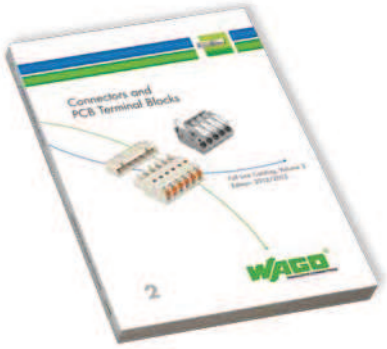
WAGO Full Line Catalogs

Volume 1, Rail-Mounted Terminal Block Systems



- Rail-Mounted Terminal Blocks
- Modular Connectors (X-COM®-SYSTEM and X-COM®-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System

Volume 2, Connectors and PCB Terminal Blocks



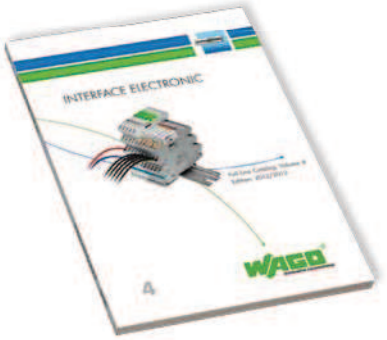
- PCB Terminal Blocks
- Feedthrough Terminal Blocks
- *MULTI CONNECTION SYSTEM*
- Pluggable PCB Connectors
- Specialty Connectors

Volume 3, AUTOMATION



- IP20 Modular I/O-SYSTEM
- Wireless Technology, *TO-PASS*® Telecontrol Technology
- Industrial Switches, *PERSPECTO*®
- IP67 Modular I/O-SYSTEM, IP67 Block I/O-SYSTEM
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors
- Power Supplies

Volume 4, INTERFACE ELECTRONIC



- Relays – Optocouplers – Special Functions
- Interface Modules
- Transducers
- Power Supplies
- Overvoltage Protection
- Wireless Technology
- Empty Housings and Mounting Carriers

Volume 5, *WINSTA*® – The Connection System



- *WINSTA*® MINI – Connectors
- *WINSTA*® MINI special – Connectors
- *WINSTA*® MIDI – Connectors
- *WINSTA*® MIDI special – Connectors
- *WINSTA*® MAXI – Connectors
- *WINSTA*® RD – Cable Assemblies
- *WINSTA*® KNX – Connectors
- *WINSTA*® IDC – Flat Cables

Operation of WAGO Connection Technologies*

CAGE CLAMP®S



The universal connectionwith "SPECIAL"

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.

CAGE CLAMP®



The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!

POWER CAGE CLAMP®



The universal connection for conductors larger than 6 AWG (16 mm²)

Handling:
- Open clamp by turning appropriate hex wrench, or operating tool, counter-clockwise.
- Press integrated latch to open clamping unit for hands-free wiring.
- Insert conductor until it hits backstop.
- A small, counter-clockwise rotation closes the clamp, securing conductor.

FIT CLAMP®



Insulation Displacement Connection (IDC)

Handling:
Push unstripped conductor into the IDC contact using an operating tool.

PUSH WIRE®



PUSH WIRE® connection for solid and stranded conductors (depending on model used)

Handling:
Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into unit.

* Please follow applicable product instructions for product-specific handling.

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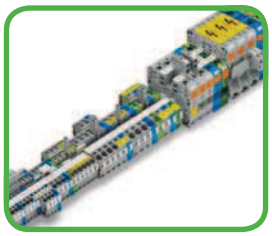
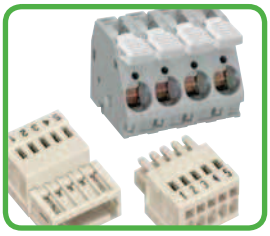


Rail-Mounted Terminal Block Systems 24 – 93
Through Terminal Blocks, Double- and Triple-Deck Terminal Blocks, Ground Terminal Blocks, Ex Terminal Blocks, High-Current Terminal Blocks, Diode Terminal Blocks, Fuse Terminal Blocks, Disconnect Terminal Blocks, X-COM® SYSTEM, X-COM®S SYSTEM, PUSH WIRE® Connectors for Junction Boxes, Lighting Connectors

Excerpt from Full Line Catalog, Volume 1, Rail-Mounted Terminal Block Systems

1



Connectors and PCB Terminal Blocks 94 – 139
MULTI CONNECTION SYSTEM:
MICRO, MINI, MINI HD, MIDI, MIDI Classic, MAXI
Rail-Mounted Terminal Blocks, Modular Terminal Blocks, Double-, Triple- and Quadruple-Deck Terminal Strips, SMD Terminal Blocks, Terminal Blocks

Excerpt from Full Line Catalog, Volume 2, Connectors and PCB Terminal Blocks

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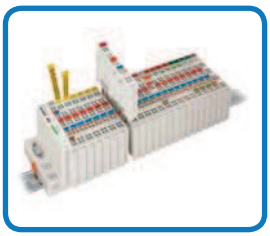

AUTOMATION 140 – 158
Fieldbus Couplers, Programmable Fieldbus Controllers, Input and Output Modules, *PERSPECTO®*, *TO-PASS®* Telecontrol Modules, Industrial Switches, Power Supply Units, Shield Connecting System

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7

Over 50 Years of Innovations

Since its establishment in 1951, WAGO has been pioneering innovative connection systems in electrical engineering and electronics. The idea for a screwless termination system was born in 1951; the first terminal blocks with spring clamp termination technology were presented at the Hanover Fair the same year.

Precisely designed and manufactured, spring-loaded connections not only guarantee a faster and easier connection, but also offer a higher safety level since the contact quality is largely independent of operator skill.

Now, WAGO is the leading specialist of Spring Pressure Termination Technology and is providing components for automation technology. In 1977, the success story of the CAGE CLAMP® began – "vibration-proof, fast and maintenance-free connections." Safe operation for countless devices, systems and installation depends on the unconditional reliability of our products.

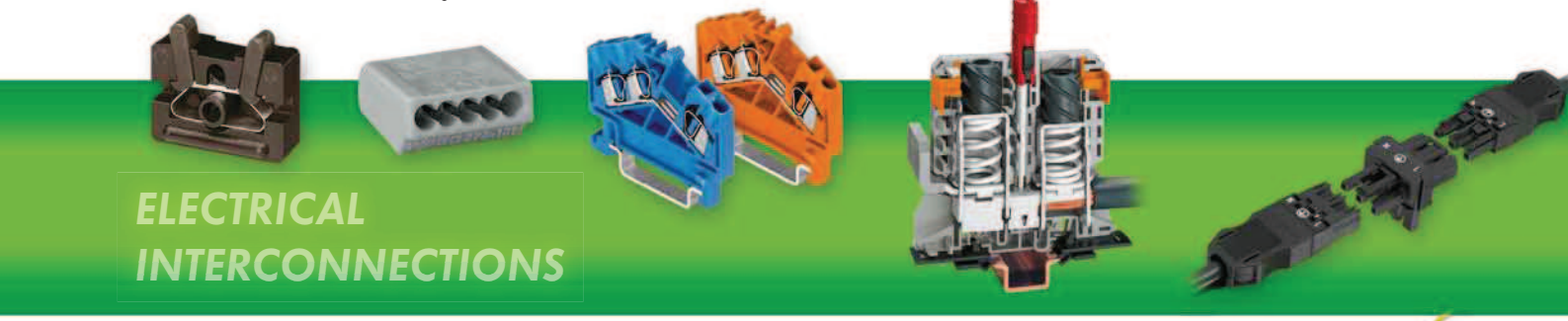
1951
The first WAGO spring clamp

1974
WAGO PUSH WIRE® Connector for Junction Boxes

1977
Rail-mounted terminal blocks with CAGE CLAMP®

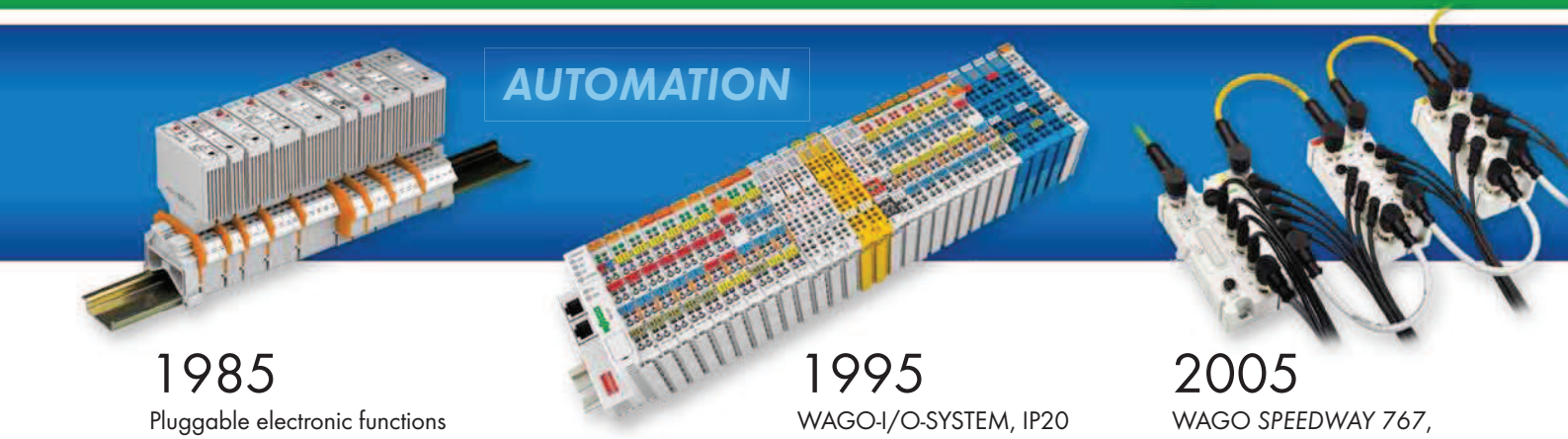
1998
POWER CAGE CLAMP®

2001
WINSTA® – The Connection System



ELECTRICAL INTERCONNECTIONS

AUTOMATION



1985
Pluggable electronic functions on rail-mounted terminal blocks

1995
WAGO-I/O-SYSTEM, IP20

2005
WAGO *SPEEDWAY 767*, modular I/O-SYSTEM, IP67

Recognized and Approved Worldwide

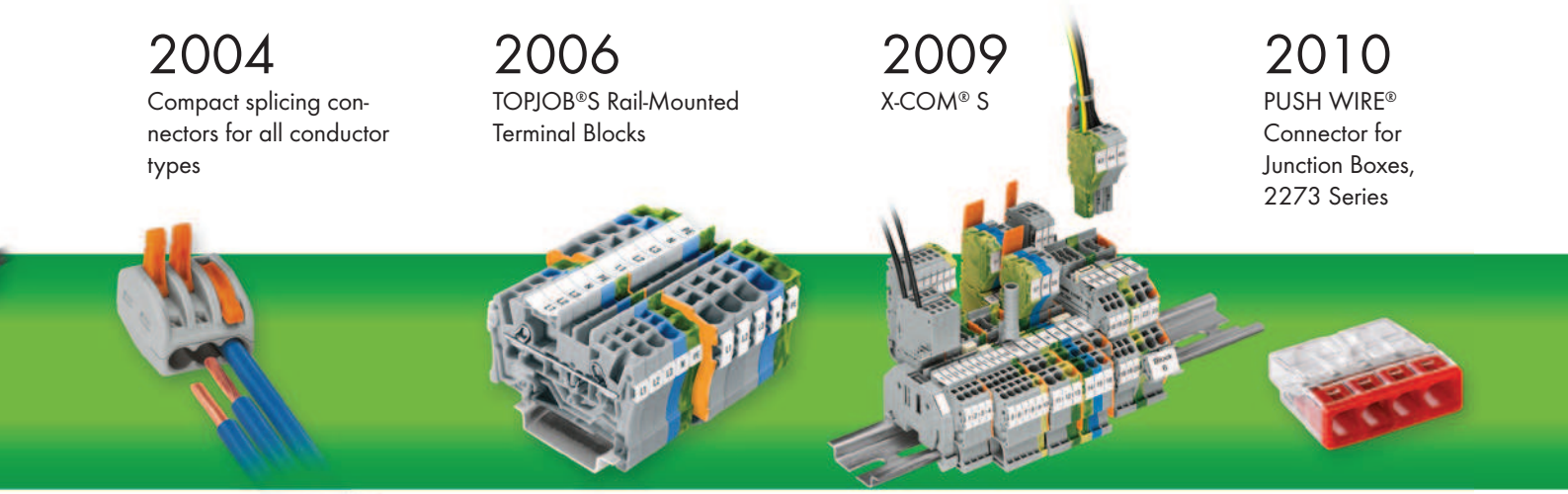


2004
Compact splicing connectors for all conductor types

2006
TOPJOB®S Rail-Mounted Terminal Blocks

2009
X-COM® S

2010
PUSH WIRE® Connector for Junction Boxes, 2273 Series





2006
WAGO *JUMPFLEX*® Transducers and Pluggable Relay Modules

2008
TO-PASS® – Scalable Telecontrol Technology

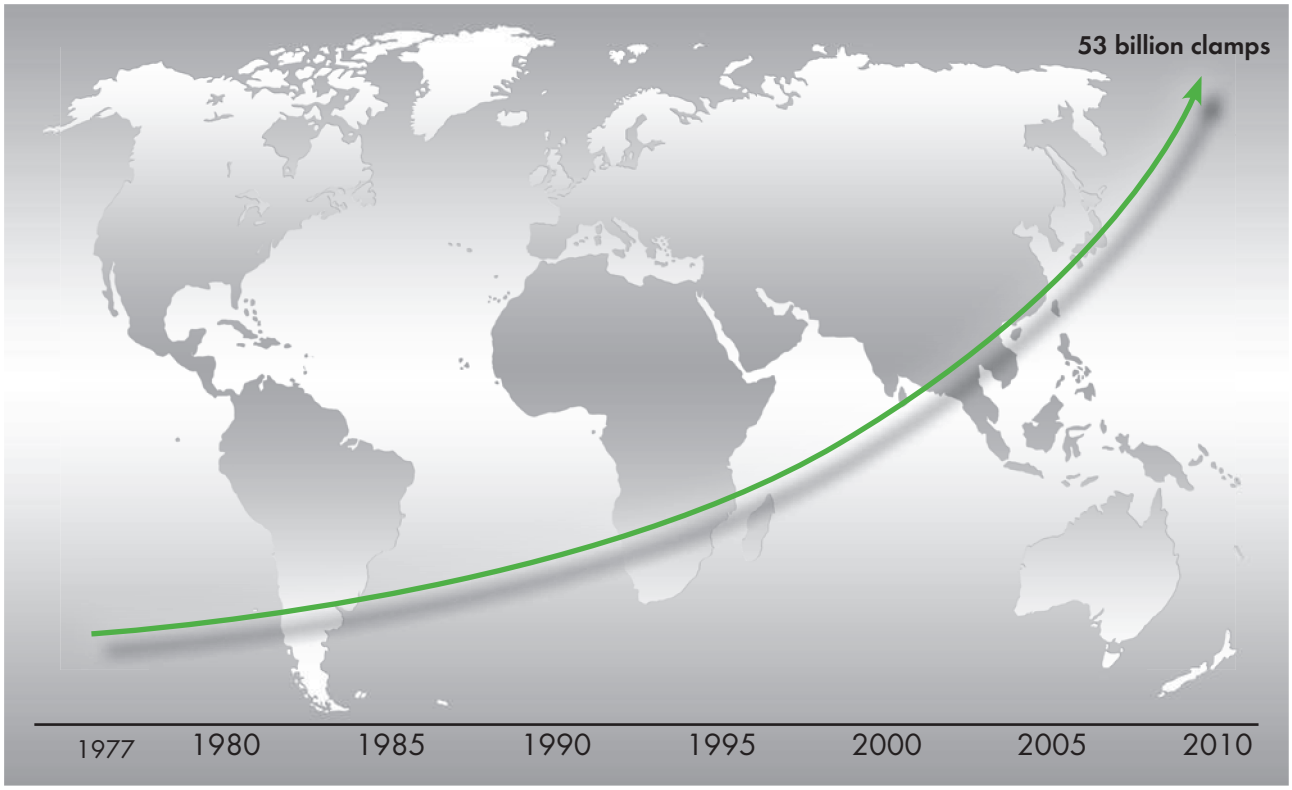
2010
PERSPECTO® Touch and Control Panels

From Pioneer to Leader

When the first terminal blocks with spring clamp termination technology debuted at the Hanover Fair in 1951, it represented a significant advancement in manufacturing. At the time, manufacturing terminal blocks was not possible because the carbon steel of the time did not meet the high quality requirements

However, WAGO was quite active in the years leading up to the 1977 debut of the first series of CAGE CLAMP®-equipped rail-mount terminal blocks from 28 to 6 AWG (0.08–6mm²). With numerous developments – from the Suprafix banana plug product family up to the first range of rail-mounted terminal blocks for conductors up to 6 AWG (16mm²) – WAGO has firmly established itself as an innovator.

With this reputation and WAGO's slogan "vibration-proof, fast and maintenance-free," CAGE CLAMP®, which was superior to all previous connection technologies, has become a worldwide industrial standard.



Number of spring clamps for terminal blocks and connectors produced to date

Today, CAGE CLAMP® technology has several imitators, yet it remains unmatched. Again WAGO is setting new standards with further developments, such as CAGE CLAMP® Compact (1996) for ultra-compact applications or WAGO POWER CAGE CLAMP (1998) for a rated cross section up to 4/0 AWG (95mm²). Furthermore, figures speak for themselves: More than 53 billion spring clamps have been sold worldwide and, every day, millions of clamps are added to that number.

WAGO Worldwide

WAGO was founded 1951 in Minden, Germany. Now, the WAGO Group consists of 32 companies with more than 5,000 employees, worldwide operations and global sales greater than 500 million euros (2010).

The first factory was located in Minden, Germany, which is also our headquarters. As part of WAGO's global expansion, additional factories have been built: 1977 in Domdidier/Switzerland, 1979 in Milwaukee/USA, 1995 in Sondershausen/Germany and Dehli/India, 1997 in Tianjin/China and Wroclaw/Poland.

Products manufactured locally for domestic and foreign markets create the starting point for a local distribution network with strong coverage of the complete product range. Such organization enables WAGO subsidiaries and sales offices to develop and deliver custom-designed products that comply with local regulations and meet local demand. Approximately half of WAGO's global staff of 5,000 is employed outside of Germany.



WAGO Minden, Headquarters



WAGO Sondershausen



WAGO Switzerland



WAGO USA



WAGO China

WAGO – At Home in the World

International success requires international presence.

WAGO is a group of companies that operates on the world stage with subsidiaries or agencies on all continents and production facilities in Germany (Minden/Westfalia and Sondershausen/Thuringia), Switzerland (Domdidier/Fribourg), Poland (Wroclaw), China (Tianjin), India (Noida/Delhi), USA (Germantown) and Japan (Koto-Ku/Tokio).

Our presence in local markets enables us to provide service tailored to our individual customers, with a finger on the pulse of our customers and suppliers. This allows us to develop and deliver products and solutions that are compliant with local codes and regulations. That is what we consider being close to our customers.

- Production sites
- Sales companies
- Representatives

America >>



Europe >>

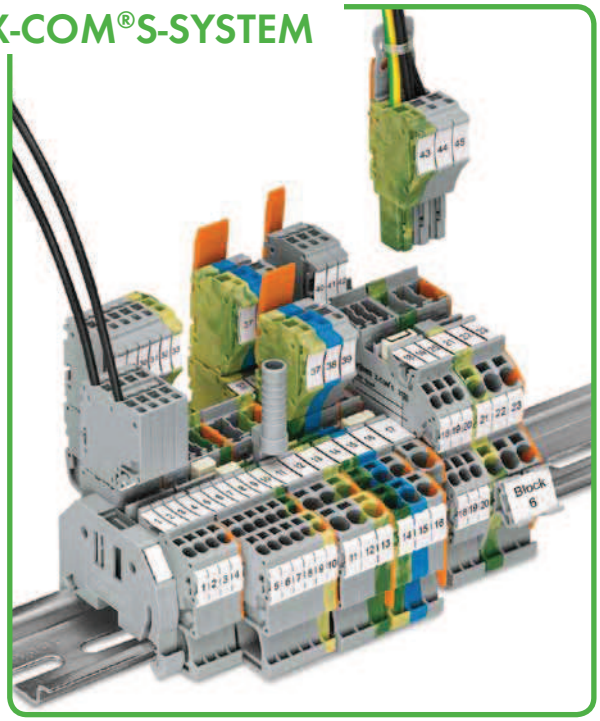
Asia >>



WAGO®
INNOVATIVE CONNECTIONS

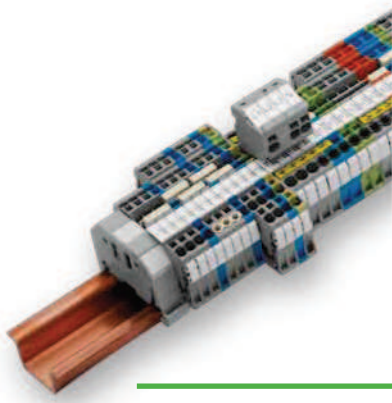
WAGO Product Range: Electrical Interconnections

X-COM®-SYSTEM
X-COM®S-SYSTEM

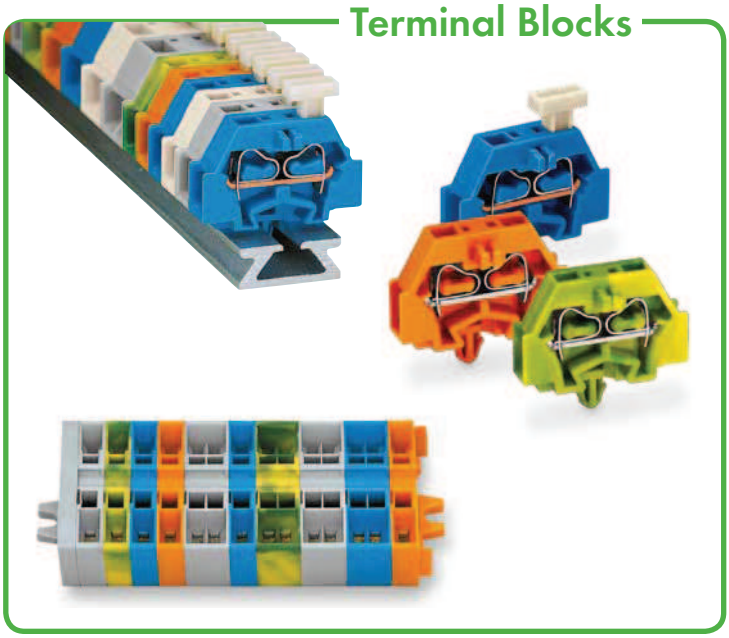


Installation Connectors

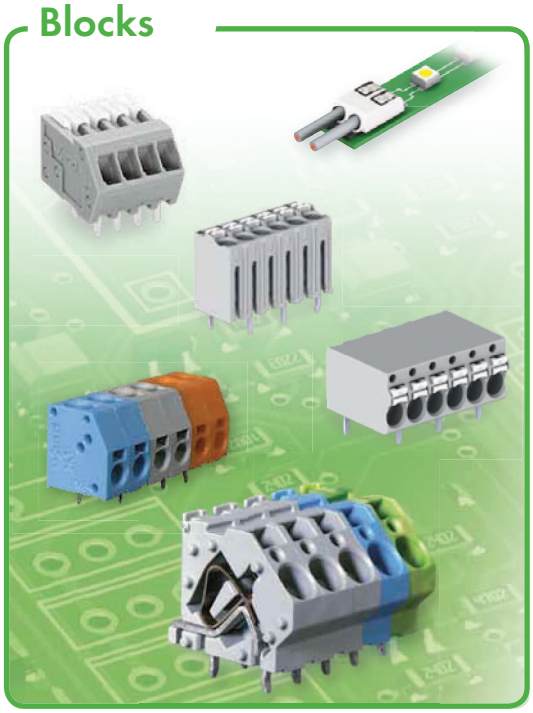




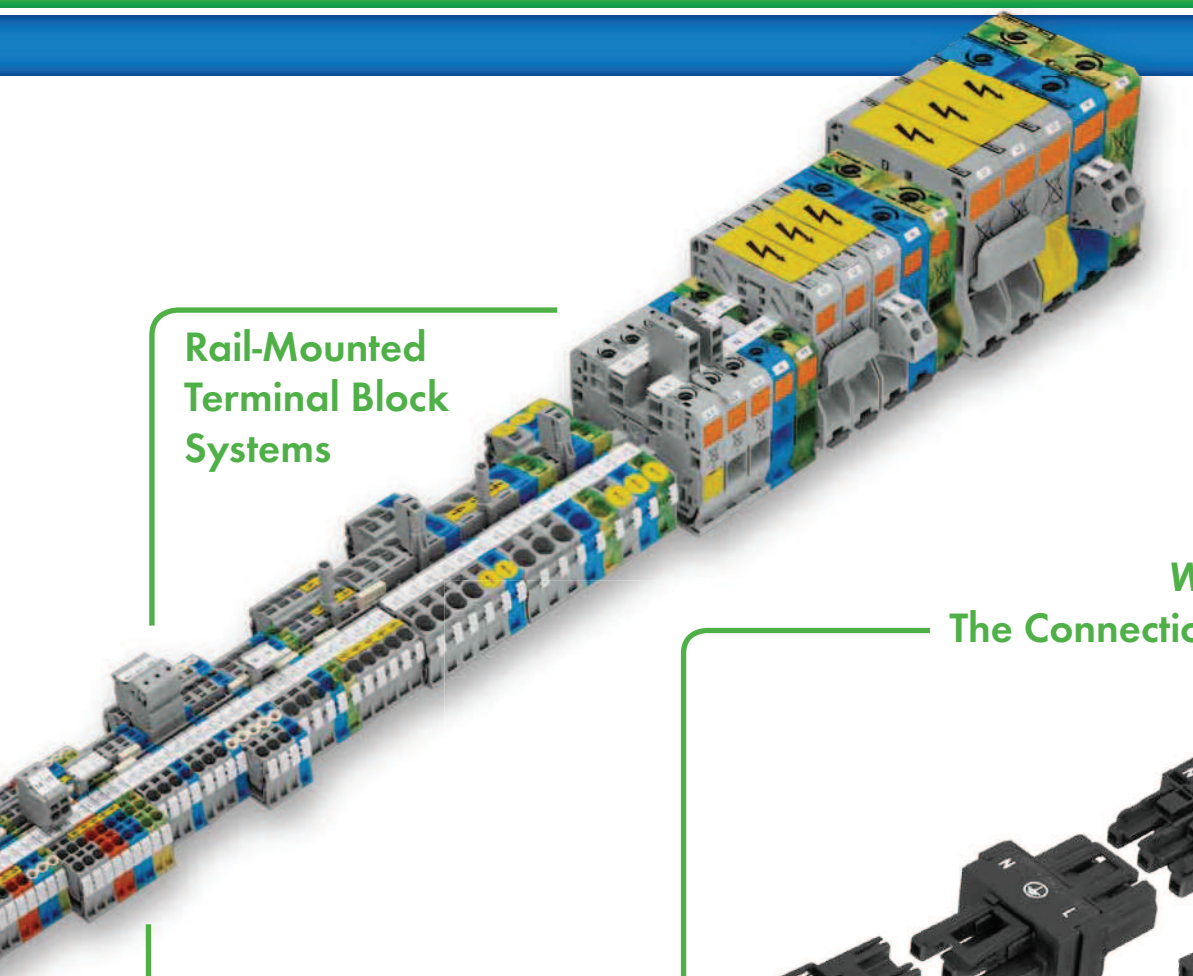
Modular Terminal Blocks



PCB Terminal Blocks



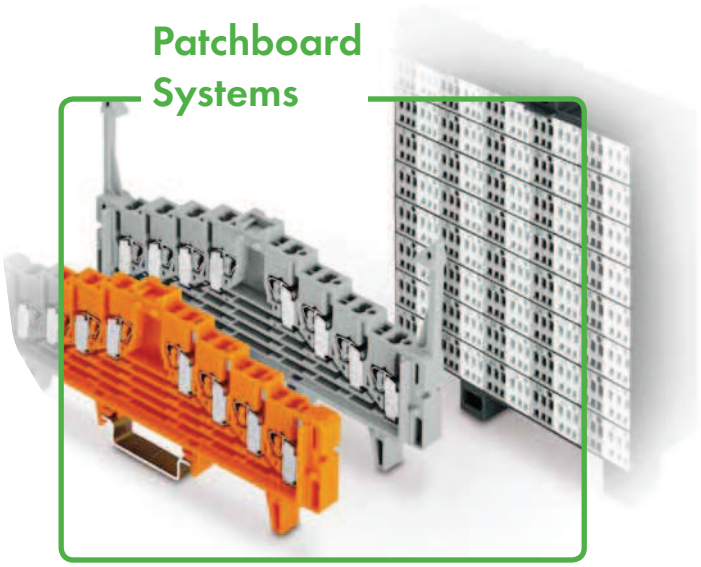
Rail-Mounted Terminal Block Systems



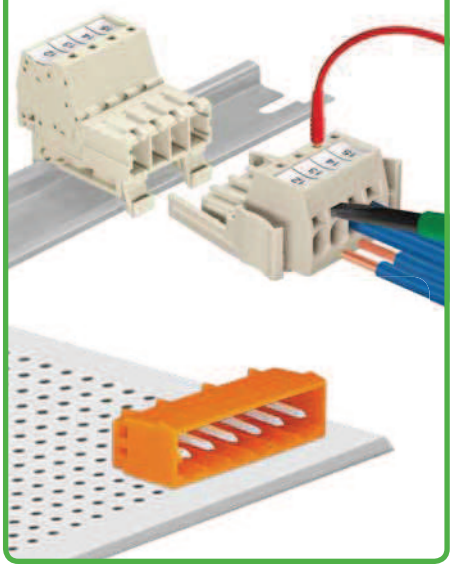
WINSTA® – The Connection System



Patchboard Systems

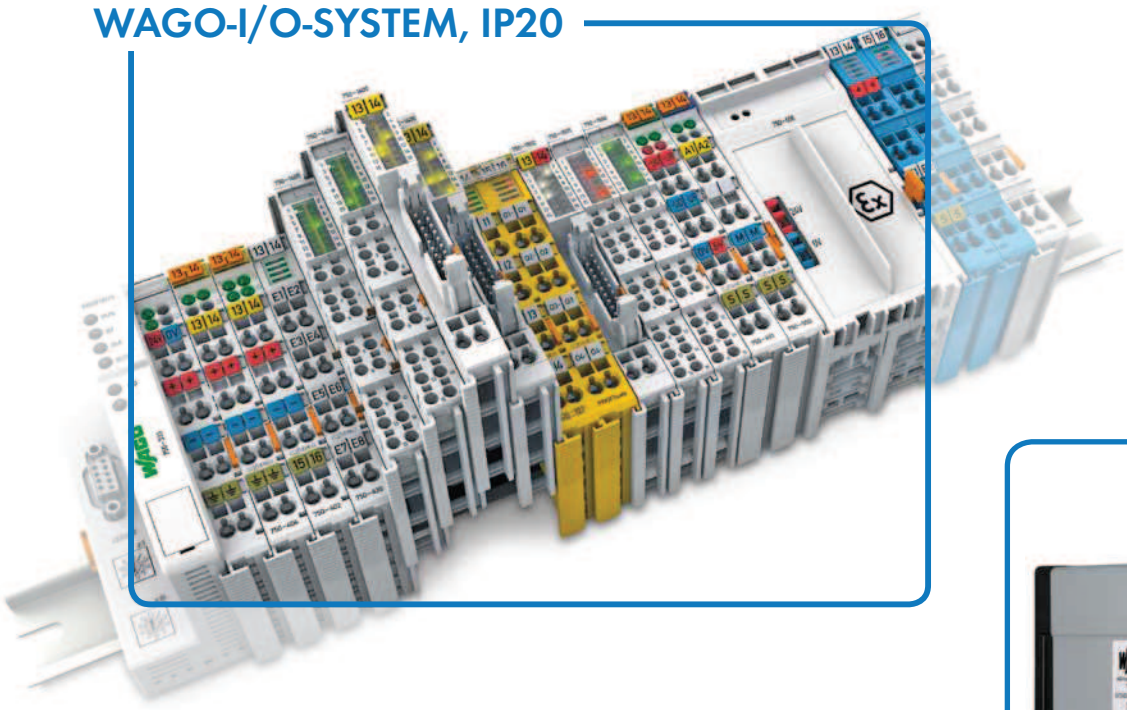


Connectors



WAGO Product Range: Automation

WAGO-I/O-SYSTEM, IP20



Power Supplies



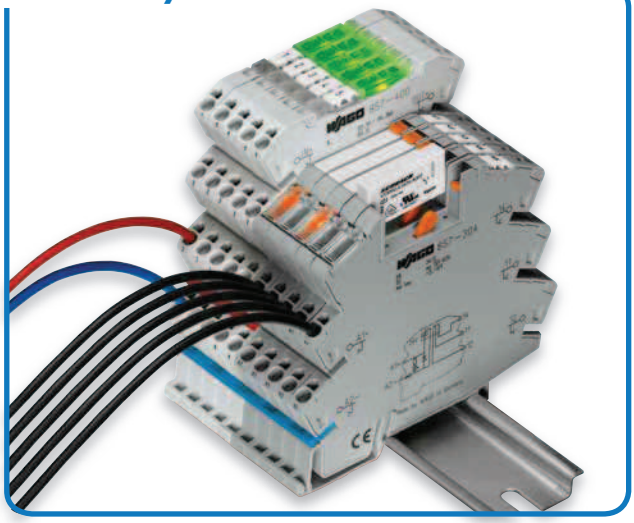
WAGO *SPEEDWAY 767*, Modular I/O-SYSTEM, IP67



PERSPECTO®



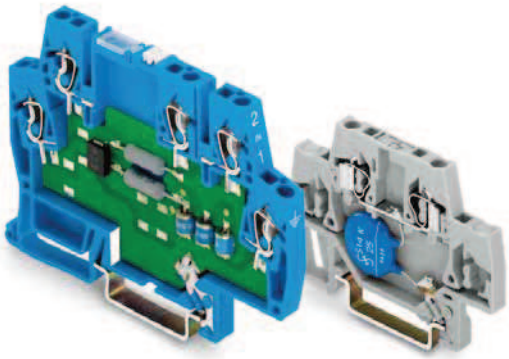
JUMPFLEX® – Transducers and Relay Modules



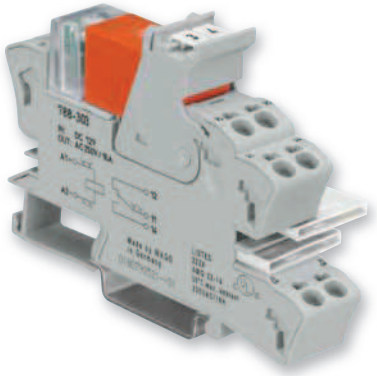
Interface Modules

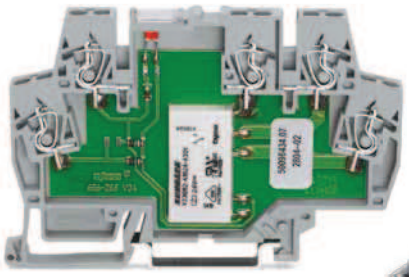


Overvoltage Protection



Relay Modules and Relay Sockets







The Wide Variety of Applications

BUILDING AUTOMATION



Building installation and automation

POWER AND PROCESS TECHNOLOGY



Energy, food, water, chemical, petrochemical and metal industries

INDUSTRY



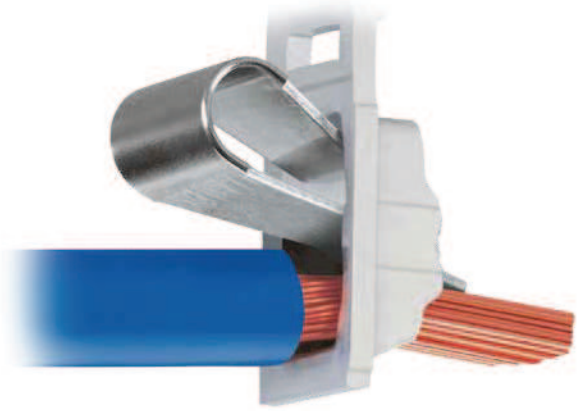
Plant automation and traffic engineering

WAGO products can be used in a wide range of applications. Our components and systems are used worldwide in industrial, automotive, process engineering, building and many other sophisticated applications.

- implement innovative solutions
- create a compact design
- save energy
- make equipment safer
- react to requirements in a flexible way
- minimize installation, maintenance costs and downtime
- guarantee reliable operation under extreme conditions
- guarantee high availability and technical safety
- accommodate individual customer requirements

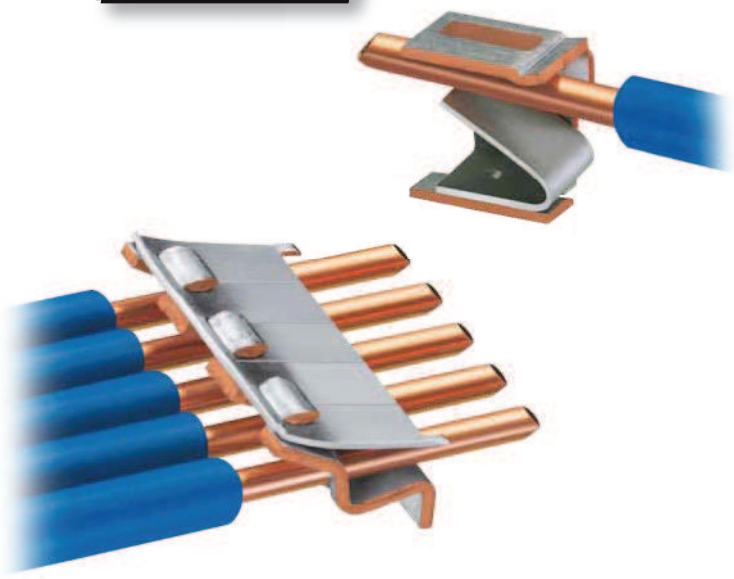
WAGO Connection Technologies

CAGE CLAMP®S



The CAGE CLAMP®S technology offers the same quality and handling features as the CAGE CLAMP® connection, however with a significant additional benefit: Solid and stranded conductors that are rigid enough, as well as fine-stranded conductors with ferrules can be directly connected without any tools. This is achieved by simply pushing in the conductor until fully inserted, without having to previously open the clamping unit

PUSH WIRE®



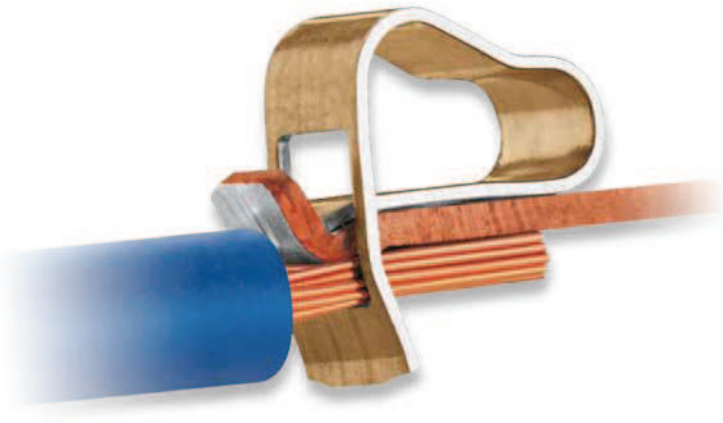
PUSH WIRE® technology is perfectly suited for fast connection of solid conductors. It utilizes the conductor's stiffness to provide safe, direct insertion into the clamping unit.

This is the fastest way to connect stripped solid conductors. PUSH WIRE® technology is widely used in connectors for junction boxes that are also available for stranded conductors. Conductor removal is performed by simultaneously twisting and pulling the conductor.

Other types of PUSH WIRE® connectors allow the connection of conductors with less rigidity by opening the clamp using a screwdriver or a push-button.

Similarly, the connected conductor can be easily removed by releasing the clamp.

CAGE CLAMP®



Rail-mounted terminal blocks with the patented WAGO CAGE CLAMP® connection were introduced in 1977. The CAGE CLAMP® technology is available for conductors with a rated cross section from 20 to 2 AWG (0.5–35mm²) in thousands of product variations.

The CAGE CLAMP® technology is suitable for solid, stranded, fine-stranded and extra fine-stranded conductors from a cross section of 28 AWG (0.08mm²). Before inserting the conductor, the CAGE CLAMP® spring must be opened using a screwdriver or, for many products, using an operating lever, push-button or slide.

After releasing the spring, the conductor, which has been inserted into the clamping point, is pressed against the current bar within a defined contact zone. The predefined contact force then ensures consistent clamping forces by automatically adjusting to the conductor cross section.

POWER CAGE CLAMP®



The POWER CAGE CLAMP connection technology is suitable for all conductor types from 10 to 4/0 AWG (6–95mm²). The connected conductor is clamped in a double cage consisting of a spring-loaded bracket and the U-shaped current bar.

To terminate the conductor, a standard Allen wrench is inserted and rotated counterclockwise. Then, the locking tab is pushed in for hands free wiring. The prepared conductor can now be inserted until it hits the backstop. A short counterclockwise turn of the Allen wrench unlocks the locking tab. After rotating Allen wrench clockwise (automatic), the conductor is terminated securely.

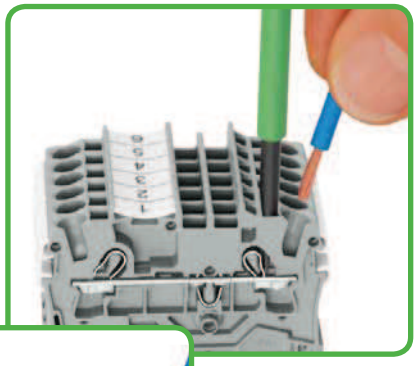
Benefits of WAGO Connection Technology

Simple, easy-to-use design

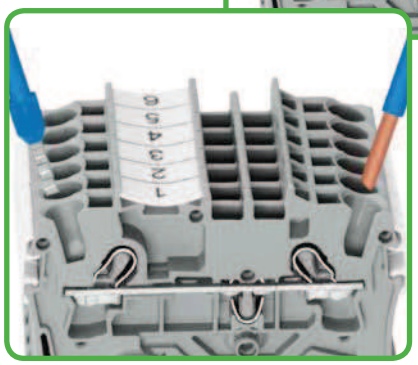
Front-entry wiring:

Side-entry wiring:

CAGE CLAMP®S

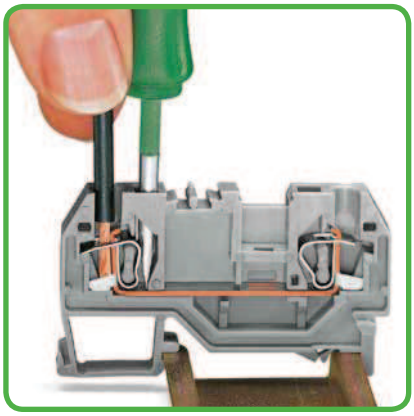


CAGE CLAMP®S connection

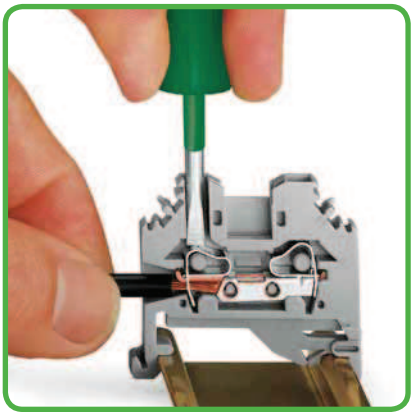


CAGE CLAMP®S connection, **push-in termination** of solid and ferruled conductors

CAGE CLAMP®



CAGE CLAMP® connection



CAGE CLAMP® connection

One Conductor per Clamping Unit – Damage-Free Connections for all Copper Conductors

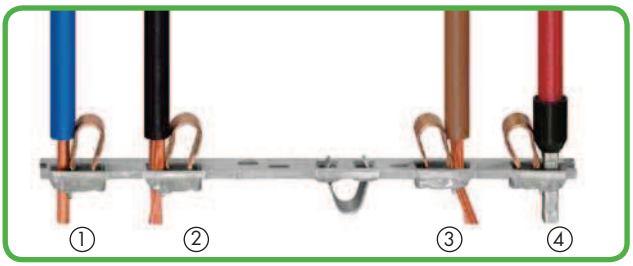
A number of VDE directives mandate or recommend that only one conductor should or must be connected per clamping unit (e.g., DIN VDE 0611, Part 4, 02.91, Section 3.1.9). WAGO complies with this safety requirement, as expressed in the corresponding directives.

Technical and economical benefits for the users:

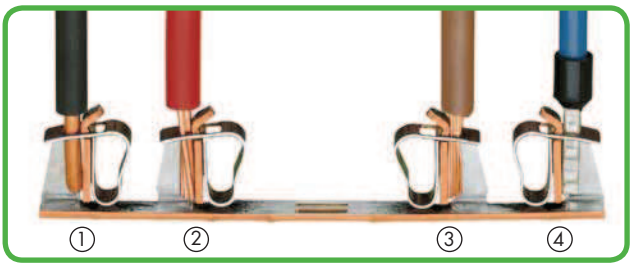
- Each conductor is clamped independently.
- Any conductor size combination per potential can be safely connected.
- Where re-wiring is required, only the conductor to be changed is removed from the clamping point, all other conductors remain safely clamped.
- The arrangement of more than two clamping units on one current bar permits potential multiplication, without jumpers or additional terminal blocks.

CAGE CLAMP® and CAGE CLAMP®S clamp all copper conductors from 28 to 2 AWG (0.08–35mm²) (4/0 AWG/ 95mm²), or from 22 to 4 AWG (0.25–25mm²). Splice protection is not required, but possible.

The conductor is pressed against the current bar in the **predefined contact area**, without damage. The clamping force adjusts automatically to the conductor size. Dynamic contact compensates for changes/movement of the conductor to eliminate the risk of a loose connection.

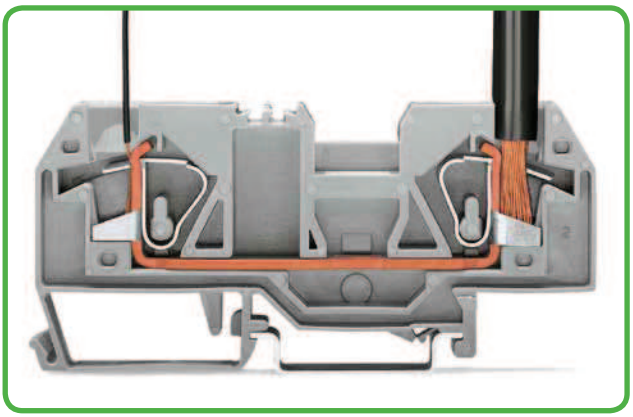


CAGE CLAMP® clamps one conductor per clamping unit.



CAGE CLAMP® clamps one conductor per clamping unit.

① solid
② stranded
③ fine-stranded
④ fine-stranded with ferrule (gastight crimped)



An unlikely connection demonstrates this capability: 24 AWG (0.2mm²) conductor (left) and 6 AWG (16mm²) conductor (right) in a 6 AWG (16mm²) terminal block.

Benefits of WAGO Connection Technology

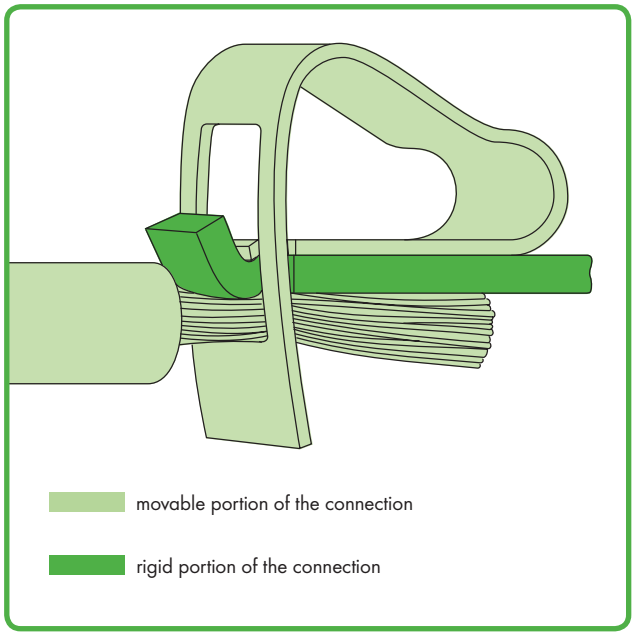
Vibration- and Shock-Proof – Maintenance-Free

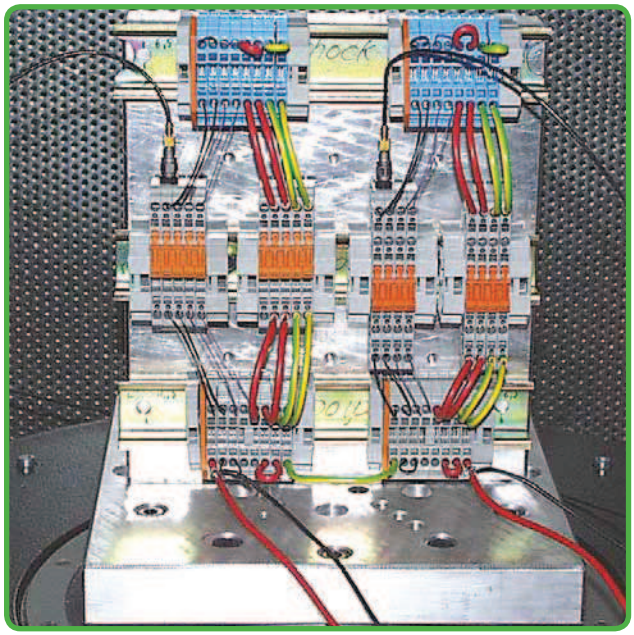
The **vibration-proof properties** of CAGE CLAMP® connections have been tested and verified in a vibration test to IEC/EN 60068-2-6. In this test, a frequency band up to 2000Hz, at different accelerations up to 20g and different amplitudes up to 20m, is passed continuously in three axes. Additionally, international authorities have placed extremely demanding requirements on electrical installations. Railway authorities have applied testing for electrical installations in rolling stock (IEC/EN 61373); multiple marine agencies (e.g., GL, LR and DNV) have also held CAGE CLAMP® to their lofty approval standards. Each rigorous test was successfully passed.

In the **Impact Test** (IEC/EN 60068-2-27) or for railway applications (IEC/EN 61373), test specimens are exposed to instant shock stresses, instead of permanent vibrations. Stresses up to 100g on the x-, y-, and z-axis were easily passed.

Maintenance-free operation results from excellent long-term consistency of the electrical and mechanical properties of the clamping connection – or more precisely, the clamping unit. The Voltage Drop Test evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences, in order to verify that the contact point is gas-tight. The long-term consistency of CAGE CLAMP® technology has been demonstrated both through laboratory testing by international approval agencies and from world-wide applications.

The resulting maintenance-free operation reduces service costs, leading to greater equipment availability and reliability.



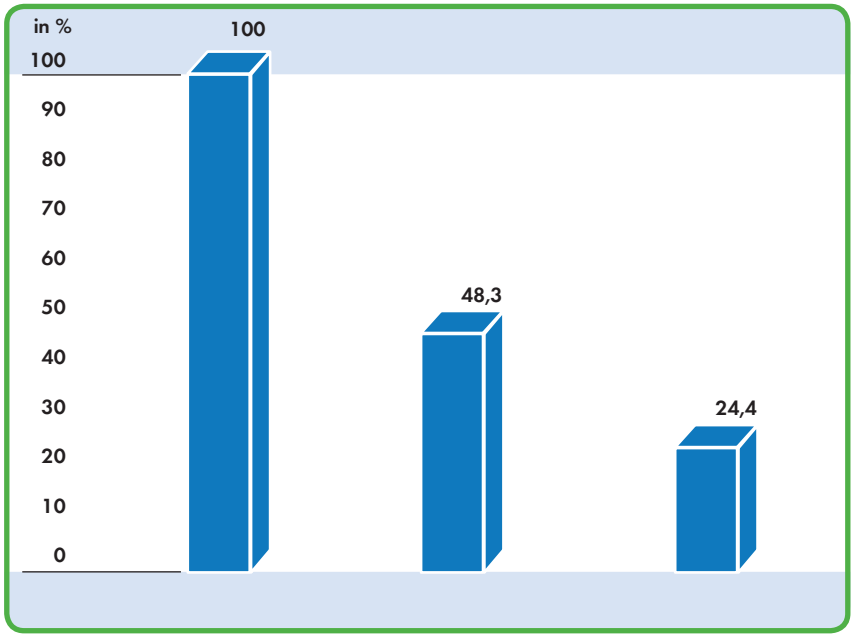


Time-Saving

CAGE CLAMP® technology **significantly reduces wiring times**, which helps minimize labor costs.

Additional savings provided via **faster project commissioning** and **elimination of service costs** due to maintenance-free terminations.

Savings go further **by reducing both material and labor costs** through eliminating the need to prepare ferrules or pin terminals prior to termination. Front-entry terminal blocks are specified for top-tier designs because they minimize both install time and effort.



Average manual wiring times in a percentage comparison (per MTM)

Benefits of WAGO Connection Technology

Gastight Clamping Units – Measurable Contact Quality



Climatic chambers simulate standard atmospheres that could impact long-term constancy of clamping units. All WAGO products meet requirements for the following climatic tests:

- Temperature Cycling Test to IEC/EN 60947-7-1, IEC/EN 60998-2-2
- Industrial Atmospheres to EN ISO 6988, IEC/EN 60068-2-42, IEC/EN 60068-2-60
- Salt Spray Test to IEC/EN 60068-2-11, Marine Applications GL, LR, DNV
- Quick Change of Temperature to IEC/EN 60068-2-14
- Damp Heat, Cyclic (12 + 12 Hours) to IEC/EN 60068-2-30, Marine Applications GL, LR, DNV

Long-term consistency for the low contact resistance of both CAGE CLAMP® and CAGE CLAMP®S results from **gas-tight** clamping units. The spring clamp (acid- and saltwater-proof CrNi spring steel) presses the connected conductor against the current bar (electrolyte copper with lead-free, pure tin coating) within a defined contact zone. The conductor is embedded into the soft tin layer with high contact pressure, securing it against corrosive infiltration.

The contact pressure

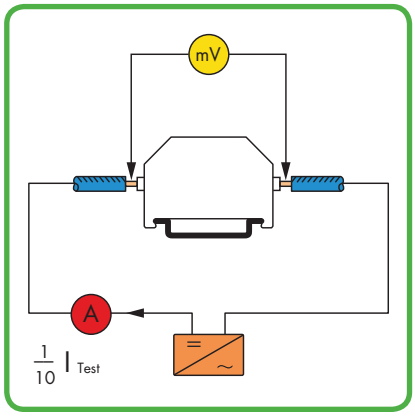
$$P\left[\frac{N}{mm^2}\right] = \frac{\text{Force F [N]}}{\text{Area A [mm}^2\text{]}}$$

exerted by CAGE CLAMP® terminations is similar to screw-style terminals.



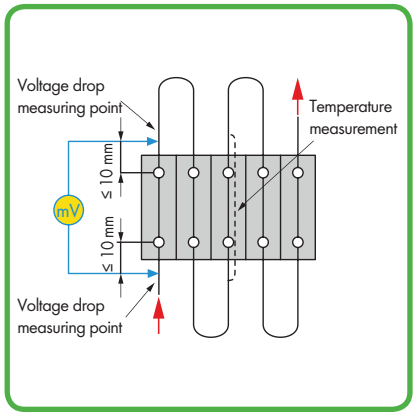
To best evaluate the quality of a clamping point, WAGO uses the following test procedures:

The **Voltage Drop Test** evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences.



Test arrangement: "Voltage Drop Test"

The **Temperature-Rise Test** examines the clamping unit, including the surrounding insulation, at rated current, overcurrent and short-circuit current levels.



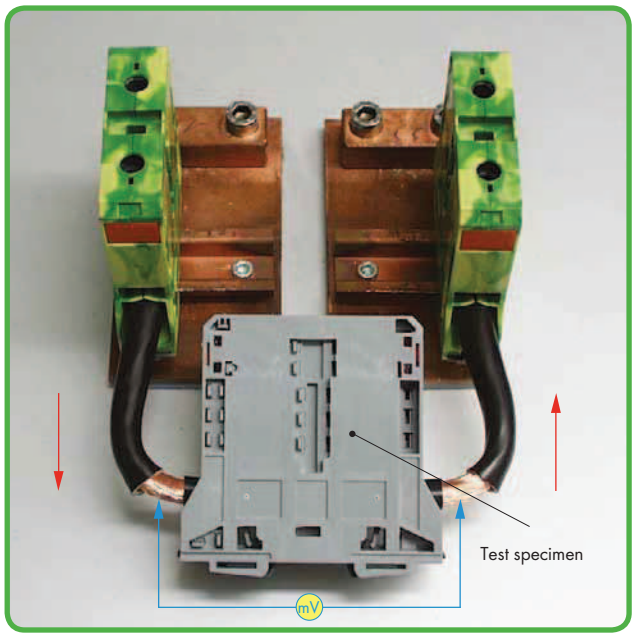
Test arrangement: "Temperature-Rise Test"

High-Current Carrying Capacity

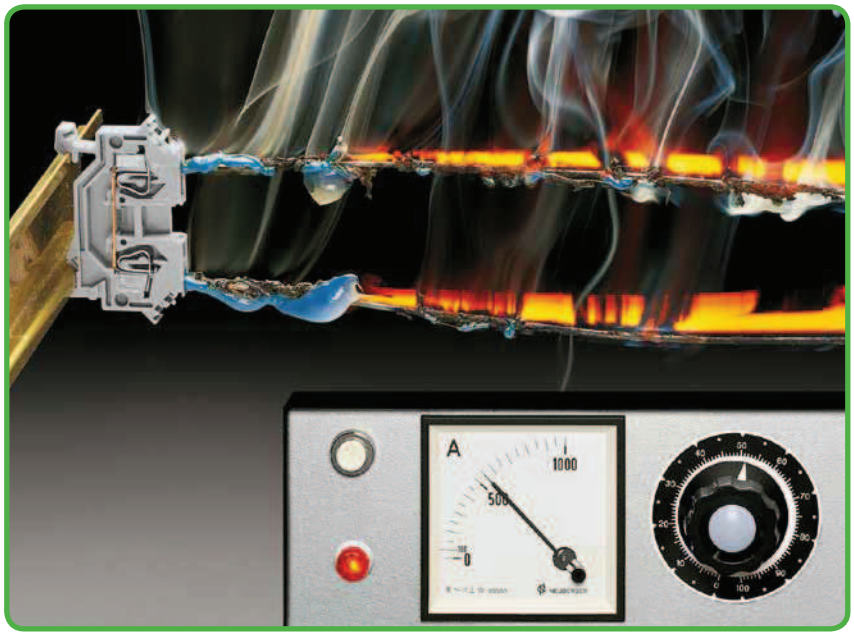
The **short-time withstand capacity** is defined in standards such as IEC/EN 60947-7-1 for through rail-mounted terminal blocks. It is a **current-carrying capacity of 120A per mm² nominal diameter** for the duration of 1 second. **In the case of a 4/0 AWG (95 mm²)** WAGO 285 Series **High-Current Terminal Block, this translates to 11,400A!**

Ground conductor terminal blocks are submitted to the "120A per mm²" test for 3x one second.

The pass criterion for the test is the voltage drop (limit value and constancy). CAGE CLAMP® and CAGE CLAMP®S connections passed this test without damage or reduced functionality.



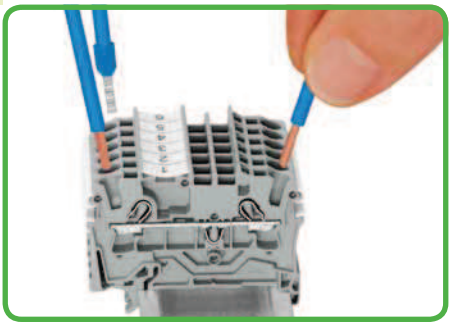
Test arrangement: "Short-Time Current Withstand Test"



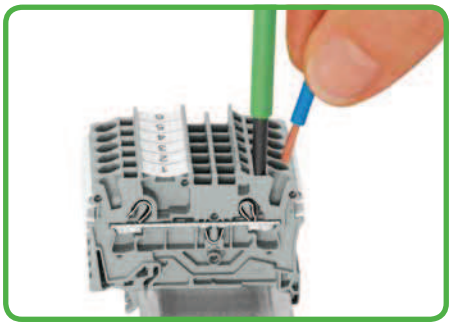
Unrealistic test of a CAGE CLAMP®-equipped,12 AWG (4mm²) rail-mounted terminal block: **Increase of current without time limit.** In such an extreme test – normally, fuse devices would have interrupted the current – **the electrical connection is undamaged.**

TOPJOB®S Rail-Mounted Terminal Blocks 2000, 2001, 2002, 2004, 2006, 2010 and 2016 Series

Conductor termination/removal



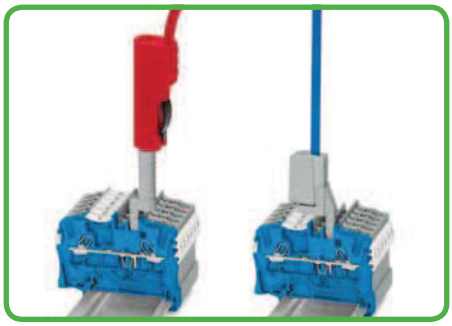
Push-in termination: Solid conductors with cross sections from either one size above, or up to two sizes below, the rated cross section can be pushed in directly – without tools.



With screwdriver: The operation of the clamp remains the same for unprepared fine-stranded conductors or small cross sections that don't allow push-in termination.

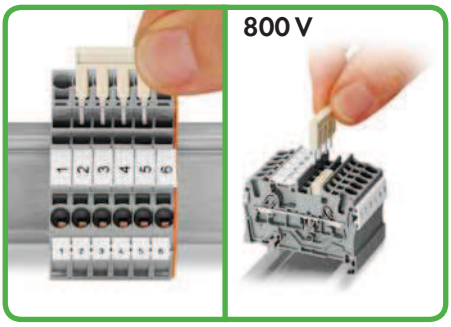
Like the original CAGE CLAMP®, a screwdriver is used for conductor removal with CAGE CLAMP®S.

Testing



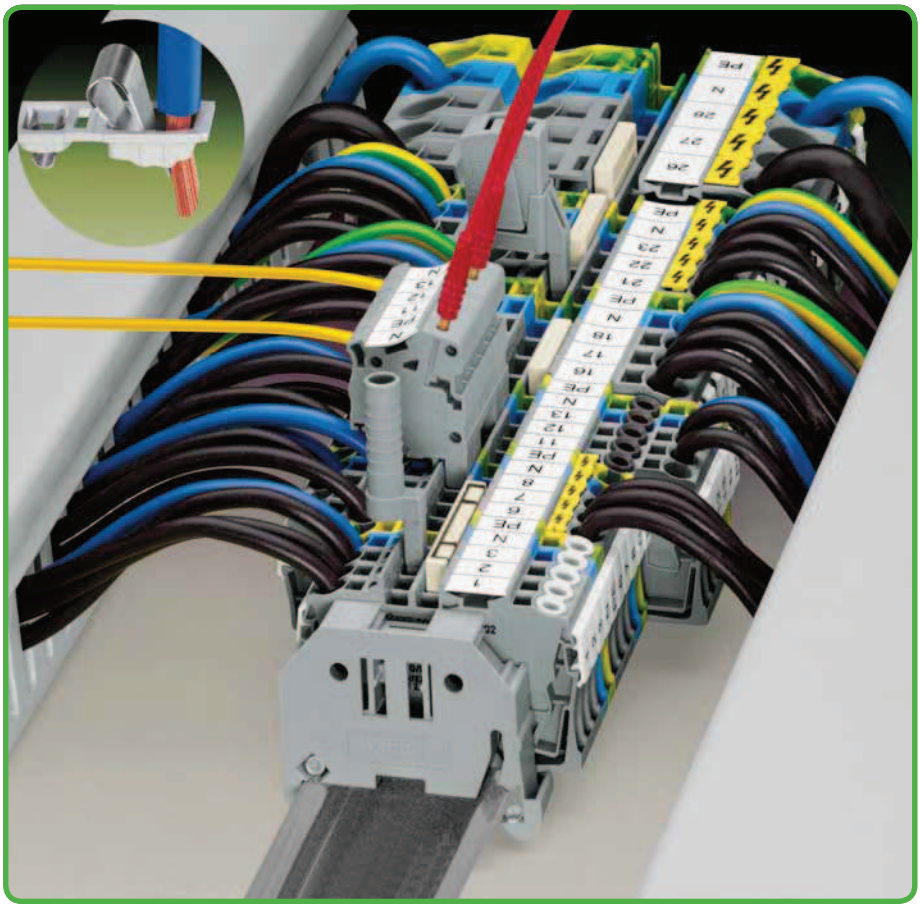
Testing of TOPJOB®S rail-mounted terminal blocks using test plug adapter or testing tap

Commoning

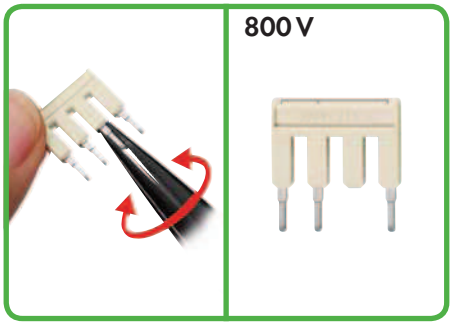


Twin integrated, spring-loaded jumper system allows use of comb-style jumper bars, test plugs and connectors.

Jumper bars rated at 800V (ex works).



Commoning

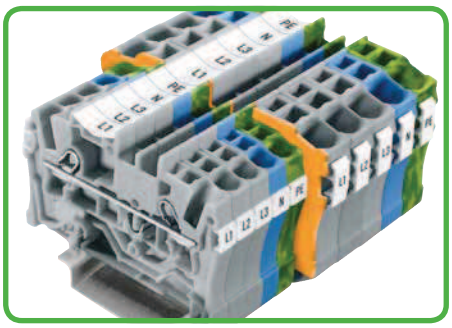


Jumper contacts that are not required can be broken off and removed, the upper-side of the jumper can then be marked accordingly. Applies to 2001, 2002 and 2004 Series.

Marking

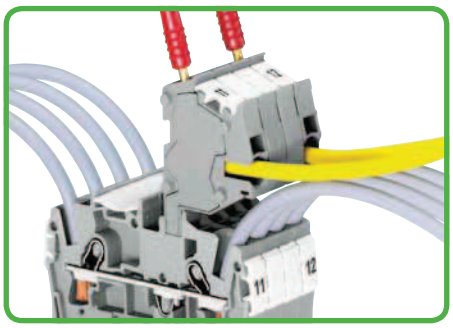


A thermal transfer printer and WAGO "smartDESIGNER" software generate the marking.



TOPJOB®S offers three marking positions for WMB markers, miniature WSB markers or a full-length marking strip.

Pre-assembled connectors



Pre-assembled connectors with CAGE CLAMP®S connection provide an additional connection option.

CAGE CLAMP®S clamps the following copper conductors:



solid | stranded | fine-stranded | tip bonded | with ferrule | with pin terminal

Strip length, see packaging or instructions.

TOPJOB®S
Rail-Mounted Terminal Blocks 1.0 (1.5) mm²
2000 Series

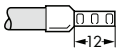
CAGE CLAMP®S

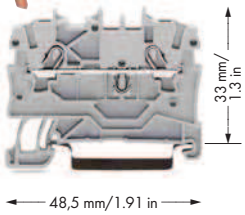
0.14 - 1.0 (1.5) mm² ❶	AWG 24 - 16
800 V/6 kV/3	600 V, 10 A
I_N 13.5 A (18 A)	600 V, 10 A

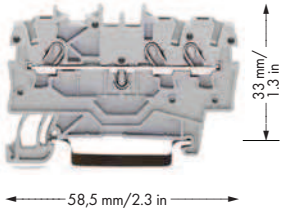
Terminal block width 3.5 mm / 0.138 in
9 - 11 mm / 0.39 in
❷ Approvals

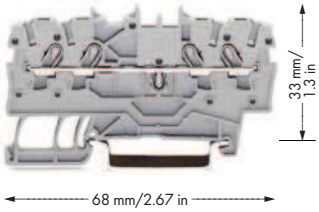
❶ Conductor sizes: 0.14 – 1.5 mm² "s + f-st";
Push-in conductor sizes: 0.5 – 1.5 mm² "s" and 0.5 – 1 mm² "insulated ferrule, 12 mm"











Color	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**2000-1201**	100
blue	**2000-1204**	100
orange	**2000-1202**	100
red	**2000-1203**	100
black	**2000-1205**	100
yellow	**2000-1206**	100
2-conductor ground terminal block		
green-yellow	**2000-1207**	100

Color	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**2000-1301**	100
blue	**2000-1304**	100
orange	**2000-1302**	100
red	**2000-1303**	100
black	**2000-1305**	100
yellow	**2000-1306**	100
3-conductor ground terminal block		
green-yellow	**2000-1307**	100

Color	Item No.	Pack. Unit
4-conductor through terminal block		
gray	**2000-1401**	100
blue	**2000-1404**	100
orange	**2000-1402**	100
red	**2000-1403**	100
black	**2000-1405**	100
yellow	**2000-1406**	100
4-conductor ground terminal block		
green-yellow	**2000-1407**	100

Item-Specific Accessories

End and intermediate plate, 0.7 mm thick



orange **2000-1292** 100 (4x25)
gray **2000-1291** 100 (4x25)

End and intermediate plate, 0.7 mm thick



orange **2000-1392** 100 (4x25)
gray **2000-1391** 100 (4x25)

End and intermediate plate, 0.7 mm thick



orange **2000-1492** 100 (4x25)
gray **2000-1491** 100 (4x25)

2000 Series Accessories

Appropriate marking systems: **WMB/Marking Strips**

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)
: :
10-way **2000-410** 100 (4x25)

Push-in type jumper bar, insulated, I_N 14 A, light gray



1 - 3 **2000-433** 200 (8x25)
1 - 4 **2000-434** 200 (8x25)
1 - 5 **2000-435** 100 (4x25)
: :
1 - 10 **2000-440** 100 (4x25)

Star point jumper, insulated,



I_N = I_N terminal block, light gray
1–3–5 **2000-405/011-000**
100 (4x25)

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



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

WMB Multi marking system,

10 strips with 10 markers per card
for 3.5 mm terminal block width,
plain **793-3501** 50 (10x5)

Marking strips, plain



11 mm wide,
50m roll
white **2009-110** 1

Operating tool with partially insulated shaft,



type 1, (2.5 x 0.4) mm blade
210-719 1

Suitable for Ex i applications

Test plug adapter, for test plug 4 mm Ø



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

Insulated ferrules, extra long,
for TOPJOB®S terminal blocks
see page 195



Testing tap, for max. 2.5 mm²/AWG 14



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

❷ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

WAGO®

TOPJOB®S
Through/Ground Conductor and Ex Terminal Blocks 1.5 (2.5) mm²
2001 Series

0.25 - 1.5 (2.5) mm² ❶ | **AWG 22 - 14**
800 V/8 kV/3 | **600 V, 10 A**
I_N 18 A (24 A) | **600 V, 10 A**
Terminal block width 4.2 mm / 0.165 in
9 – 11 mm / 0.39 in
❷ Approvals

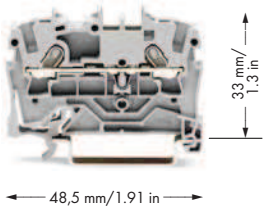
0.25 - 1.5 (2.5) mm² ❶ | **AWG 22 - 14**
800 V/8 kV/3 | **600 V, 10 A**
I_N 18 A (24 A) | **600 V, 10 A**
Terminal block width 4.2 mm / 0.165 in
9 – 11 mm / 0.39 in
❷ Approvals

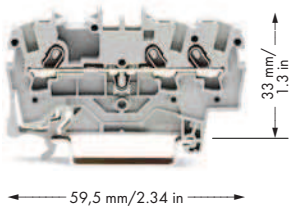
0.25 - 1.5 (2.5) mm² ❶ | **AWG 22 - 14**
800 V/8 kV/3 | **600 V, 10 A**
I_N 18 A (24 A) | **600 V, 10 A**
Terminal block width 4.2 mm / 0.165 in
9 – 11 mm / 0.39 in
❷ Approvals

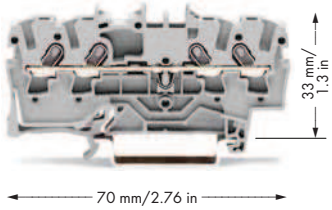


❶ Conductor sizes: 0.25 – 2.5 mm² "s + f-st";
Push-in conductor sizes: 0.5 – 2.5 mm² "s" and
0.75 – 1.5 mm² "insulated ferrule, 12 mm"









Color	Item No.	Pack. Unit
2-conductor through terminal block		
gray Ex	**2001-1201**	100
blue Ex	**2001-1204**	100
orange Ex	**2001-1202**	100
red Ex	**2001-1203**	100
black Ex	**2001-1205**	100
yellow Ex	**2001-1206**	100
2-conductor ground terminal block		
green-yellow Ex	**2001-1207**	100
Other terminal blocks with the same profile:		
Diode	**2001-1211/1000-411**	Volume 1

Color	Item No.	Pack. Unit
3-conductor through terminal block		
gray Ex	**2001-1301**	100
blue Ex	**2001-1304**	100
orange Ex	**2001-1302**	100
red Ex	**2001-1303**	100
black Ex	**2001-1305**	100
yellow Ex	**2001-1306**	100
3-conductor ground terminal block		
green-yellow Ex	**2001-1307**	100
Other terminal blocks with the same profile:		
Diode	**2001-1311/1000-411**	Volume 1
LED	**2001-1321/1000-434**	Volume 1

Color	Item No.	Pack. Unit
4-conductor through terminal block		
gray Ex	**2001-1401**	100
blue Ex	**2001-1404**	100
orange Ex	**2001-1402**	100
red Ex	**2001-1403**	100
black Ex	**2001-1405**	100
yellow Ex	**2001-1406**	100
4-conductor ground terminal block		
green-yellow Ex	**2001-1407**	100
Other terminal blocks with the same profile:		
Diode	**2001-1411/1000-411**	Volume 1
Diode	**2001-1411/1000-434**	Volume 1
Double-potential	**2001-1441**	Volume 1

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

End and intermediate plate, 0.8 mm thick



orange **2002-1292** 100 (4x25)
gray **2002-1291** 100 (4x25)

End and intermediate plate, 0.8 mm thick



orange **2002-1392** 100 (4x25)
gray **2002-1391** 100 (4x25)

End and intermediate plate, 0.8 mm thick



orange **2002-1492** 100 (4x25)
gray **2002-1491** 100 (4x25)

Separator, oversized, 0.8 mm thick



orange **2002-1294** 100 (4x25)
gray **2002-1293** 100 (4x25)

Separator, oversized, 0.8 mm thick



orange **2002-1394** 100 (4x25)
gray **2002-1393** 100 (4x25)

Separator, oversized, 0.8 mm thick



orange **2002-1494** 100 (4x25)
gray **2002-1493** 100 (4x25)

2001 Series Accessories

Appropriate marking systems: **WMB/Marking Strips**

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)
: :
10-way **2001-410** 100 (4x25)

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



1 - 3 **2001-433** 200 (8x25)
1 - 4 **2001-434** 200 (8x25)
1 - 5 **2001-435** 100 (4x25)
: :
1 - 10 **2001-440** 100 (4x25)

Push-in type wire jumper, insulated, I_N 16 A,
wire size 1.5 mm²/AWG 16



60 mm **2009-412** 100 (10x10)
110 mm **2009-414** 100 (10x10)
250 mm **2009-416** 100 (10x10)

Insulation stop,



5 pcs/strip,
0.25 – 0.5 mm²
light gray **2001-171** 200 (8x25)

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



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

TOPJOB®S connector, modular,
for jumper contact slot



gray **2001-511** 100 (4x25)

Spacer module
gray **2001-549** 100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 4 – 4.2 mm
plain **793-4501** 5

Suitable for Ex i applications
Suitable for Ex e II applications
550 V, 17 A

Operating tool with partially insulated shaft,



type 1, (2.5 x 0.4) mm blade
210-719 1

Marking strip, plain,



11 mm wide,
50m roll
white **2009-110** 1

Insulated ferrules, extra long,



for TOPJOB®S terminal blocks
see page 195

❷ Approvals are available online at: www.wago.com.

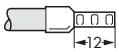
For technical explanations and abbreviations, see technical section.

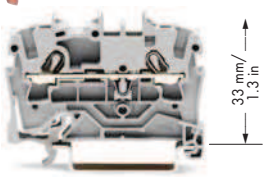
TOPJOB®S
Through/Ground Conductor and Ex Terminal Blocks 2.5 (4) mm²
2002 Series

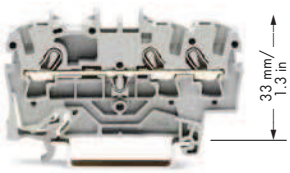
CAGE CLAMP®S

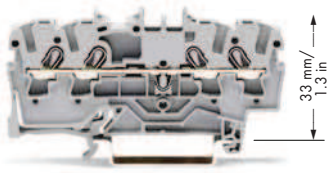
0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 I_N 24 A (32 A) AWG 22 - 12 600 V, 20 A 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in. ❷ Approvals	0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 I_N 24 A (32 A) AWG 22 - 12 600 V, 20 A 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in. ❷ Approvals	0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 I_N 24 A (32 A) AWG 22 - 12 600 V, 20 A 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in. ❷ Approvals

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









Color	Item No.	Pack. Unit
2-conductor through terminal block		
gray (Ex)	**2002-1201**	100
blue (Ex)	**2002-1204**	100
orange (Ex)	**2002-1202**	100
red (Ex)	**2002-1203**	100
black (Ex)	**2002-1205**	100
yellow (Ex)	**2002-1206**	100
2-conductor ground terminal block		
green-yellow (Ex)	**2002-1207**	100
Other terminal blocks with the same profile:		
Diode	**2002-1211/1000-411**	Page 42

Color	Item No.	Pack. Unit
3-conductor through terminal block		
gray (Ex)	**2002-1301**	100
blue (Ex)	**2002-1304**	100
orange (Ex)	**2002-1302**	100
red (Ex)	**2002-1303**	100
black (Ex)	**2002-1305**	100
yellow (Ex)	**2002-1306**	100
3-conductor ground terminal block		
green-yellow (Ex)	**2002-1307**	100
Other terminal blocks with the same profile:		
Diode	**2002-1311/1000-411**	Page 42
LED	**2002-1321/1000-434**	Page 42

Color	Item No.	Pack. Unit
4-conductor through terminal block		
gray (Ex)	**2002-1401**	100
blue (Ex)	**2002-1404**	100
orange (Ex)	**2002-1402**	100
red (Ex)	**2002-1403**	100
black (Ex)	**2002-1405**	100
yellow (Ex)	**2002-1406**	100
4-conductor ground terminal block		
green-yellow (Ex)	**2002-1407**	100
Other terminal blocks with the same profile:		
Diode	**2002-1411/1000-411**	Page 42
Diode	**2002-1411/1000-434**	Page 42
Double-potential	**2002-1441**	Volume 1

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

End and intermediate plate, 0.8 mm thick



orange	**2002-1292**	100 (4x25)
gray	**2002-1291**	100 (4x25)

End and intermediate plate, 0.8 mm thick



orange	**2002-1392**	100 (4x25)
gray	**2002-1391**	100 (4x25)

End and intermediate plate, 0.8 mm thick



orange	**2002-1492**	100 (4x25)
gray	**2002-1491**	100 (4x25)

Separator, oversized, 0.8 mm thick



orange	**2002-1294**	100 (4x25)
gray	**2002-1293**	100 (4x25)

Separator, oversized, 0.8 mm thick



orange	**2002-1394**	100 (4x25)
gray	**2002-1393**	100 (4x25)

Separator, oversized, 0.8 mm thick



orange	**2002-1494**	100 (4x25)
gray	**2002-1493**	100 (4x25)

2002 Series Accessories

Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Mini-WSB**

Push-in type jumper bar, insulated, I_N 25 A, light gray



2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
:	:	
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated, I_N 25 A, light gray



1 - 3	**2002-433**	200 (8x25)
1 - 4	**2002-434**	200 (8x25)
1 - 5	**2002-435**	100 (4x25)
:	:	
1 - 10	**2002-440**	100 (4x25)

Staggered jumper, insulated, I_N 25 A, light gray



2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
:	:	
12-way	**2002-482**	50 (2x25)

Insulation stop, 5 pcs/strip 200 strips



light gray	**2002-171**	0.25–0.5 mm²
dark gray	**2002-172**	0.75–1 mm²

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



yellow	**2002-115**	100 (4x25)

TOPJOB®S connector, modular,



for jumper contact slot

gray	**2002-511**	100 (4x25)

Spacer module

gray	**2002-549**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 – 5.2 mm

plain	**793-5501**	5

Marking strip, plain,



11 mm wide, 50m roll

white	**2009-110**	1

- Suitable for Ex i applications
- (Ex) Suitable for Ex e II applications 550 V, 22 A

Operating tool with partially insulated shaft,



type 2, (3.5 x 0.5) mm blade

	210-720	1

Insulated ferrules, extra long,



for TOPJOB®S terminal blocks

see page 195

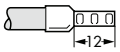
TOPJOB®S
Through/Ground and Ex Terminal Blocks 2.5 (4) mm², Angled Type
2002 Series

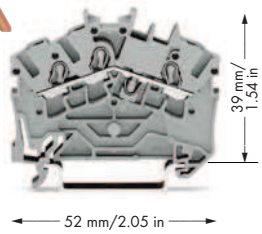
0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 I_N 24 A (32 A)	AWG 22 - 12 600 V, 20 A 600 V, 20 A
Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in.	
❷ Approvals	

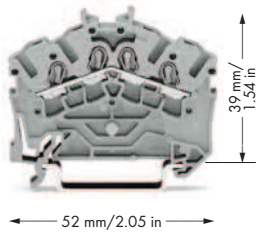
0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 I_N 24 A (32 A)	AWG 22 - 12 600 V, 20 A 600 V, 20 A
Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in.	
❷ Approvals	

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









Color	Item No.	Pack. Unit
3-conductor through terminal block		
gray Ex	**2002-6301**	100
blue Ex	**2002-6304**	100
orange Ex	**2002-6302**	100
Additional colors pending		
3-conductor ground terminal block		
green-yellow Ex	**2002-6307**	100

Color	Item No.	Pack. Unit
4-conductor through terminal block		
gray Ex	**2002-6401**	100
blue Ex	**2002-6404**	100
orange Ex	**2002-6402**	100
Additional colors pending		
4-conductor ground terminal block		
green-yellow Ex	**2002-6407**	100

Notice: These terminal blocks cannot be commoned with push-in type jumper bars!

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange	**2002-6392**	100 (4x25)
gray	**2002-6391**	100 (4x25)

End and intermediate plate, 0.8 mm thick



orange	**2002-6392**	100 (4x25)
gray	**2002-6391**	100 (4x25)

2002 Series Accessories

Appropriate marking systems:
WMB/Marker Strips/WMB Inline/Mini-WSB

Push-in type jumper bar, insulated, 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)
:	:	
10-way	**2002-410**	100 (4x25)

Push-in type jumper bars, light gray, insulated, I_N 25 A



1 - 3	**2002-433**	200 (8x25)
1 - 4	**2002-434**	200 (8x25)
1 - 5	**2002-435**	100 (4x25)
:	:	
1 - 10	**2002-440**	100 (4x25)

Staggered jumper, insulated, I_N 25 A, light gray



2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
:	:	
12-way	**2002-482**	50 (2x25)

TOPJOB®S connector, modular,



for jumper contact slot		
gray	**2002-511**	100 (4x25)

Spacer module

gray	**2002-549**	100 (4x25)

Operating tool with partially insulated shaft,



type 2, (3.5 x 0.5) mm blade		
	210-720	1

Insulated ferrules, extra long,



for TOPJOB®S terminal blocks,
see page 195

Insulation stop, 5 pcs/strip 200 strips



light gray	**2002-171**	0.25–0.5 mm²
dark gray	**2002-172**	0.75–1 mm²

Protective warning marker, with high-voltage symbol,



for 5 terminal blocks		
yellow	**2002-115**	100 (4x25)

Test plug adapter, for test plug 4 mm Ø



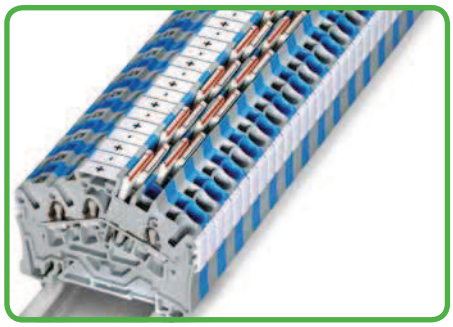
gray	**2009-174**	100 (4x25)
Testing tap, for max. 2.5 mm²/AWG 14		
gray	**2009-182**	100 (4x25)

Banana plugs, only for safety extra-low voltage (42 V)



black	**215-311**	50
red	**215-212**	50
blue	**215-711**	50

Suitable for Ex i applications
Suitable for Ex e II applications
550 V, 22 A



3- and 4-conductor terminal blocks

The TOPJOB®S rail-mounted terminal blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. For applications in switchgear and control cabinets using the LSC wiring system from Lütze, e.g., these terminal blocks are a space- and cost-saving solution. This allows the cable duct to be placed very close to the terminal blocks, keeping its height relatively low.

Product features:

- CAGE CLAMP®S connection for all conductor types, with the additional benefit of solid and ferruled conductors being simply pushed in
- Vibration-proof, fast, maintenance-free terminations
- 3-conductor through and ground conductor terminal blocks equipped with a dual jumper slot
- 4-conductor terminal blocks permit potential multiplication – no additional jumpers or terminal blocks needed
- 3- and 4-conductor terminal blocks have **the same dimensions**

An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

❷ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.