| General ordering data                     | 4000-0000   |
|---|---|
| Order No.                                 | 1639700000  |
| Part designation<br>Version               | BL 3.5/2/270 SN SW  |
|   | PCB plug-in connector, Female connectors,<br>Clamping yoke connection, Clamping range, max.:<br>1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 270°,<br>Box |
| EAN                                       | 4008190277253   |
| Qty.                                      | 100 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                              | 2   |
| No. of rows                               | 1   |
| Screwdriver blade                         | 0.4 x 2.5   |
| Screwdriver blade standard                | DIN 5264  |
| Tightening torque, min.                   | 0.2<br>0.25 Nm  |
| Tightening torque, max.                   | 0.25 Nm<br>M 2  |
| Clamping screw<br>Stripping length        | 6 mm  |
| L1 in mm                                  | 3.5 mm  |
| L1 in inch                                | 0.138 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                 | Illa  |
| Flammability class UL 94                  | V-0   |
| CTI                                       | >= 200  |
|   |   |



| Motorial data                                     |                        |
|---|------------------------|
| Material data<br>Contact base material            | Copper alloy           |
| Contact base material                             | Copper alloy<br>tinned |
| Contact surface                                   | unneu                  |
| 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;       |
| 5   | ,                      |
| 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     | 320 V                  |
| severity II/2                                     |                        |
| Rated voltage for overvoltage class/pollution     | 160 V                  |
| severity III/2                                    |                        |
| Rated voltage for overvoltage class/pollution     | 160 V                  |
| severity III/3                                    |                        |
| Rated impulse withstand voltage for overvoltage   | 2.5 kV                 |
| class/pollution severity II/2                     |                        |
| Rated impulse withstand voltage for overvoltage   | 2.5 kV                 |
| class/pollution severity III/2                    |                        |
| Rated impulse withstand voltage for overvoltage   | 2.5 kV                 |
| class/pollution severity III/3                    | 2 x 1 x x i + 100 A    |
| 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                     |
|   |                        |



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/270

## Approvals

Approvals institutes



| 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

| 1639470000 | BL 3.5/2/270 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       |
|------------|--------------------|--|
| 1639480000 | BL 3.5/3/270 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       |
| 1639710000 | BL 3.5/3/270 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       |
| 1639490000 | BL 3.5/4/270 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       |
| 1639720000 | BL 3.5/4/270 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       |
| 1639500000 | BL 3.5/5/270 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       |
| 1639730000 | BL 3.5/5/270 SN SW | PCB plug-in connector, Female connectors, Clamping yoke<br>connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of<br>poles: 5, 270°, Box |
| 1639510000 | BL 3.5/6/270 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       |
| 1639740000 | BL 3.5/6/270 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       |
| 1639520000 | BL 3.5/7/270 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       |
| 1639750000 | BL 3.5/7/270 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       |



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/270

|  | 1639530000 | BL 3.5/8/270 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  |
|--|------------|---------------------|---|
|  | 1639760000 | BL 3.5/8/270 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  |
|  | 1639540000 | BL 3.5/9/270 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  |
|  | 1639770000 | BL 3.5/9/270 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  |
|  | 1639550000 | BL 3.5/10/270 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 |
|  | 1639780000 | BL 3.5/10/270 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 |
|  | 1639560000 | BL 3.5/11/270 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 |
|  | 1639790000 | BL 3.5/11/270 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 |
|  | 1639570000 | BL 3.5/12/270 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 |
|  | 1639800000 | BL 3.5/12/270 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 |
|  | 1639580000 | BL 3.5/13/270 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 |
|  | 1639810000 | BL 3.5/13/270 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 |
|  | 1639590000 | BL 3.5/14/270 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 |
|  | 1639820000 | BL 3.5/14/270 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 |
|  | 1639600000 | BL 3.5/15/270 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 |
|  | 1639830000 | BL 3.5/15/270 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 |
|  | 1639610000 | BL 3.5/16/270 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 |
|  |            |                     |   |



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/270

| 1639840000 | BL 3.5/16/270 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 |
|------------|---------------------|---|
| 1639620000 | BL 3.5/17/270 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 |
| 1639850000 | BL 3.5/17/270 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 |
| 1639630000 | BL 3.5/18/270 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 |
| 1639860000 | BL 3.5/18/270 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 |
| 1639640000 | BL 3.5/19/270 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 |
| 1639870000 | BL 3.5/19/270 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 |
| 1639650000 | BL 3.5/20/270 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 |
| 1639880000 | BL 3.5/20/270 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 |
| 1639660000 | BL 3.5/21/270 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 |
| 1639890000 | BL 3.5/21/270 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, 270°, Box |
| 1639670000 | BL 3.5/22/270 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 |
| 1639900000 | BL 3.5/22/270 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 |
| 1639680000 | BL 3.5/23/270 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 |
| 1639910000 | BL 3.5/23/270 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 |
| 1639690000 | BL 3.5/24/270 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 |
| 1639920000 | BL 3.5/24/270 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 |

