



#### General ordering data

|                  |   |
|------------------|---|
| Order No.        | 1640350000  |
| Part designation | BL 3.5/21/270F 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: 21, 270°, Box |
| EAN              | 4008190277932   |
| Qty.             | 20 pc(s).   |

#### System parameters

|   |                          |
|---|--------------------------|
| Conductor connection system               | Clamping yoke connection |
| Outgoing direction of conductor           | 270°                     |
| Pitch                                     | 3.5 mm                   |
| Pitch in inch                             | 0.138 inch               |
| No. of poles                              | 21                       |
| 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                                  | 70 mm                    |
| L1 in inch                                | 2.756 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)   | 12 A              |
| Rated current, max. No. pins (Tu=20°C)   | 10 A              |
| Rated current, min. No. pins (Tu=40°C)   | 10 A              |
| Rated current, max. No. pins (Tu=40°C)   | 8 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) | 8 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  |
|------------|---------------------|--|
| 1639930000 | BL 3.5/2/270F 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, 270°, Box |
| 1640160000 | BL 3.5/2/270F 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, 270°, Box |
| 1639940000 | BL 3.5/3/270F 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, 270°, Box |
| 1640170000 | BL 3.5/3/270F 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, 270°, Box |
| 1639950000 | BL 3.5/4/270F 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, 270°, Box |
| 1640180000 | BL 3.5/4/270F 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, 270°, Box |
| 1639960000 | BL 3.5/5/270F 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, 270°, Box |
| 1640190000 | BL 3.5/5/270F 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, 270°, Box |
| 1639970000 | BL 3.5/6/270F 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, 270°, Box |
| 1640200000 | BL 3.5/6/270F 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, 270°, Box |
| 1639980000 | BL 3.5/7/270F 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, 270°, Box |

|            |                      |   |
|------------|----------------------|---|
| 1640210000 | BL 3.5/7/270F 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, 270°, Box  |
| 1639990000 | BL 3.5/8/270F 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, 270°, Box  |
| 1640220000 | BL 3.5/8/270F 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, 270°, Box  |
| 1640000000 | BL 3.5/9/270F 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, 270°, Box  |
| 1640230000 | BL 3.5/9/270F 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, 270°, Box  |
| 1640010000 | BL 3.5/10/270F 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, 270°, Box |
| 1640240000 | BL 3.5/10/270F 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, 270°, Box |
| 1640020000 | BL 3.5/11/270F 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, 270°, Box |
| 1640250000 | BL 3.5/11/270F 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, 270°, Box |
| 1640030000 | BL 3.5/12/270F 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, 270°, Box |
| 1640260000 | BL 3.5/12/270F 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, 270°, Box |
| 1640040000 | BL 3.5/13/270F 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, 270°, Box |
| 1640270000 | BL 3.5/13/270F 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: 13, 270°, Box |
| 1640050000 | BL 3.5/14/270F 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, 270°, Box |
| 1640280000 | BL 3.5/14/270F 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, 270°, Box |
| 1640060000 | BL 3.5/15/270F 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, 270°, Box |
| 1640290000 | BL 3.5/15/270F 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, 270°, Box |

|            |                      |   |
|------------|----------------------|---|
| 1640070000 | BL 3.5/16/270F 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, 270°, Box |
| 1640300000 | BL 3.5/16/270F 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, 270°, Box |
| 1640080000 | BL 3.5/17/270F 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, 270°, Box |
| 1640310000 | BL 3.5/17/270F 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, 270°, Box |
| 1640090000 | BL 3.5/18/270F 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, 270°, Box |
| 1640320000 | BL 3.5/18/270F 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, 270°, Box |
| 1640100000 | BL 3.5/19/270F 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, 270°, Box |
| 1640330000 | BL 3.5/19/270F 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, 270°, Box |
| 1640110000 | BL 3.5/20/270F 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, 270°, Box |
| 1640340000 | BL 3.5/20/270F 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, 270°, Box |
| 1640120000 | BL 3.5/21/270F 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, 270°, Box |
| 1640130000 | BL 3.5/22/270F 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, 270°, Box |
| 1640360000 | BL 3.5/22/270F 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, 270°, Box |
| 1640140000 | BL 3.5/23/270F 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, 270°, Box |
| 1640370000 | BL 3.5/23/270F 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, 270°, Box |
| 1640150000 | BL 3.5/24/270F 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, 270°, Box |
| 1640380000 | BL 3.5/24/270F 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, 270°, Box |