miniCON plug connector



8595/1-CB1-S-S25-00E Art. No. 298986



- · Simple handling using hot swap technology
- · Versatile application possibilities thanks to modular structure
- · Most extreme operating conditions in hazardous areas
- Reliable data and signal connections or power supplies
- Simple connection and disconnection thanks to one-handed operation

MY R. STAHL 8595F



R. STAHL's Series 8595/1 explosion-protected miniCON plug connectors with up to eight poles keep you safely connected. The high-quality plastic or stainless steel plug connectors have impressed many customers with their reliability and versatility in application. Their hot swap disconnecting capacity means that intrinsically safe signal supplies and power supplies up to 500 V/16 A can be connected and disconnected reliably and safely without the need for a hot work permit or other hot work authorisation. The miniCON connectors designed for conductor cross-sections of 0.25 mm² to 2.5 mm² are available for directly connecting electrical lines or for device installation in the device plug and flange socket types of construction. The new plug connectors for hazardous areas in Zones 1 and 21 stand out from the competition thanks to their modular structure and logically arranged components, which enable quick, easy mounting. Our patented single-handed operation means that matching plug connectors, which can be defined by the installer using internal coding for up to three applications, can be connected in no time.

Technical Data

Explosion Protection	
Scope of validity	European Union (ATEX)
	IECEx
Application range (zones)	1
	2
	21
	22
IECEx gas certificate	IECEx EPS 20.0035X
IECEx gas explosion protection	Ex db eb IIC T6 / T5 Gb
IECEx gas explosion protection 2	Ex ia IIC T6 Ga
IECEx dust certificate	IECEx EPS 20.0035X
IECEx dust explosion protection	Ex tb IIIC T80 °C / T95 °C Db
IECEx dust explosion protection 2	Ex ia IIIC T80 °C Da
ATEX gas certificate	EPS 20 ATEX 1075 X
ATEX gas explosion protection	
ATEX gas explosion protection 2	
ATEX dust certificate	EPS 20 ATEX 1075 X
ATEX dust explosion protection	
ATEX dust explosion protection 2	
Certificates	ATEX (EPS), IECEx (EPS)
Declaration of Conformity	ATEX (EUK)

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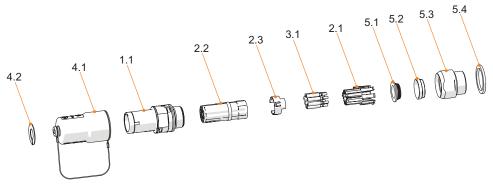
Rated operational voltage DC max. 110 V Voltage tolerance +10% Rated insulation voltage 690 V Rated operational current for AC 16 A Rated operational current for DC 8 A Rated operational current for DC 2 16 A No. of poles 7 P + PE / 8 P AC frequency range 50 - 60 Hz Device Specific Date 50 - 60 Hz Back-up fuse with thermal protection 25 A GL Back-up fuse with thermal protection 16 A GL Ambient Conditions	Electrical Data	
Voltage tolerance +10% Rated insulation voltage 690 V Rated operational current for AC 16 A Rated operational current for DC 2 8 A Rated operational current for DC 2 16 A No. of poles 7 P + PE / 8 P AC frequency range 50 - 60 Hz Device Specific Data Back-up fuse with thermal protection 25 A GL Back-up fuse with thermal protection 16 A GL Ambient Conditions -60 °C +75 °C Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Ex e flange socket Version Ex e flange socket Degree of protection (IPC 60079) IP66 IP67 IP68 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection revas-section AWG AWG16 Connection thread M32 x 1.5	Rated operational voltage AC	500 V
Rated insulation voltage 690 V Rated operational current for AC 16 A Rated operational current for DC 2 16 A No. of poles 7 P + P E / 8 P AC frequency range 50 - 60 Hz Device Specific Data Back-up fuse without thermal protection 25 A GL Back-up fuse without thermal protection 16 A GL Ambient Conditions Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Ex e flange socket Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7.J Coding 1.3, arbitrary	Rated operational voltage DC	max. 110 V
Rated operational current for AC 16 A Rated operational current for DC 8 A Rated operational current for DC 2 16 A No. of poles 7 P + PE / 8 P AC frequency range 50 - 60 Hz Device Specific Data Back-up fuse without thermal protection 25 A GL Back-up fuse without thermal protection 16 A GL Ambient Conditions Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Ex e flange socket Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Connection cross-section 2 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary <	Voltage tolerance	+10%
Rated operational current for DC 8 A Rated operational current for DC 2 16 A No. of poles 7 P + PE / 8 P AC frequency range 50 – 60 Hz Device Specific Data Back-up fuse with thermal protection 25 A GL Back-up fuse with uthermal protection 16 A GL Ambient Conditions Ambient Conditions -60 °C +75 °C Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Version Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP6 gree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary </td <td>Rated insulation voltage</td> <td>690 V</td>	Rated insulation voltage	690 V
Rated operational current for DC 2 16 A No. of poles 7 P + PE / 8 P AC frequency range 50 - 60 Hz Device Specific Data	Rated operational current for AC	16 A
No. of poles 7 P + PE / 8 P AC frequency range 50 - 60 Hz Device Specific Data Back-up fuse with thermal protection 25 A GL Back-up fuse without thermal protection 16 A GL Ambient Conditions Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Wersion Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7.J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight (Sound) 7.5 Connec	Rated operational current for DC	8 A
AC frequency range 50 – 60 Hz Device Specific Data Back-up fuse with thermal protection 16 A GL Ambient Conditions Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2 1.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type 2 solder Connection type 2 solder Connection type 2 Connection type 2 Frimp Frim	Rated operational current for DC 2	16 A
Device Specific Data Back-up fuse with thermal protection 25 A GL Back-up fuse without thermal protection 16 A GL Ambient Conditions Ambient temperature Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Version Version Ex eflange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG AWG14 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight on type crimp Connection type crimp Connection type 2 solder Components	No. of poles	7 P + PE / 8 P
Back-up fuse with thermal protection 25 A GL Back-up fuse without thermal protection 16 A GL Ambient Conditions —60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data ————————————————————————————————————	AC frequency range	50 – 60 Hz
Back-up fuse without thermal protection Ambient Conditions Ambient temperature -60 °C +75 °C Ambient temperature -76 °F +167 °F Mechanical Data Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Weight 400 g Weight Mounting / Installation Connection type crimp Connection type crimp Connection type 2 solder Components	Device Specific Data	
Ambient Conditions Ambient temperature	Back-up fuse with thermal protection	25 A GL
Ambient temperature	Back-up fuse without thermal protection	16 A GL
Ambient temperature -76 °F +167 °F Mechanical Data Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection tread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Ambient Conditions	
Mechanical Data Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight Jinstallation Connection type crimp Connection type 2 solder Components	Ambient temperature	-60 °C +75 °C
Version Ex e flange socket Degree of protection (IP) (IEC 60529) IP66 IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type 2 solder Components	Ambient temperature	-76 °F +167 °F
Degree of protection (IP) (IEC 60529) IP degree of protection (IEC 60079) IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight Mounting / Installation Connection type Connection type Connection type 2 Solder Components	Mechanical Data	
IP67 IP degree of protection (IEC 60079) IP64 Base part Coupling Enclosure material Nickel-plated brass Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Version	Ex e flange socket
IP degree of protection (IEC 60079) Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight Mounting / Installation Connection type Connection type 2 Solder Components	Degree of protection (IP) (IEC 60529)	
Base part Coupling Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	IP degree of protection (IEC 60079)	
Enclosure material Nickel-plated brass Contact type Socket contact Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components		Coupling
Contact type Socket contact Connection cross-section 2 1.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components		
Connection cross-section 2.5 mm² Connection cross-section 2 1.5 mm² Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Contact type	
Connection cross-section AWG AWG14 Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components		2.5 mm²
Connection cross-section AWG2 AWG16 Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Connection cross-section 2	1.5 mm ²
Connection thread M32 x 1.5 Impact strength (IEC 60079) 7 J Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Connection cross-section AWG	AWG14
Impact strength (IEC 60079)	Connection cross-section AWG2	AWG16
Coding 1-3, arbitrary Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Connection thread	M32 x 1.5
Seal Silicone Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Impact strength (IEC 60079)	7 J
Weight 400 g Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Coding	1-3, arbitrary
Weight 0.88 lb Mounting / Installation Connection type crimp Connection type 2 solder Components	Seal	Silicone
Mounting / Installation Connection type crimp Connection type 2 solder Components	Weight	400 g
Connection type crimp Connection type 2 solder Components	Weight	0.88 lb
Connection type 2 solder Components	Mounting / Installation	
Components	Connection type	crimp
	Connection type 2	solder
Protective cap available Yes	Components	
1 T 1 T	Protective cap available	Yes

miniCON plug connector



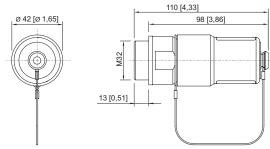
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Technical Drawings – Subject to Alterations



- Code disk
- Protective cap Coupling basic part
- 4.2 4.1 1.1 2.2 2.3 3.1 2.1 5.1 5.2 5.3
- Insulator
- PE contact (only for metal variant)
- Contacts Contact holder
- Earthing ring
- Clamping disc
- Ex e adapter
- Seal

Dimensional Drawings (All Dimensions in mm [inches]) - Subject to Alterations



8595/1 Ex e flange socket

Accessories

EMC/shielding		Art. No.	
00	To create an EMC-compliant connection of braided, shielded or reinforced conductors.	307512	
Plug		Art. No.	
	Enclosure material: Nickel-plated brass Contact type: Pin contact Connection cross-section: 2.5 mm² Number of poles: 7 P + PE/8 P Connection type: Crimping	298972	
	Enclosure material: Nickel-plated brass Contact type: Pin contact Connection cross-section: 2.5 mm² Number of poles: 7 P + PE/8 P Connection type: Crimping	298973	

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	CMP-737DR Reducer M32 x 1.5 - M25 x 1.5 Brass	281584
	CMP-737DR Reducer M32 x 1.5 - M20 x 1.5 Brass CMP-737DR Reducer M32 x 4.5 - M25 x 4.5	281582
educer		Art. No.
000	Customer-specific labelling available on request	
<u> </u>	KIT coding plate 8595, four colours, without labelling	289939
Code disks		Art. No.
	KIT 8595 socket contacts (2.5 mm²), 8 pieces	286154
Socket contact		Art. No.
	KIT 8595 nickel-plated brass adaptor, M32 x 1.5, for installation in Ex e enclosure	296754
	KIT 8595 nickel-plated brass adaptor, M25 x 1.5, for installation in Ex e enclosure	304568
0	KIT 8595 nickel-plated brass adaptor, M20 x 1.5, for installation in Ex e enclosure	304566
daptor	LUT OFOE II I I I I I I I I I I I I I I I I I	Art. No.
	 Exact positioning of the crimp contact during the crimping process Reliable, reproducible crimping result Adapted for miniCON contacts 	
ontact mounts/p	The selection of the contact mount is based on the crimp contacts to be processed.	299586
Contact mounts in	ositioners for rotated industrial contacts	Art. No.
	For all versions with crimp connection of 0.14 to 6 mm ²	295689
rimping tool		Art. No.
	Number of poles: 7 P + PE/8 P Connection type: Crimping	
	Connection cross-section: 2.5 mm²	
	Enclosure material: Plastic Contact type: Pin contact	286555
	Connection type: Crimping	
	Connection cross-section: 2.5 mm ² Number of poles: 7 P + PE/8 P	
	Contact type: Pin contact	

Spare Parts

Jam nut, nickel-plated brass (-60 to +75 °C) To mount the cable entries in the through holes

Art. No.

miniCON plug connector



8595/1-CB1-S-S25-00E Art. No. 298986

	Material: Nickel-plated brass One piece Thread size: M32	110869
Contact holder	for socket contact	Art. No.
	KIT 8595 socket contact insert + PE	286146
Protective cap		Art. No.
0	KIT 8595 coupling protective cap (socket) Incl. KIT 8595 coding plates, four colours, without labelling	286159

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.