



#### General ordering data

|                  |   |
|------------------|---|
| Order No.        | 1798150000  |
| Part designation | BCZ 3.81/08/90F SN BK BX  |
| Version          | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 8, 90°, Box |
| EAN              | 4032248241347   |
| Qty.             | 50 pc(s).   |

#### System parameters

|   |                          |
|---|--------------------------|
| Conductor connection system               | Clamping yoke connection |
| Outgoing direction of conductor           | 90°                      |
| Pitch                                     | 3.81 mm                  |
| Pitch in inch                             | 0.15 inch                |
| No. of poles                              | 8                        |
| No. of rows                               | 1                        |
| Screwdriver blade                         | 0.4 x 2.5                |
| Screwdriver blade standard                | DIN 5264                 |
| Tightening torque, min.                   | 0.2                      |
| Tightening torque, max.                   | 0.25 Nm                  |
| Clamping screw                            | M 2                      |
| Stripping length                          | 7 mm                     |
| L1 in mm                                  | 26.67 mm                 |
| L1 in inch                                | 1.05 inch                |
| Electric shock protection to DIN VDE 0470 | IP 20                    |
| Electric shock protection to DIN VDE 0470 | Safe from finger touch   |

#### Material data

|                           |                     |
|---------------------------|---------------------|
| Insulating material       | PA GF               |
| Colour                    | black               |
| colour chart              | Similar to RAL 9011 |
| Insulating material group | II                  |
| Flammability class UL 94  | V-0                 |
| CTI                       | >= 475              |
| Contact base material     | Copper alloy        |

#### Material data

|                 |        |
|-----------------|--------|
| Contact surface | tinned |
|-----------------|--------|

#### Connectable conductors

|   |                          |
|---|--------------------------|
| Clamping range, min.                              | 0.08 mm <sup>2</sup>     |
| Clamping range, max.                              | 1.5 mm <sup>2</sup>      |
| AWG, min.   | 28                       |
| AWG, max.   | 16                       |
| Solid, min. H05(07) V-U                           | 0.2 mm <sup>2</sup>      |
| Solid, max. H05(07) V-U                           | 1.5 mm <sup>2</sup>      |
| Flexible, min. H05(07) V-K                        | 0.2 mm <sup>2</sup>      |
| Flexible, max. H05(07) V-K                        | 1.5 mm <sup>2</sup>      |
| With wire end ferrule, acc. to DIN 46 228/1, min. | 0.2 mm <sup>2</sup>      |
| With wire end ferrule, acc. to DIN 46 228/1, max. | 1.5 mm <sup>2</sup>      |
| w. plastic collar ferrule, DIN 46228 pt 4, min.   | 0.2 mm <sup>2</sup>      |
| w. plastic collar ferrule, DIN 46228 pt 4, max.   | 1.5 mm <sup>2</sup>      |
| Gauge to EN 60999 a x b; ø                        | 2.4 mm x 1.5 mm ; 2.4 mm |

#### DIN IEC rating data

|  |                  |
|--|------------------|
| Rated current, min. No. pins (Tu=20°C)   | 17.5 A           |
| Rated current, max. No. pins (Tu=20°C)   | 15.9 A           |
| Rated current, min. No. pins (Tu=40°C)   | 17.5 A           |
| Rated current, max. No. pins (Tu=40°C)   | 14.1 A           |
| Rated voltage for overvoltage class/pollution severity II/2                    | 320 V            |
| Rated voltage for overvoltage class/pollution severity III/2                   | 160 V            |
| Rated voltage for overvoltage class/pollution severity III/3                   | 160 V            |
| Rated impulse withstand voltage for overvoltage class/pollution severity II/2  | 2.5 kV           |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/2 | 2.5 kV           |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/3 | 2.5 kV           |
| Short-time withstand current resistance  | 3 x 1s with 76 A |

#### CSA rating data

|                                    |       |
|------------------------------------|-------|
| Rated voltage (Use group D)        | 300 V |
| Rated current (Use group D)        | 10 A  |
| AWG conductor (field wiring), min. | 28    |
| AWG conductor (field wiring), max. | 16    |

#### UL 1059 rating data

|                             |       |
|-----------------------------|-------|
| Rated voltage (Use group D) | 300 V |
| Rated current (Use group D) | 10 A  |
| AWG conductor, min.         | 28    |
| AWG conductor, max.         | 16    |

### Approvals

Approvals institutes



### Classifications

|            |             |
|------------|-------------|
| eClass 4.1 | 27-26-07-01 |
| eClass 5.0 | 27-26-07-01 |
| eClass 5.1 | 27-26-07-04 |

### Similar products

| Order No.  | Part designation         | Version   |
|------------|--------------------------|---|
| 1939980000 | BCZ 3.81/02/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 2, 90°, Box |
| 1798780000 | BCZ 3.81/02/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 2, 90°, Box |
| 1798850000 | BCZ 3.81/02/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 2, 90°, Box |
| 1939990000 | BCZ 3.81/03/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 3, 90°, Box |
| 1798140000 | BCZ 3.81/03/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 3, 90°, Box |
| 1798860000 | BCZ 3.81/03/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 3, 90°, Box |
| 1940000000 | BCZ 3.81/04/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 4, 90°, Box |
| 1798790000 | BCZ 3.81/04/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 4, 90°, Box |
| 1798870000 | BCZ 3.81/04/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 4, 90°, Box |
| 1940010000 | BCZ 3.81/05/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 5, 90°, Box |
| 1798800000 | BCZ 3.81/05/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 5, 90°, Box |

|            |                          |  |
|------------|--------------------------|--|
| 1798880000 | BCZ 3.81/05/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 5, 90°, Box  |
| 1940020000 | BCZ 3.81/06/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 6, 90°, Box  |
| 1798810000 | BCZ 3.81/06/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 6, 90°, Box  |
| 1798890000 | BCZ 3.81/06/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 6, 90°, Box  |
| 1940030000 | BCZ 3.81/07/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 7, 90°, Box  |
| 1845690000 | BCZ 3.81/07/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 7, 90°, Box  |
| 1940130000 | BCZ 3.81/07/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 7, 90°, Box  |
| 1940040000 | BCZ 3.81/08/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 8, 90°, Box  |
| 1798900000 | BCZ 3.81/08/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 8, 90°, Box  |
| 1940050000 | BCZ 3.81/09/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 9, 90°, Box  |
| 1899540000 | BCZ 3.81/09/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 9, 90°, Box  |
| 1940140000 | BCZ 3.81/09/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 9, 90°, Box  |
| 1940060000 | BCZ 3.81/10/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 10, 90°, Box |
| 1798820000 | BCZ 3.81/10/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 10, 90°, Box |
| 1798910000 | BCZ 3.81/10/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 10, 90°, Box |
| 1940070000 | BCZ 3.81/11/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 11, 90°, Box |
| 1899560000 | BCZ 3.81/11/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 11, 90°, Box |

|            |                          |  |
|------------|--------------------------|--|
| 1940150000 | BCZ 3.81/11/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 11, 90°, Box |
| 1940080000 | BCZ 3.81/12/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 12, 90°, Box |
| 1798830000 | BCZ 3.81/12/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 12, 90°, Box |
| 1798920000 | BCZ 3.81/12/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 12, 90°, Box |
| 1940090000 | BCZ 3.81/13/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 13, 90°, Box |
| 1899580000 | BCZ 3.81/13/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 13, 90°, Box |
| 1940160000 | BCZ 3.81/13/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 13, 90°, Box |
| 1940100000 | BCZ 3.81/14/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 14, 90°, Box |
| 1899600000 | BCZ 3.81/14/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 14, 90°, Box |
| 1940170000 | BCZ 3.81/14/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 14, 90°, Box |
| 1940110000 | BCZ 3.81/15/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 15, 90°, Box |
| 1899620000 | BCZ 3.81/15/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 15, 90°, Box |
| 1940180000 | BCZ 3.81/15/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 15, 90°, Box |
| 1940120000 | BCZ 3.81/16/90F SN OR BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 16, 90°, Box |
| 1798840000 | BCZ 3.81/16/90F SN BK BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 16, 90°, Box |
| 1798930000 | BCZ 3.81/16/90F SN GN BX | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.81 mm, No. of poles: 16, 90°, Box |