



#### General ordering data

|                  |   |
|------------------|---|
| Order No.        | 1615890000  |
| Part designation | BL 3.5/13F SN SW  |
| Version          | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 180°, Box |
| EAN              | 4008190064075   |
| Qty.             | 50 pc(s).   |

#### System parameters

|   |                          |
|---|--------------------------|
| Conductor connection system               | Clamping yoke connection |
| Outgoing direction of conductor           | 180°                     |
| Pitch                                     | 3.5 mm                   |
| Pitch in inch                             | 0.138 inch               |
| No. of poles                              | 13                       |
| 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                          | 6 mm                     |
| L1 in mm                                  | 42 mm                    |
| L1 in inch                                | 1.654 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       | PBT                 |
| Colour                    | black               |
| colour chart              | Similar to RAL 9011 |
| Insulating material group | IIIa                |
| Flammability class UL 94  | V-0                 |
| CTI                       | >= 200              |

#### Material data

|                       |              |
|-----------------------|--------------|
| Contact base material | Copper alloy |
| 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.   | 14                   |
| AWG, max.   | 28                   |
| 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;     |

#### DIN IEC rating data

|  |                   |
|--|-------------------|
| Rated current, min. No. pins (Tu=20°C)   | 17 A              |
| Rated current, max. No. pins (Tu=20°C)   | 12 A              |
| Rated current, min. No. pins (Tu=40°C)   | 14.5 A            |
| Rated current, max. No. pins (Tu=40°C)   | 10 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 100 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. | 14    |

#### 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.         | 14    |

## Approvals

Approvals institutes



## Classifications

|            |             |
|------------|-------------|
| ETIM 2.0   | NK          |
| ETIM 3.0   | EC001284    |
| 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  |
|------------|------------------|--|
| 1606640000 | BL 3.5/2F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 180°, Box |
| 1615780000 | BL 3.5/2F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 180°, Box |
| 1606650000 | BL 3.5/3F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 180°, Box |
| 1615790000 | BL 3.5/3F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 180°, Box |
| 1606660000 | BL 3.5/4F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 180°, Box |
| 1615800000 | BL 3.5/4F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 180°, Box |
| 1606670000 | BL 3.5/5F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 180°, Box |
| 1615810000 | BL 3.5/5F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 180°, Box |
| 1606680000 | BL 3.5/6F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 180°, Box |
| 1615820000 | BL 3.5/6F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 180°, Box |
| 1606690000 | BL 3.5/7F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 180°, Box |

|            |                  |   |
|------------|------------------|---|
| 1615830000 | BL 3.5/7F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 180°, Box  |
| 1606700000 | BL 3.5/8F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 180°, Box  |
| 1615840000 | BL 3.5/8F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 180°, Box  |
| 1606710000 | BL 3.5/9F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 180°, Box  |
| 1615850000 | BL 3.5/9F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 180°, Box  |
| 1606720000 | BL 3.5/10F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 180°, Box |
| 1615860000 | BL 3.5/10F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 180°, Box |
| 1606730000 | BL 3.5/11F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 180°, Box |
| 1615870000 | BL 3.5/11F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 180°, Box |
| 1606740000 | BL 3.5/12F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 180°, Box |
| 1615880000 | BL 3.5/12F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 180°, Box |
| 1606750000 | BL 3.5/13F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 180°, Box |
| 1606760000 | BL 3.5/14F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 180°, Box |
| 1615900000 | BL 3.5/14F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 180°, Box |
| 1606770000 | BL 3.5/15F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 180°, Box |
| 1615910000 | BL 3.5/15F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 180°, Box |
| 1606780000 | BL 3.5/16F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 180°, Box |

|            |                  |   |
|------------|------------------|---|
| 1615920000 | BL 3.5/16F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 180°, Box |
| 1620760000 | BL 3.5/17F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 180°, Box |
| 1620840000 | BL 3.5/17F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 180°, Box |
| 1620770000 | BL 3.5/18F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 180°, Box |
| 1620850000 | BL 3.5/18F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 180°, Box |
| 1620780000 | BL 3.5/19F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 180°, Box |
| 1620860000 | BL 3.5/19F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 180°, Box |
| 1620790000 | BL 3.5/20F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 180°, Box |
| 1620870000 | BL 3.5/20F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 180°, Box |
| 1620800000 | BL 3.5/21F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 180°, Box |
| 1620880000 | BL 3.5/21F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 180°, Box |
| 1620810000 | BL 3.5/22F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 180°, Box |
| 1620890000 | BL 3.5/22F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 180°, Box |
| 1620820000 | BL 3.5/23F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 180°, Box |
| 1620900000 | BL 3.5/23F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 180°, Box |
| 1620830000 | BL 3.5/24F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 180°, Box |
| 1620910000 | BL 3.5/24F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 180°, Box |