



#### General ordering data

|                  |   |
|------------------|---|
| Order No.        | 1000590001  |
| Part designation | BLF 5.08/20/90LR SN BK BX   |
| Version          | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 20, 90°, Box |
| EAN              | 4032248690558   |
| Qty.             | 12 pc(s).   |
| Packaging        | Box   |

#### System parameters

|   |                        |
|---|------------------------|
| Conductor connection system                 | PUSH IN                |
| Outgoing direction of conductor             | 90°                    |
| Pitch in mm                                 | 5.08 mm                |
| Pitch in inch                               | 0.2 inch               |
| No. of poles                                | 20                     |
| No. of rows                                 | 1                      |
| Screwdriver blade                           | 0.6 x 3.5              |
| Screwdriver blade standard                  | DIN 5264               |
| Stripping length                            | 10 mm                  |
| L1 in mm                                    | 96.52 mm               |
| L1 in inch                                  | 3.8 inch               |
| Electric shock protection to DIN VDE 0470   | IP 20                  |
| Electric shock protection to DIN VDE 57 106 | Safe from finger touch |

#### Material data

|                          |                     |
|--------------------------|---------------------|
| Insulating material      | PBT                 |
| Colour                   | black               |
| colour chart             | Similar to RAL 9011 |
| Flammability class UL 94 | V-0                 |
| Contact material         | CuSn                |
| Contact surface          | tinned              |
| Contact base material    | CuSn                |

#### Connectable conductors

|   |                      |
|---|----------------------|
| Clamping range, min.                              | 0.13 mm <sup>2</sup> |
| Clamping range, max.                              | 3.31 mm <sup>2</sup> |
| Conductor connection cross-section AWG, min.      | AWG 26               |
| Conductor connection cross-section AWG, max.      | AWG 12               |
| Solid, min. H05(07) V-U                           | 0.2 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                           | 2.5 mm <sup>2</sup>  |
| Stranded, max. H07V-R                             | 2 mm <sup>2</sup>    |
| Stranded, min. H07V-R                             | 0 mm <sup>2</sup>    |
| Flexible, min. H05(07) V-K                        | 0.2 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K                        | 2.5 mm <sup>2</sup>  |
| w. wire end ferrule, DIN 46228 pt 1, min          | 0.2 mm <sup>2</sup>  |
| with wire end ferrule, DIN 46228 pt 1, max.       | 2.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, min.   | 0.2 mm <sup>2</sup>  |
| with plastic collar ferrule, DIN 46228 pt 4, max. | 2.5 mm <sup>2</sup>  |
| Gauge to EN 60999 a x b; ø                        | 2.4 mm x 1.5 mm      |

#### DIN IEC rating data

|  |                   |
|--|-------------------|
| Rated current, min. No. of poles (Tu=20°C)                                     | 18.5 A            |
| Rated current, max. No. of poles (Tu=20°C)                                     | 6 A               |
| Rated current, no. of poles (Tu=40°C), min.                                    | 12.5 A            |
| Rated current, no. of poles (Tu=40°C), max.                                    | 6 A               |
| Rated voltage for overvoltage class/pollution severity II/2                    | 400 V             |
| Rated voltage for overvoltage class/pollution severity III/2                   | 320 V             |
| Rated voltage at overvoltage category/pollution degree III/3                   | 250 V             |
| Rated impulse withstand voltage for overvoltage class/pollution severity II/2  | 4 kV              |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/2 | 4 kV              |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/3 | 4 kV              |
| Short-time withstand current resistance  | 3 x 1s with 120 A |

#### Approvals

|                      |                  |
|----------------------|------------------|
| Approvals institutes | CSA; CURUS; ROHS |
|----------------------|------------------|

#### Classifications

|            |             |
|------------|-------------|
| eClass 6.0 | 27-26-07-08 |
|------------|-------------|

#### Notes

Notes

#### Similar products

| Order No.  | Part designation          | Version  |
|------------|---------------------------|--|
| 1000410001 | BLF 5.08/02/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 2, 90°, Box |

|            |                           |   |
|------------|---------------------------|---|
| 1000420001 | BLF 5.08/03/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 3, 90°, Box  |
| 1000430001 | BLF 5.08/04/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 4, 90°, Box  |
| 1000440001 | BLF 5.08/05/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 5, 90°, Box  |
| 1000450001 | BLF 5.08/06/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 6, 90°, Box  |
| 1000460001 | BLF 5.08/07/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 7, 90°, Box  |
| 1000470001 | BLF 5.08/08/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 8, 90°, Box  |
| 1000480001 | BLF 5.08/09/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 9, 90°, Box  |
| 1000490001 | BLF 5.08/10/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 10, 90°, Box |
| 1000500001 | BLF 5.08/11/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 11, 90°, Box |
| 1000510001 | BLF 5.08/12/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 12, 90°, Box |
| 1000520001 | BLF 5.08/13/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 13, 90°, Box |
| 1000530001 | BLF 5.08/14/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 14, 90°, Box |
| 1000540001 | BLF 5.08/15/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 15, 90°, Box |
| 1000550001 | BLF 5.08/16/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 16, 90°, Box |
| 1000560001 | BLF 5.08/17/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 17, 90°, Box |
| 1000570001 | BLF 5.08/18/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 18, 90°, Box |
| 1000580001 | BLF 5.08/19/90LR SN BK BX | PCB plug-in connector, PUSH IN, Clamping range, max.: 3.31 mm <sup>2</sup> , Pitch in mm: 5.08 mm, No. of poles: 19, 90°, Box |