

LL 6.35/07/90V 5.0SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

This PCB terminal, pitch 6.35 mm, with proven clamping yoke connection provides the following features: connections for 1000 V, 32 A, 6 mm² conductor cross-section, and off-set solder pins, 90° conductor outlet direction.

General ordering data

| | |
|--------------|---|
| Version | Printed circuit board terminals, 6.35 mm, Number of poles: 7, 90°, Solder pin length (l): 5 mm, tinned, black, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Order No. | 1356890000 |
| Type | LL 6.35/07/90V 5.0SN BK BX |
| GTIN (EAN) | 4050118214666 |
| Qty. | 36 pc(s). |
| Product data | IEC: 1000 V / 32 A / 0.18 - 6 mm ² UL: 600 V / 30 A / AWG 26 - AWG 10 |
| Packaging | Box |

Creation date July 1, 2024 2:40:24 AM CEST

Catalogue status 14.06.2024 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

| | | | |
|--------------------------|------------|-----------------|------------|
| Depth | 15.85 mm | Depth (inches) | 0.624 inch |
| Height | 33.5 mm | Height (inches) | 1.319 inch |
| Height of lowest version | 28.5 mm | Width | 45.05 mm |
| Width (inches) | 1.774 inch | Net weight | 20.375 g |

System parameters

| | | | |
|---|-----------------------------|--|--------------------------|
| Product family | OMNIMATE Signal - series LL | Wire connection method | Clamping yoke connection |
| Mounting onto the PCB | THT solder connection | Conductor outlet direction | 90° |
| Pitch in mm (P) | 6.35 mm | Pitch in inches (P) | 0.25 " |
| Number of poles | 7 | Pin series quantity | 1 |
| Fitted by customer | No | Number of rows | 1 |
| Max. adjacent poles per row | 24 | Solder pin length (l) | 5 mm |
| Solder pin dimensions | 1.0 x 0.6 mm | Solder eyelet hole diameter (D) | 1.3 mm |
| Solder eyelet hole diameter tolerance (D)+ 0,1 mm | | Number of solder pins per pole | 1 |
| Screwdriver blade | 0.8 x 4.0, PZ 1 | Screwdriver blade standard | DIN 5264 |
| Tightening torque, min. | 0.5 Nm | Tightening torque, max. | 0.6 Nm |
| Clamping screw | M 3 | Stripping length | 8 mm |
| L1 in mm | 38.1 mm | L1 in inches | 1.5 " |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Protection degree | IP20 | | |

Material data

| | | | |
|---------------------------------------|--------------------------------|---------------------------------------|--------|
| Insulating material | Wemid (PA) | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | I |
| Comparative Tracking Index (CTI) | ≥ 600 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Coating | 4-6 µm SN | Tinning type | matt |
| Layer structure of solder connection | 2...4 µm Ni / 4...6 µm Sn matt | Storage temperature, min. | -40 °C |
| Storage temperature, max. | 70 °C | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 120 °C | Temperature range, installation, min. | -25 °C |
| Temperature range, installation, max. | 120 °C | | |

Conductors suitable for connection

| | |
|---|----------------------|
| Clamping range, min. | 0.18 mm ² |
| Clamping range, max. | 6 mm ² |
| Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 10 |
| Solid, min. H05(07) V-U | 0.18 mm ² |
| Solid, max. H05(07) V-U | 6 mm ² |
| Stranded, min. H07V-R | 0.22 mm ² |
| Stranded, max. H07V-R | 4 mm ² |
| Flexible, min. H05(07) V-K | 0.22 mm ² |
| Flexible, max. H05(07) V-K | 4 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max. | |

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Technical data

w. wire end ferrule, DIN 46228 pt 1, min. 0.5 mm²w. wire end ferrule, DIN 46228 pt 1, max. 4 mm²

Plug gauge in accordance with EN 60999 a x b; ø 3.6 mm x 3.1 mm; 2.7 mm

Clampable conductor

| | | | |
|--|------------------------------|-------------------------------|-------|
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 0.5 mm ² | |
| wire end ferrule | Stripping length | nominal | 10 mm |
| | Recommended wire-end ferrule | H0.5/14 OR | |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 0.75 mm ² | |
| wire end ferrule | Stripping length | nominal | 10 mm |
| | Recommended wire-end ferrule | H0.75/14T HBL | |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 1 mm ² | |
| wire end ferrule | Stripping length | nominal | 10 mm |
| | Recommended wire-end ferrule | H1.0/14 GE | |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 1.5 mm ² | |
| wire end ferrule | Stripping length | nominal | 10 mm |
| | Recommended wire-end ferrule | H1.5/14D SW | |
| wire end ferrule | Stripping length | nominal | 7 mm |
| | Recommended wire-end ferrule | H1.5/7 | |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 2.5 mm ² | |
| wire end ferrule | Stripping length | nominal | 7 mm |
| | Recommended wire-end ferrule | H2.5/7 | |
| wire end ferrule | Stripping length | nominal | 10 mm |
| | Recommended wire-end ferrule | H2.5/15D BL | |

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)

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

| | |
|---|---------|
| Rated current, max. number of poles (Tu=20°C) | 32 A |
| Rated current, max. number of poles (Tu=40°C) | 32 A |
| Rated voltage for surge voltage class / pollution degree III/2 | 1,000 V |
| Rated impulse voltage for surge voltage class/ pollution degree II/2 | 8 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 8 kV |

| | |
|---|-------------------|
| Rated current, min. number of poles (Tu=20°C) | 32 A |
| Rated current, min. number of poles (Tu=40°C) | 32 A |
| Rated voltage for surge voltage class / pollution degree II/2 | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/3 | 800 V |
| Rated impulse voltage for surge voltage class/ pollution degree III/2 | 8 kV |
| Short-time withstand current resistance | 3 x 1s with 120 A |

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Technical data

Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1202191

| | |
|-----------------------------------|--|
| Rated voltage (Use group B / CSA) | 600 V |
| Rated voltage (Use group D / CSA) | 600 V |
| Rated current (Use group C / CSA) | 30 A |
| Wire cross-section, AWG, min. | AWG 26 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. |

| | |
|-----------------------------------|--------|
| Rated voltage (Use group C / CSA) | 600 V |
| Rated current (Use group B / CSA) | 30 A |
| Rated current (Use group D / CSA) | 5 A |
| Wire cross-section, AWG, max. | AWG 10 |

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 D / UL 1059) | 600 V |
| Rated current (Use group C / UL 1059) | 30 A |
| Wire cross-section, AWG, min. | AWG 26 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. |

| | |
|---------------------------------------|--------|
| Rated voltage (Use group C / UL 1059) | 600 V |
| Rated current (Use group B / UL 1059) | 30 A |
| Rated current (Use group D / UL 1059) | 5 A |
| Wire cross-section, AWG, max. | AWG 10 |

Packing

| | | | |
|-----------|--------|------------|--------|
| Packaging | Box | VPE length | 332 mm |
| VPE width | 141 mm | VPE height | 51 mm |

Type tests

Test: Clampable cross section

Standard

IEC 60999-1 section 7 and 9.1 / 11.99, IEC 60947-1 section 8.2.4.5.1 / 03.11

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002643 | ETIM 7.0 | EC002643 |
| ETIM 8.0 | EC002643 | ETIM 9.0 | 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 | 27-46-01-01 |
| ECLASS 12.0 | 27-46-01-01 | ECLASS 13.0 | 27-46-01-01 |

Environmental Product Compliance

REACH SVHC

/

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Technical data

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. |
| Notes | <ul style="list-style-type: none"> • Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • P on drawing = pitch • 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. • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (cURus) | E60693 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| Product Change Notification | 20211106 Anpassung der Verpackung LL 6.35 20211106 Change of packaging to LL 6.35 Modification of the clamping yoke on product families LM 5.0x, LL 6.35, LL 9.52 and WGK 4 |
| User Documentation | QR-Code product handling video |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN |

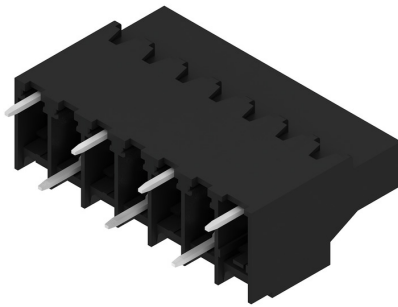
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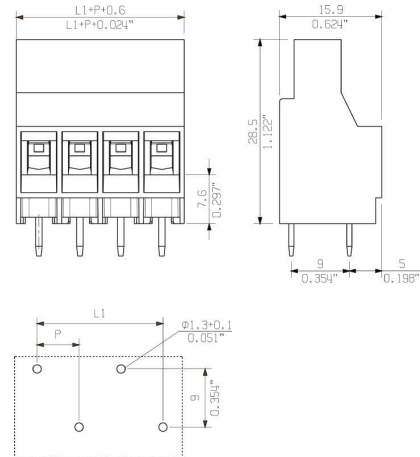
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Drawings

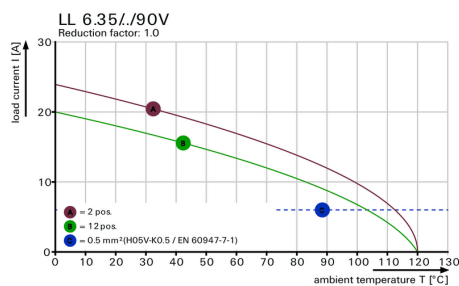
Product image



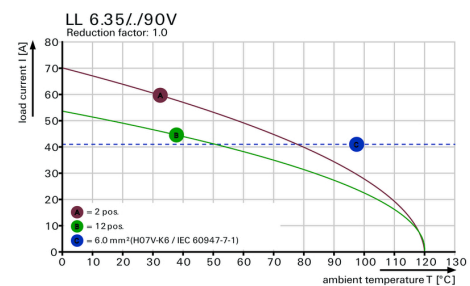
Dimensional drawing



Graph



Graph



Product benefits



Power up to UL 600 V
 Offset solder pins

Product benefits



Secure connection

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www.weidmueller.com**Accessories****Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|--------------------------|
| Type | SDIS 0.8X4.0X100 | Version |
| Order No. | 9008400000 | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056361 | |
| Qty. | 1 pc(s). | |

Crosshead screwdriver Pozidriv

Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SDK PZ1 X 80 | Version |
| Order No. | 2749440000 | Screwdriver, Blade width (B): 80 mm, Blade thickness (A): |
| GTIN (EAN) | 4050118895667 | |
| Qty. | 1 pc(s). | |

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www.weidmueller.com**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265,
ISO 2380/2, output to DIN 5264, ISO 2380/1.
ChromTop tip, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|--------------------------|
| Type | SDS 0.8X4.0X100 | Version |
| Order No. | 9008340000 | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056293 | |
| Qty. | 1 pc(s). | |

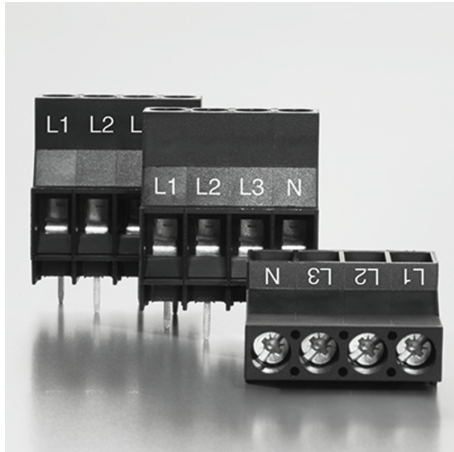
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Drawings

Product benefits



Clear marking
Printing on 3 levels is possible

Recommended wave soldering profiles

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Fax: +49 5231 14-292083
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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

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