

**LLF 7.50/09/90V 5.0SN BK BX****Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

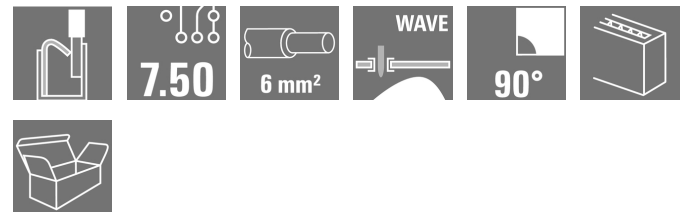
32760 Detmold

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similar to illustration

**The sturdy, direct connection for extreme current and voltage requirements in all power electronics applications such as solar inverters, frequency converters, servo-controllers and power supplies.**

**General ordering data**

|              |  |
|--------------|--|
| Version      | Printed circuit board terminals, 7.50 mm, Number of poles: 9, 90°, Solder pin length (l): 5 mm, tinned, black, PUSH IN with actuator, Clamping range, max. : 6 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">2472150000</a>   |
| Type         | LLF 7.50/09/90V 5.0SN BK BX  |
| GTIN (EAN)   | 4050118550078  |
| Qty.         | 30 pc(s).  |
| Product data | IEC: 1000 V / 41 A / 0.5 - 6 mm <sup>2</sup><br>UL: 600 V / 35 A / AWG 24 - AWG 8  |
| Packaging    | Box  |

Creation date November 23, 2020 8:37:18 AM CET

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## Technical data

## Dimensions and weights

|                          |          |                 |            |
|--------------------------|----------|-----------------|------------|
| Depth                    | 22.07 mm | Depth (inches)  | 0.869 inch |
| Height                   | 36.55 mm | Height (inches) | 1.439 inch |
| Height of lowest version | 31.55 mm | Net weight      | 32.425 g   |
| Width                    | 68.5 mm  | Width (inches)  | 2.697 inch |

## System parameters

|  |                            |  |                       |
|--|----------------------------|--|-----------------------|
| Product family                               | OMNIMATE Power - series LL | Wire connection method                     | PUSH IN with actuator |
| Mounting onto the PCB                        | THT solder connection      | Conductor outlet direction                 | 90°                   |
| Pitch in mm (P)                              | 7.5 mm                     | Pitch in inches (P)                        | 0.295 inch            |
| Number of poles                              | 9                          | Pin series quantity                        | 1                     |
| Fitted by customer                           | No                         | Solder pin length (l)                      | 5 mm                  |
| Solder pin dimensions                        | d = 1.5 mm                 | Solder eyelet hole diameter (D)            | 2 mm                  |
| Solder eyelet hole diameter tolerance (D)+   | 0,1 mm                     | Number of solder pins per pole             | 1                     |
| Stripping length                             | 12 mm                      | L1 in mm                                   | 60 mm                 |
| L1 in inches                                 | 2.36 inch                  | Touch-safe protection acc. to DIN VDE 0470 | IP 20                 |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch     |  |                       |

## Material data

|                                      |                      |                             |        |
|--------------------------------------|----------------------|-----------------------------|--------|
| Insulating material                  | Wemid (PA)           | Colour                      | black  |
| Colour chart (similar)               | RAL 9011             | Insulating material group   | I      |
| Insulation strength                  | $\geq 10^8 \Omega$   | UL 94 flammability rating   | V-0    |
| Contact material                     | E-Cu                 | Contact surface             | tinned |
| Layer structure of solder connection | 4...10 $\mu$ Sn matt | Storage temperature, min.   | -40 °C |
| Storage temperature, max.            | 70 °C                | Operating temperature, min. | -40 °C |
| Operating temperature, max.          | 120 °C               |                             |        |

## Conductors suitable for connection

|   |   |   |                   |
|---|---|---|-------------------|
| Clamping range, min.                            | 0.25 mm <sup>2</sup>  | Clamping range, max.                            | 6 mm <sup>2</sup> |
| Wire connection cross section AWG, min.         | AWG 24  | Wire connection cross section AWG, max.         | AWG 8             |
| Solid, min. H05(07) V-U                         | 0.5 mm <sup>2</sup>   | Solid, max. H05(07) V-U                         | 6 mm <sup>2</sup> |
| Flexible, min. H05(07) V-K                      | 0.5 mm <sup>2</sup>   | Flexible, max. H05(07) V-K                      | 6 mm <sup>2</sup> |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.25 mm <sup>2</sup>  | w. plastic collar ferrule, DIN 46228 pt 4, max. | 6 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, min.       | 0.25 mm <sup>2</sup>  | w. wire end ferrule, DIN 46228 pt 1, max.       | 6 mm <sup>2</sup> |
| Reference text                                  | Length of ferrules is to be chosen depending on the product and the rated voltage. The outside diameter of the plastic collar should not be larger than the pitch (P) |   |                   |

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## Technical data


## Rated data acc. to IEC

|   |                                  |   |         |
|---|----------------------------------|---|---------|
| tested acc. to standard   | In accordance with IEC 60947-7-1 | Rated current, min. number of poles (Tu=20°C)                         | 41 A    |
| Rated current, max. number of poles (Tu=20°C)                             | 35 A                             | Rated current, min. number of poles (Tu=40°C)                         | 41 A    |
| Rated current, max. number of poles (Tu=40°C)                             | 30 A                             | Rated voltage for surge voltage class / pollution degree II/2         | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/2            | 1,000 V                          | Rated voltage for surge voltage class / pollution degree III/3        | 1,000 V |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 8 kV                             | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 8 kV    |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 8 kV                             |   |         |

## Rated data acc. to CSA

|                                   |        |                                   |       |
|-----------------------------------|--------|-----------------------------------|-------|
| Rated voltage (Use group B / CSA) | 600 V  | Rated voltage (Use group C / CSA) | 600 V |
| Rated voltage (Use group D / CSA) | 600 V  | Rated current (Use group B / CSA) | 35 A  |
| Rated current (Use group C / CSA) | 35 A   | Rated current (Use group D / CSA) | 5 A   |
| Wire cross-section, AWG, min.     | AWG 24 | Wire cross-section, AWG, max.     | AWG 8 |

## Rated data acc. to UL 1059

|                                       |   |                                       |        |
|---------------------------------------|---|---------------------------------------|--------|
| Institute (cURus)                     |  | Certificate No. (cURus)               | E60693 |
| Rated voltage (Use group B / UL 1059) | 600 V   | Rated voltage (Use group C / UL 1059) | 600 V  |
| Rated voltage (Use group D / UL 1059) | 600 V   | Rated current (Use group B / UL 1059) | 35 A   |
| Rated current (Use group C / UL 1059) | 35 A  | Rated current (Use group D / UL 1059) | 5 A    |
| Wire cross-section, AWG, min.         | AWG 24  | Wire cross-section, AWG, max.         | AWG 8  |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.              |                                       |        |

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 290 mm |
| VPE width | 210 mm | VPE height | 50 mm  |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002643    | ETIM 7.0    | EC002643    |
| eClass 9.0  | 27-44-04-01 | eClass 9.1  | 27-44-04-01 |
| eClass 10.0 | 27-44-04-01 | eClass 11.0 | 27460101    |

## Important note

|                |  |
|----------------|--|
| IPC conformity | Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request. |
|----------------|--|

**Data sheet****LLF 7.50/09/90V 5.0SN BK BX****Weidmüller Interfaces GmbH & Co. KG**

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Approvals



UL File Number Search

E60693

**Downloads**Approval/Certificate/Document of  
Conformity[Declaration of the Manufacturer](#)

Engineering Data

[STEP](#)

User Documentation

[QR-Code product handling video](#)

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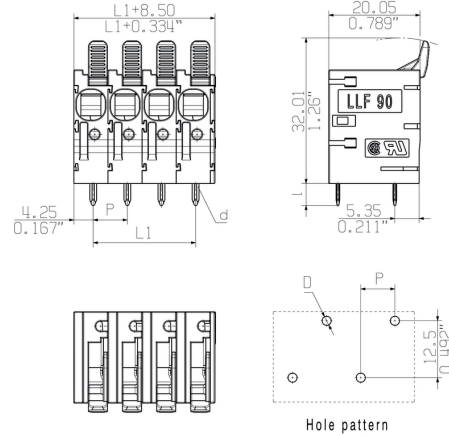
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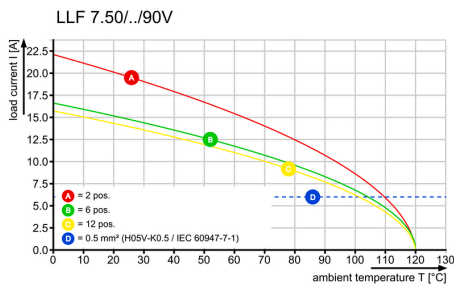
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**Drawings**

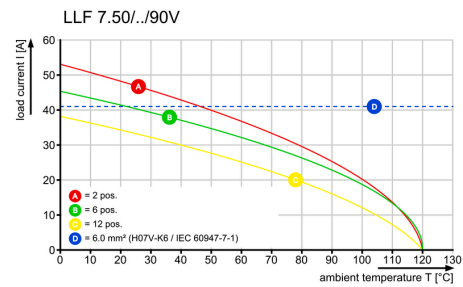
**Dimensional drawing** [info@weidmueller.com](mailto:info@weidmueller.com)



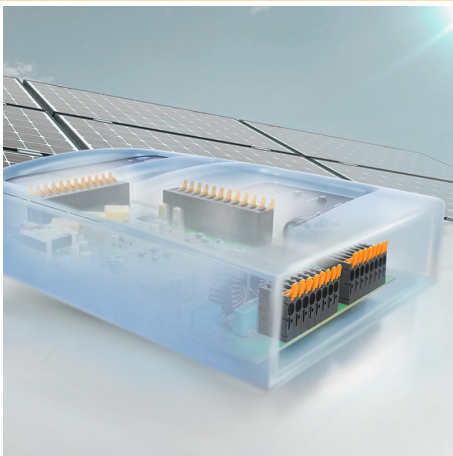
**Derating curve**



**Derating curve**

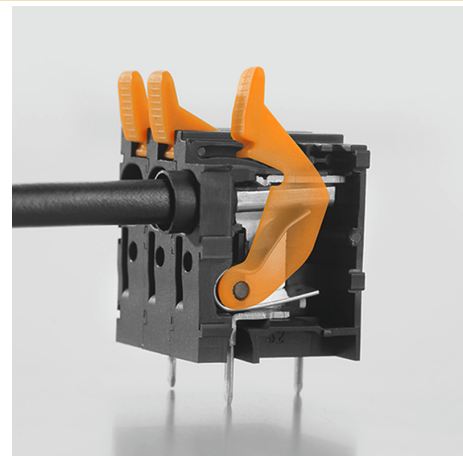


**Product benefits**



Power up to UL 600 V  
Offset solder pins

**Product benefits**



Tool-free wiring  
Top contact security

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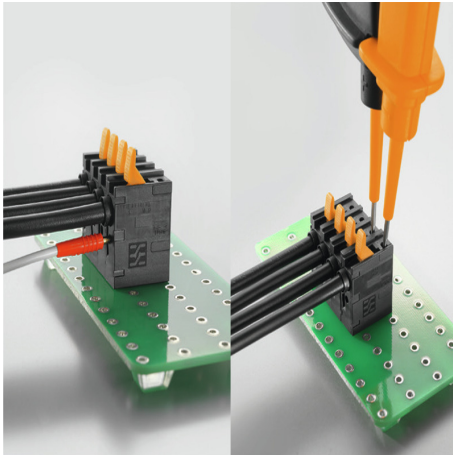
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**Drawings**

**Product benefits**



Maximum diagnosis flexibility  
Easily accessible test point