

## System LXXX LXXX 15.00/04/90 4.5SN BK BX

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The high-current PCB connection for more power on board:  
150 A /1000 V with wires up to 50 mm<sup>2</sup>, transmitted right to the PCB!

The LXXX 15.0 – with its proven steel clamping-yoke technology in a compact standard housing – integrates the latest market requirements for security, power density and miniaturization in power electronics. It connects these requirements into an efficient solution for the entire value-creation chain – including development, production, installation and maintenance.

The function and form of the application's connection method plays a key role. It influences the application's design, reliability, usability and costs. With the Substitution of For example, with the replacement of complex constructions involving bolts or bus bars, the PCB can be transformed into a system platform that is both consistent and sustainable into the future – even for high-current applications.

The LXXX 15.0 reduces size and complexity while at the same time improving application integration. In so doing, it fulfils the requirements of power electronics better than the established mechanisms and connection elements.

### General ordering data

|                             |                                                                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material number             | <a href="#">1047150000</a>                                                                                                                                               |
| Short text for material     | LXXX 15.00/04/90 4.5SN BK BX                                                                                                                                             |
| Article - short description | PCB terminal, Clamping yoke connection, Solder connection, Clamping range, rated connection, max.: 50 mm <sup>2</sup> , Pitch in mm: 15.00 mm, No. of poles: 4, 90°, Box |
| EAN                         | 4032248784004                                                                                                                                                            |
| Qty.                        | 10 pc(s).                                                                                                                                                                |
| Packaging                   | Box                                                                                                                                                                      |

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## Technical data

### Approvals

Approvals CSA; UR

### System parameters

|                                |                   |                                                |                          |
|--------------------------------|-------------------|------------------------------------------------|--------------------------|
| Product family                 | System LXXX       | Conductor connection system                    | Clamping yoke connection |
| Fitted to PCB                  | Solder connection | Outgoing direction of conductor                | 90°                      |
| Pitch in mm                    | 15 mm             | Pitch in inch                                  | 0.591 inch               |
| No. of poles                   | 4                 | Fitted by customer                             | No                       |
| No. of rows                    | 1                 | Solder pin length                              | 4.5 mm                   |
| Diameter of solder eyelet      | 1.6 mm            | Tolerance of the diameter of the solder eyelet | + 0,1 mm                 |
| Number of solder pins per pole | 4                 | Screwdriver blade                              | 1.2 x 6.5                |
| Screwdriver blade standard     | DIN 5264          | Tightening torque, min.                        | 2.5 Nm                   |
| Tightening torque, max.        | 4 Nm              | Clamping screw                                 | M 6                      |
| Stripping length               | 18 mm             | L1 in mm                                       | 45 mm                    |
| L1 in inch                     | 1.772 inch        |                                                |                          |

### Material data

|                          |              |                 |        |
|--------------------------|--------------|-----------------|--------|
| Insulating material      | Wemid (PA)   | Colour          | black  |
| Flammability class UL 94 | V-0          | CTI             | ≥ 600  |
| Contact material         | Copper alloy | Contact surface | tinned |
| Contact base material    | Copper alloy |                 |        |

### Connectable conductors

|                                                 |                     |                                                   |                    |
|-------------------------------------------------|---------------------|---------------------------------------------------|--------------------|
| Clamping range, rated connection, min.          | 0.5 mm <sup>2</sup> | Clamping range, rated connection, max.            | 50 mm <sup>2</sup> |
| Conductor connection cross-section AWG, min.    | AWG 20              | Conductor connection cross-section AWG, max.      | AWG 1              |
| Solid, min. H05(07) V-U                         | 0.5 mm <sup>2</sup> | Solid, max. H05(07) V-U                           | 16 mm <sup>2</sup> |
| Stranded, max. H07V-R                           | 50 mm <sup>2</sup>  | Stranded, min. H07V-R                             | 6 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                      | 0.5 mm <sup>2</sup> | Flexible, max. H05(07) V-K                        | 35 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, min.       | 0.5 mm <sup>2</sup> | with wire end ferrule, DIN 46228 pt 1, max.       | 35 mm <sup>2</sup> |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.5 mm <sup>2</sup> | with plastic collar ferrule, DIN 46228 pt 4, max. | 35 mm <sup>2</sup> |

### DIN IEC rating data

|                                                                                |         |                                                                                |         |
|--------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------|---------|
| Rated current, min. No. of poles (Tu=20°C)                                     | 150 A   | Rated current, no. of poles (Tu=40°C), min.                                    | 150 A   |
| Rated voltage for overvoltage class/pollution severity II/2                    | 1,000 V | Rated voltage for overvoltage class/pollution severity III/2                   | 1,000 V |
| Rated voltage at overvoltage category/pollution degree III/3                   | 1,000 V | Rated impulse withstand voltage for overvoltage class/pollution severity II/2  | 8 kV    |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/2 | 8 kV    | Rated impulse withstand voltage for overvoltage class/pollution severity III/3 | 8 kV    |

### CSA rating data

|                               |        |                               |       |
|-------------------------------|--------|-------------------------------|-------|
| Rated voltage (Use group B)   | 600 V  | Rated current (use group B)   | 127 A |
| Rated voltage (Use group C)   | 600 V  | Rated current (use group C)   | 127 A |
| Rated voltage (use group D)   | 600 V  | Rated current (use group D)   | 5 A   |
| Wire cross-section, AWG, min. | AWG 20 | Wire cross-section, AWG, max. | AWG 1 |

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### UL 1059 rating data

|                               |        |                               |       |
|-------------------------------|--------|-------------------------------|-------|
| Rated voltage (use group B)   | 600 V  | Rated current (use group B)   | 127 A |
| Rated voltage (use group C)   | 600 V  | Rated current (use group C)   | 127 A |
| Rated voltage (use group D)   | 600 V  | Rated current (use group D)   | 5 A   |
| Wire cross-section, AWG, min. | AWG 20 | Wire cross-section, AWG, max. | AWG 1 |

### Classifications

|            |             |          |          |
|------------|-------------|----------|----------|
| ETIM 3.0   | EC001284    | ETIM 4.0 | EC002643 |
| eClass 6.0 | 27-26-11-01 |          |          |

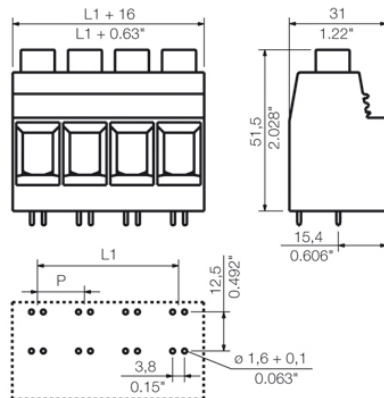
### Notes

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes | <ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section and min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228 pt 1</li> <li>• Wire end ferrule with plastic collar to DIN 46228 pt 4</li> <li>• P on drg. = pitch</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> <li>• IP 20 from 16 mm² to 50 mm²</li> </ul> |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

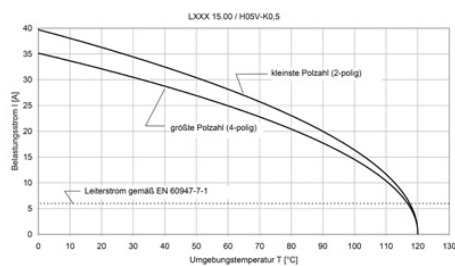
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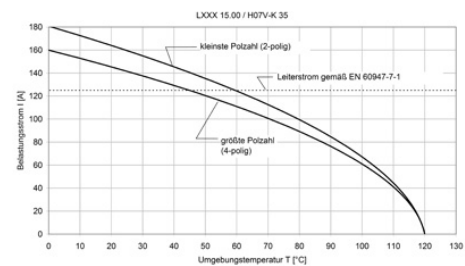
## Drawings



### Derating curve



### Derating curve



### Derating curve

