

---

ABB Switzerland Ltd.  
Low Voltage Products  
Fulachstrasse 150  
CH-8201 Schaffhausen  
Telefon +41 (0) 58 586 41 11  
Telefax +41 (0) 58 586 42 22

**abb.ch**

---

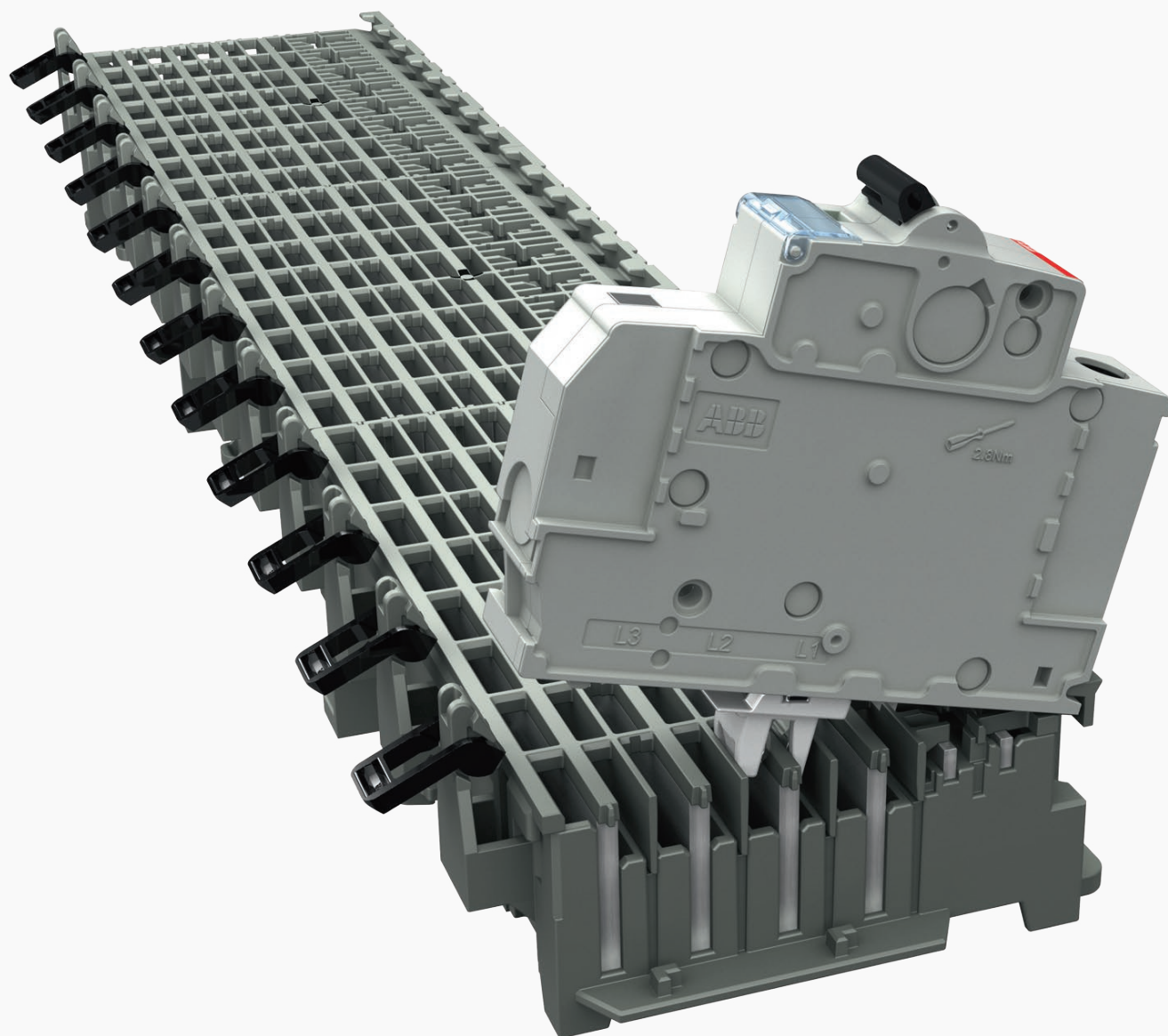
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.  
Copyright© 2017 ABB  
All rights reserved

SMISLINE

# Technical catalogue

SMISLINE TP-Touch proof system  
Power Bar System 250 A

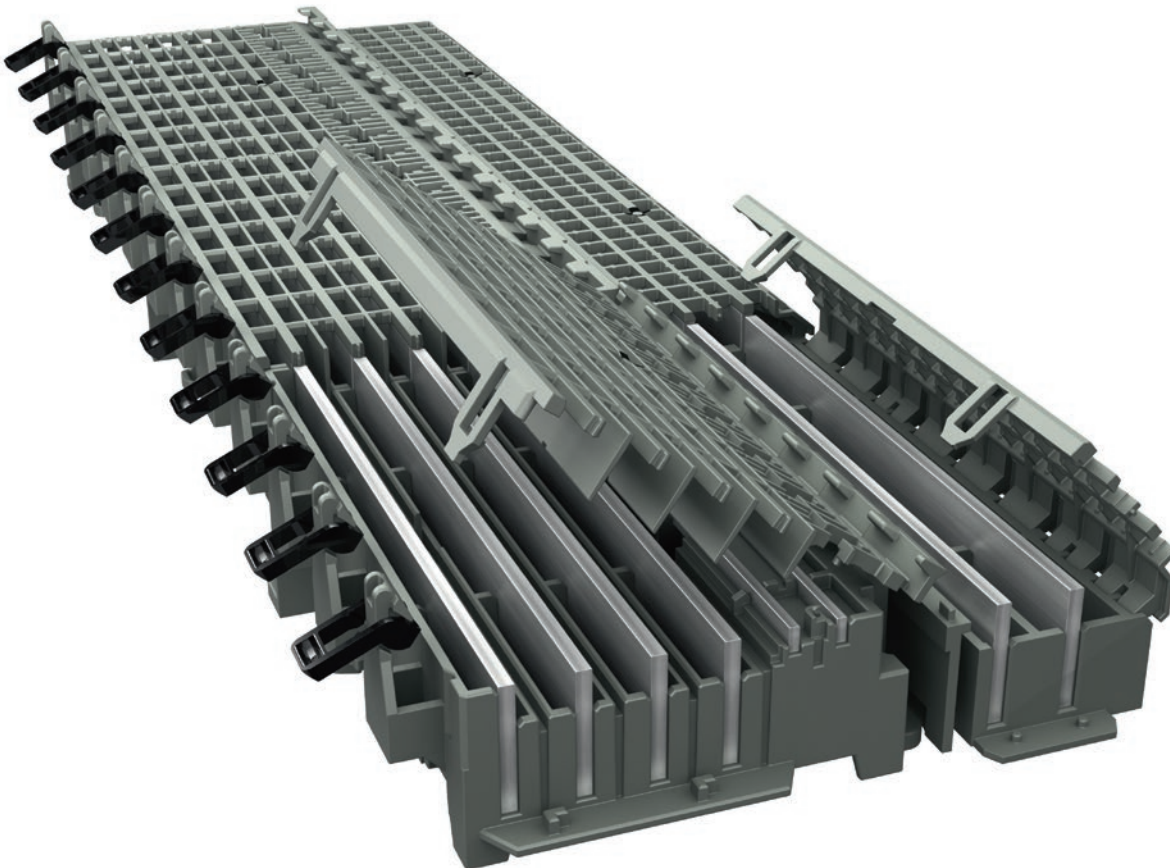


---

## Power behind bars

### The world's safest socket system

Small cause, large effect: as the world's first pluggable socket system, SMISSLINE TP ensures that load-free devices and components can be snapped on and off under voltage without the need for additional personal protective equipment to guard against electrical hazards. That opens up completely new prospects for you when it comes to installation, operation and flexibility.



## Efficiency you can touch

### Plug in components during ongoing operation

#### Even safer: Protection against electrical hazards

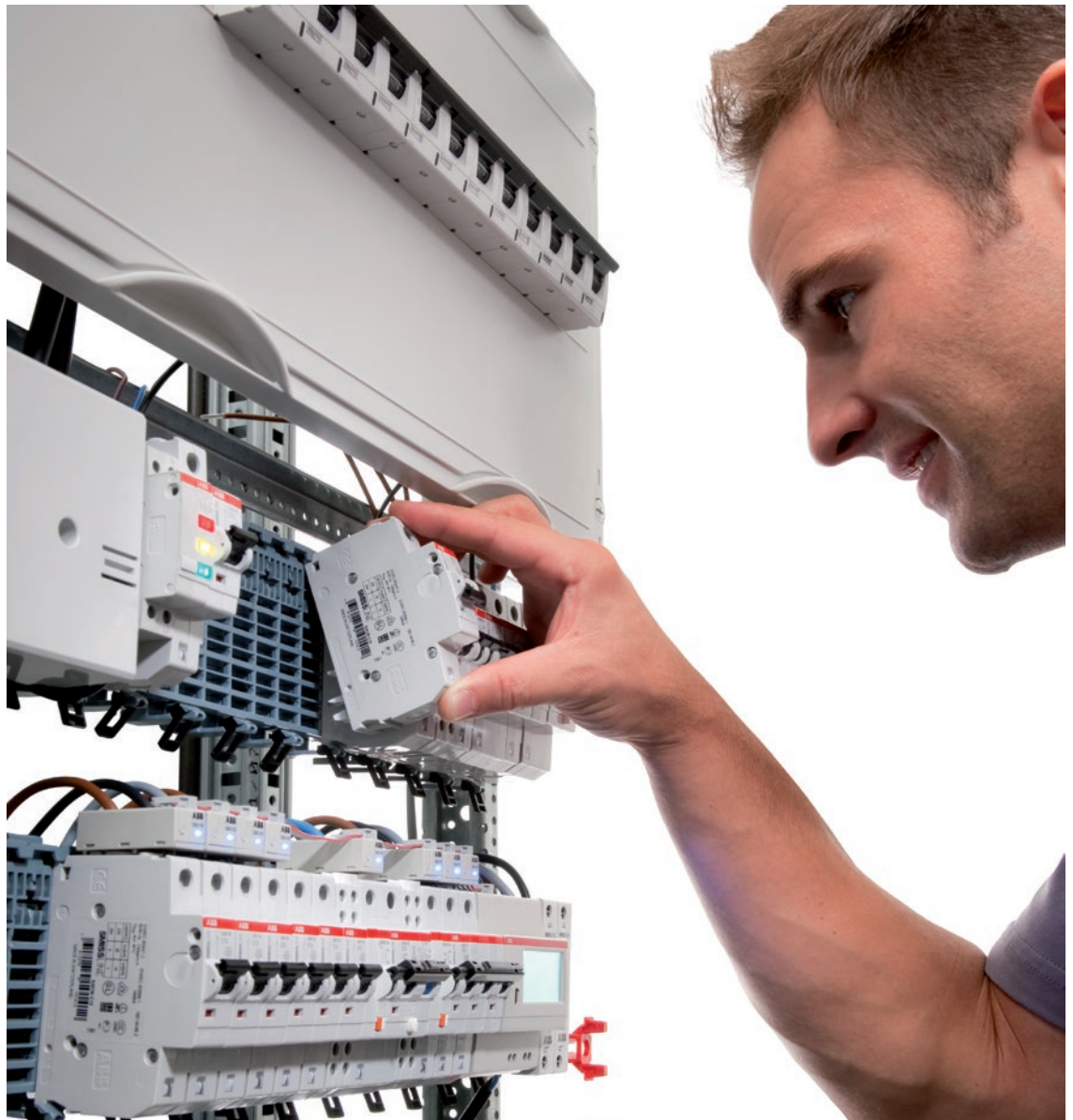
We have upgraded our unique SMISLINE TP socket system even further through the addition of a pioneering innovation. With the new SMISLINE TP system, components can now be plugged in or unplugged load-free without any risk from electrical current running through the body.

The SMISLINE TP pluggable socket system is completely finger-safe (IP20B) – when devices are plugged in and unplugged, the system is always touch-proof. This means that SMISLINE TP prevents any danger to personnel from switching arcs or accidental arcing.

#### Even more flexible: make additions and changes during ongoing operation

Pluggable devices can be added and changed quickly, safely and simply during ongoing operation. And this can be done without any need for personal protective equipment.

This means that you benefit from more flexibility, savings on installation and maintenance – and improved safety. SMISLINE TP provides greater availability and operating safety than conventional systems.



# Remote Power Panel – Data Center

## Application Note

### Backup protection

Based on backup and selectivity requirements a Molded Case Circuit Breaker (XT4) is used to protect the Sub-Distribution. The rating can go up to 250 A per MCCB if parallel incoming is used. The Backup protection complies with IEC/EN 60898-1 and IEC/EN 60947-2 and allows industrial use. With the integrated COM-Module all voltages, currents, power factors and status data is available through a Modbus RTU interface.

### Circuit Monitoring System Control Unit – CMS-700

RPP's heart is the Control Unit CMS-700 which aggregates the current readings from the CMS and the Power Quality Values to create consumption data and generate alarms in case of system errors. In addition to the optional front door touch display CP651-WEB, a generic Modbus TCP and SNMP interface is supported. Typically this protocols are used to interface the data center infrastructure management system – DCIM.

### Circuit Monitoring System – open core and solid core sensors

ABB's CMS is the most compact, neat and hassle-free branch circuit monitoring system available on the market. The sensors are mounted directly on the SMISSLINE Miniature Circuit Breakers and there is no need of conventional expensive and cumbersome cabling thanks to internal Modbus instead of typical Current Transformer star wiring. The new range of open core sensors helps to add branch monitoring into existing installations without the need to power-off they system.

### Touch proof system - SMISSLINE TP

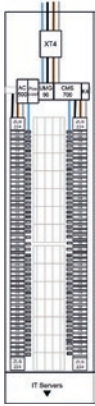
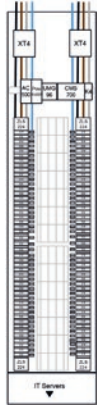
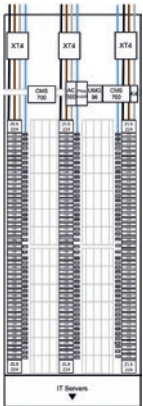
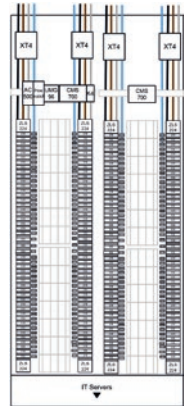
The world's first pluggable and touch proof socket system, SMISSLINE TP ensures that load-free devices and components can be safely snapped on and off under voltage without shutting down one single server. In addition maintenance can be done by instructed personnel without electrician's qualification. Moreover you can save 20% space for the typical A/B distribution in a data center. Compared to a conventional build up time of 15 hours of an RPP like this – SMISSLINE needs only 8h which allows another 45% of time saving.



## Remote Power Panel Range

Different sizes for different applications

| Remote Power Panel families and technical features compared at a glance: |                                     | RPP-250A                                                           | RPP-500A     | RPP-750A     | RPP-1000A     |
|--------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------|--------------|--------------|---------------|
| Rated current of the assembly (I <sub>na</sub> )                         |                                     | 250A                                                               | 2x250A       | 3x250A       | 4x250A        |
| Rated operational voltage                                                |                                     | 240/415 VAC                                                        |              |              |               |
| Number of branch circuits per system                                     |                                     | 128                                                                | 128          | 192          | 256           |
|                                                                          | with remote tripping indication     | 84                                                                 | 84           | 128          | 170           |
|                                                                          | with overvoltage module             | 112                                                                | 112          | 168          | 222           |
|                                                                          | with MID meter                      | 42                                                                 | 42           | 63           | 84            |
| Operating temperature                                                    |                                     | -5 ... +40 °C                                                      |              |              |               |
| Storage temperature                                                      |                                     | -25 ... +70 °C                                                     |              |              |               |
| CMS-700 Control Unit                                                     | Communication                       | Modbus RTU (RS485); Modbus TCP/IP; SNMP v1/2 and encrypted SNMP v3 |              |              |               |
|                                                                          | Accuracy voltage measurement        | ±1 %                                                               |              |              |               |
|                                                                          | Accuracy branch current measurement | ±1 % full scale                                                    |              |              |               |
| Display                                                                  |                                     | Integrated webserver (CMS-700); optional front door device/display |              |              |               |
| Dimensions (mm)                                                          | H x W x D                           | 1950/550/350                                                       | 1950/550/350 | 1950/800/350 | 1950/1050/350 |

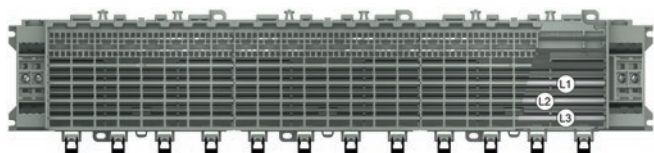
## International type numbering of ABB data center solutions

Example type number: **RPP-500A-NP-INT-OVR-MID-PQ-TS**

| X1      | Electrical Specification |                                |                                  | Monitoring and Features          |                         |                             |                           |
|---------|--------------------------|--------------------------------|----------------------------------|----------------------------------|-------------------------|-----------------------------|---------------------------|
|         | X2                       | X3                             | X4                               | X5                               | X6                      | X7                          | X8                        |
| Product | Input current            | Protection                     | MCCB placement                   | Features                         | Branch measurement      | Power & network analyzing   | Display/Touch             |
| RPP     | 250A                     | P (single phase)               | INT (internal)                   | Not selected                     | Not selected            | Not selected                | Not selected              |
|         | 500A                     | NP (phase and neutral)         | EXT (external)                   | RTI (remote tripping indication) | BCM (branch monitoring) | NET (network analyzer)      | TS (panel pc/touchscreen) |
|         | 750A                     | 3P (three phase)               | SINT (single line with internal) | OVR (overvoltage protection)     | MID (billing meters)    | PQ (power quality analyzer) |                           |
|         | 1000A                    | 3NP (three phase and neutral)  | SEXT (single line with external) | RTIOVR (combination RTI&OVR)     |                         |                             |                           |
|         |                          | KXXX (tolerant tripping curve) |                                  |                                  |                         |                             |                           |

# Starter pack Power Bar System

## 3L

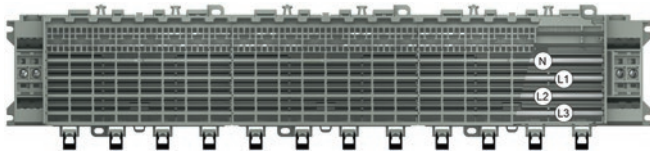


Starter Pack 3L: L1, L2, L3 included socket end piece

| Solutions available     | Type name      | ABB IT number   | EAN number 761 227 | Pack unit | Moduls (1 PLE 18mm) | Weight in grams |
|-------------------------|----------------|-----------------|--------------------|-----------|---------------------|-----------------|
| Starter Pack 3L PLE 30  | ZLSP950E30-3L  | 2CCF212200A0001 | 148 8246           | 1         | 30PLE-3L            | 1755            |
| Starter Pack 3L PLE 32  | ZLSP950E32-3L  | 2CCF212201A0001 | 148 8260           | 1         | 32PLE-3L            | 1863            |
| Starter Pack 3L PLE 34  | ZLSP950E34-3L  | 2CCF212202A0001 | 148 8284           | 1         | 34PLE-3L            | 1981            |
| Starter Pack 3L PLE 36  | ZLSP950E36-3L  | 2CCF212203A0001 | 148 8307           | 1         | 36PLE-3L            | 2088            |
| Starter Pack 3L PLE 38  | ZLSP950E38-3L  | 2CCF212204A0001 | 148 8321           | 1         | 38PLE-3L            | 2195            |
| Starter Pack 3L PLE 40  | ZLSP950E40-3L  | 2CCF212205A0001 | 148 8345           | 1         | 40PLE-3L            | 2303            |
| Starter Pack 3L PLE 42  | ZLSP950E42-3L  | 2CCF212206A0001 | 148 8369           | 1         | 42PLE-3L            | 2421            |
| Starter Pack 3L PLE 44  | ZLSP950E44-3L  | 2CCF212207A0001 | 148 8383           | 1         | 44PLE-3L            | 2528            |
| Starter Pack 3L PLE 46  | ZLSP950E46-3L  | 2CCF212208A0001 | 148 8406           | 1         | 46PLE-3L            | 2635            |
| Starter Pack 3L PLE 48  | ZLSP950E48-3L  | 2CCF212209A0001 | 148 8420           | 1         | 48PLE-3L            | 2742            |
| Starter Pack 3L PLE 50  | ZLSP950E50-3L  | 2CCF212210A0001 | 148 8444           | 1         | 50PLE-3L            | 2861            |
| Starter Pack 3L PLE 52  | ZLSP950E52-3L  | 2CCF212211A0001 | 148 8468           | 1         | 52PLE-3L            | 2968            |
| Starter Pack 3L PLE 54  | ZLSP950E54-3L  | 2CCF212212A0001 | 148 8482           | 1         | 54PLE-3L            | 3075            |
| Starter Pack 3L PLE 56  | ZLSP950E56-3L  | 2CCF212213A0001 | 148 8505           | 1         | 56PLE-3L            | 3182            |
| Starter Pack 3L PLE 58  | ZLSP950E58-3L  | 2CCF212214A0001 | 148 8529           | 1         | 58PLE-3L            | 3301            |
| Starter Pack 3L PLE 60  | ZLSP950E60-3L  | 2CCF212215A0001 | 148 8543           | 1         | 60PLE-3L            | 3408            |
| Starter Pack 3L PLE 62  | ZLSP950E62-3L  | 2CCF212216A0001 | 148 8567           | 1         | 62PLE-3L            | 3515            |
| Starter Pack 3L PLE 64  | ZLSP950E64-3L  | 2CCF212217A0001 | 148 8581           | 1         | 64PLE-3L            | 3622            |
| Starter Pack 3L PLE 66  | ZLSP950E66-3L  | 2CCF212218A0001 | 148 8604           | 1         | 66PLE-3L            | 3741            |
| Starter Pack 3L PLE 68  | ZLSP950E68-3L  | 2CCF212219A0001 | 148 8628           | 1         | 68PLE-3L            | 3848            |
| Starter Pack 3L PLE 70  | ZLSP950E70-3L  | 2CCF212220A0001 | 148 8642           | 1         | 70PLE-3L            | 3955            |
| Starter Pack 3L PLE 72  | ZLSP950E72-3L  | 2CCF212221A0001 | 148 8666           | 1         | 72PLE-3L            | 4062            |
| Starter Pack 3L PLE 74  | ZLSP950E74-3L  | 2CCF212222A0001 | 148 8680           | 1         | 74PLE-3L            | 4180            |
| Starter Pack 3L PLE 76  | ZLSP950E76-3L  | 2CCF212223A0001 | 148 8703           | 1         | 76PLE-3L            | 4288            |
| Starter Pack 3L PLE 78  | ZLSP950E78-3L  | 2CCF212224A0001 | 148 8727           | 1         | 78PLE-3L            | 4395            |
| Starter Pack 3L PLE 80  | ZLSP950E80-3L  | 2CCF212225A0001 | 148 8741           | 1         | 80PLE-3L            | 4502            |
| Starter Pack 3L PLE 82  | ZLSP950E82-3L  | 2CCF212226A0001 | 148 8765           | 1         | 82PLE-3L            | 4620            |
| Starter Pack 3L PLE 84  | ZLSP950E84-3L  | 2CCF212227A0001 | 148 8789           | 1         | 84PLE-3L            | 4728            |
| Starter Pack 3L PLE 86  | ZLSP950E86-3L  | 2CCF212228A0001 | 148 8802           | 1         | 86PLE-3L            | 4835            |
| Starter Pack 3L PLE 88  | ZLSP950E88-3L  | 2CCF212229A0001 | 148 8826           | 1         | 88PLE-3L            | 4942            |
| Starter Pack 3L PLE 90  | ZLSP950E90-3L  | 2CCF212230A0001 | 148 8840           | 1         | 90PLE-3L            | 5060            |
| Starter Pack 3L PLE 92  | ZLSP950E92-3L  | 2CCF212231A0001 | 148 8864           | 1         | 92PLE-3L            | 5167            |
| Starter Pack 3L PLE 94  | ZLSP950E94-3L  | 2CCF212232A0001 | 148 8888           | 1         | 94PLE-3L            | 5275            |
| Starter Pack 3L PLE 96  | ZLSP950E96-3L  | 2CCF212233A0001 | 148 8901           | 1         | 96PLE-3L            | 5382            |
| Starter Pack 3L PLE 98  | ZLSP950E98-3L  | 2CCF212234A0001 | 148 8925           | 1         | 98PLE-3L            | 5500            |
| Starter Pack 3L PLE 100 | ZLSP950E100-3L | 2CCF212235A0001 | 148 8949           | 1         | 100PLE-3L           | 5607            |
| Starter Pack 3L PLE 102 | ZLSP950E102-3L | 2CCF212236A0001 | 148 8963           | 1         | 102PLE-3L           | 5715            |
| Starter Pack 3L PLE 104 | ZLSP950E104-3L | 2CCF212237A0001 | 148 8987           | 1         | 104PLE-3L           | 5822            |
| Starter Pack 3L PLE 106 | ZLSP950E106-3L | 2CCF212238A0001 | 148 9007           | 1         | 106PLE-3L           | 5940            |
| Starter Pack 3L PLE 108 | ZLSP950E108-3L | 2CCF212239A0001 | 148 9021           | 1         | 108PLE-3L           | 6047            |
| Starter Pack 3L PLE 110 | ZLSP950E110-3L | 2CCF212240A0001 | 148 9045           | 1         | 110PLE-3L           | 6121            |

# Starter pack Power Bar System

## 3LN

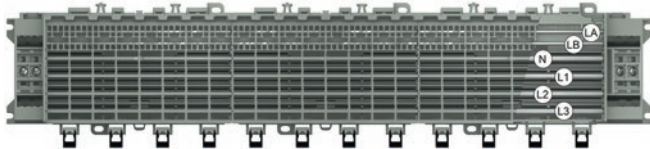


Starter Pack 3L: L1, L2, L3 included socket end piece

| Solutions available      | Type name       | ABB IT number   | EAN number 761 227 | Pack unit | Moduls (1 PLE 18mm) | Weight in grams |
|--------------------------|-----------------|-----------------|--------------------|-----------|---------------------|-----------------|
| Starter Pack 3LN PLE 30  | ZLSP950E30-3LN  | 2CCF212300A0001 | 148 9069           | 1         | 30PLE-3LN           | 2122            |
| Starter Pack 3LN PLE 32  | ZLSP950E32-3LN  | 2CCF212301A0001 | 148 9083           | 1         | 32PLE-3LN           | 2253            |
| Starter Pack 3LN PLE 34  | ZLSP950E34-3LN  | 2CCF212302A0001 | 148 9106           | 1         | 34PLE-3LN           | 2396            |
| Starter Pack 3LN PLE 36  | ZLSP950E36-3LN  | 2CCF212303A0001 | 148 9120           | 1         | 36PLE-3LN           | 2527            |
| Starter Pack 3LN PLE 38  | ZLSP950E38-3LN  | 2CCF212304A0001 | 148 9144           | 1         | 38PLE-3LN           | 2659            |
| Starter Pack 3LN PLE 40  | ZLSP950E40-3LN  | 2CCF212305A0001 | 148 9168           | 1         | 40PLE-3LN           | 2791            |
| Starter Pack 3LN PLE 42  | ZLSP950E42-3LN  | 2CCF212306A0001 | 148 9182           | 1         | 42PLE-3LN           | 2933            |
| Starter Pack 3LN PLE 44  | ZLSP950E44-3LN  | 2CCF212307A0001 | 148 9205           | 1         | 44PLE-3LN           | 3065            |
| Starter Pack 3LN PLE 46  | ZLSP950E46-3LN  | 2CCF212308A0001 | 148 9229           | 1         | 46PLE-3LN           | 3197            |
| Starter Pack 3LN PLE 48  | ZLSP950E48-3LN  | 2CCF212309A0001 | 148 9243           | 1         | 48PLE-3LN           | 3328            |
| Starter Pack 3LN PLE 50  | ZLSP950E50-3LN  | 2CCF212310A0001 | 148 9267           | 1         | 50PLE-3LN           | 3471            |
| Starter Pack 3LN PLE 52  | ZLSP950E52-3LN  | 2CCF212311A0001 | 148 9281           | 1         | 52PLE-3LN           | 3603            |
| Starter Pack 3LN PLE 54  | ZLSP950E54-3LN  | 2CCF212312A0001 | 148 9304           | 1         | 54PLE-3LN           | 3734            |
| Starter Pack 3LN PLE 56  | ZLSP950E56-3LN  | 2CCF212313A0001 | 148 9328           | 1         | 56PLE-3LN           | 3866            |
| Starter Pack 3LN PLE 58  | ZLSP950E58-3LN  | 2CCF212314A0001 | 148 9342           | 1         | 58PLE-3LN           | 4008            |
| Starter Pack 3LN PLE 60  | ZLSP950E60-3LN  | 2CCF212315A0001 | 148 9366           | 1         | 60PLE-3LN           | 4140            |
| Starter Pack 3LN PLE 62  | ZLSP950E62-3LN  | 2CCF212316A0001 | 148 9380           | 1         | 62PLE-3LN           | 4272            |
| Starter Pack 3LN PLE 64  | ZLSP950E64-3LN  | 2CCF212317A0001 | 148 9403           | 1         | 64PLE-3LN           | 4403            |
| Starter Pack 3LN PLE 66  | ZLSP950E66-3LN  | 2CCF212318A0001 | 148 9427           | 1         | 66PLE-3LN           | 4546            |
| Starter Pack 3LN PLE 68  | ZLSP950E68-3LN  | 2CCF212319A0001 | 148 9441           | 1         | 68PLE-3LN           | 4678            |
| Starter Pack 3LN PLE 70  | ZLSP950E70-3LN  | 2CCF212320A0001 | 148 9465           | 1         | 70PLE-3LN           | 4809            |
| Starter Pack 3LN PLE 72  | ZLSP950E72-3LN  | 2CCF212321A0001 | 148 9489           | 1         | 72PLE-3LN           | 4941            |
| Starter Pack 3LN PLE 74  | ZLSP950E74-3LN  | 2CCF212322A0001 | 148 9502           | 1         | 74PLE-3LN           | 5084            |
| Starter Pack 3LN PLE 76  | ZLSP950E76-3LN  | 2CCF212323A0001 | 148 9526           | 1         | 76PLE-3LN           | 5215            |
| Starter Pack 3LN PLE 78  | ZLSP950E78-3LN  | 2CCF212324A0001 | 148 9540           | 1         | 78PLE-3LN           | 5347            |
| Starter Pack 3LN PLE 80  | ZLSP950E80-3LN  | 2CCF212325A0001 | 148 9564           | 1         | 80PLE-3LN           | 5478            |
| Starter Pack 3LN PLE 82  | ZLSP950E82-3LN  | 2CCF212326A0001 | 148 9588           | 1         | 82PLE-3LN           | 5621            |
| Starter Pack 3LN PLE 84  | ZLSP950E84-3LN  | 2CCF212327A0001 | 148 9601           | 1         | 84PLE-3LN           | 5753            |
| Starter Pack 3LN PLE 86  | ZLSP950E86-3LN  | 2CCF212328A0001 | 148 9625           | 1         | 86PLE-3LN           | 5884            |
| Starter Pack 3LN PLE 88  | ZLSP950E88-3LN  | 2CCF212329A0001 | 148 9649           | 1         | 88PLE-3LN           | 6016            |
| Starter Pack 3LN PLE 90  | ZLSP950E90-3LN  | 2CCF212330A0001 | 148 9663           | 1         | 90PLE-3LN           | 6159            |
| Starter Pack 3LN PLE 92  | ZLSP950E92-3LN  | 2CCF212331A0001 | 148 9687           | 1         | 92PLE-3LN           | 6290            |
| Starter Pack 3LN PLE 94  | ZLSP950E94-3LN  | 2CCF212332A0001 | 148 9700           | 1         | 94PLE-3LN           | 6422            |
| Starter Pack 3LN PLE 96  | ZLSP950E96-3LN  | 2CCF212333A0001 | 148 9724           | 1         | 96PLE-3LN           | 6554            |
| Starter Pack 3LN PLE 98  | ZLSP950E98-3LN  | 2CCF212334A0001 | 148 9748           | 1         | 98PLE-3LN           | 6696            |
| Starter Pack 3LN PLE 100 | ZLSP950E100-3LN | 2CCF212335A0001 | 148 9762           | 1         | 100PLE-3LN          | 6828            |
| Starter Pack 3LN PLE 102 | ZLSP950E102-3LN | 2CCF212336A0001 | 148 9786           | 1         | 102PLE-3LN          | 6959            |
| Starter Pack 3LN PLE 104 | ZLSP950E104-3LN | 2CCF212337A0001 | 148 9809           | 1         | 104PLE-3LN          | 7091            |
| Starter Pack 3LN PLE 106 | ZLSP950E106-3LN | 2CCF212338A0001 | 148 9823           | 1         | 106PLE-3LN          | 7234            |
| Starter Pack 3LN PLE 108 | ZLSP950E108-3LN | 2CCF212339A0001 | 148 9847           | 1         | 108PLE-3LN          | 7365            |
| Starter Pack 3LN PLE 110 | ZLSP950E110-3LN | 2CCF212340A0001 | 148 9861           | 1         | 110PLE-3LN          | 7463            |

# Starter pack Power Bar System

## 3LN LA LB



Starter Pack 3L: L1, L2, L3 included socket end piece

| Solutions available            | Type name           | ABB IT number   | EAN number 761 227 | Pack unit | Moduls (1 PLE 18mm) | Weight in grams |
|--------------------------------|---------------------|-----------------|--------------------|-----------|---------------------|-----------------|
| Starter Pack 3LN LA LB PLE 30  | ZLSP950E30-3LNLALB  | 2CCF212400A0001 | 148 9885           | 1         | 30PLE-3LNLALB       | 2480            |
| Starter Pack 3LN LA LB PLE 32  | ZLSP950E32-3LNLALB  | 2CCF212401A0001 | 148 9908           | 1         | 32PLE-3LNLALB       | 2611            |
| Starter Pack 3LN LA LB PLE 34  | ZLSP950E34-3LNLALB  | 2CCF212402A0001 | 148 9922           | 1         | 34PLE-3LNLALB       | 2754            |
| Starter Pack 3LN LA LB PLE 36  | ZLSP950E36-3LNLALB  | 2CCF212403A0001 | 148 9946           | 1         | 36PLE-3LNLALB       | 2885            |
| Starter Pack 3LN LA LB PLE 38  | ZLSP950E38-3LNLALB  | 2CCF212404A0001 | 148 9960           | 1         | 38PLE-3LNLALB       | 3017            |
| Starter Pack 3LN LA LB PLE 40  | ZLSP950E40-3LNLALB  | 2CCF212405A0001 | 148 9984           | 1         | 40PLE-3LNLALB       | 3149            |
| Starter Pack 3LN LA LB PLE 42  | ZLSP950E42-3LNLALB  | 2CCF212406A0001 | 149 0003           | 1         | 42PLE-3LNLALB       | 3291            |
| Starter Pack 3LN LA LB PLE 44  | ZLSP950E44-3LNLALB  | 2CCF212407A0001 | 149 0027           | 1         | 44PLE-3LNLALB       | 3423            |
| Starter Pack 3LN LA LB PLE 46  | ZLSP950E46-3LNLALB  | 2CCF212408A0001 | 149 0041           | 1         | 46PLE-3LNLALB       | 3555            |
| Starter Pack 3LN LA LB PLE 48  | ZLSP950E48-3LNLALB  | 2CCF212409A0001 | 149 0065           | 1         | 48PLE-3LNLALB       | 3686            |
| Starter Pack 3LN LA LB PLE 50  | ZLSP950E50-3LNLALB  | 2CCF212410A0001 | 149 0089           | 1         | 50PLE-3LNLALB       | 3829            |
| Starter Pack 3LN LA LB PLE 52  | ZLSP950E52-3LNLALB  | 2CCF212411A0001 | 149 0102           | 1         | 52PLE-3LNLALB       | 3961            |
| Starter Pack 3LN LA LB PLE 54  | ZLSP950E54-3LNLALB  | 2CCF212412A0001 | 149 0126           | 1         | 54PLE-3LNLALB       | 4092            |
| Starter Pack 3LN LA LB PLE 56  | ZLSP950E56-3LNLALB  | 2CCF212413A0001 | 149 0140           | 1         | 56PLE-3LNLALB       | 4224            |
| Starter Pack 3LN LA LB PLE 58  | ZLSP950E58-3LNLALB  | 2CCF212414A0001 | 149 0164           | 1         | 58PLE-3LNLALB       | 4366            |
| Starter Pack 3LN LA LB PLE 60  | ZLSP950E60-3LNLALB  | 2CCF212415A0001 | 149 0188           | 1         | 60PLE-3LNLALB       | 4498            |
| Starter Pack 3LN LA LB PLE 62  | ZLSP950E62-3LNLALB  | 2CCF212416A0001 | 149 0201           | 1         | 62PLE-3LNLALB       | 4630            |
| Starter Pack 3LN LA LB PLE 64  | ZLSP950E64-3LNLALB  | 2CCF212417A0001 | 149 0225           | 1         | 64PLE-3LNLALB       | 4761            |
| Starter Pack 3LN LA LB PLE 66  | ZLSP950E66-3LNLALB  | 2CCF212418A0001 | 149 0249           | 1         | 66PLE-3LNLALB       | 4904            |
| Starter Pack 3LN LA LB PLE 68  | ZLSP950E68-3LNLALB  | 2CCF212419A0001 | 149 0263           | 1         | 68PLE-3LNLALB       | 5036            |
| Starter Pack 3LN LA LB PLE 70  | ZLSP950E70-3LNLALB  | 2CCF212420A0001 | 149 0287           | 1         | 70PLE-3LNLALB       | 5167            |
| Starter Pack 3LN LA LB PLE 72  | ZLSP950E72-3LNLALB  | 2CCF212421A0001 | 149 0300           | 1         | 72PLE-3LNLALB       | 5299            |
| Starter Pack 3LN LA LB PLE 74  | ZLSP950E74-3LNLALB  | 2CCF212422A0001 | 149 0324           | 1         | 74PLE-3LNLALB       | 5442            |
| Starter Pack 3LN LA LB PLE 76  | ZLSP950E76-3LNLALB  | 2CCF212423A0001 | 149 0348           | 1         | 76PLE-3LNLALB       | 5573            |
| Starter Pack 3LN LA LB PLE 78  | ZLSP950E78-3LNLALB  | 2CCF212424A0001 | 149 0362           | 1         | 78PLE-3LNLALB       | 5705            |
| Starter Pack 3LN LA LB PLE 80  | ZLSP950E80-3LNLALB  | 2CCF212425A0001 | 149 0386           | 1         | 80PLE-3LNLALB       | 5836            |
| Starter Pack 3LN LA LB PLE 82  | ZLSP950E82-3LNLALB  | 2CCF212426A0001 | 149 0409           | 1         | 82PLE-3LNLALB       | 5979            |
| Starter Pack 3LN LA LB PLE 84  | ZLSP950E84-3LNLALB  | 2CCF212427A0001 | 149 0423           | 1         | 84PLE-3LNLALB       | 6111            |
| Starter Pack 3LN LA LB PLE 86  | ZLSP950E86-3LNLALB  | 2CCF212428A0001 | 149 0447           | 1         | 86PLE-3LNLALB       | 6242            |
| Starter Pack 3LN LA LB PLE 88  | ZLSP950E88-3LNLALB  | 2CCF212429A0001 | 149 0461           | 1         | 88PLE-3LNLALB       | 6374            |
| Starter Pack 3LN LA LB PLE 90  | ZLSP950E90-3LNLALB  | 2CCF212430A0001 | 149 0485           | 1         | 90PLE-3LNLALB       | 6517            |
| Starter Pack 3LN LA LB PLE 92  | ZLSP950E92-3LNLALB  | 2CCF212431A0001 | 149 0508           | 1         | 92PLE-3LNLALB       | 6648            |
| Starter Pack 3LN LA LB PLE 94  | ZLSP950E94-3LNLALB  | 2CCF212432A0001 | 149 0522           | 1         | 94PLE-3LNLALB       | 6780            |
| Starter Pack 3LN LA LB PLE 96  | ZLSP950E96-3LNLALB  | 2CCF212433A0001 | 149 0546           | 1         | 96PLE-3LNLALB       | 6912            |
| Starter Pack 3LN LA LB PLE 98  | ZLSP950E98-3LNLALB  | 2CCF212434A0001 | 149 0560           | 1         | 98PLE-3LNLALB       | 7054            |
| Starter Pack 3LN LA LB PLE 100 | ZLSP950E100 3LNLALB | 2CCF212435A0001 | 149 0584           | 1         | 100PLE-3LNLALB      | 7186            |
| Starter Pack 3LN LA LB PLE 102 | ZLSP950E102 3LNLALB | 2CCF212436A0001 | 149 0607           | 1         | 102PLE-3LNLALB      | 7317            |
| Starter Pack 3LN LA LB PLE 104 | ZLSP950E104 3LNLALB | 2CCF212437A0001 | 149 0621           | 1         | 104PLE-3LNLALB      | 7449            |
| Starter Pack 3LN LA LB PLE 106 | ZLSP950E106 3LNLALB | 2CCF212438A0001 | 149 0645           | 1         | 106PLE-3LNLALB      | 7592            |
| Starter Pack 3LN LA LB PLE 108 | ZLSP950E108 3LNLALB | 2CCF212439A0001 | 149 0669           | 1         | 108PLE-3LNLALB      | 7723            |
| Starter Pack 3LN LA LB PLE 110 | ZLSP950E110 3LNLALB | 2CCF212440A0001 | 149 0683           | 1         | 110PLE-3LNLALB      | 7821            |

# Sockets and Incoming components

## Socket base

|                                                                                    | Description                                                   | Type name | ABB IT number   | EAN number 761 227 | Pack unit | Moduls (1 PLE 18mm) | Weight in grams |
|------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------|-----------------|--------------------|-----------|---------------------|-----------------|
|  | 8-module socket<br>Length 144 mm<br>(includes base and cover) | ZLSP906   | 2CCF212053A0001 | 148 7324           | 10        | 6                   | 113             |
|                                                                                    | 6-module socket<br>Length 108 mm<br>(includes base and cover) | ZLSP908   | 2CCF212050A0001 | 148 7300           | 10        | 8                   | 147             |

## Busbars for the sockets

|                                                                                     | Description                                                                           | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | 250A busbar plated,<br>25x3 mm, for L1, L2, L3, N and PE<br>– Delivery length 1979 mm | ZLSP1250  | 2CCF212100M0110 | 148 8222           | 1               | 110    | 1343            |
|                                                                                     | 40A auxiliary busbar plated,<br>5x2 mm, for LA und LB<br>– Delivery length 1979 mm    | ZLS202    | 2CCF002773R0001 | 001 5719           | 10              | 110    | 240             |

## Socket end piece

|                                                                                     | Description                                    | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | To prevent displacement of sockets and busbars | ZLSP920   | 2CCF212082A0001 | 148 7386           | 1               | 2      | 103             |
|                                                                                     | To prevent displacement of sockets and busbars | ZLSP921   | 2CCF212085A0001 | 148 7409           | 1               | 2      | 54              |

## Incoming terminal component 10 mm<sup>2</sup> to 95 mm<sup>2</sup>, 250 A

|                                                                                     | Version                               | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|---------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | Feeder component N                    | ZLSP250   | 2CCV672600R0001 | 149 0782           | 1               | 2      | 112             |
|                                                                                     | Feeder component L1                   | ZLSP251   | 2CCV672601R0001 | 149 0805           | 1               | 2      | 112             |
|                                                                                     | Feeder component L2                   | ZLSP252   | 2CCV672602R0001 | 149 0829           | 1               | 2      | 112             |
|                                                                                     | Feeder component L3                   | ZLSP253   | 2CCV672603R0001 | 149 0843           | 1               | 2      | 112             |
|                                                                                     | Feeder component N additional socket  | ZLSP954   | 2CCV672608R0001 | 149 0867           | 1               | 2      | 100             |
|                                                                                     | Feeder component PE additional socket | ZLSP959   | 2CCV672609R0001 | 149 0881           | 1               | 2      | 100             |

# Additional socket Power Bar System

## Socket accessories

### Additional socket

The additional socket can easily be fitted onto the socket base to accommodate the external N and/or PE busbars. This enables neutral connections to be made where single-pole miniature circuit breakers are used with unswitched neutral.

Neutral terminals are clipped onto the additional socket and can be used as detachable neutral connections. One N busbar and/or one PE busbar can be fitted. Each socket base can be equipped with an additional socket.

### Additional socket for external N and PE busbars

|                                                                                    |                                                  | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|------------------------------------------------------------------------------------|--------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | – 8-module socket (suitable for 8-module socket) | ZLSP928   | 2CCF212060A0001 | 148 7348           | 10              | 8      | 67              |
|                                                                                    | – 6-module socket (suitable for 6-module socket) | ZLSP926   | 2CCF212061A0001 | 148 7362           | 10              | 6      | 53              |

### Busbar insulator

|                                                                                     |                                                                           | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | dark grey, 20 for isolation and spacing of separate busbar sections, 18mm | ZLS938    | 2CCA205611R0001 | 141 8205           | 1               | 1      | 1               |

### Busbar cover

|                                                                                     |                                                                                                                                                                                 | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | electrically protected covering of main and auxiliary busbars. The 4 modules cover can be divided. Suitable to accept extension adapter ZLS 101 4x18mm – bag containing 5 items | ZLS100    | 2CCF002762R0001 | 001 5603           | 1               | 1      | 95              |

### Add-on adapter

|                                                                                     |                                                                                                                                   | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | 18mm wide, can be plugged on busbar cover ZLS100. To mount conventional DIN devices with 45mm cap size. – bag containing 10 items | ZLS101    | 2CCF002763R0001 | 001 5610           | 10              | 1      | 2               |

# SMISLINE TP

## New terminal range IEC

### N terminals and PE terminals

Corresponding N terminals (blue) or PE terminals (yellow-green) are available for the power supply and the outgoing conductors of the external N and PE busbars for cross sections. The terminals are fitted with label holders which can be used with the marking adapter or the self-adhesive marking label (Phoenix Contact type Cipline UC-TM):

### Connection for the terminals

|             |                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZLS918, 919 | 0,75 mm <sup>2</sup> up to 10 mm <sup>2</sup> strand wire with ferrule<br>1 mm <sup>2</sup> up to 10 mm <sup>2</sup> strand<br>2x1,5 mm <sup>2</sup> or 2x2,5 mm <sup>2</sup> allowed, all other combinations it is only allowed with one wire |
| ZLS913, 929 | 16 mm <sup>2</sup> up to 35 mm <sup>2</sup> wire with ferrule, max. 1 wire                                                                                                                                                                     |
| ZLS954, 959 | 50 mm <sup>2</sup> up to 95 mm <sup>2</sup> wire with ferrule, max. 1 wire                                                                                                                                                                     |

### N terminal for additional socket light blue, for external busbars

| N terminal for additional socket right side, for external busbars                   |                      |               |                    |                 |        |                 |     |
|-------------------------------------------------------------------------------------|----------------------|---------------|--------------------|-----------------|--------|-----------------|-----|
|                                                                                     | Type name            | ABB IT number | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |     |
|  | N 10mm²              | ZLS918        | 2CCA183440R0001    | 148 7027        | 10     | 0.5             | 11  |
|                                                                                     | N 35mm²              | ZLS913        | 2CCA183470R0001    | 142 1304        | 10     | 1               | 30  |
|                                                                                     | N 95mm²              | ZLS954        | 2CCV672508R0001    | 142 4404        | 1      | 2               | 100 |
|                                                                                     | N 95mm² double entry | ZLS954-1      | 2CCF183335R0001    | 145 2797        | 1      | 2               | 100 |

### PE terminal for additional socket yellow-green, for external busbars

|                                                                                     |                       |        |                 |          |    |     |     |
|-------------------------------------------------------------------------------------|-----------------------|--------|-----------------|----------|----|-----|-----|
|  | PE 10 mm <sup>2</sup> | ZLS919 | 2CCA183441R0001 | 148 7041 | 10 | 0.5 | 11  |
|                                                                                     | PE 35 mm <sup>2</sup> | ZLS929 | 2CCA183387R0001 | 148 6921 | 10 | 1   | 30  |
|                                                                                     | PE 95 mm <sup>2</sup> | ZLS959 | 2CCA672510R0001 | 148 7164 | 1  | 2   | 100 |

### Red/orange terminals for additional socket

|                                                                                     |                    |               |                 |          |    |     |    |
|-------------------------------------------------------------------------------------|--------------------|---------------|-----------------|----------|----|-----|----|
|  | 10 mm <sup>2</sup> | ZLS918/Red    | 2CCA183443R0001 | 148 7089 | 10 | 0.5 | 11 |
|                                                                                     | 10 mm <sup>2</sup> | ZLS919/Orange | 2CCA183444R0001 | 148 7102 | 10 | 0.5 | 11 |
|                                                                                     | 10 mm <sup>2</sup> | ZLS918/Black  | 2CCA183445R0001 | 148 7126 | 10 | 0.5 | 11 |
|                                                                                     | 35 mm <sup>2</sup> | ZLS913/Red    | 2CCA183465R0001 | 142 1342 | 10 | 1   | 30 |
|                                                                                     | 35 mm <sup>2</sup> | ZLS916/Orange | 2CCA183466R0001 | 142 1366 | 10 | 1   | 30 |
|                                                                                     |                    |               |                 |          |    |     |    |

### Insulator block

The dark grey insulator block isolates the bus bar section from one another and simultaneously marks the disconnection point externally.

### Insulator block for additional socket

| Insulator block for additional socket                                               |                                                              | Type name | ABB IT number   | EAN number | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------|-----------------|------------|-----------------|--------|-----------------|
|  |                                                              |           |                 | 761 227    |                 |        |                 |
|                                                                                     | dark gray, to isolate the N bus bar on the additional socket | ZLS927    | 2CCA183442R0001 | 148 7065   | 10              | 0.5    | 9               |

# Universal adapters 32 A and 63 A

## Universal adapters 32 A and 63 A, Adapter for use EN/IEC 61439-6

|                                                                                    | Designation                        | Type name  | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|------------------------------------------------------------------------------------|------------------------------------|------------|-----------------|--------------------|-----------------|--------|-----------------|
|  | <b>Adapter 32A</b>                 |            |                 |                    |                 |        |                 |
|                                                                                    | L1 or L2 or L3 wire top            | ZLS970     | 2CCA180551R0001 | 144 4563           | 10              | 1      | 20              |
|                                                                                    | L1 or L2 or L3 wire bottom         | ZLS971     | 2CCA180552R0001 | 144 4570           | 10              | 1      | 20              |
|                                                                                    | N wire top                         | ZLS970N    | 2CCA180553R0001 | 144 4587           | 10              | 1      | 20              |
|                                                                                    | N wire bottom                      | ZLS971N    | 2CCA180554R0001 | 144 4570           | 10              | 1      | 20              |
|                                                                                    | <b>Adapter 63A</b>                 |            |                 |                    |                 |        |                 |
|                                                                                    | L1 or L2 or L3 wire top            | ZLS972     | 2CCA180555R0001 | 144 4709           | 10              | 1      | 24              |
|                                                                                    | L1 or L2 or L3 wire bottom         | ZLS973     | 2CCA180556R0001 | 144 4716           | 10              | 1      | 24              |
|                                                                                    | N wire top                         | ZLS972N    | 2CCA180557R0001 | 144 4723           | 10              | 1      | 24              |
|                                                                                    | N wire bottom                      | ZLS973N    | 2CCA180558R0001 | 144 4730           | 10              | 1      | 24              |
|                                                                                    | <b>Adapter 32A with 300mm wire</b> |            |                 |                    |                 |        |                 |
|                                                                                    | L1 or L2 or L3 wire top            | ZLS970300  | 2CCA180559R0001 | 144 4747           | 10              | 1      | 26              |
|                                                                                    | L1 or L2 or L3 wire bottom         | ZLS971300  | 2CCA180560R0001 | 144 4754           | 10              | 1      | 26              |
|                                                                                    | N wire top                         | ZLS970N300 | 2CCA180561R0001 | 144 4761           | 10              | 1      | 26              |
|                                                                                    | N wire bottom                      | ZLS971N300 | 2CCA180562R0001 | 144 4778           | 10              | 1      | 26              |
|                                                                                    | <b>Adapter 63A with 300mm wire</b> |            |                 |                    |                 |        |                 |
|                                                                                    | L1 or L2 or L3 wire top            | ZLS972300  | 2CCA180563R0001 | 144 4785           | 10              | 1      | 37              |
|                                                                                    | L1 or L2 or L3 wire bottom         | ZLS973300  | 2CCA180564R0001 | 144 4792           | 10              | 1      | 37              |
|                                                                                    | N wire top                         | ZLS972N300 | 2CCA180565R0001 | 144 4808           | 10              | 1      | 37              |
|                                                                                    | N wire bottom                      | ZLS973N300 | 2CCA180566R0001 | 144 4815           | 10              | 1      | 37              |

## Accessory

|                                                                                     | Designation                                                       | Type name | ABB IT number   | EAN number 761 227 | Pack-aging unit | Module | Weight in grams |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------|-----------------|--------------------|-----------------|--------|-----------------|
|  | <b>Dummy housing</b>                                              |           |                 |                    |                 |        |                 |
|                                                                                     |                                                                   | ZLS964    | 2CCA180550R0001 | 144 4556           | 10              | 1      | 11              |
|                                                                                     | <b>Connector for multi-pole adapter</b>                           |           |                 |                    |                 |        |                 |
|                                                                                     | Bag with 30 pcs.<br>2 connectors are needed to connect 2 adapters | E210-SPV  | 2CCC703715R0001 | 141 4801           | Set of 30 pcs.  |        | 50              |

# Busbars Power Bar System 250 A and 40 A

250 A and 40 A busbars / selection table for sockets

| Order data<br>busbar<br>250 A | ABB<br>IT number | EAN<br>number<br>761227 | ZLSP908 | ZLSP906 | Pack<br>unit | Moduls<br>(1 PLE<br>18mm) | Weight<br>in<br>grams | Busbar<br>length<br>in mm | Order data<br>busbar<br>40 A | ABB<br>IT number | EAN<br>number<br>761 227 |
|-------------------------------|------------------|-------------------------|---------|---------|--------------|---------------------------|-----------------------|---------------------------|------------------------------|------------------|--------------------------|
| ZLSP1250E30                   | 2CCF212100M0030  | 148 7423                | 3       | 1       | 1            | 30                        | 366                   | 535                       | ZLS203E30                    | 2CCF800229R0001  | 001 7669                 |
| ZLSP1250E32                   | 2CCF212100M0032  | 148 7447                | 4       | –       | 1            | 32                        | 391                   | 571                       | ZLS203E32                    | 2CCF800230R0001  | 001 7683                 |
| ZLSP1250E34                   | 2CCF212100M0034  | 148 7461                | 2       | 3       | 1            | 34                        | 415                   | 607                       | ZLS203E34                    | 2CCF800231R0001  | 001 7706                 |
| ZLSP1250E36                   | 2CCF212100M0036  | 148 7485                | 3       | 2       | 1            | 36                        | 439                   | 643                       | ZLS203E36                    | 2CCF800232R0001  | 001 7720                 |
| ZLSP1250E38                   | 2CCF212100M0038  | 148 7508                | 4       | 1       | 1            | 38                        | 464                   | 679                       | ZLS203E38                    | 2CCF800233R0001  | 001 7744                 |
| ZLSP1250E40                   | 2CCF212100M0040  | 148 7522                | 5       | –       | 1            | 40                        | 488                   | 715                       | ZLS203E40                    | 2CCF800234R0001  | 001 7768                 |
| ZLSP1250E42                   | 2CCF212100M0042  | 148 7546                | 3       | 3       | 1            | 42                        | 513                   | 751                       | ZLS203E42                    | 2CCF800235R0001  | 001 7782                 |
| ZLSP1250E44                   | 2CCF212100M0044  | 148 7560                | 4       | 2       | 1            | 44                        | 537                   | 787                       | ZLS203E44                    | 2CCF800236R0001  | 001 7805                 |
| ZLSP1250E46                   | 2CCF212100M0046  | 148 7584                | 5       | 1       | 1            | 46                        | 561                   | 823                       | ZLS203E46                    | 2CCF800237R0001  | 001 7829                 |
| ZLSP1250E48                   | 2CCF212100M0048  | 148 7607                | 6       | –       | 1            | 48                        | 586                   | 859                       | ZLS203E48                    | 2CCF800238R0001  | 001 7843                 |
| ZLSP1250E50                   | 2CCF212100M0050  | 148 7621                | 4       | 3       | 1            | 50                        | 610                   | 895                       | ZLS203E50                    | 2CCF800239R0001  | 001 7867                 |
| ZLSP1250E52                   | 2CCF212100M0052  | 148 7645                | 5       | 2       | 1            | 52                        | 635                   | 932                       | ZLS203E52                    | 2CCF800240R0001  | 001 7881                 |
| ZLSP1250E54                   | 2CCF212100M0054  | 148 7669                | 6       | 1       | 1            | 54                        | 659                   | 968                       | ZLS203E54                    | 2CCF800241R0001  | 001 7904                 |
| ZLSP1250E56                   | 2CCF212100M0056  | 148 7683                | 7       | –       | 1            | 56                        | 683                   | 1004                      | ZLS203E56                    | 2CCF800242R0001  | 001 7928                 |
| ZLSP1250E58                   | 2CCF212100M0058  | 148 7706                | 5       | 3       | 1            | 58                        | 708                   | 1040                      | ZLS203E58                    | 2CCF800243R0001  | 001 7942                 |
| ZLSP1250E60                   | 2CCF212100M0060  | 148 7720                | 6       | 2       | 1            | 60                        | 732                   | 1076                      | ZLS203E60                    | 2CCF800244R0001  | 001 7973                 |
| ZLSP1250E62                   | 2CCF212100M0062  | 148 7744                | 7       | 1       | 1            | 62                        | 757                   | 1112                      | ZLS203E62                    | 2CCF800245R0001  | 001 7997                 |
| ZLSP1250E64                   | 2CCF212100M0064  | 148 7768                | 8       | –       | 1            | 64                        | 781                   | 1148                      | ZLS203E64                    | 2CCF800246R0001  | 001 8017                 |
| ZLSP1250E66                   | 2CCF212100M0066  | 148 7782                | 6       | 3       | 1            | 66                        | 806                   | 1184                      | ZLS203E66                    | 2CCF800247R0001  | 001 8031                 |
| ZLSP1250E68                   | 2CCF212100M0068  | 148 7805                | 7       | 2       | 1            | 68                        | 830                   | 1220                      | ZLS203E68                    | 2CCF800248R0001  | 001 8055                 |
| ZLSP1250E70                   | 2CCF212100M0070  | 148 7829                | 8       | 1       | 1            | 70                        | 854                   | 1256                      | ZLS203E70                    | 2CCF800249R0001  | 001 8079                 |
| ZLSP1250E72                   | 2CCF212100M0072  | 148 7843                | 9       | –       | 1            | 72                        | 879                   | 1292                      | ZLS203E72                    | 2CCF800250R0001  | 001 8093                 |
| ZLSP1250E74                   | 2CCF212100M0074  | 148 7867                | 7       | 3       | 1            | 74                        | 903                   | 1328                      | ZLS203E74                    | 2CCF800251R0001  | 001 8116                 |
| ZLSP1250E76                   | 2CCF212100M0076  | 148 7881                | 8       | 2       | 1            | 76                        | 928                   | 1364                      | ZLS203E76                    | 2CCF800252R0001  | 001 8130                 |
| ZLSP1250E78                   | 2CCF212100M0078  | 148 7904                | 9       | 1       | 1            | 78                        | 952                   | 1400                      | ZLS203E78                    | 2CCF800253R0001  | 001 8154                 |
| ZLSP1250E80                   | 2CCF212100M0080  | 148 7928                | 10      | –       | 1            | 80                        | 976                   | 1436                      | ZLS203E80                    | 2CCF800254R0001  | 001 8185                 |
| ZLSP1250E82                   | 2CCF212100M0082  | 148 7942                | 8       | 3       | 1            | 82                        | 1001                  | 1472                      | ZLS203E82                    | 2CCF800255R0001  | 001 8208                 |
| ZLSP1250E84                   | 2CCF212100M0084  | 148 7966                | 9       | 2       | 1            | 84                        | 1025                  | 1508                      | ZLS203E84                    | 2CCF800256R0001  | 001 8222                 |
| ZLSP1250E86                   | 2CCF212100M0086  | 148 7980                | 10      | 1       | 1            | 86                        | 1050                  | 1544                      | ZLS203E86                    | 2CCF800257R0001  | 001 8246                 |
| ZLSP1250E88                   | 2CCF212100M0088  | 148 8000                | 11      | –       | 1            | 88                        | 1074                  | 1580                      | ZLS203E88                    | 2CCF800258R0001  | 001 8260                 |
| ZLSP1250E90                   | 2CCF212100M0090  | 148 8024                | 9       | 3       | 1            | 90                        | 1098                  | 1616                      | ZLS203E90                    | 2CCF800259R0001  | 001 8284                 |
| ZLSP1250E92                   | 2CCF212100M0092  | 148 8048                | 10      | 2       | 1            | 92                        | 1123                  | 1652                      | ZLS203E92                    | 2CCF800260R0001  | 001 8307                 |
| ZLSP1250E94                   | 2CCF212100M0094  | 148 8062                | 11      | 1       | 1            | 94                        | 1147                  | 1688                      | ZLS203E94                    | 2CCF800261R0001  | 001 8321                 |
| ZLSP1250E96                   | 2CCF212100M0096  | 148 8086                | 12      | –       | 1            | 96                        | 1172                  | 1724                      | ZLS203E96                    | 2CCF800262R0001  | 001 8345                 |
| ZLSP1250E98                   | 2CCF212100M0098  | 148 8109                | 10      | 3       | 1            | 98                        | 1196                  | 1760                      | ZLS203E98                    | 2CCF800263R0001  | 001 8369                 |
| ZLSP1250E100                  | 2CCF212100M0100  | 148 8123                | 11      | 2       | 1            | 100                       | 1220                  | 1796                      | ZLS203E100                   | 2CCF800264R0001  | 001 7195                 |
| ZLSP1250E102                  | 2CCF212100M0102  | 148 8147                | 12      | 1       | 1            | 102                       | 1245                  | 1832                      | ZLS203E102                   | 2CCF800265R0001  | 001 7218                 |
| ZLSP1250E104                  | 2CCF212100M0104  | 148 8161                | 13      | –       | 1            | 104                       | 1269                  | 1868                      | ZLS203E104                   | 2CCF800266R0001  | 001 7232                 |
| ZLSP1250E106                  | 2CCF212100M0106  | 148 8185                | 11      | 3       | 1            | 106                       | 1294                  | 1904                      | ZLS203E106                   | 2CCF800267R0001  | 001 7256                 |
| ZLSP1250E108                  | 2CCF212100M0108  | 148 8208                | 12      | 2       | 1            | 108                       | 1318                  | 1940                      | ZLS203E108                   | 2CCF800268R0001  | 001 7270                 |

Planning for the incorporation of feeder block and spare places should be taken into account.  
The total lengths given above were calculated taking socket spacings and tolerances into account.  
For this reason, the indicated busbar length is not necessarily a multiple of 18 mm (1 Module).



# Table of contents

## Technical data

|                |                                                                  |
|----------------|------------------------------------------------------------------|
|                | <b>Busbar system</b>                                             |
| <b>015</b>     | <b>Socket/additional socket/<br/>busbars</b>                     |
| <b>016–017</b> | <b>Incoming terminal block/<br/>Incoming terminal components</b> |
| <b>18</b>      | <b>Definitions</b>                                               |
| <b>19</b>      | <b>Technical data according to<br/>IEC/EN61439-6</b>             |

## Socket/additional socket/busbars

### Socket bases ZLSP906, ZLPS908

The smissline socket system is a totally new kind of assembly and connection technology for the construction of distributions. Besides the classic method of snapping the devices onto 35-mm mounting rails, the new family of devices can be directly attached to the socket bases with integrated busbars. The time-consuming process of connecting up the supply is thereby no longer needed. In addition, in the event of rearrangement or expansion, the replacement of devices in existing systems is made significantly easier.

The socket sections and the wide range of accessories make it possible to plan with the capability for expansion and to construct distribution systems of any desired size in a short period of time.

6- and 8-module sockets are installed either by screwing them onto any flat surface or by snapping them onto a 35 mm DIN mounting rail. Lateral movement or detachment of the sockets again is possible before final fixing.

In order to determine the required socket length, the space necessary for

- the devices required
- the incoming terminal block and
- any reserve spaces needed must be determined.

### Snap mounting

Pull down the slide with a screwdriver until it latches (socket can be moved).

Press on front of slid:

Fixed position

(Sockets fixed)

### The key features

System of any desired length (even number of poles)

Integrated busbars

Simple device change

Long-term planning and problem free extension possible

Significant time savings during assembly and connection

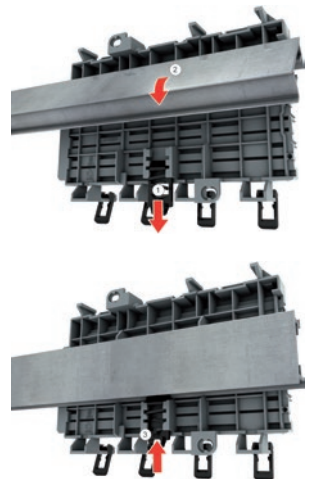
### Busbars for the sockets and additional socket ZLSP250

The busbars of size 25x3mm can be loaded with currents up to 250A. They are plated for perfect contact with the devices plug-in contacts. The maximum available busbar length is 1979 mm. The same busbar type is used, regardless whether it is fitted in the socket (L1, L2, L3, N) or in the additional socket (N, PE). The busbars are inserted in to the socket from the front.

### Auxiliary busbars for the socket ZLS202

The 5x2mm auxiliary busbars are intended for a common power supply of auxiliary switches and signal contacts. They are also plated and their max. delivery length is 1979 mm.

Like the main busbars, the auxiliary busbars are inserted in holders LA and LB from the front. Of course, only on auxiliary busbar can be fitted.



## Incoming terminal block/ Incoming terminal components

### General

The incoming terminal block is used to connect cables directly to the busbars. The terminals act directly on the busbars and therefore fix the incoming terminal block. Removable terminal tops permit the connection of continuous conductors (risers) while horizontal or vertical cable entry is also possible. Instead of using the incoming terminal block, the power supply can also be realized via a device (e.g. residual current operated circuit breaker, miniature circuit breaker or switch disconnector).

### Incoming terminal component ZLSP250 to ZLSP253

The incoming terminal component, with an installation width of 36 mm is available as a single-pole component for the line conductors L1, L2, L3 and as neutral. The terminals act directly on the busbars and thereby fix the incoming terminal component. The incoming terminal component, L1, L2, L3 and N can be combined to meet specific needs. A maximum cable cross-section of 95 mm<sup>2</sup> can be connected to the incoming terminal component.



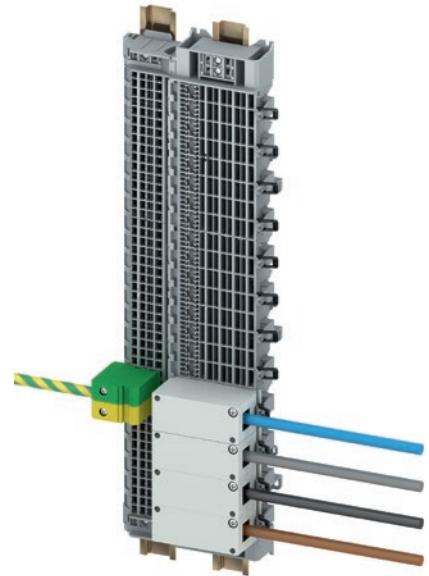
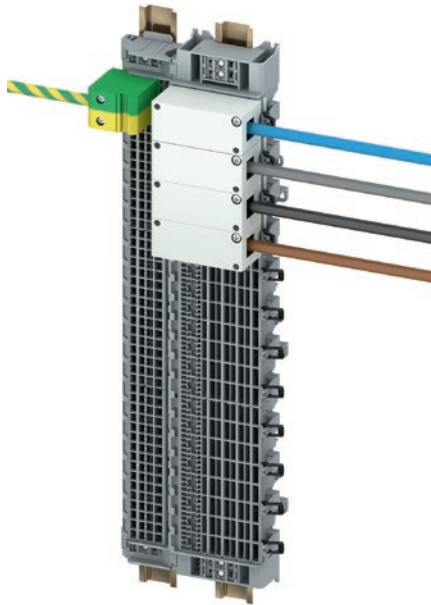
# Incoming Power Bar System

## 250 A and 400 A

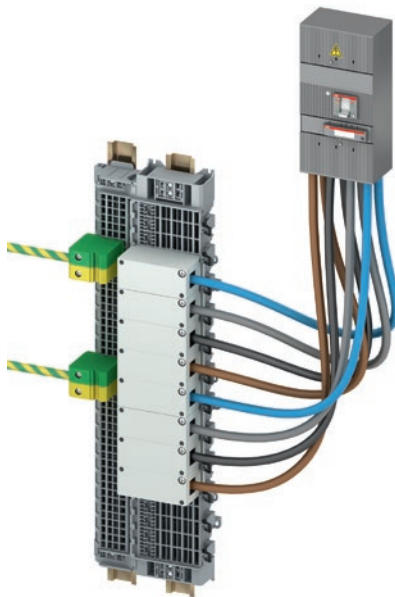
—  
01 Power supply side feed, maximum 250 A.

—  
02 Central feed  
250 A, 400 A total.  
The cables in the  
connections must have  
the same length.  
Incoming terminal  
blocks ZLP25X.

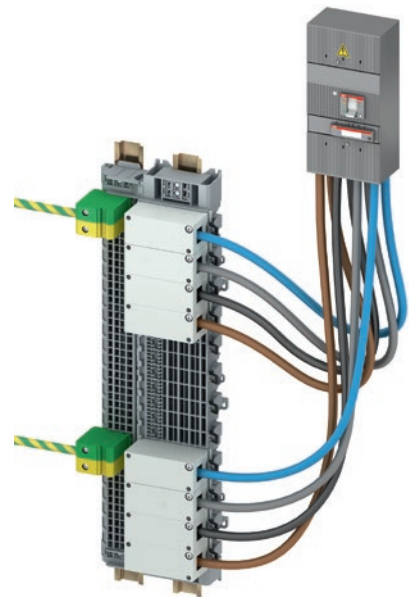
—  
03 Side feed maximum  
250 A, 400 A total.  
The cables in the  
connections must have  
the same length.



—  
01



—  
02



—  
03

## Definitions

### **Rated short-circuit breaking capacity $I_{cn}$**

#### **According to EN 60898-1**

The maximum current which a switching device can switch off without damage at a rated operational voltage and rated operational frequency. It is specified as an effective value.

### **Rated ultimate short-circuit breaking capacity $I_{cu}$**

#### **According to EN 60947-2**

Ultimate short-circuit breaking capacity that a circuit breaker can switch off without damage at a rated operational voltage and rated operational frequency. It is specified as an effective value.

### **Rated service short-circuit breaking capacity $I_{cs}$**

#### **According to EN 60947-2**

Service short-circuit breaking capacity that a circuit breaker can switch off without damage at a rated operational voltage and rated operational frequency. It is specified as an effective value.

### **Rated insulation voltage $U_i$**

The rated insulation voltage ( $U_i$ ) is the voltage to which dielectric checks and creepage distances refer. The maximum rated operational voltage must not exceed its rated insulation voltage.

### **Rated impulse withstand voltage $U_{imp}$**

Peak of a withstand voltage of a specified form and polarity with which the circuit can be loaded under specified test conditions without a breakdown and to which clearances relate.

The rated impulse withstand voltage must be equal to or greater than the values of the withstand over-voltages (transient overvoltages) which occur in the system in which the device is used.

### **Rated short-time withstand current $I_{cw}$**

The rated short-time withstand current is the effective value of the short-circuit current, as specified by the manufacturer for this circuit, that the circuit can conduct without damage. Unless otherwise specified, a time of 1 s shall apply.

### **Rated conditional short-circuit current $I_{cc}$**

The rated conditional short-circuit current is the value of the prospective short-circuit current, as specified by the manufacturer, for a switching device combination that the latter can conduct during the total break time. The information about the specified short-circuit device must be given by the manufacturer.

### **Rated fused short-circuit current $I_{cf}$**

The rated fused short-circuit current is the conditional rated short-circuit current if the short-circuit device is a fuse in accordance with IEC 60269 [IEV 441-17-21, modified].

### **Rated peak withstand current $I_{pk}$**

The rated peak withstand current is the peak value of the withstand current of the circuit of a combination of switching devices, as specified by the manufacturer.

### **Back-up protection**

Assignment of two overcurrent protective devices in series, where the protective device, generally but not necessarily on the supply side, effects the overcurrent protection with or without the assistance of the other protective device and prevents excessive stress on the latter [IEC 60947-1, definition 2.5.24].

### **Total selectivity**

Overcurrent discrimination where, in the presence of two overcurrent protective devices in series, the protective device on the load side effects the protection without causing the other protective device to operate [IEC 60947-2, definition 2.17.2].

### **Partial selectivity**

Overcurrent discrimination where, in the presence of two overcurrent protective devices in series, the protective device on the load side effects the protection up to a given level of overcurrent, without causing the other protective device to operate [IEC 60947-2, definition 2.17.3].

# Technical data according to IEC/EN 61439-6

## Power Bar System 250 A

### Busbar system touch proof:

Use only for wall mounted application (horizontal or vertical). When installed correctly the requirements of EN/IEC 61439-2 are met.

|                                                              |                                                                                             |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Number of poles:                                             | max. 6 to 110<br>3p+N / 2 additional bars PE+N                                              |
| Rated operational voltage ( $U_e$ ):                         | 690 VAC, 1000 VDC<br>(400 VAC, 250 VDC when used for load-free snap on and off under power) |
| Rated insulation voltage ( $U_i$ ) Main circuit:             | 690 VAC, 1000 VDC                                                                           |
| Rated insulation voltage ( $U_i$ ) Auxiliary circuit:        | 415 VAC                                                                                     |
| IP Code:                                                     | IP20B                                                                                       |
| Mounting position:                                           | horizontal or vertical, direct mounting or mounting on DIN rail<br>acc. to EN 60715 35 mm   |
| Pollution degree:                                            | 3 (690 V a.c.) 2 (1000 V d.c.)                                                              |
| Rated impulse voltage ( $U_{imp}$ ):                         | 8 kV mainbusbars; 6 kV auxiliary busbars                                                    |
| Rated current of the assembly ( $I_n A$ ) :                  | max. 250 A side feeding; max. 400A double side feed, or double center feed                  |
| Auxiliary circuit:                                           | max. 40 A                                                                                   |
| Rated current of a circuit ( $I_{nc}$ ) :                    | Main circuit: Max. 100 A                                                                    |
| Rated current of Auxiliary circuit:                          | 40 A                                                                                        |
| Rated short-time withstand current ( $I_{cw}$ ):             | 15 kA / 300 ms                                                                              |
| Auxiliary circuit:                                           | 4 kA / 50 ms                                                                                |
| Rated peak withstand current Main circuit ( $I_{pk}$ ):      | Main circuit: 30 kA                                                                         |
| Rated peak withstand current Auxiliary circuit ( $I_{pk}$ ): | 6 kA                                                                                        |
| Rated frequency (f):                                         | 50/60 Hz                                                                                    |
| Rated conditional short-circuit current ( $I_{cc}$ ):        | see table below                                                                             |
| Ambient air temperature:                                     | max. 60°C                                                                                   |
| Size of CU bars 3P+N+PE:                                     | 3 x 25 mm (75 mm <sup>2</sup> )                                                             |
| Size of CU auxiliary bars La Lb:                             | 2 x 5 mm (10 mm <sup>2</sup> )                                                              |

| Rated conditional short-circuit current ( $I_{cc}$ ) at 415 VAC | Incoming current of main busbars (L1, L2, L3, N) | Short circuit protection device (SCPD) |                                                         |
|-----------------------------------------------------------------|--------------------------------------------------|----------------------------------------|---------------------------------------------------------|
|                                                                 |                                                  | Fuse                                   | MCCB                                                    |
| 40 kA                                                           | 400 A                                            | NH3 gG<br>690 V/400 A                  | ABB<br>$T_{max}$ 400 A                                  |
| 100 kA                                                          | 250 A                                            | NH2 gG<br>690 V/250 A                  | ABB<br>$T_{max}$ T/XT 250 A                             |
|                                                                 | Incoming current of auxiliary busbars (LA LB)    |                                        |                                                         |
|                                                                 | 40 A                                             | NH00 gG<br>500 V/40 A                  | ABB<br>Type S800 in combination with<br>(240 V/415 VAC) |

