
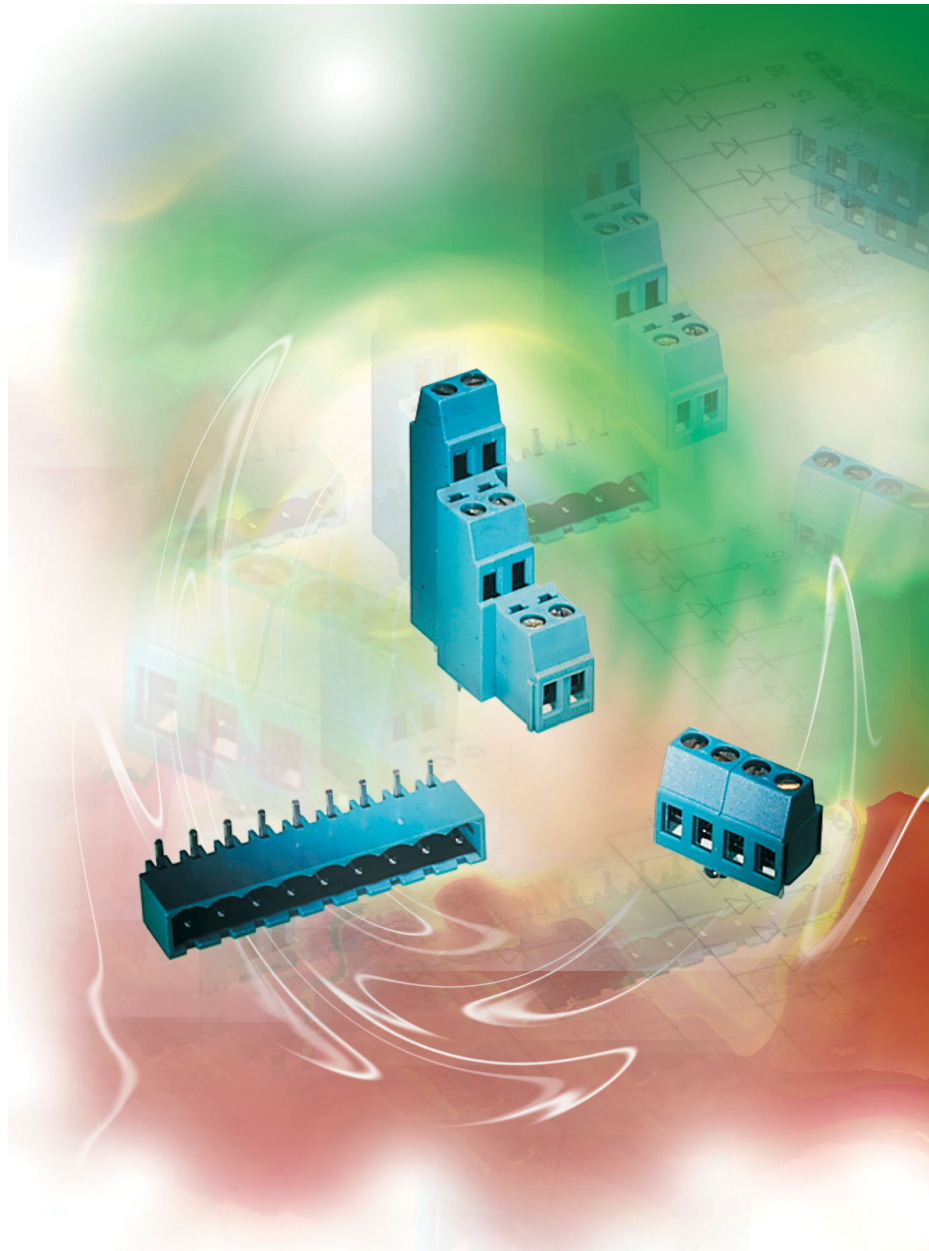


# TERMINALS FOR PRINTED

  
**woertz**



## CIRCUIT BOARDS

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# Terminals for printed circuit boards

## Introduction

Whether of small size and space-saving or of greater size and suitable for higher voltages or currents, our complete range of terminals for printed circuit boards offers the possibility to safely connect various wires to a circuit board using screw connection. The compactness of the 2- and 3-step terminals allow the users to have more connections within a reduced area . The terminals for printed circuit boards may be combined to obtain the required number of poles.

Marking can be performed on each individual connection to ensure a reliable link to the circuit boards (also very useful for trouble shooting and controls). For more information concerning our low-priced marking service, please contact us.

To easily connect the printed circuit boards you may use our connectors for printed circuit boards with various pin spacing and number of poles. These can quickly be plugged-in or -out, without using any tool. They may also be marked.



## Properties

- Terminals for printed circuit boards may be aligned
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Accessories

- 30413RO Cross junction rack 20p red  
30413BL Cross junction rack 20p blue



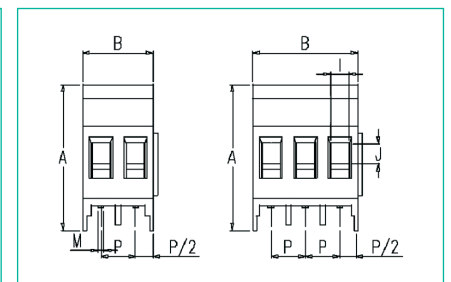
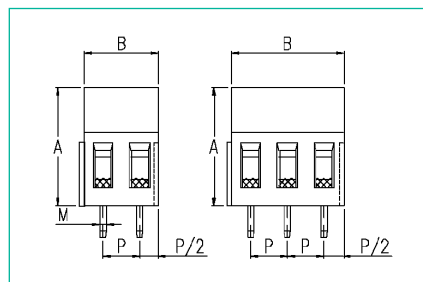
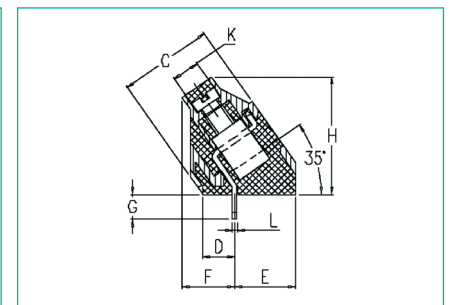
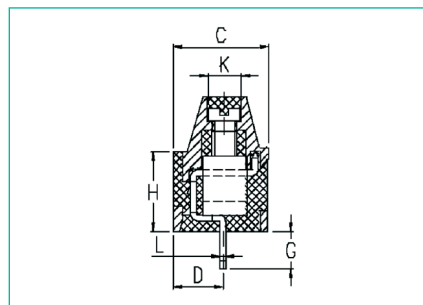
## Approvals

**cUL** 16A-300V



## Dimensions

	31251H	31251A		31251H	31251A
A	16.00	20.00	H	9.40	16.30
B	n x 5.08	n x 5.08	I	2.80	2.80
C	11.00	13.00	J	2.80	2.80
D	5.00	4.50	K	• 3.80	• 3.80
E	-	7.70	L	0.70	0.70
F	-	7.30	M	0.90	0.90
G	4.50	4.00	P	5.08	5.08



## Technical data

### Version

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Hole diameter of printed board

### horizontal

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

VO (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm

### 35°

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

VO (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm



## Order numbers

Number of poles 2  
3

31251H/102  
31251H/103

31251A/102  
31251A/103

# Terminals for printed circuit boards

2.5 mm<sup>2</sup>, 5.08 mm pin spacing



## Properties

- Terminals for printed circuit boards may be aligned
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Accessories

30413RO Cross junction rack 20p red  
30413BL Cross junction rack 20p blue



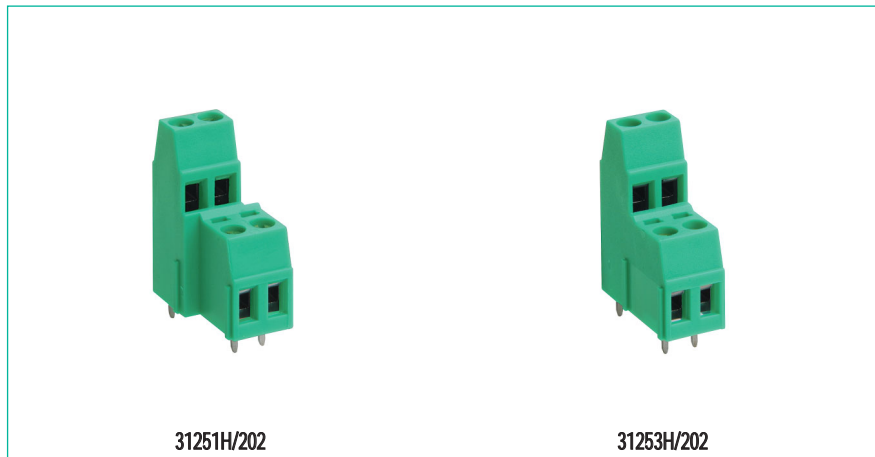
## Approvals

16A-300V



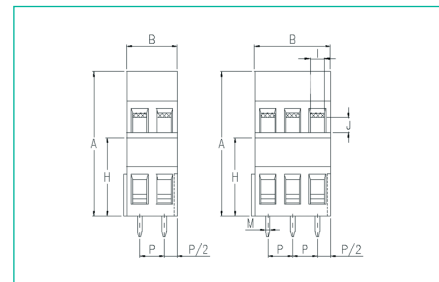
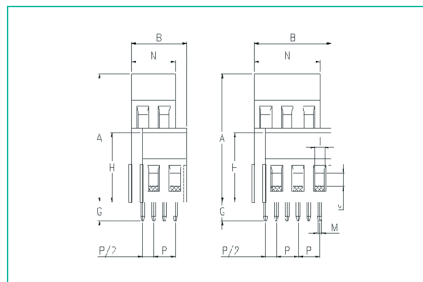
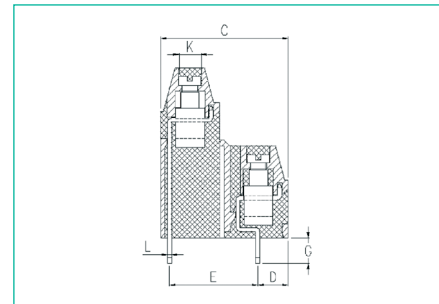
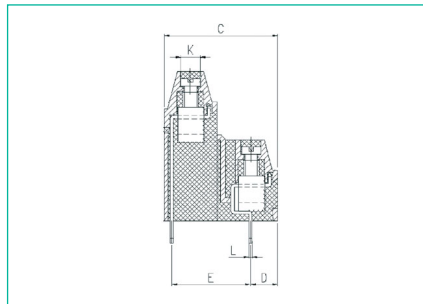
## Dimensions

	31251	31253		31251	31253
A	29.50	29.50	I	2.80	2.80
B	N + 2.54	n x 5.08	J	2.80	2.80
C	22.0	22.00	K	• 3.80	• 3.80
D	5.30	5.30	L	0.70	0.70
E	15.24	15.24	M	0.90	0.90
G	4.70	4.70	N	n x 5.08	-
H	16.00	16.00	P	5.08	5.08



31251H/202

31253H/202



## Technical data

### Version

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Hole diameter of printed board

### With shifted poles

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm

### Without shifted poles

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm



## Order numbers

Number of poles    4  
                              6

31251H/202  
31251H/203

31253H/202  
31253H/203



## Properties

- Terminals for printed circuit boards may be aligned
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Accessories

- 30413RO Cross junction rack 20p red  
30413BL Cross junction rack 20p blue



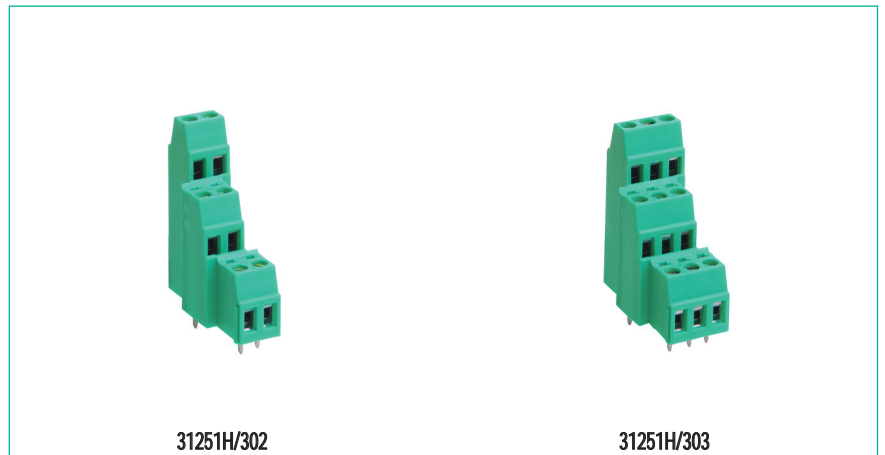
## Approvals

**cUL** 16A-300V



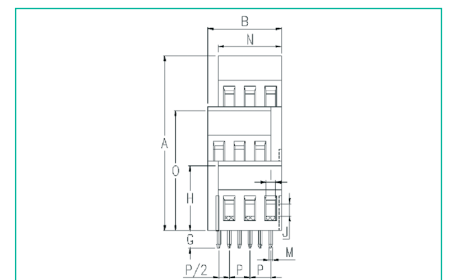
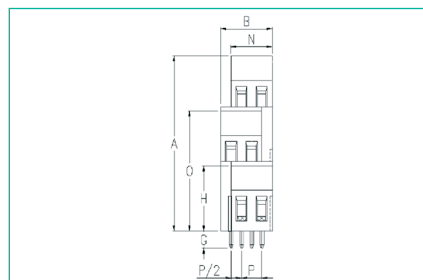
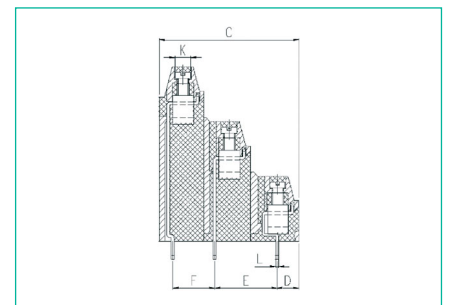
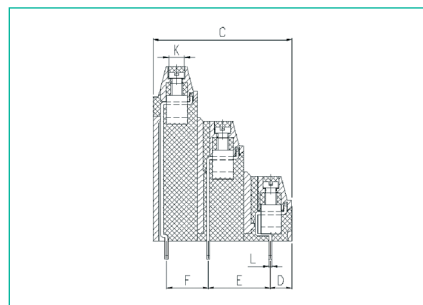
## Dimensions

	6-pole	9-pole		6-pole	9-pole
A	43.00	43.00	I	2.80	2.80
B	12.70	17.78	J	2.80	2.80
C	34.00	34.00	K	• 3.80	• 3.80
D	5.30	5.30	L	0.70	0.70
E	15.24	15.24	M	0.90	0.90
F	10.16	10.16	N	10.16	15.24
G	4.50	4.50	O	29.50	29.50
H	16.00	16.00	P	5.08	5.08



31251H/302

31251H/303



## Technical data

### Version

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Hole diameter of printed board

### 6-pole

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

VO (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm

### 9-pole

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

16 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

VO (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm



## Order numbers

31251H/302

31251H/303

# Terminals for printed circuit boards

4.0 mm<sup>2</sup>, 6.35 mm resp. 9.52 mm pin spacing



## Properties

- Terminals for printed circuit boards may be aligned
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Approvals

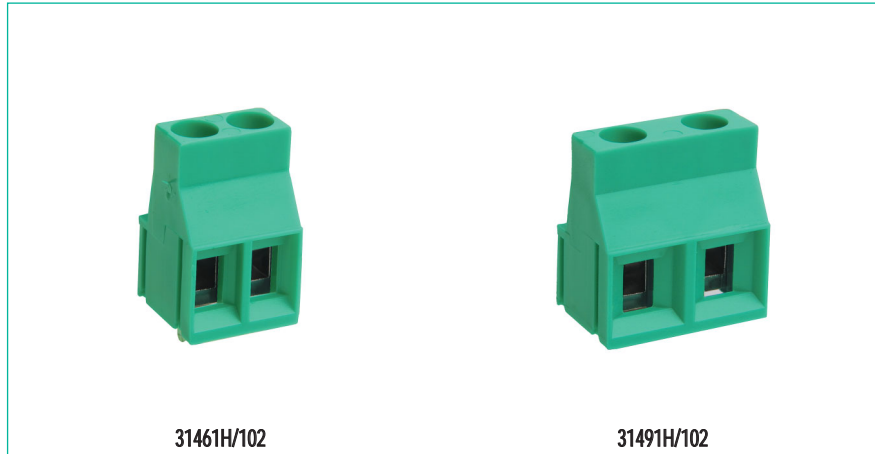


25A-300V



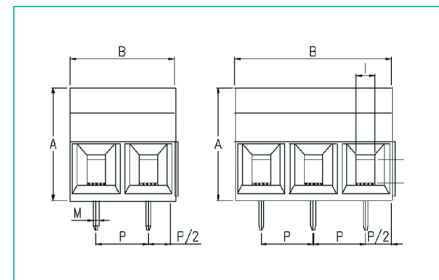
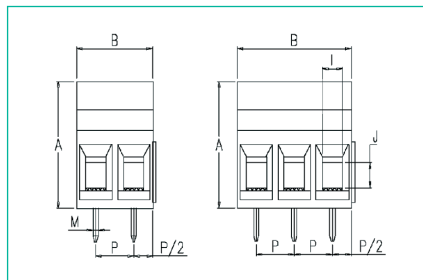
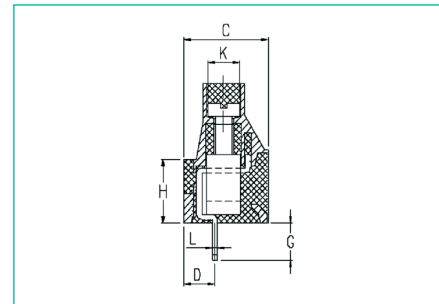
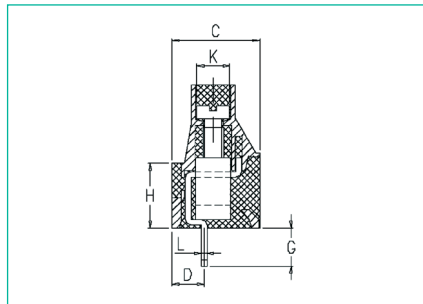
## Dimensions

	31461	31491		31461	31491
A	21.00	21.00	I	3.10	3.10
B	n x 6.35	n x 9.52	J	3.90	3.90
C	12.50	12.50	K	4.70	4.70
D	4.20	4.20	L	0.80	0.80
G	4.10	4.10	M	0.90	0.90
H	9.50	9.50	P	6.35	9.52



31461H/102

31491H/102



## Technical data

### Version

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Hole diameter of printed board

### 6.35 mm pin spacing

Stranded wires 4.0 mm<sup>2</sup> (12AWG)

Solid wire 6.0 mm<sup>2</sup> (10AWG)

6.35 mm

500 V

25 A

3 kV eff. / 60 s (CEI 23-20)

Igr C660

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

- 1.3 mm

31461H/102  
31461H/103

### 9.52 mm pin spacing

Stranded wires 4.0 mm<sup>2</sup> (12AWG)

Solid wire 6.0 mm<sup>2</sup> (10AWG)

9.52 mm

750 V

25 A

3 kV eff. / 60 s (CEI 23-20)

Igr C1000

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

- 1.3 mm

31491H/102  
31491H/103



## Order numbers

Number of poles    2  
                              3





## Properties

- May be aligned
- May be combined with terminals for printed circuit boards series 31251H with 5.08 mm pin spacing
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Approvals

16A-300V

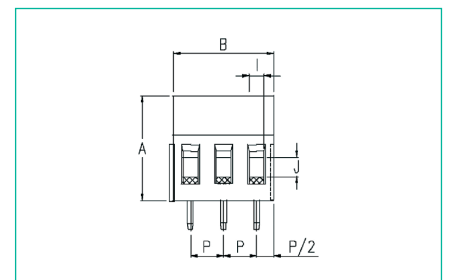
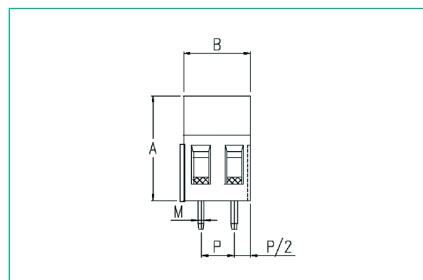
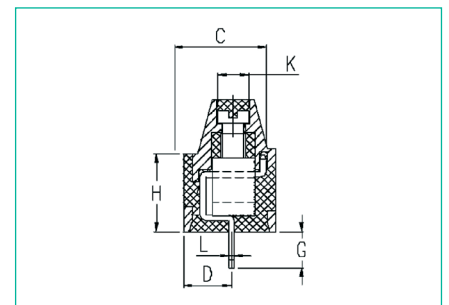
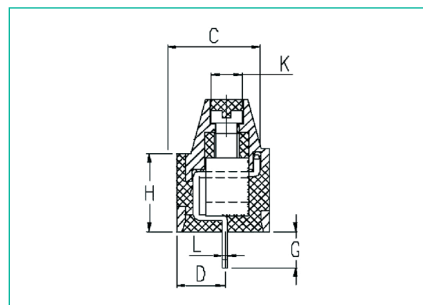


## Dimensions

	2-pole	3-pole		2-pole	3-pole
A	16.00	16.00	I	2.80	2.80
B	15.00	22.50	J	2.80	2.80
C	11.00	11.00	K	• 3.80	• 3.80
D	5.30	5.30	L	0.70	0.70
G	4.50	4.50	M	0.90	0.90
H	9.40	9.40	P	7.50	7.50



31270H/102



## Technical data

### Version

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Hole diameter of printed board

### Horizontal

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

7.5 mm

500 V

16 A

3 kV eff. / 60 s (CEI 23-20)

Igr C660

Polyamide 66

125°C (UL 746B)

VO (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

• 1.3 mm



## Order numbers

Number of poles    2  
                              3

31270H/102  
31270H/103

# Pluggable PCB terminal strips: sockets

2.5 mm<sup>2</sup>, 5.08 mm pin spacing



## Properties

- Number of poles from 2 up to 12 (up to 24 poles on request)
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Accessories

Pin terminals blocks series 31051

30413RO Cross junction rack 20p red

30413BL Cross junction rack 20p blue



## Approvals



12A-300V



## Dimensions

	31251H		31251H
A	15.50	H	• 3.80
C	18.80	I	2.80
D	8.30	J	3.10
E	1.00	K	• 1.80
F	5.70	P	5.08



## Technical data

Nominal cross-section

Pin spacing

Rated voltage

Rated current

Test voltage

Insulation class

Insulating body

Max. operating temperature

Flammability classification

Comparative Tracking Index

Tightening torque

Clamping screw

Connecting pins / Protective covering of wires

Connecting bar

Stranded wires 2.5 mm<sup>2</sup> (14AWG)

Solid wire 4.0 mm<sup>2</sup> (12AWG)

5.08 mm

250 V

12 A

2.5 kV eff. / 60 s (CEI 23-20)

Igr C250

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated



## Order numbers

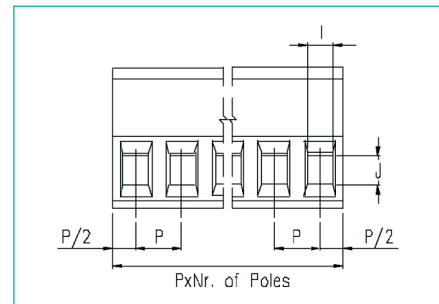
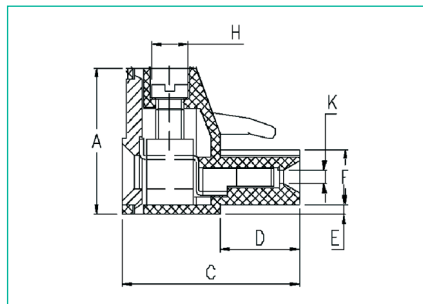
Number of poles

2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12

31251H/002  
31251H/003  
31251H/004  
31251H/005  
31251H/006  
31251H/007  
31251H/008  
31251H/009  
31251H/010  
31251H/011  
31251H/012



31251H/002





## Properties

- Number of poles from 2 up to 12 (up to 24 on request)
- Versions with vertical or 90° pins
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise (matches with the bases for printed circuit boards Woertz)
- Further colors on request



## Accessories

Multiple contact strips series 31251



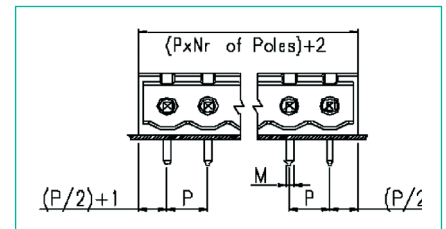
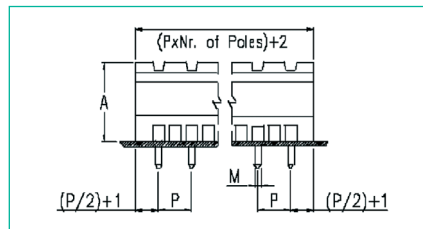
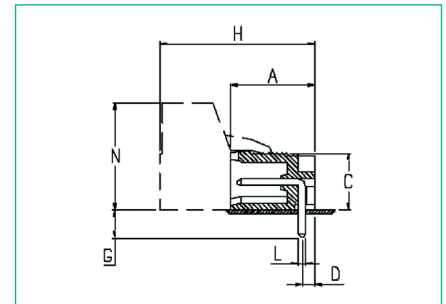
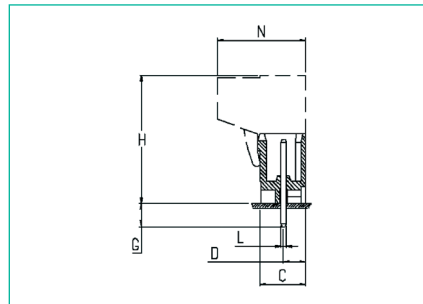
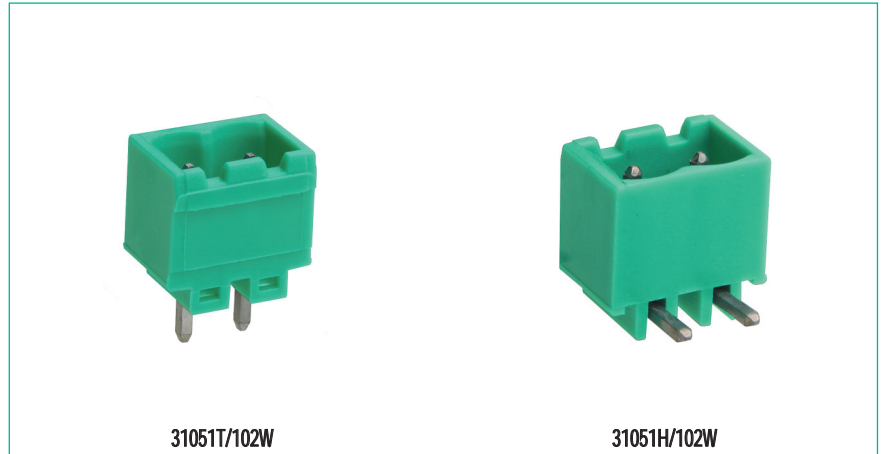
## Approvals

12A - 300V



## Dimensions

	31051T	31051H		31051T	31051H
A	12.20	12.20	L	1.00	1.00
C	8.10	8.10	M	1.00	1.00
D	4.00	1.90	N	15.50	15.50
G	4.00	4.00	P	5.08	5.08
H	22.80	22.80			



## Technical data

### Version

- Pin spacing
- Rated voltage
- Rated current
- Test voltage
- Insulation class
- Insulating body
- Max. operating temperature
- Flammability classification
- Comparative Tracking Index
- Material of pins
- Hole diameter of printed board

**with vertical pins**

- 5.08 mm
- 250 V
- 12 A
- 2.5 kV eff, 60 s (CEI 23-20)
- Igr C250
- Polyamide 66
- 125°C (UL 746B)
- VO (UL 94)
- CTI 400
- CuZn, tinned
- 1.5 mm

31051T/102W  
31051T/103W  
31051T/104W  
31051T/105W  
31051T/106W  
31051T/107W  
31051T/108W  
31051T/109W  
31051T/110W  
31051T/111W  
31051T/112W

**with 90° pins**

- 5.08 mm
- 250 V
- 12 A
- 2.5 kV eff, 60 s (CEI 23-20)
- Igr C250
- Polyamide 66
- 125°C (UL 746B)
- VO (UL 94)
- CTI 400
- CuZn, tinned
- 1.5 mm

31051H/102W  
31051H/103W  
31051H/104W  
31051H/105W  
31051H/106W  
31051H/107W  
31051H/108W  
31051H/109W  
31051H/110W  
31051H/111W  
31051H/112W



## Order numbers

Number of poles	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12

# Pluggable PCB terminal strips: plugs and sockets

2.5 mm<sup>2</sup>, 7.50 mm pin spacing



## Properties

- 2- and 3-pole push-on connectors
- Ideal for connecting appliances to the electrical mains
- Marking by means of adhesive labels, marker pen, etc.
- Standard color: turquoise
- Further colors and pole numbers on request



## Accessories

- 31251H/0xx Multiple contact strips,  
5.08mm pin spacing
- 31051x/1xx Pin terminal blocks,  
5.08mm pin spacing



## Approvals

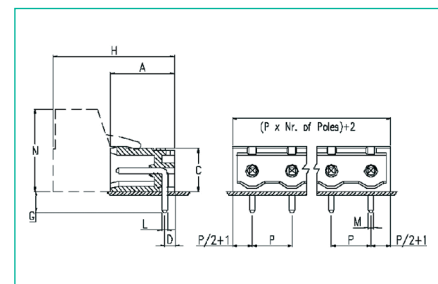
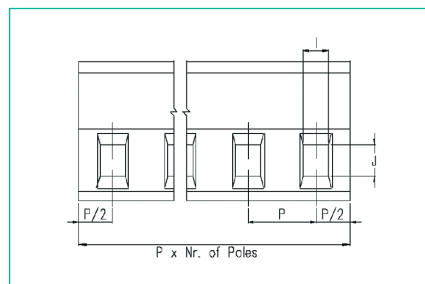
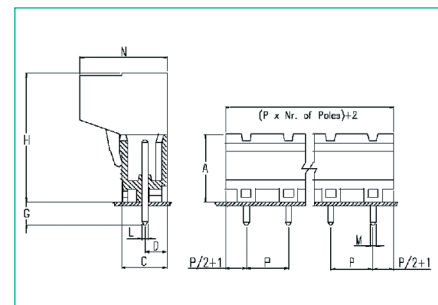
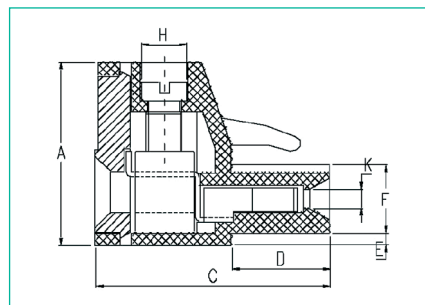
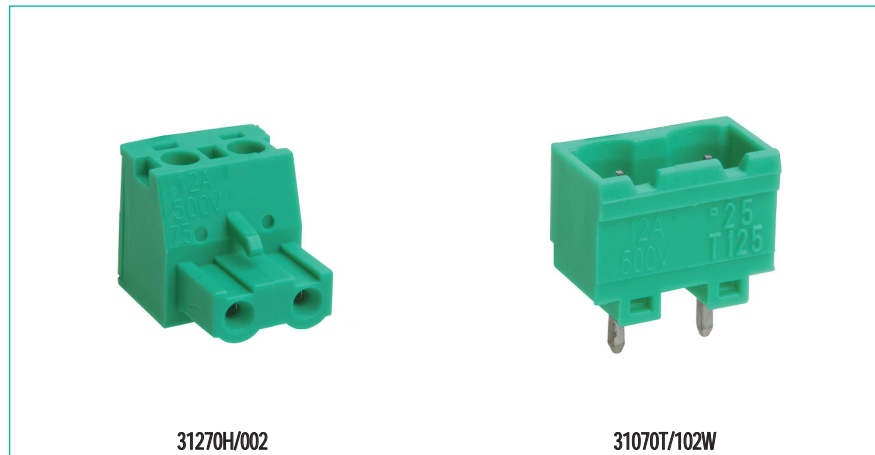


12A-300V



## Dimensions

	31270H		31051T	31051H
A	15.50	A	12.20	12.20
C	19.85	C	8.10	8.10
D	8.30	D	4.00	1.90
E	1.00	G	4.00	4.00
F	5.70	H	23.75	23.75
H	• 4.00	L	1.00	1.00
I	2.80	M	1.00	1.00
J	3.20	N	15.50	15.50
K	• 1.80	P	7.50	7.50
P	7.50			



## Technical data

Nominal cross-section

- Pin spacing
- Rated voltage
- Rated current
- Test voltage
- Insulation class
- Insulating body
- Max. operating temperature
- Flammability classification
- Comparative Tracking Index
- Tightening torque
- Clamping screw
- Connecting pins / Protective covering of wires
- Connecting bar
- Hole diameter of printed board

Stranded wires 2.5 mm<sup>2</sup> (14AWG)  
Solid wire 4.0 mm<sup>2</sup> (12AWG)

7.50 mm

500 V

12 A

3 kV eff. / 60 s (CEI 23-20)

Igr C660

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

0.5 Nm

M3, galvanized steel

CuZn, tinned

CuZn, nickel-plated

7.50 mm

500 V

12 A

3 kV eff. / 60 s (CEI 23-20)

Igr C660

Polyamide 66

125°C (UL 746B)

V0 (UL 94)

CTI 400

CuZn, tinned

- 1.5 mm

31270H/002  
31270H/003

31070T/102W  
31070H/102W  
31070T/103W  
31070H/103W



## Order numbers

- Multiple contact strips 2-pole  
3-pole
- Pin terminal blocks 2-pole, vertical, with side barrier  
2-pole, bent, with side barrier  
3-pole, vertical, with side barrier  
3-pole, bent, with side barrier

