



General ordering data

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| Order No. | 1640110000 |
| Part designation | BL 3.5/20/270F SN OR |
| Version | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Pitch: 3.50 mm, No. of poles: 20, 270°, Box |
| EAN | 4008190277666 |
| Qty. | 20 pc(s). |

System parameters

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| Conductor connection system | Clamping yoke connection |
| Outgoing direction of conductor | 270° |
| Pitch | 3.5 mm |
| Pitch in inch | 0.138 inch |
| No. of poles | 20 |
| 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 | 66.5 mm |
| L1 in inch | 2.618 inch |
| Electric shock protection to DIN VDE 0470 | IP 20 |
| Electric shock protection to DIN VDE 0470 | Safe from finger touch |

Material data

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| Insulating material | PBT |
| Colour | orange |
| colour chart | Similar to RAL 2000 |
| Insulating material group | IIIa |
| Flammability class UL 94 | V-0 |
| CTI | >= 200 |

Material data

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| Contact base material | Copper alloy |
| Contact surface | tinned |

Connectable conductors

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| Clamping range, min. | 0.08 mm ² |
| Clamping range, max. | 1.5 mm ² |
| AWG, min. | 14 |
| AWG, max. | 28 |
| Solid, min. H05(07) V-U | 0.2 mm ² |
| Solid, max. H05(07) V-U | 1.5 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 1.5 mm ² |
| With wire end ferrule, acc. to DIN 46 228/1, min. | 0.2 mm ² |
| With wire end ferrule, acc. to DIN 46 228/1, max. | 1.5 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, max. | 1.5 mm ² |
| Gauge to EN 60999 a x b; ø | 2.4 mm x 1.5 mm; |

DIN IEC rating data

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| 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

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| 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

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|-----------------------------|-------|
| 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

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|------------|-------------|
| 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 7, 270°, Box |

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| 1640210000 | BL 3.5/7/270F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 15, 270°, Box |

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| 1640070000 | BL 3.5/16/270F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 19, 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 21, 270°, Box |
| 1640350000 | BL 3.5/21/270F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 24, 270°, Box |