

# Data Sheet | Item Number: 231-346/108-000

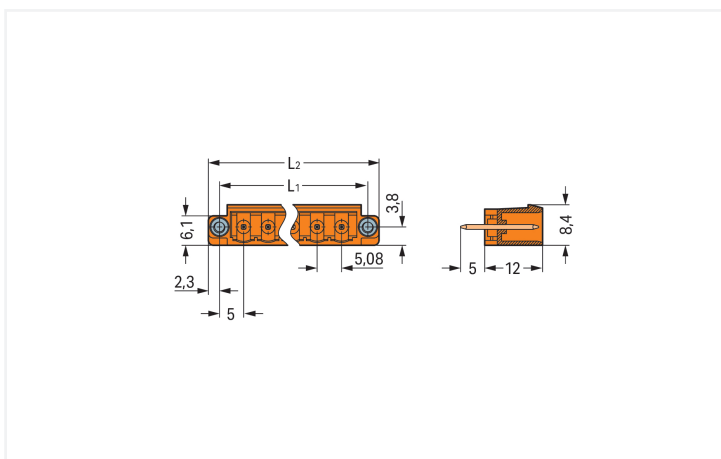
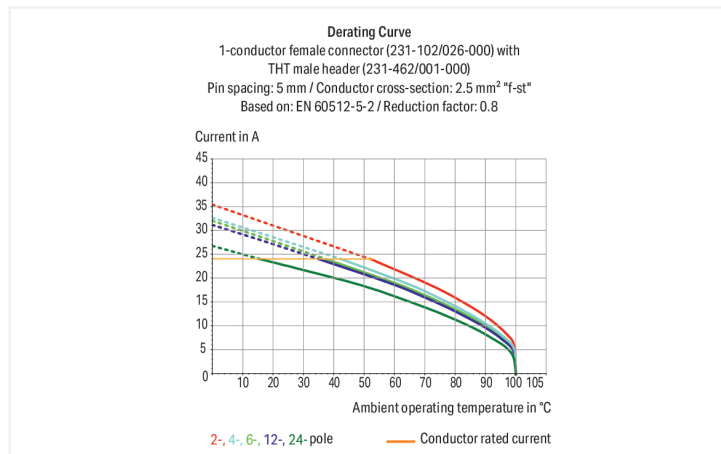
THT male header; 1.0 x 1.0 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 16-pole; orange

<https://www.wago.com/231-346/108-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

$L1 = (\text{pole no.} \times \text{pin spacing}) + 5.4 \text{ mm}$   
 $L2 = (\text{pole no.} \times \text{pin spacing}) + 10 \text{ mm}$

Male connector, 231 Series, solder pin dimensions 1 x 1 mm

Our male connector (item number 231-346/108-000) simplifies electrical installations. Dimensions: (91.28 x 17 x 8.4) mm (width x height x depth).

Tin is used for coating the contact surfaces. The pcb connector is designed for THT soldering.

## Notes

## Safety Information

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Variants:

Other pole numbers  
3.8 mm pin projection for male headers with straight solder pins  
Gold-plated or partially gold-plated contact surfaces  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	12 A	12 A	12 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

## Ratings per UL 1977

Rated current UL 1977	10 A
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Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

## Connection Data

Total number of potentials	16
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	16

## Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	91.28 mm / 3.594 inches
Height	17 mm / 0.669 inches
Height from the surface	12 mm / 0.472 inches
Depth	8.4 mm / 0.331 inches
Solder pin length	5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	1.4 (+0.1) mm

## Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90 °
Locking of plug-in connection	Threaded flange

### PCB contact

PCB contact	THT
Solder pin arrangement	over the entire male connector (in-line)
Number of solder pins per potential	1

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	orange
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.092 MJ
Weight	5.8 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

### Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard

### Environmental Testing

Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454029173
Customs tariff number	85366930000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 10.0	EC002637
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	06380b25-04f5-4bcc-b9c3-912ee6f7dd14
SCIP notification number (Belgium)	3f91cb0b-aad6-464d-a7e0-d40a740752d5
SCIP notification number (Bulgaria)	892487d1-e274-477d-af3e-f8eea3030749
SCIP notification number (Czech Republic)	8d6c7d53-8531-49d3-8735-7b4490d82384
SCIP notification number (Denmark)	966feeed-db40-4a0c-a21c-0d16b66cac00
SCIP notification number (Finland)	81321a22-2fdf-462e-9127-bd6be2712688
SCIP notification number (France)	47ecc41d-8efa-4634-ae52-6a5b4f81da88
SCIP notification number (Germany)	fd665e75-ecb4-4de5-ba05-40b4b7a3bdd4
SCIP notification number (Hungary)	f359b52c-1c34-43a7-8636-dcb5ad6e8888
SCIP notification number (Italy)	23ab09f0-0420-4598-ade9-b08718f613c8
SCIP notification number (Netherlands)	217d525a-ce5c-4e72-b79d-7f826ece4ca7
SCIP notification number (Poland)	7ae97f53-c902-4047-a548-97a5c557f18e
SCIP notification number (Romania)	a0e487dd-611a-402b-a7c0-8e1039fa5bea
SCIP notification number (Sweden)	e4dfa69d-9f7c-4b45-9bda-71ba6f3040a8

### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UL UL International Germany GmbH	UL 1977	E45171
UR Underwriters Laboratories Inc.	UL 1059	E45172

#### Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance  
231-346/108-000



### Documentation

#### Additional Information

Technical Section

03.04.2019

pdf  
2027.26 KB



### CAD/CAE-Data

#### CAD data

2D/3D Models  
231-346/108-000



#### CAE data

EPLAN Data Portal  
231-346/108-000



ZUKEN Portal  
231-346/108-000



#### PCB Design

Symbol and Footprint  
via SamacSys  
231-346/108-000



Symbol and Footprint  
via Ultra Librarian  
231-346/108-000



## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.:** [231-316/107-000](#)

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; Screw flange; orange

**Item No.:** [2231-316/107-000](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; Screw flange; 2,50 mm²; orange

**Item No.:** [231-2316/107-000](#)

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; Screw flange; orange

### 1.2 Optional Accessories

#### 1.2.1 Coding

##### 1.2.1.1 Coding



**Item No.:** [231-129](#)

Coding key; snap-on type; light gray

##### 1.2.1.2 Intermediate plate

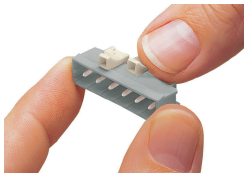


**Item No.:** [231-500](#)

Spacer; for formation of groups; light gray

## Installation Notes

### Coding



Coding a male header – fitting coding key(s).