

## Data Sheet | Item Number: 769-193/769-319

1-conductor/1-conductor terminal block for pluggable modules; 6-pole; with 2-conductor terminal blocks; with 2 jumper positions; with orange separator plate; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; gray

<https://www.wago.com/769-193/769-319>



Color: ■ gray

Carrier terminal block for fuses and electronic modules, 769 Series, gray

Fault-free electrical installations are guaranteed with this carrier terminal block for fuses and electronic modules (item number 769-193/769-319). Strip lengths must be between 8 and 9 mm when connecting conductors to this carrier terminal block for fuses and electronic modules. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the properties of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. This product features conductor terminals and utilizes CAGE CLAMP®. Our tried-and-tested universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. Depending on the type of conductor, this carrier terminal block for fuses and electronic modules is ideal for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 4 mm<sup>2</sup>.

### Notes

#### Safety Information

A separator plate (Item No. 209-191) or a 10 mm end stop (Item No. 249-117) must be placed at the end of a WAGO X-COM®-SYSTEM terminal strip.

### Electrical data

#### Ratings per IEC/EN

Nominal voltage (III/3)	400 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	16 A
Legend (ratings)	(III / 3) $\triangleq$ Overvoltage category III / Pollution degree 3

#### Power Loss

Power loss, per pole (potential)	0.256 W
Rated current $I_N$ for power loss specification	16 A
Resistance value for specified, current-dependent power loss	0.001 $\Omega$

### General information

Wiring direction	Front-entry wiring
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### Connection data

Clamping units	6
Total number of potentials	6
Number of levels	1

### Connection 1

Connection technology	CAGE CLAMP®
Connectable conductor materials	Copper
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Pole number	6
Wiring direction	Front-entry wiring

### Physical data

Width	16.1 mm / 0.634 inches
Height	87.5 mm / 3.445 inches
Depth from upper-edge of DIN-rail	28.5 mm / 1.122 inches

### Mechanical data

Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Center marking

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.566 MJ
Weight	28.7 g

### Environmental requirements

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

### Commercial data

Product Group	18 (X-COM-System)
PU (SPU)	5 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918935258
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 10.0	EC000897
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

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

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626
CSA CSA Group	C22.2	1101144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2190419.01
UL Underwriters Laboratories Inc.	UL 1059	E45172
UL Underwriters Laboratories Inc.	UL 1977	E 45171

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



Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004428.000

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance  
769-193/769-319



## Documentation

### Bid Text

769-193/769-319	19.02.2019	xml 3.35 KB	
769-193/769-319	04.10.2017	doc 25.50 KB	

## CAD/CAE-Data

### CAD data

2D/3D Models  
769-193/769-319



### CAE data

EPLAN Data Portal  
769-193/769-319



WSCAD Universe  
769-193/769-319



ZUKEN Portal  
769-193/769-319



## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 769-317**

End and intermediate plate; 1.1 mm thick; gray



**Item No.: 769-318**

End and intermediate plate; 1.1 mm thick; orange

### 1.2 Optional Accessories

#### 1.2.1 Coding

##### 1.2.1.1 Coding



**Item No.: 769-435**

Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange

## 1.2.2 Cover

### 1.2.2.1 Cover



**Item No.: 769-438**

Pin cover; with marker slot for miniature WSB; gray



**Item No.: 769-439**

Pin cover; with marker slot for miniature WSB; orange

## 1.2.3 DIN-rail

### 1.2.3.1 Mounting accessories



**Item No.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



**Item No.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item No.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-115**

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



**Item No.: 210-112**

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



**Item No.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



**Item No.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

## 1.2.4 End plate

### 1.2.4.1 End plate



**Item No.: 769-319**

Separator plate; 1.1 mm thick; oversized; orange

## 1.2.5 Ferrule

### 1.2.5.1 Ferrule



**Item No.: 216-301**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated

### 1.2.5.1 Ferrule



**Item No.: 216-204**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-104**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-206**  
 Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; blue

### 1.2.6 Installation

#### 1.2.6.1 Mounting accessories



**Item No.: 209-106**  
 Mounting carrier; for isolated mounting on DIN 35 rails; gray

**Item No.: 249-116**  
 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

### 1.2.7 Insulation stop

#### 1.2.7.1 Insulation stop



**Item No.: 769-470**  
 Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white

**Item No.: 769-471**  
 Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 769-472**  
 Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray

### 1.2.8 Jumper

#### 1.2.8.1 Jumper



**Item No.: 280-402**  
 Jumper; insulated; gray

**Item No.: 280-409**  
 Jumper; insulated; gray

**Item No.: 780-452**  
 Staggered jumper; from 1 to 2; insulated; gray

**Item No.: 780-453**  
 Staggered jumper; from 1 to 3; insulated; gray



**Item No.: 780-454**  
 Staggered jumper; from 1 to 4; insulated; gray

**Item No.: 780-455**  
 Staggered jumper; from 1 to 5; insulated; gray

**Item No.: 780-456**  
 Staggered jumper; from 1 to 6; insulated; gray

**Item No.: 780-457**  
 Staggered jumper; from 1 to 7; insulated; gray



**Item No.: 780-458**  
 Staggered jumper; from 1 to 8; insulated; gray

### 1.2.9 Marking

#### 1.2.9.1 Marker



**Item No.: 2009-145**  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 248-501**  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

## 1.2.10 Plug

### 1.2.10.1 AND gate module



**Item No.: 286-826**

AND gate module with 6 inputs; light gray

### 1.2.10.2 Bridge rectifier module



**Item No.: 286-830**

Bridge rectifier module; Input voltage: 24 VAC; with varistor protective circuit; gray

### 1.2.10.3 Component module with diode



**Item No.: 286-805**

Component module with diode; with 5 pcs; Diode 1N4007; with common anode; gray



**Item No.: 286-809**

Component module with diode; with 9 pcs; Diode 1N4007; with common anode; gray

### 1.2.10.4 Component module with LED



**Item No.: 286-822**

Component module with LED; Red LED; with common cathode

### 1.2.10.5 Current flow monitoring module



**Item No.: 286-664**

Current flow monitoring module; AC currents; Monitoring range: 0.2 A – 3 A; 1 changeover contact; light gray



**Item No.: 286-665**

Current flow monitoring module; AC currents; Monitoring range: 1 A – 10 A; 1 changeover contact; light gray



**Item No.: 286-662**

Current flow monitoring module; DC currents; Monitoring range: 0.4 A – 3.5 A; 1 make contact; light gray

### 1.2.10.6 Empty component plug housing



**Item No.: 286-111**

Empty component plug housing; Type 10; 15 mm wide; 6-pole; gray



**Item No.: 286-113**

Empty component plug housing; Type 12; 25 mm wide; 10-pole; gray



**Item No.: 786-101**

Empty component plug housing; Type 14; 15 mm wide; 6-pole; gray



**Item No.: 786-103**

Empty component plug housing; Type 16; 25 mm wide; 10-pole; gray

### 1.2.10.7 Fuse plug



**Item No.: 281-512/281-418**

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 120 V; 6 mm wide; gray



**Item No.: 281-512/281-417**

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 230 V; 6 mm wide; gray



**Item No.: 281-512/281-501**

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 24 V AC/DC; 6 mm wide; gray



**Item No.: 281-512**

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray

### 1.2.10.7 Fuse plug



**Item No.: 281-511**

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; without blown fuse indication; 6 mm wide; gray

### 1.2.10.8 Optocoupler module



**Item No.: 286-725**

Optocoupler module; gray



**Item No.: 286-723**

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 15 ... 30 VDC; Limiting continuous current: 4 A; 3-wire connection/high-side switching; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-721**

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 15 ... 30 VDC; Limiting continuous current: 5 A; 3-wire connection/low-side switching; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-752**

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 20 ... 30 VDC; Limiting continuous current: 0.5 A; 3-wire connection/high-side switching; Frequency: 25 kHz; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-752/002-000**

Optocoupler module; Nominal input voltage: 5 VDC; Output voltage range: 20 ... 30 VDC; Limiting continuous current: 0.5 A; 3-wire connection/high-side switching; Frequency: 25 kHz; Red status indicator; Module width: 15 mm; gray

### 1.2.10.9 Relay module



**Item No.: 286-380**

Bistable relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Module width: 15 mm; gray



**Item No.: 286-573**

Latching relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Red status indicator; Module width: 15 mm



**Item No.: 286-307/004-000**

Relay module; Nominal input voltage: 110 VDC; 1 changeover contact; Limiting continuous current: 3 A; Railway; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-507**

Relay module; Nominal input voltage: 115 VAC; 1 changeover contact; Limiting continuous current: 7 A; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-508**

Relay module; Nominal input voltage: 230 VAC; 1 changeover contact; Limiting continuous current: 7 A; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-394/004-000**

Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 1 A; with gold contacts; Railway; Red status indicator; Module width: 15 mm; light gray



**Item No.: 286-304/004-000**

Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Railway; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-304**

Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 7 A; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-376**

Relay module; Nominal input voltage: 24 VDC; 1 make contact; Limiting continuous current: 5 A; for switching higher DC loads; Red status indicator; Module width: 15 mm; gray



**Item No.: 286-336/001-000**

Relay module; Nominal input voltage: 24 VDC; 2 break and 2 make contacts; Red status indicator; Module width: 25 mm; gray



**Item No.: 286-344/004-000**

Relay module; Nominal input voltage: 24 VDC; 3 break contacts and 1 make contact; Railway; Red status indicator; Module width: 25 mm; gray



**Item No.: 286-352/004-000**

Relay module; Nominal input voltage: 24 VDC; 4 make contacts; Limiting continuous current: 5 A; Railway; Red status indicator; Module width: 25 mm; gray

### 1.2.10.10 S0 interface power supply unit



**Item No.: 286-742**

S0 interface power supply; Input voltage: 230 VAC; S0 interface

### 1.2.10.11 Switching module



**Item No.: 286-895**

Switching module; with changeover rocker switch; Switching voltage: 250 VAC; Switching current: 6 A; gray

**Item No.: 286-896**

Switching module; with momentary switch; Switching voltage: 250 VAC; Switching current: 6 A; gray

### 1.2.11 Protective warning marker

#### 1.2.11.1 Cover



**Item No.: 280-415**

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

### 1.2.12 Push-in type wire jumper

#### 1.2.12.1 Jumper



**Item No.: 249-126**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black

**Item No.: 249-123**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black

**Item No.: 249-127**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; black

**Item No.: 249-125**

Push-in type wire jumper; insulated; 60 mm long; black

### 1.2.13 Test and measurement

#### 1.2.13.1 Testing accessories



**Item No.: 280-419**

Spacer module; modular; bridging commoned terminal blocks; gray

**Item No.: 280-404**

Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> tbs; gray

**Item No.: 280-418**

Test plug module; modular; suitable for all WAGO 280 and 780 Series rail-mounted terminal blocks with jumper slots in the current bar; gray

**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

### 1.2.14 Tool

#### 1.2.14.1 Operating tool

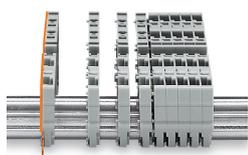


**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Installation

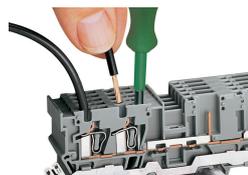


Snap individual carrier terminal blocks on to the DIN-rail and slide together.



Open the assembly by laterally sliding a block via operating tool and remove terminal block via release lever.

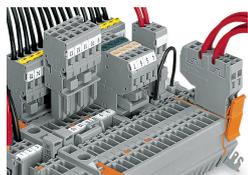
### Conductor termination



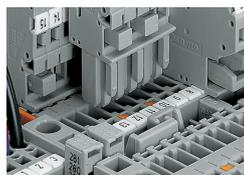
#### CAGE CLAMP® connection

Carrier terminal block: Insert/remove conductor via operating tool (3.5 x 0.5 mm blade).

### Commoning



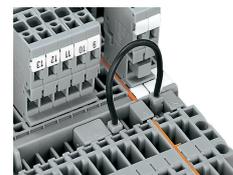
Commoning with adjacent or staggered jumpers. Push jumpers down until fully inserted.



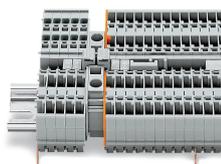
Commoning carrier terminal blocks via staggered jumpers.



Commoning a 2-conductor female plug via staggered jumper and carrier terminal blocks via adjacent jumpers.

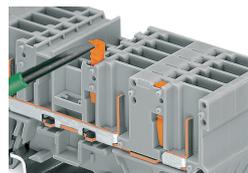


Commoning carrier terminal blocks via push-in type wire jumpers or adjacent plate.



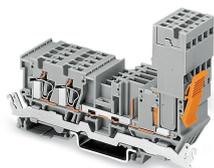
Commoning "supply terminal blocks" (up to 10 mm<sup>2</sup>/8 AWG) with carrier terminal blocks via step-down jumpers.

### Coding



Snap coding pin in proper direction on carrier terminal block. Shown: Coding pin removal from carrier terminal block.

## Locking system



Securing a female plug via locking lever on the terminal block side.