

**Data sheet | Item number: 2020-2238**

2-conductor/2-pin double-deck carrier terminal; 2-conductor/2-pin through terminal block; L; internal commoning; conductor entry with violet marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00 mm<sup>2</sup>; gray

[www.wago.com/2020-2238](http://www.wago.com/2020-2238)



Color:



**Data**

**Electrical data**

Subject to changes. Please also observe the further product documentation!

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### Ratings per IEC/EN

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated current	13.5 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

### Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	15 A

### Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group C)	300 V
Rated current CSA (Use Group C)	10 A

### Power Loss

Power loss, per pole (potential)	0.434 W
Rated current $I_N$ for specified power loss	13.5 A
Resistance value for specified, current-dependent power loss	0.002 $\Omega$

### Connection data

Connection points	2
Female plug slots	2
Total number of potentials	1
Number of levels	2
Number of jumper slots	3
Number of jumper slots (rank)	2

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## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm <sup>2</sup>
Solid conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm <sup>2</sup> / 20 ... 18 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Wiring direction	Front-entry wiring

## Physical data

Width	3.5 mm / 0.138 inches
Height	80.1 mm / 3.154 inches
Depth from upper-edge of DIN-rail	61.4 mm / 2.417 inches

## Mechanical Data

Potential marking	L
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Side marking

## Material Data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.238 MJ
Weight	10.1 g

Subject to changes. Please also observe the further product documentation!



## Environmental requirements

Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

## Commercial data

Product Group	18 (X-COM-System)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821049616
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CCA</b> DEKRA Certification B.V.	EN 60947	NTR NL 7617
	<b>CSA</b> DEKRA Certification B.V.	C22.2	2516073
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 60947	71- 100670
	<b>UL</b> UL International Germany GmbH	UL 1059	E 45172

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>UK-Declaration of Conformity</b>	-	-

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**Approvals for marine applications**

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	<b>BV</b> Bureau Veritas S.A.	EN 60947	38586/B0 BV
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2

**Counterpart**

<b>Item no.2020-102</b> 1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm <sup>2</sup> ; Pin spacing 3.5 mm; 2-pole; 1,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/2020-102">www.wago.com/2020-102</a>
<b>Item no.2020-202</b> 2-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm <sup>2</sup> ; Pin spacing 3.5 mm; 2-pole; 1,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/2020-202">www.wago.com/2020-202</a>

**Required accessories****End plate**

<b>Item no.: 2020-2291</b> End and intermediate plate; 1 mm thick; gray	<a href="http://www.wago.com/2020-2291">www.wago.com/2020-2291</a>
<b>Item no.: 2020-2292</b> End and intermediate plate; 1 mm thick; orange	<a href="http://www.wago.com/2020-2292">www.wago.com/2020-2292</a>

**Optional accessories****Push-in type wire jumper**

<b>Jumper</b>	
<b>Item no.: 2009-404</b> Push-in type wire jumper; 0.75 mm <sup>2</sup> ; insulated; 110 mm long; gray	<a href="http://www.wago.com/2009-404">www.wago.com/2009-404</a>
<b>Item no.: 2009-402</b> Push-in type wire jumper; 0.75 mm <sup>2</sup> ; insulated; 60 mm long; gray	<a href="http://www.wago.com/2009-402">www.wago.com/2009-402</a>
<b>Item no.: 2009-406</b> Push-in type wire jumper; 0.75 mm <sup>2</sup> ; insulated; 250 mm long; gray	<a href="http://www.wago.com/2009-406">www.wago.com/2009-406</a>

**Testing and measuring**

Subject to changes. Please also observe the further product documentation!

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## Testing accessories

**Item no.: 859-500**

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm uninsulated; Test lead for soldering up to 0,5mm<sup>2</sup>

[www.wago.com/859-500](http://www.wago.com/859-500)

## Coding

## Coding

**Item no.: 2020-100**

Carrier with 6 coding pins; for coding of female plugs; for carrier terminal blocks; orange

[www.wago.com/2020-100](http://www.wago.com/2020-100)

## Marking accessories

## Marking strip

**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

[www.wago.com/2009-110](http://www.wago.com/2009-110)

## Marker

**Item no.: 2009-113**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

[www.wago.com/2009-113](http://www.wago.com/2009-113)

**Item no.: 793-3501**

WMB marking card; as card; plain; snap-on type; white

[www.wago.com/793-3501](http://www.wago.com/793-3501)

## Jumpers

## Jumper

**Item no.: 210-123**

Wire commoning chain; insulated; blue

[www.wago.com/210-123](http://www.wago.com/210-123)

**Item no.: 2000-408**

Jumper; 8-way; insulated; light gray

[www.wago.com/2000-408](http://www.wago.com/2000-408)

**Item no.: 2000-407**

Jumper; 7-way; insulated; light gray

[www.wago.com/2000-407](http://www.wago.com/2000-407)

**Item no.: 2000-409**

Jumper; 9-way; insulated; light gray

[www.wago.com/2000-409](http://www.wago.com/2000-409)

**Item no.: 2000-408/000-006**

Jumper; 8-way; insulated; blue

[www.wago.com/2000-408/000-006](http://www.wago.com/2000-408/000-006)

**Item no.: 2000-408/000-005**

Jumper; 8-way; insulated; red

[www.wago.com/2000-408/000-005](http://www.wago.com/2000-408/000-005)

**Item no.: 2000-409/000-005**

Jumper; 9-way; insulated; red

[www.wago.com/2000-409/000-005](http://www.wago.com/2000-409/000-005)

**Item no.: 2000-407/000-006**

Jumper; 7-way; insulated; blue

[www.wago.com/2000-407/000-006](http://www.wago.com/2000-407/000-006)

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<b>Item no.: 2000-410</b> Jumper; 10-way; insulated; light gray	<a href="http://www.wago.com/2000-410">www.wago.com/2000-410</a>
<b>Item no.: 2000-410/000-006</b> Jumper; 10-way; insulated; blue	<a href="http://www.wago.com/2000-410/000-006">www.wago.com/2000-410/000-006</a>
<b>Item no.: 2000-433/000-005</b> Jumper; from 1 to 3; insulated; red	<a href="http://www.wago.com/2000-433/000-005">www.wago.com/2000-433/000-005</a>
<b>Item no.: 2000-407/000-005</b> Jumper; 7-way; insulated; red	<a href="http://www.wago.com/2000-407/000-005">www.wago.com/2000-407/000-005</a>
<b>Item no.: 2000-433/000-006</b> Jumper; from 1 to 3; insulated; blue	<a href="http://www.wago.com/2000-433/000-006">www.wago.com/2000-433/000-006</a>
<b>Item no.: 2000-410/000-005</b> Jumper; 10-way; insulated; red	<a href="http://www.wago.com/2000-410/000-005">www.wago.com/2000-410/000-005</a>
<b>Item no.: 2000-435</b> Jumper; from 1 to 5; insulated; light gray	<a href="http://www.wago.com/2000-435">www.wago.com/2000-435</a>
<b>Item no.: 2000-409/000-006</b> Jumper; 9-way; insulated; blue	<a href="http://www.wago.com/2000-409/000-006">www.wago.com/2000-409/000-006</a>
<b>Item no.: 2000-436</b> Jumper; from 1 to 6; insulated; light gray	<a href="http://www.wago.com/2000-436">www.wago.com/2000-436</a>
<b>Item no.: 2000-433</b> Jumper; from 1 to 3; insulated; light gray	<a href="http://www.wago.com/2000-433">www.wago.com/2000-433</a>
<b>Item no.: 2000-434</b> Jumper; from 1 to 4; insulated; light gray	<a href="http://www.wago.com/2000-434">www.wago.com/2000-434</a>
<b>Item no.: 2000-402</b> Jumper; 2-way; insulated; light gray	<a href="http://www.wago.com/2000-402">www.wago.com/2000-402</a>
<b>Item no.: 2000-402/000-006</b> Jumper; 2-way; insulated; blue	<a href="http://www.wago.com/2000-402/000-006">www.wago.com/2000-402/000-006</a>
<b>Item no.: 2000-403</b> Jumper; 3-way; insulated; light gray	<a href="http://www.wago.com/2000-403">www.wago.com/2000-403</a>
<b>Item no.: 2000-402/000-005</b> Jumper; 2-way; insulated; red	<a href="http://www.wago.com/2000-402/000-005">www.wago.com/2000-402/000-005</a>

Subject to changes. Please also observe the further product documentation!



**Item no.: 2000-402/000-018**

Jumper; 2-way; insulated; yellow-green

[www.wago.com/2000-402/000-018](http://www.wago.com/2000-402/000-018)

**Item no.: 2000-404**

Jumper; 4-way; insulated; light gray

[www.wago.com/2000-404](http://www.wago.com/2000-404)

**Item no.: 2000-403/000-005**

Jumper; 3-way; insulated; red

[www.wago.com/2000-403/000-005](http://www.wago.com/2000-403/000-005)

**Item no.: 2000-404/000-006**

Jumper; 4-way; insulated; blue

[www.wago.com/2000-404/000-006](http://www.wago.com/2000-404/000-006)

**Item no.: 2000-403/000-006**

Jumper; 3-way; insulated; blue

[www.wago.com/2000-403/000-006](http://www.wago.com/2000-403/000-006)

**Item no.: 2000-404/000-005**

Jumper; 4-way; insulated; red

[www.wago.com/2000-404/000-005](http://www.wago.com/2000-404/000-005)

**Item no.: 2000-405**

Jumper; 5-way; insulated; light gray

[www.wago.com/2000-405](http://www.wago.com/2000-405)

**Item no.: 2000-405/011-000**

Star point jumper; 3-way; insulated; light gray

[www.wago.com/2000-405/011-000](http://www.wago.com/2000-405/011-000)

**Item no.: 2000-405/000-006**

Jumper; 5-way; insulated; blue

[www.wago.com/2000-405/000-006](http://www.wago.com/2000-405/000-006)

**Item no.: 2000-406/000-006**

Jumper; 6-way; insulated; blue

[www.wago.com/2000-406/000-006](http://www.wago.com/2000-406/000-006)

**Item no.: 2000-405/000-005**

Jumper; 5-way; insulated; red

[www.wago.com/2000-405/000-005](http://www.wago.com/2000-405/000-005)

**Item no.: 2000-406**

Jumper; 6-way; insulated; light gray

[www.wago.com/2000-406](http://www.wago.com/2000-406)

**Item no.: 2000-406/000-005**

Jumper; 6-way; insulated; red

[www.wago.com/2000-406/000-005](http://www.wago.com/2000-406/000-005)

**Item no.: 2000-406/020-000**

Delta jumper; insulated; light gray

[www.wago.com/2000-406/020-000](http://www.wago.com/2000-406/020-000)

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<b>Item no.: 2000-437</b> Jumper; from 1 to 7; insulated; light gray	<a href="http://www.wago.com/2000-437">www.wago.com/2000-437</a>
<b>Item no.: 2000-438</b> Jumper; from 1 to 8; insulated; light gray	<a href="http://www.wago.com/2000-438">www.wago.com/2000-438</a>
<b>Item no.: 2000-439</b> Jumper; from 1 to 9; insulated; light gray	<a href="http://www.wago.com/2000-439">www.wago.com/2000-439</a>
<b>Item no.: 2000-440</b> Jumper; from 1 to 10; insulated; light gray	<a href="http://www.wago.com/2000-440">www.wago.com/2000-440</a>
<b>Item no.: 210-103</b> Wire commoning chain; insulated; black	<a href="http://www.wago.com/210-103">www.wago.com/210-103</a>
<b>Protective warning marker</b>	
Cover	
<b>Item no.: 2000-115</b> Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow	<a href="http://www.wago.com/2000-115">www.wago.com/2000-115</a>
<b>Carrier rail</b>	
Mounting accessories	
<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-197">www.wago.com/210-197</a>
<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<a href="http://www.wago.com/210-198">www.wago.com/210-198</a>
<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>
<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-118">www.wago.com/210-118</a>
<b>Item no.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	<a href="http://www.wago.com/210-112">www.wago.com/210-112</a>
<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-114">www.wago.com/210-114</a>
<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored	<a href="http://www.wago.com/210-115">www.wago.com/210-115</a>
<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-196">www.wago.com/210-196</a>
<b>Ferrule</b>	
Ferrule	
<b>Item no.: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
<b>Item no.: 216-242</b>	

Subject to changes. Please also observe the further product documentation!



Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

[www.wago.com/216-242](http://www.wago.com/216-242)

**Item no.: 216-243**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

[www.wago.com/216-243](http://www.wago.com/216-243)

**Tool**

Operating tool

**Item no.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

[www.wago.com/210-648](http://www.wago.com/210-648)

**Item no.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

[www.wago.com/210-647](http://www.wago.com/210-647)

**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)

**Downloads**

**Documentation**

**Bid Text**

2020-2238 X81 - Datei	2019 年2月19日	xml 4.4 kB	Download
2020-2238 docx - Datei	2018 年8月7日	docx 15.8 kB	Download

**Additional Information**

pdf  
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**CAD/CAE-Data**

**CAD data**

2D/3D Models 2020-2238  
URL  
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**CAE data**

WSCAD Universe 2020-2238  
URL  
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ZUKEN Portal 2020-2238  
URL  
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EPLAN Data Portal 2020-2238  
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 2020-2238

URL

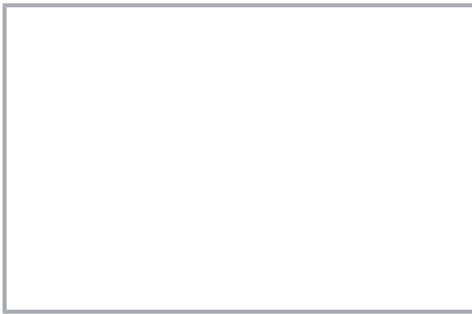
Download

2-conductor/2-pin double-deck carrier terminal; 2-conductor/2-pin through terminal block; L; internal commoning; conductor entry with violet marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00 mm²; gray

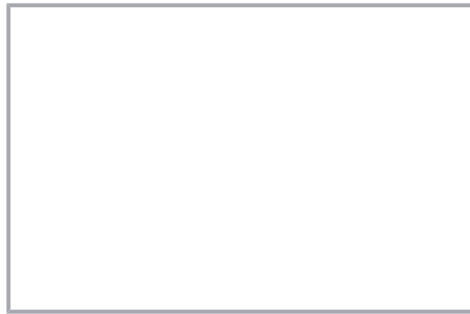
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## Installation Notes

### Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.

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Subject to changes. Please also observe the further product documentation!



1-conductor female plug

Double-deck carrier terminal blocks can be commoned via 2000 Series Push-In Type Jumper Bars and tested via 859-500 Test Pin.

### Marking



Clear marking via large marking area



Group marking with height-adjustable group marker carrier (2009-163)



Marking via marker carrier (2009-198)

### Product family

**X-COM S-Mini**

[Show all products from the family](#)

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