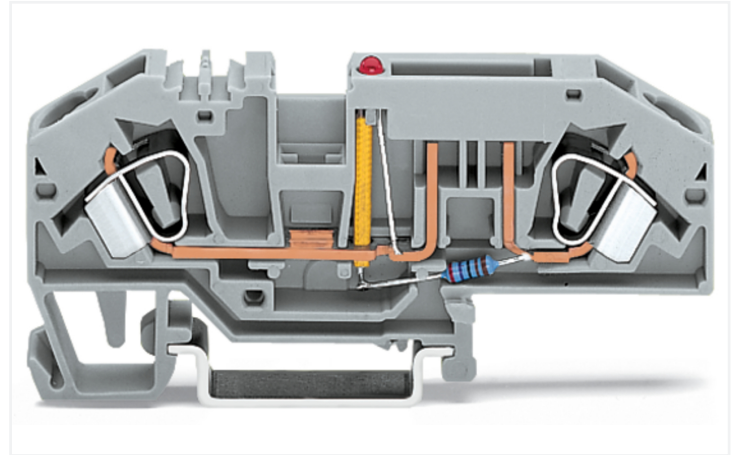
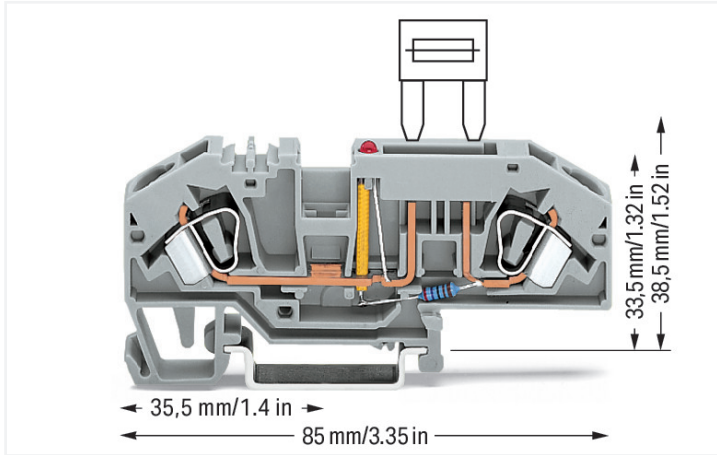


## Data Sheet | Item Number: 282-698/281-449

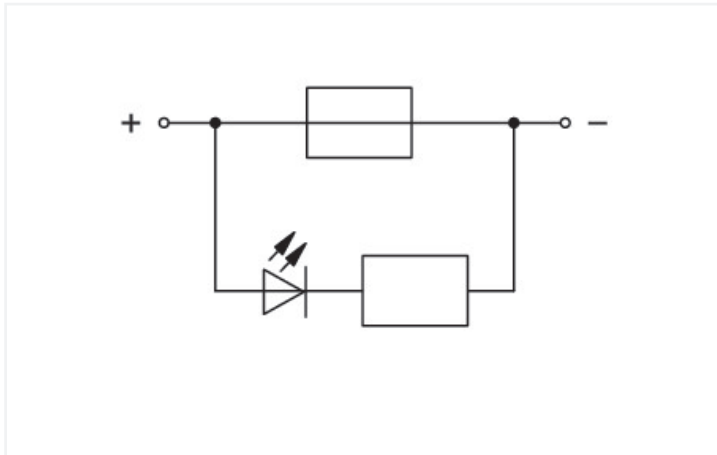
2-conductor fuse terminal block; for automotive blade-style fuses; with test option; with blown fuse indication by LED; 12 V; for DIN-rail 35 x 15 and 35 x 7.5; 6 mm<sup>2</sup>; CAGE CLAMP®; gray



<https://www.wago.com/282-698/281-449>



Color: ■ gray



### Fuse terminal block, 282 Series, gray

This fuse terminal block (item number 282-698/281-449) is designed for quick and easy connections. Strip lengths must be between 12 and 13 mm when connecting conductors to this fuse terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. This fuse terminal block is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 6 mm<sup>2</sup>.

### Electrical data

#### Ratings per IEC/EN

Nominal voltage (III/3)	400 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	25 A
Current at conductor cross-section (max.) mm <sup>2</sup>	30 A
Operation status indicator	12 V
Blown fuse indication	with blown fuse indication by LED
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

#### Ratings per IEC/EN – Notes

Ratings (note)	Electrical ratings are given by the fuse and blown fuse indication.
Rated current (note)	LED power consumption: 4.8 mA

### Ratings per IEC/EN 2

Ratings (note)	Blade-style fuses: Observe touch-proof protection for 42 V and higher voltages!
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### General information

Fuse receptacle	pluggable
Fuse type	Standard flat plug-in fuse; 19.1 x 5.1 x 18.5 mm
Number/type of diode/LED	Red LED
Wiring direction	Front-entry wiring
Alignment	Left-side anode

### Connection Data

Clamping units	2
Total number of potentials	2
Number of levels	1

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Solid conductor	0.2 ... 6 mm <sup>2</sup> / 24 ... 10 AWG
Fine-stranded conductor	0.2 ... 6 mm <sup>2</sup> / 24 ... 10 AWG
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
Wiring direction	Front-entry wiring

### Physical data

Width	8 mm / 0.315 inches
Height	85 mm / 3.346 inches
Depth from upper-edge of DIN-rail	33.5 mm / 1.319 inches

### Mechanical data

Design	angled
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	0.3 MJ
Weight	17.7 g

### Environmental requirements

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

**Commercial data**

Product Group	1 (Rail Mounted Terminal Blocks)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143260749
Customs tariff number	85369095000

**Product Classification**

UNSPSC	39121410
eCl@ss 10.0	27-14-11-16
eCl@ss 9.0	27-14-11-16
ETIM 9.0	EC000899
ETIM 10.0	EC000899
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(c)-I

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 8027
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-136074
UR UL International Germany GmbH	UL 1059	E45172

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>	
Environmental Product Compliance 282-698/281-449	<a href="#">↓</a>

**Documentation**

Bid Text			
282-698/281-449	19.02.2019	xml 3.68 KB	
282-698/281-449	09.03.2017	doc 25.00 KB	

**CAD/CAE-Data**

CAD data	
2D/3D Models 282-698/281-449	

CAE data	
EPLAN Data Portal 282-698/281-449	
WSCAD Universe 282-698/281-449	
ZUKEN Portal 282-698/281-449	

**1 Compatible Products**

**1.1 Required Accessories**

**1.1.1 End plate**

**1.1.1.1 End plate**



**Item No.: 282-334**  
End plate; 2 mm thick; gray

**Item No.: 282-333**  
End plate; 2 mm thick; orange

**1.2 Optional Accessories**

**1.2.1 DIN-rail**

**1.2.1.1 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

## 1.2.2 Ferrule

### 1.2.2.1 Ferrule



**Item No.: 216-262**

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



**Item No.: 216-263**

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



**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-266**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-267**

Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

## 1.2.3 Installation

### 1.2.3.1 Cover



**Item No.: 709-154**

Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

### 1.2.3.2 Cover carrier



**Item No.: 709-168**

Cover carrier; Type 2; incl. fixing/retaining screws and knurled nut; suitable for 283 to 285 Series rail-mounted terminal blocks; suitable for 279 to 281 Series double- and triple-deck terminal blocks; suitable for 780 to 785, 775, 776 and 777 Series TOPJOB® rail-mounted terminal blocks; suitable for 280 Series sensor and actuator terminal blocks; suitable for 282 Series disconnect/test terminal blocks for transformer circuits; gray

### 1.2.3.3 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

1.2.4 Jumper

1.2.4.1 Jumper



**Item No.: 282-402**  
Jumper; insulated; gray

**Item No.: 282-409**  
Jumper; insulated; gray

**Item No.: 282-424**  
Jumper; insulated; orange

**Item No.: 282-422**  
Jumper; insulated; yellow-green



**Item No.: 709-110**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black

**Item No.: 709-111**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black

**Item No.: 709-112**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black

1.2.5 Marking

1.2.5.1 Group marker carrier



**Item No.: 209-143**  
Group marker carrier; gray

**Item No.: 209-144**  
Group marker carrier; gray

**Item No.: 249-105**  
Group marker carrier; gray

1.2.5.2 Marker



**Item No.: 793-5501/000-006**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 793-5501/000-014**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown

**Item No.: 793-5501/000-007**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 793-5501/000-023**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 793-5501/000-017**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

**Item No.: 793-5501/000-012**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 793-5501/000-005**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item No.: 793-5501/000-024**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 793-5501**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 793-5501/000-002**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item No.: 793-501/000-006**  
WMB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 793-501/000-007**  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 793-501/000-023**  
WMB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 793-501/000-017**  
WMB marking card; as card; not stretchable; plain; snap-on type; light green

**Item No.: 793-501/000-012**  
WMB marking card; as card; not stretchable; plain; snap-on type; orange

**Item No.: 793-501/000-005**  
WMB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 793-501/000-024**  
WMB marking card; as card; not stretchable; plain; snap-on type; violet

**Item No.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white

**Item No.: 793-501/000-002**  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow

**Item No.: 2009-115/000-006**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

**Item No.: 2009-115/000-012**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-024**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

**Item No.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

## 1.2.6 Protective warning marker

### 1.2.6.1 Cover



**Item No.: 282-415**

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

## 1.2.7 Test and measurement

### 1.2.7.1 Testing accessories



**Item No.: 709-311**

B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 709-310**

B-type test plug module; modular; suitable for all WAGO 282 Series rail-mounted terminal blocks with jumper slots; 6,00 mm<sup>2</sup>; gray



**Item No.: 209-170**

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup> tbs; gray



**Item No.: 210-136**

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

## 1.2.8 Tool

### 1.2.8.1 Operating tool



**Item No.: 210-721**

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

## Installation Notes

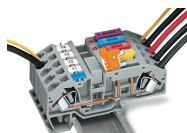
### Testing



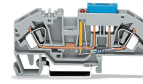
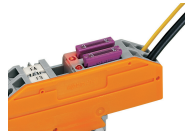
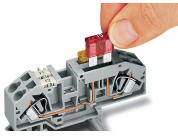
Testing via conductor entry.



Testing via jumper contact slot.



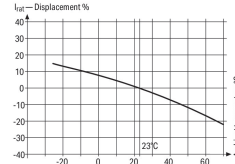
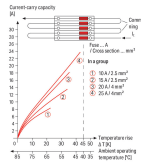
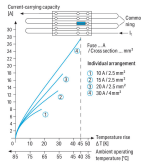
Power supply via disconnect link – disconnecting all outputs.



Inserting a fuse.

Blown fuse indication via LED

2-conductor fuse terminal block with mini-automotive blade-style fuse



Information from the mini-automotive, blade-type fuse manufacturers

Temp/°C	%	$F_i$
14	0.877	
15	0.885	
16	0.893	
17	0.901	
18	0.909	
19	0.917	
20	0.925	
21	0.933	
22	0.941	
23	0.949	
24	0.957	
25	0.965	
26	0.973	
27	0.981	
28	0.989	
29	0.997	
30	1.005	
31	1.013	
32	1.021	
33	1.029	
34	1.037	
35	1.045	
36	1.053	
37	1.061	
38	1.069	
39	1.077	
40	1.085	
41	1.093	
42	1.101	
43	1.109	
44	1.117	
45	1.125	
46	1.133	
47	1.141	
48	1.149	
49	1.157	
50	1.165	
51	1.173	
52	1.181	
53	1.189	
54	1.197	
55	1.205	
56	1.213	
57	1.221	
58	1.229	
59	1.237	
60	1.245	

**Application Notes on Terminal Blocks for Glass Cartridge Fuses**  
Diagram: "Individual Arrangement"

**Application Notes on Terminal Blocks for Glass Cartridge Fuses**  
Diagram: "Block Arrangement"

**Application Notes on Terminal Blocks for Glass Cartridge Fuses**  
Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is a max. 80% of their nominal current according to DIN 72581/Part 3 (for a surrounding air temperature of 23°C).  
Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and reliability. Fuse cartridges will only operate perfectly as protection components (break-off point) if they are properly selected and used as intended (i.e., according to the state of the technology and valid specifications, as well as data sheet characteristics), according to basic safety requirements (i.e., persons, animals and property must be protected against hazards).

Concerning product safety, fuse cartridges must generally be tested under both normal and faulty operating conditions within your application.