

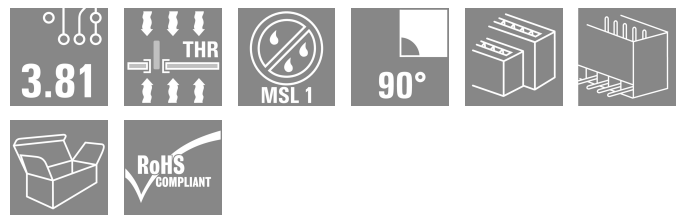
**SCDN-THR 3.81/28/90G 3.2SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Extra flat high-temperature-resistant two-tier SCDN-THR pin header for reflow soldering.

- Two compact interfaces are used with the flat BCF 3.81 (PUSH IN) socket block.
- Available as 90° (recumbent).
- Connections on a single level, allowing access that is flush over the front board.
- Space for labelling and coding
- Packed in cardboard box.

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of standard connectors and offer space for labelling and coding.

**General ordering data**

|              |                                                                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.81 mm, Number of poles: 28, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box |
| Order No.    | <a href="#">1039080000</a>                                                                                                                                       |
| Type         | SCDN-THR 3.81/28/90G 3.2SN BK BX                                                                                                                                 |
| GTIN (EAN)   | 4032248772414                                                                                                                                                    |
| Qty.         | 20 items                                                                                                                                                         |
| Product data | IEC: 320 V / 17.5 A<br>UL: 300 V / 11 A                                                                                                                          |
| Packaging    | Box                                                                                                                                                              |

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## Technical data

## Approvals

|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

## Dimensions and weights

|                          |             |                 |             |
|--------------------------|-------------|-----------------|-------------|
| Depth                    | 13.3 mm     | Depth (inches)  | 0.5236 inch |
| Height                   | 18.4 mm     | Height (inches) | 0.7244 inch |
| Height of lowest version | 15.2 mm     | Width           | 54.73 mm    |
| Width (inches)           | 2.1547 inch | Net weight      | 8.85 g      |

## Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

## System specifications

|                                              |                                                     |                                            |                              |
|----------------------------------------------|-----------------------------------------------------|--------------------------------------------|------------------------------|
| Product family                               | OMNIMATE Signal - series BC/SC 3.81                 | Type of connection                         | Board connection             |
| Mounting onto the PCB                        | THT/THR solder connection                           | Pitch in mm (P)                            | 3.81 mm                      |
| Pitch in inches (P)                          | 0.150 "                                             | Outgoing elbow                             | 90°                          |
| Number of poles                              | 28                                                  | Number of solder pins per pole             | 1                            |
| Solder pin length (l)                        | 3.2 mm                                              | Solder pin length tolerance                | +0,02 / -0,02 mm             |
| Solder pin dimensions                        | d = 1.0 mm, Octagonal                               | Solder pin dimensions = d tolerance        | 0 / -0,03 mm                 |
| Solder eyelet hole diameter (D)              | 1.3 mm                                              | Solder eyelet hole diameter tolerance (D)  | + 0,1 mm                     |
| Outside diameter of solder pad               | 2.1 mm                                              | Template aperture diameter                 | 1.9 mm                       |
| L1 in mm                                     | 49.53 mm                                            | L1 in inches                               | 1.950 "                      |
| Number of rows                               | 2                                                   | Pin series quantity                        | 2                            |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe unplugged/<br>back-of-hand-safe plugged | Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged |
| Volume resistance                            | ≤5 mΩ                                               | Can be coded                               | Yes                          |

## Material data

|                                       |          |                                       |          |
|---------------------------------------|----------|---------------------------------------|----------|
| Insulating material                   | LCP GF   | Colour                                | black    |
| Colour chart (similar)                | RAL 9011 | Insulating material group             | IIla     |
| Comparative Tracking Index (CTI)      | ≥ 175    | Moisture Level (MSL)                  | 1        |
| UL 94 flammability rating             | V-0      | Contact material                      | Cu-alloy |
| Contact surface                       | tinned   | 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   |                                       |          |

## Rated data acc. to IEC

|                                                                |                        |                                                                |        |
|----------------------------------------------------------------|------------------------|----------------------------------------------------------------|--------|
| tested acc. to standard                                        | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                  | 17.5 A |
| Rated current, max. number of poles (Tu=20°C)                  | 13.2 A                 | Rated current, min. number of poles (Tu=40°C)                  | 17 A   |
| Rated current, max. number of poles (Tu=40°C)                  | 12.2 A                 | Rated voltage for surge voltage class / pollution degree II/2  | 320 V  |
| Rated voltage for surge voltage class / pollution degree III/2 | 160 V                  | Rated voltage for surge voltage class / pollution degree III/3 | 160 V  |

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## Technical data

Rated impulse voltage for surge voltage 2.5 kV  
 class/ pollution degree II/2

Rated impulse voltage for surge voltage 2.5 kV  
 class/ contamination degree III/3

Rated impulse voltage for surge voltage 2.5 kV  
 class/ pollution degree III/2

Short-time withstand current resistance 3 x 1s with 76 A

## Rated data acc. to CSA

Rated voltage (Use group B / CSA) 300 V

Rated current (Use group B / CSA) 11 A

Rated voltage (Use group D / CSA) 300 V

Rated current (Use group D / CSA) 11 A

## Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059) 300 V

Rated current (Use group B / UL 1059) 11 A

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 11 A

## Packing

Packaging Box

VPE width 136.00 mm

VPE length 275.00 mm

VPE height 28.00 mm

## 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

- Additional variants on request
- Rated current related to rated cross-section & min. No. of poles.
- 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.
- P on drawing = pitch
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

## Classifications

ETIM 8.0

EC002637

ETIM 9.0

EC002637

ETIM 10.0

EC002637

ECLASS 14.0

27-46-02-01

ECLASS 15.0

27-46-02-01

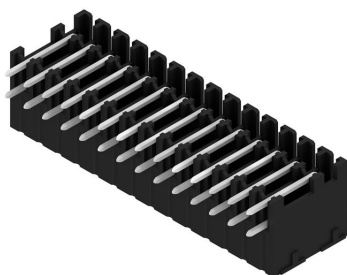
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# Drawings

## Product image



## Dimensional drawing

