

FSA20K/16BL

Rapid connection system

Utilitiesline | Industrial Connectors



FSA20K/16BL Rapid connection system with exchangeable block



FSA20K/16BL

Rapid, easy connection with 16BL round connector system



16BL-CS

The new FSA20K/16BL rapid connection system allows for a fast and safe connection of copper busbars in energy distribution systems.

Its exchangeable block makes it particularly service-friendly.

In the event of wear or damage, users can replace the insulated exchangeable block with integrated Stäubli MULTILAM louver technology themselves very easily.

Compatible with the 16BL round connector system

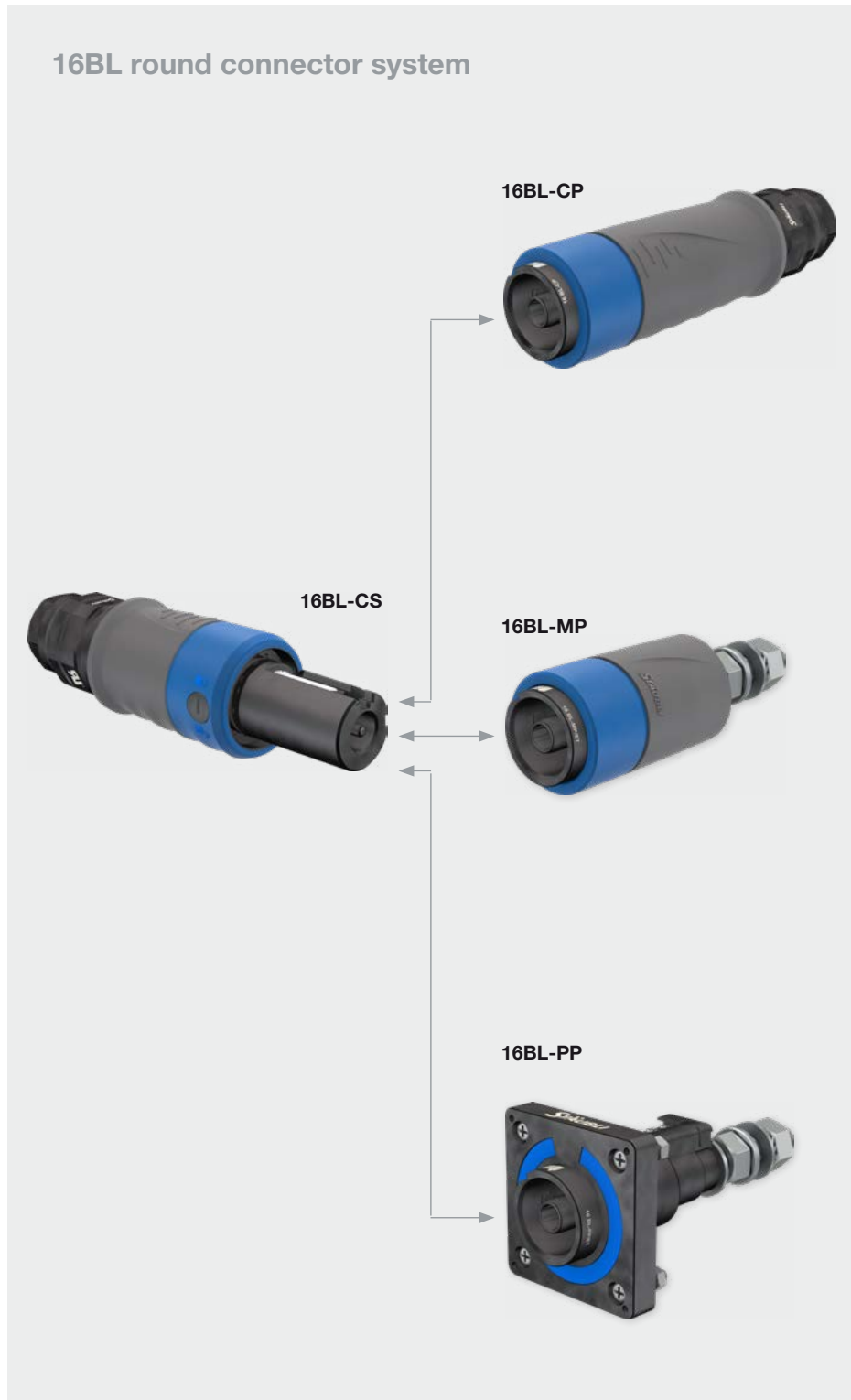
The FSA is compatible with the new Stäubli 16BL round connector system and provides maximum flexibility and safety for use in all power supply applications.

The new 16BL connector system offers durability, optimized safety, and extended functionality:

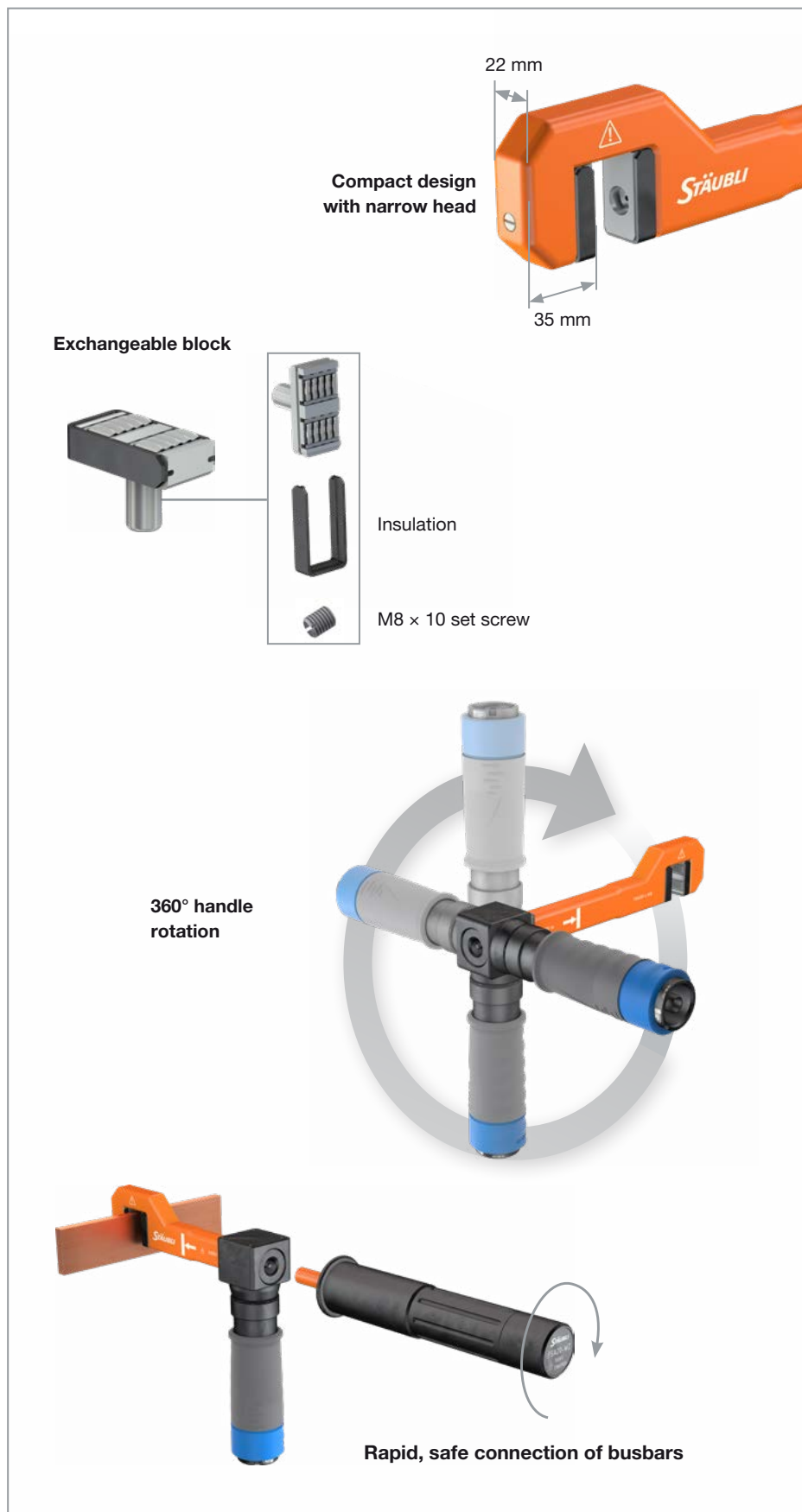
- Robust 45° bayonet locking system
- Color coding
- Mechanical coding (C1-C7)
- Locking pin to prevent accidental disconnection (requires tool to unlock)

For more information on the 16BL round connectors and accessories, refer to following document:

- **Round connectors 16BL, Ø 16 mm, insulated**



Features, advantages, and benefits



Benefits for customers:

Service-friendly, saves time and money

- Users can replace exchangeable block themselves
- Easy replacement of insulation on exchangeable block and guide block
- Lower maintenance costs
- Long lifespan of the FSA20K

Optimized operation and safety

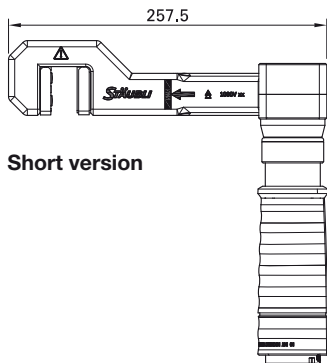
- Compact design, narrow head
- 360° rotation reduces strain caused by cable weight
- Easy access in confined spaces
- **Perfectly** tailored tapping right away
- Safe installation and removal of the FSA20K/16BL with a special tool

Simple, compatible, and practical

- Connected with 16BL connector system
- Compatible with all mechanical codings (C1-C7) of the 16BL
- Practical transport case available for a complete set (offers space for four FSA connectors and one tool)

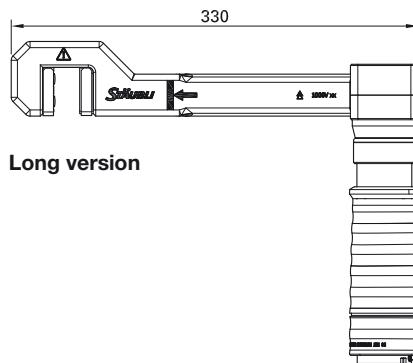
Technical data and type overview (2 versions)

FSA20K-K-WB/16BL-CP

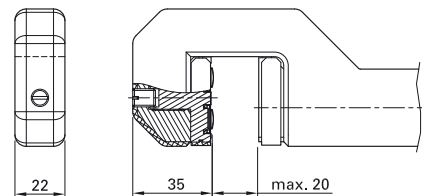


Short version

FSA20K-L-WB/16BL-CP



Long version



Technical data	
Rated current	450 A
Rated voltage	1000 V AC, 1500 V DC
Short-circuit current	7,5 kA, 1 s
Rated peak withstand current	22 kA
Rated impulse voltage	12 kV
Overvoltage category/Pollution degree (n)	CATIII/3
Insulation coordination	12 kV/3
Clamping range/max. thickness of busbar	Up to 20 mm
Length options: short...-K-WB/... long ...-L-WB/...	257,5 mm 330 mm
Connection	16BL connector
Mating cycles	1000 – 5000 depending on application Further use possible after replacement of exchangeable block
Ambient temperature range	-15°C...+80°C
Based on standards	BG: GS-ET-28 IEC 60664-1 (DIN EN 60664-1), IEC 60529 (DIN EN 60529), IEC 61984 (DIN EN 61984), IEC 60512-5-2 (DIN EN 60512-5-2)

Order No.	Type	Description	*Colors
12.1332-*	FSA20K-K-WB/16BL-CP	Rapid connection system, short	20 21 24 25 26 ¹⁾
12.1333-*	FSA20K-L-WB/16BL-CP	Rapid connection system, long	20 21 24 25 26 ¹⁾



Assembly instructions MA090

www.staubli.com/electrical



User information i400

www.staubli.com/electrical

* Please specify the color code

¹⁾ Additional colors available upon request

Accessories

FSA20-SHZ-KP



16BL-CP/PC



FSA20-WZ



FSA20K-TK



FSA20K-WB SET



FSA20K/I-WB SET



Order No.	Type	Description
12.0502	FSA20-SHZ-KP	Protective cover for connection head
15.5882	16BL-CP/PC	Protective cover for 16BL connection
12.0501	FSA20-WZ	Torque wrench
12.0521	FSA20K-TK	FSA20K/16BL transport case (empty; dimensions: 600 mm x 400 mm x 340 mm)
12.1330	FSA20K-WB SET	Exchangeable block set (including insulation and M8x100 set screw)
12.1331	FSA20K/I-WB SET	Insulation (10-piece set)

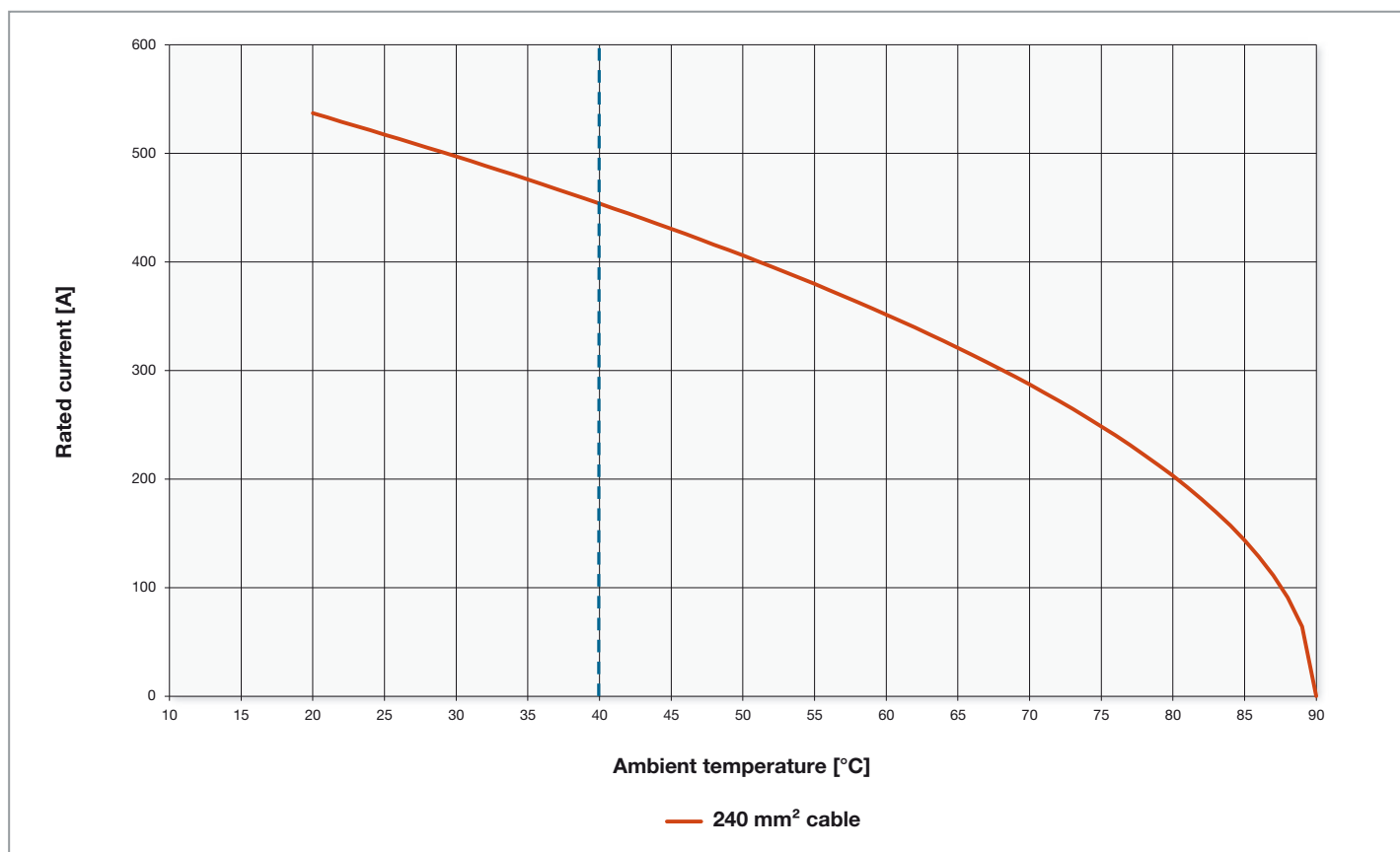
Derating diagram

Per IEC 60512-5-2

The diagram shows the values of the current-carrying capacity valid for use at different ambient temperatures. A reduction factor of 0.9 was used as a basis.

Note:

The values indicated apply to 90°C cables. If cables with a lower operating temperature are used, the currents must be reduced accordingly.



Maximum rated current of the FSA20K/16BL rapid connection system according to the cross section of the cable used

(at 40 °C with a reduction factor of 0.9)

The values specified apply to a connector used in combination with a cable that can withstand 90 °C (e.g., Purwil).

Cable cross section	Max. rated current
mm ²	A
70	254
95	274
120	303
150	356
185	412
240	450

The following product catalogs provide further information on the FSA products, application examples, round connectors, and accessories

- **Rapid connection systems**
- **Round connector, single-pole, insulated, 10 – 21 mm**



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