



Just push it

Push-in Spring motor starting solution



- Faster than ever installation
- Easier than ever wiring
- Reliable as ever connections

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With the new complete Push-in Spring motor starting solution, one push is all you need for extremely fast wiring. No tool is required, so you can save up to 50% wiring time with Push-in Spring compared to conventional spring solutions. And the connections are just as reliable. So for speed, ease and reliability, just push it.



ABB

TRIP

0

MS132-K

3,5
4,0A
3,0
2,5

MS132-K

TEST

TEST

25A
22
20

5
L3

0-4

Δ

Faster than ever installation

Just push it

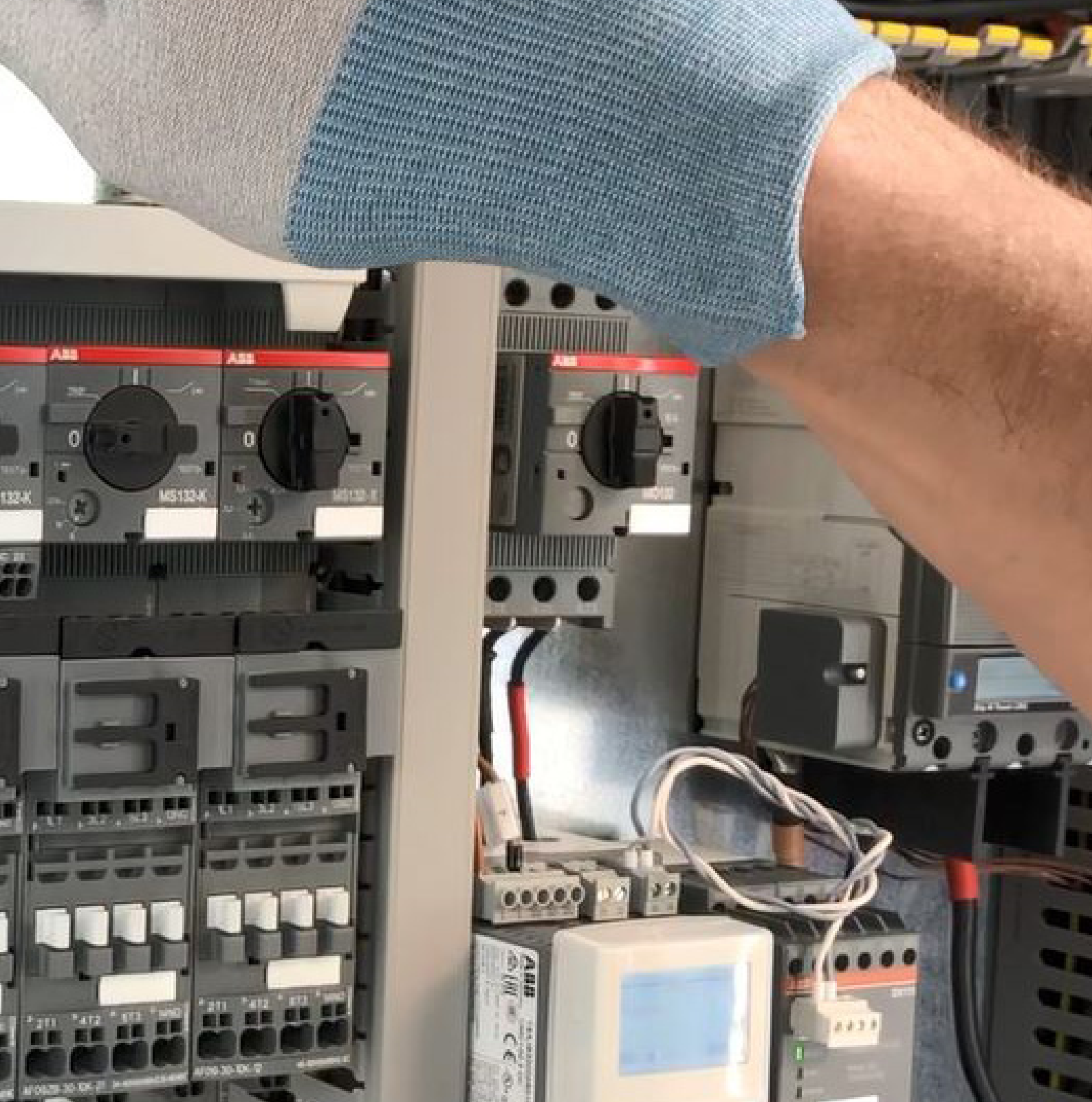
Imagine a motor starting solution that's twice as fast to install. With Push-in Spring, you no longer need to imagine – it's a reality. Push-in mode allows you to insert both ferruled and rigid cables without the need to use any tools, boosting your productivity like never before.



Speed up your projects

2-in-1 connection

For the very first time, ABB's 2-in-1 connection allows you to use ferruled and rigid cables (Push-in mode) or cables without ferrules (Spring mode) in the same terminal. In Push-in mode, cables can be inserted by just simply pushing them in by hand.



Smart accessories

100% tool-free mounting connecting kits significantly reduce installation time. You can connect devices for direct on-line, reversing and star-delta starters, without using any wires.

Complete solution

High connection capacities are optimized for motor starting solutions up to 18.5 kW 400 V AC-3 and 50 A AC-1 (25 hp 480 V and 45 A 600 V general use). This includes short-circuit fuseless protection up to 100 kA. Push-in Spring accessories can be mounted on the standard screw range of manual motor starters and contactors.

Easier than ever wiring

Just push it

Push-in Spring technology opens up new possibilities. With its unmatched ease of use, wiring becomes far more intuitive. This eliminates the need for special training and reduces the chance of wiring error. What possibilities will it open up for you?



Easy to install

Automated wiring

The Push-in Spring motor starting solution features 90° cable insertion for all terminals. Front access to terminals aids smooth, robust insertion of cables and makes automated robot wiring possible.

Intuitive wiring

With Push-in Spring, all cables and connecting links use the same round shape entry, whilst the square terminals above are clearly marked with screwdriver symbols. The result? Wiring and de-wiring that's intuitive and easily repeatable without cabling error, with little to no training required.

Just one screwdriver required

For de-wiring, only one screwdriver size is needed for the entire range. No twisting or turning is required either, so there's less chance of damage to the terminals and to your installation as a whole.



1L1

3L2

5L3

13NO

1L1

3L2

5L3

2T1

4T2

6T3

14NO

2T1

4T2

6T3

100-250V50/60HZ-DC

AF09-30-10K-13

100-2



Continuous operation

Robust by design

The special spring design guarantees excellent electrical contact. The design provides strict control of contact strength, independent from operator, giving you complete assurance.



Reliable as ever connections

Just push it

The speed and ease of Push-in Spring comes with the added reassurance of connections that are as reliable as ever. This gives you complete peace of mind when using the Push-in Spring motor starting solution.

Vibration-proof

You can count on Push-in Spring connections, even in harsh environments. Push-in Spring technology has been shock and vibration tested according to IEC 60068-2-27 and IEC 60068-2-6 standards.

No need to re-tighten

With self-tightening terminals, there's no need to re-tighten after transportation or during the lifecycle of the product. High connection strength is guaranteed throughout the whole lifetime of the device.

Application Examples

The more you wire, the more you win, with the most innovative motor starting solution available.



Self-tightening terminals ensure high connection strength throughout the entire lifecycle of the products. High-vibration environments especially benefit from the reduced maintenance effort.



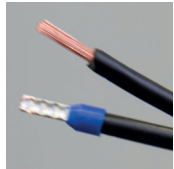
Front access, 90° one-step insertion and robust terminals make wiring simpler and faster than ever before.



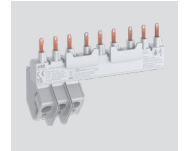
ABB is a one-stop shop for motor starting solutions, with a large product range and complete offering of accessories. Installation time is significantly reduced with the 100% tool-free connecting kits.

Push-in Spring motor starting solution

Complete range, complete efficiency



2-in-1
Benefit from both Push-in mode and Spring mode and use ferruled cables or cables without ferrules in the same terminal.



Tool-free busbars
Parallel connection of manual motor starters without the need for tools (also certified for UL Type E/ Type F applications)



Just one tool for everything
You only need a 3 mm screwdriver in Spring mode as well as for de-wiring the complete solution.



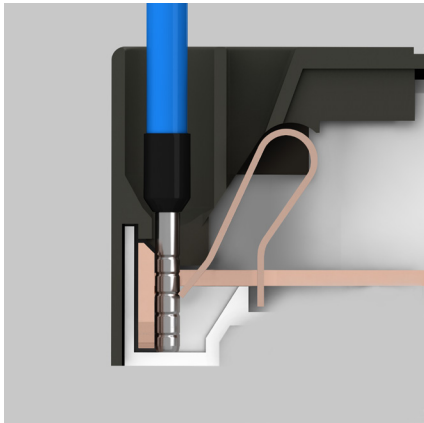
Tool-free connecting links
100% tool-free mounting connecting links.



Compatible with screw range
Mount accessories for control circuits on the screw range up to 45 kW AC-3 400 V on manual motor starters and up to 45 kW AC-3 400 V, 130 A AC-1 on contactors.

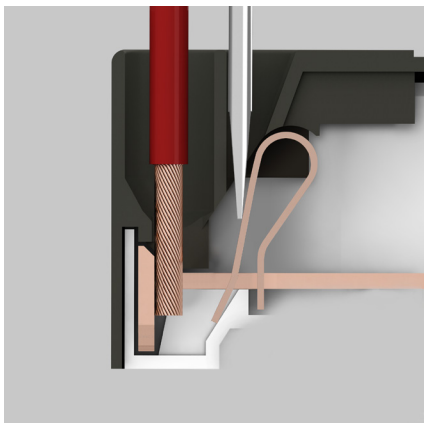


Higher connecting capacity
The solution ranges up to 18.5 kW 400 V AC-3 and 50 A AC-1 (25 hp 480 V and 45 A 600 V general use).



Push-in mode

Connect rigid cables or ferruled cables simply by pushing them into the cable holes – no need to use any tools. Push-in mode saves up to 50% wiring time compared to conventional spring solutions and makes installation a breeze. Benefit from intuitive wiring, self-tightening terminals and less chance of wiring error.



Spring Mode

This mode is used for small cable cross-sections or for cables without ferrules. It is also used for de-wiring the solution. Before inserting the cable, simply push a screwdriver into the clearly marked holes to open the terminal. ABB's Spring mode is easier to use than conventional spring technology, with less chance of damage to terminals as no twisting or turning is required.

Push-in Spring motor starting solution

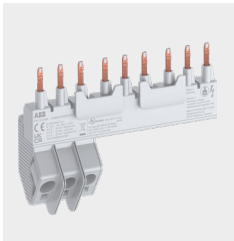
Complete motor starting solution



Manual motor starters
Up to 32 A, 15kW 400 V AC-3/AC-3e
Ics up to 100 kA



Contactors
Up to 38 A, 18.5 kW 400 V AC-3
Up to 50 A, at 40°C AC-1



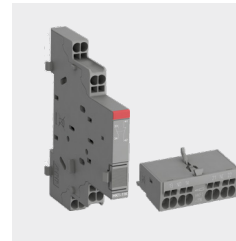
PS1-...-65K busbars for 2, 3, 4 or 5 manual motor starters



TS1-M3-K terminal spacer for UL Type E/F combination motor controllers



SK1-K and SK1-ARK signaling contacts



HK1-K, HKF1-K auxiliary contacts

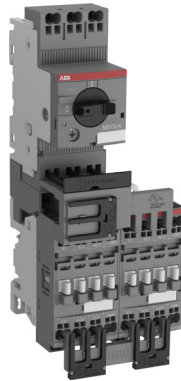


CA4..K, CAL4-11K 1, 2 and 4 pole auxiliary contacts

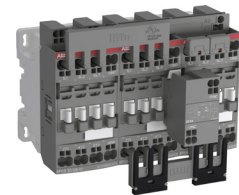
Possible combinations



Direct on-line starters
Up to 15 kW



Reversing contactors
Up to 15 kW

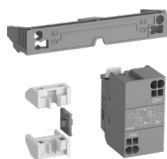


Star-delta starter
Up to 25 kW

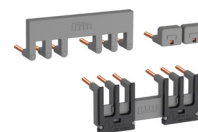
Accessories for starter combinations



Connecting links



Plug and connect mechanical and electrical interlock set



Connection sets for
• Reversing starters
• Star-delta starters

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abb.com/lowvoltage

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