



# har-flexicon terminal block vertical, push-in



## General information

|                                     |                                                                            |                                             |
|-------------------------------------|----------------------------------------------------------------------------|---------------------------------------------|
| Design                              | PCB Terminal Block                                                         |                                             |
| Type                                | har-flexicon 3.50/3.81 TTPV                                                |                                             |
| Part numbers                        | 1402xx14101xxx & 1402xx15101xxx                                            |                                             |
| Contact pitch                       | 3.50 & 3.81 mm                                                             |                                             |
| No. of contacts                     | 2 - 16 poles                                                               |                                             |
| Rated surge voltage (II/2)          | 4 kV                                                                       | (overvoltage cat. II / pollution degree 2)  |
| Rated surge voltage (III/2)         | 4 kV                                                                       | (overvoltage cat. III / pollution degree 2) |
| Rated surge voltage (III/3)         | 4 kV                                                                       | (overvoltage cat. III / pollution degree 3) |
| Rated Voltage                       | 300 V                                                                      |                                             |
| Rated voltage (II/2)                | 600 V                                                                      | (overvoltage cat. II / pollution degree 2)  |
| Rated voltage (III/2)               | 300 V                                                                      | (overvoltage cat. III / pollution degree 2) |
| Rated voltage (III/3)               | 220 V                                                                      | (overvoltage cat. III / pollution degree 3) |
| Working current                     | 10 A                                                                       |                                             |
| Usegroup B, rated voltage / current | 300 V / 10 A                                                               |                                             |
| Usegroup C, rated voltage / current | - / -                                                                      |                                             |
| Usegroup D, rated voltage / current | 300 V / 10 A                                                               |                                             |
| Contact resistance                  | max. 15 mOhm                                                               |                                             |
| Insulation resistance               | min. 10 <sup>9</sup> Ohm (500 V DC)                                        |                                             |
| Temperature range                   | -40°C ... +110°C                                                           |                                             |
| Termination technology              | THR Relfow                                                                 |                                             |
| Insertion force                     | n.a                                                                        |                                             |
| Withdrawal force                    | n.a                                                                        |                                             |
| Hot plugging                        | No                                                                         |                                             |
| Mechanical Shock IEC 61373 (05/10)  | 5 g, 30 ms, 5 shocks/axis and each direction no contact disturbance >= 1µs |                                             |
| Random Vibration IEC 61373 (05/10)  | Cat 1 class B 5,72m/s <sup>2</sup> no contact disturbance >=1µs            |                                             |
| RoHS - compliant                    | Yes                                                                        |                                             |
| UL file                             | E314677                                                                    |                                             |

## Isulator material

|                                    |               |
|------------------------------------|---------------|
| Material                           | PA/PPA        |
| Color                              | black         |
| Moisture Sensitivity Level (MSL)   | 1             |
| UL classification                  | UL 94-V0      |
| Material group acc. to IEC 60664-1 | I (CTI > 600) |

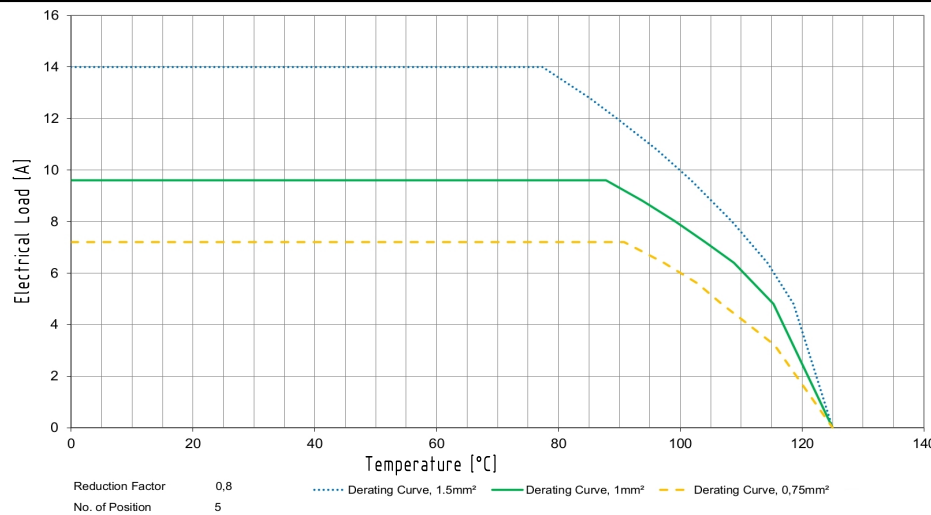
## Contact material

|                  |                  |                       |
|------------------|------------------|-----------------------|
|                  | termination zone | contact zone (spring) |
| Contact material | Copper alloy     | EN 1.4310 / AISI 301  |
| Plating          | Sn               | no                    |

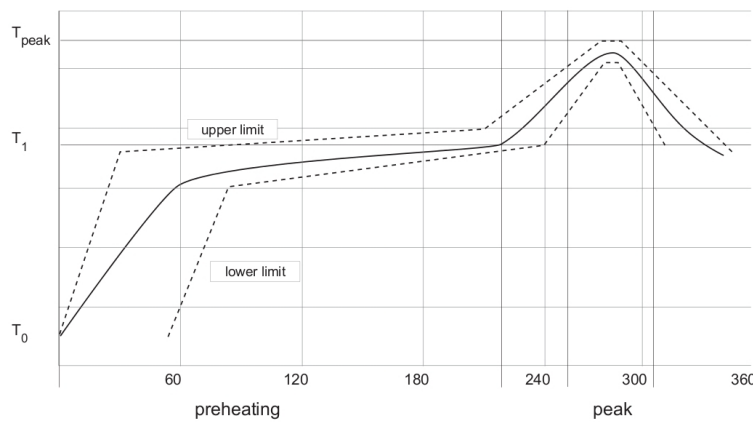
## Derating

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals.  
The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512-5



## Soldering instructions for lead-free tin soldering



|            |          |                                     |
|------------|----------|-------------------------------------|
| preheating | T0       | 25°C (77°F)                         |
|            | T1       | from 150°C (302°F) to 190°C (374°F) |
|            | time     | from 150s to 180s                   |
|            | gradient | 1,5°C/s (34°F/s)                    |
| peak       | Tpeak    | from 260°C (500°F) to 275°C (527°F) |
|            | time     | from 10s to 30s                     |

har-flexicon products with pure tin plated pins without lead, can be soldered by a lead-free reflow process, with a peak temperature till 275°C/527°F according to the related profile.

## Cable connection

|                                        |                                 |
|----------------------------------------|---------------------------------|
| Type                                   | har-flexicon 3.50/3.81 TTPV     |
| Part numbers                           | 1402xx14101xxx & 1402xx15101xxx |
| Conductor size AWG max                 | 16 AWG                          |
| Conductor size AWG min                 | 30 AWG                          |
| Conductor size solid max               | 1,5 mm <sup>2</sup>             |
| Conductor size solid min               | 0,14 mm <sup>2</sup>            |
| Conductor size stranded max            | 1,5 mm <sup>2</sup>             |
| Conductor size stranded min            | 0,14 mm <sup>2</sup>            |
| Conductor size stranded for end sleeve |                                 |
| Stripping length max                   | 10 mm                           |
| Stripping length min                   | 9 mm                            |

## Packing unit

| Type of packaging | No. of poles (xx) | Quantity | Index (xxx) | Remark |
|-------------------|-------------------|----------|-------------|--------|
| box               | 2                 | 300      | 000         |        |
| box               | 3                 | 200      | 000         |        |
| box               | 4 - 5             | 150      | 000         |        |
| box               | 6 - 12            | 100      | 000         |        |
| box               | 13 - 16           | 50       | 000         |        |

1402xx14101xxx



All Dimensions in mm  
Original Size DIN A3

Scale  
1:1

Free size tol.

Ref.

Sub.



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Department EL PD

Created by  
ZHUANGJ

Inspected by  
LUOK

Standardisation  
302077

Date  
2020-11-23

State  
Final Release

har-flexicon terminal block vertical, push-in

Doc-Key / ECM-Nr.  
100579685/UGD/000/F  
500000183169

HARTING Electronics GmbH

D-32339 Espelkamp

Type  
DS

Number  
14027401701

Rev.  
F

Page  
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# Mouser Electronics

Authorized Distributor

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## HARTING:

|                                       |                                       |                                       |                                       |                                       |                                       |
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| <a href="#"><u>14020414101333</u></a> | <a href="#"><u>14020415101333</u></a> |                                       |                                       |                                       |                                       |