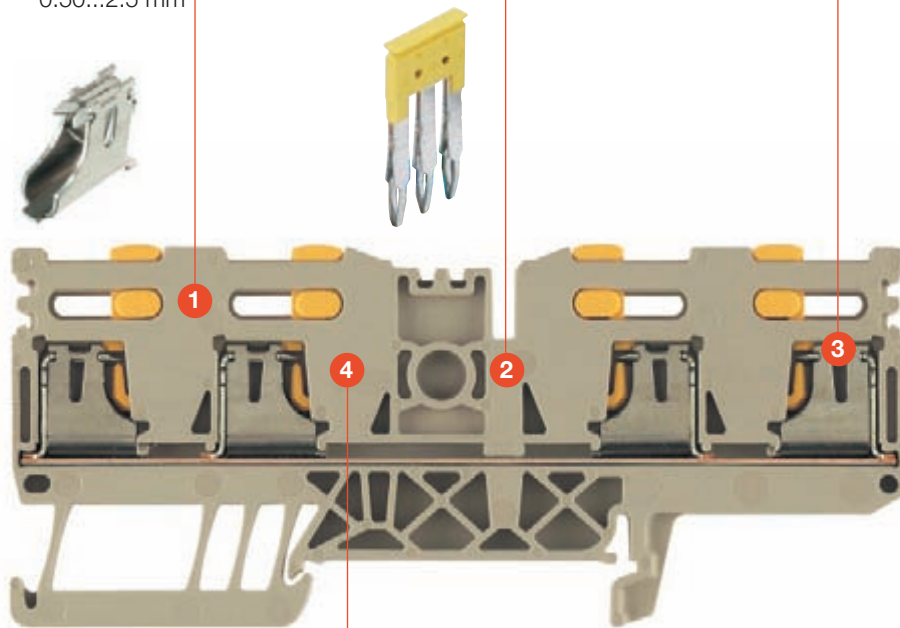


**The Wemid insulating material**

- Non-tracking, CTI 600
- Thermally stable up to 120°C
- V0 flammability rating to UL 94
- Free from halogen and phosphor flame-retardant substances

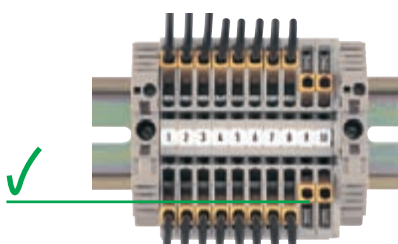
**Major time- and cost-savings**

- Time-savings of up to 76% compared with conventional types of connection (see next page)



**4 Reliable contact**

- Reliable contact thanks to the visual check



**Comprehensive accessories**

- Test adapter, test plug
- Can be used with standard and group markers
- End plates, partition plates
- Covers
- Reducing sleeves
- Fuse holder



**Standards and directives**

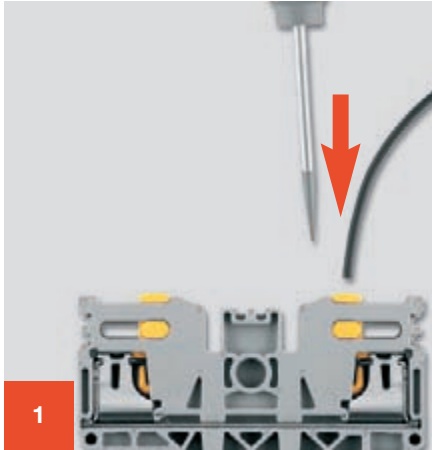
IDC2 terminals comply with standards such as:

- Modular terminal standards: IEC 60947-7-1/-2/-3
- IDC standard: IEC 60352-4
- More stringent Weidmüller tests
- National and international approvals, Germanischer Lloyd, Lloyds Register, DNV, RINA, KEMA, KEUR
- ATEX approval



## How it works

### No stripping – no crimping – no special tools



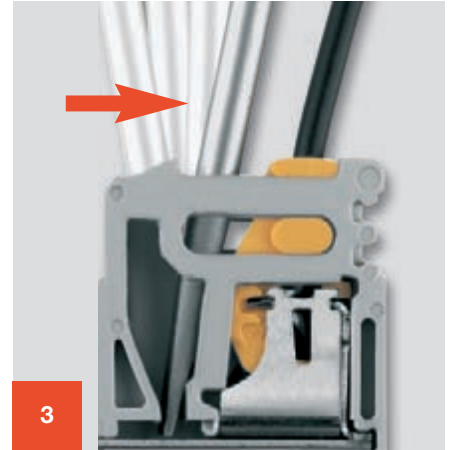
1

Insert the cut-off conductor straight into the terminal ...



2

... then insert the screwdriver as far as it will go in front of the slide.



3

Now press the slide using the screwdriver so that it engages.

Pull the screwdriver out: the conductor is securely in place. Without stripping or crimping ferrules, without the need for any special tools.

## A look inside ...

shows the benefits of our technology.

### Conductor being cut:

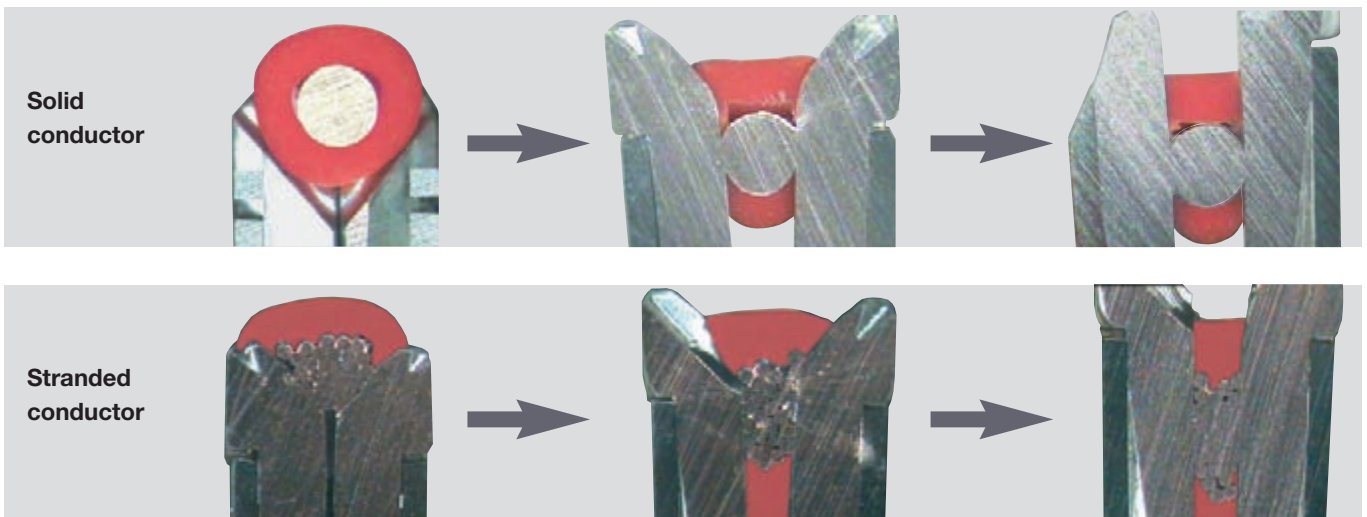
the insulation is pre-cut.

### Conductor during wiring:

the insulation is cut through, producing the first contact with the current bar.

### Conductor in its final position:

the insulation is cut through completely, ensuring secure contact over a wide area.

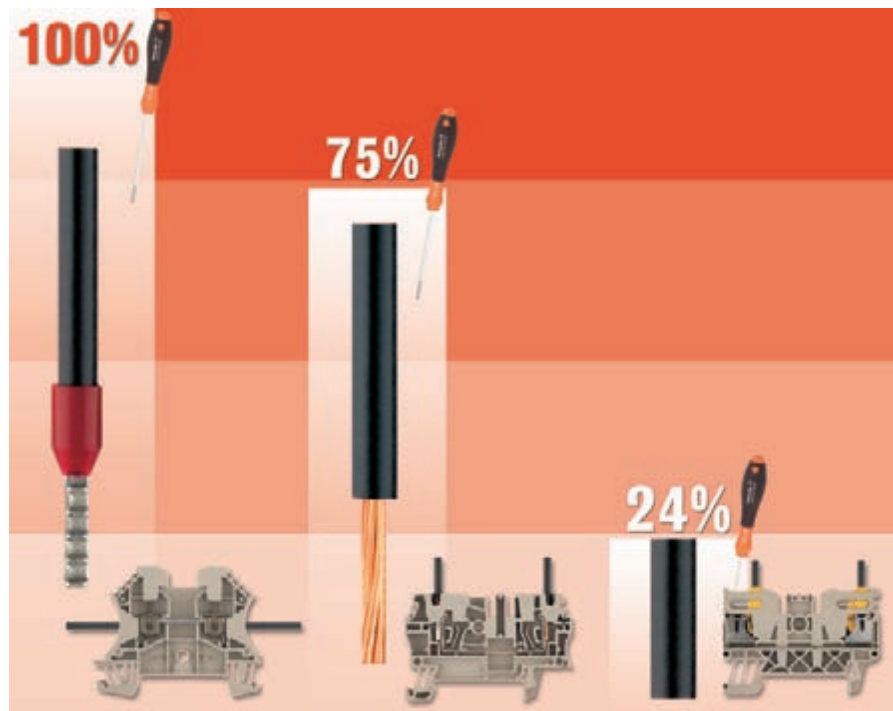


## The benefits: Extreme time-savings

In comparison:  
Clamping yoke

Tension clamp

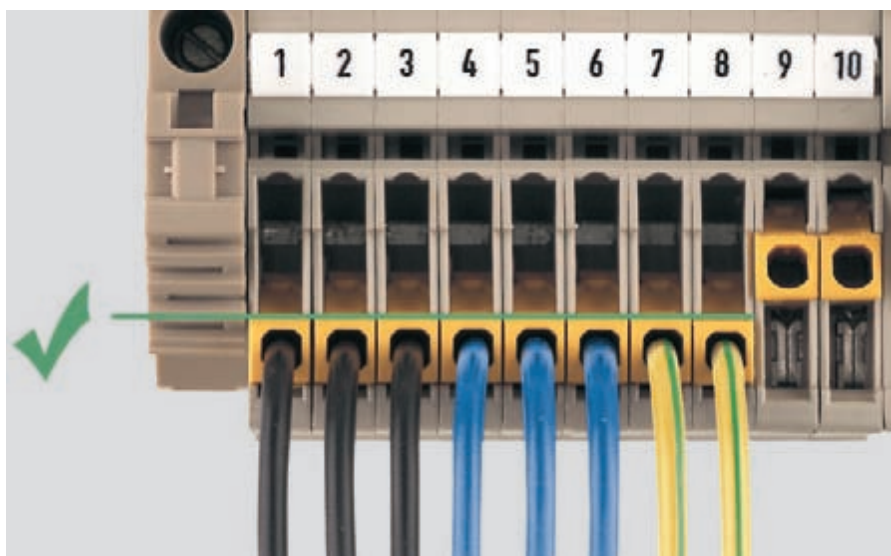
IDC2



Quick connection ...  
secure contact

Connecting with convincing results: practical tests have shown that users can achieve time-savings of up to 76 % compared to other connection techniques. The high-speed connection and more secure contact are produced without any additional tools.

## Secure connection with visual function check



The yellow sliding mechanism shows you at a glance whether the conductor is properly in contact

Separately sprung

The tensioned steel IDC contact ensures galvanic isolation. This principle offers a high degree of safety and flexibility when connecting up different conductor cross-sections.

