

# Installation equipment

## 100 A wall-mounting socket



8581/41-507 Art. No. 209874



- Reliable load disconnect switch with easily visible, lockable handle and display of the switch position
- An integrated auxiliary contact for control and signalling purposes, can be optionally enhanced using pluggable Ex e or Ex i auxiliary contacts that are easily retrofittable
- Large temperature range of use
- High mechanical impact and shock resistance
- Perfect protection against penetration of liquids and dusts
- 3D data for download on the website

MY R. STAHL 8581B



The R. STAHL Series 8581/41 sockets for Class I, Div. 2, Groups A, B, C and D and Zone 1/21 in 4- and 5-pole versions have full AC-3 switching capacity up to 100 A. The high degree of protection (IP66) ensures maximum protection against the ingress of dust and water in any application situation. Self-cleaning lamellar contacts provide optimum contact and the plugs can be inserted and removed in the zero position quickly and easily. The load disconnect switch, with a mechanical locking device and a handle that can be locked in the ON (0) and OFF (I) position, is an additional safety feature.

### Technical Data

#### Explosion Protection

Area of application	European Union (ATEX) Canada IECEX USA
Area of application Note	Other country markings available on request
Application range (zones)	1, 2, 21, 22
IECEX gas certificate	IECEX PTB 06.0034
IECEX gas explosion protection	Ex db eb IIC T6 ... T5 Gb
IECEX dust certificate	IECEX PTB 06.0034
IECEX dust explosion protection	II tb IIIC T65 °C ... T85 °C Db
ATEX gas explosion protection	⊕ II 2 G Ex db eb IIC T6 ... T5 Gb
ATEX dust explosion protection	⊕ II 2 D Ex tb IIIC T65 °C ... T85 °C Db
FMus certificate	OR6A2.AX
cFM certificate	3050350
Marking FMus	Class I, Div. 2, Groups A,B,C,D; Class II, III, Div. 1, Groups E,F,G, Enclosure Type 3, 4, 4X Class I, Zone 1, AEx d e IIC T5 Gb;
Marking cFM	Class I, Zone 1, Ex d e IIC T5 Gb; Cl. I, Div. 2 per CEC J18-150, Class II, Div. 1, Groups G, Enclosure Type 3, 4, 4X
Certificates	ATEX (PTB), Brazil (ULB), Canada (FM), China (CQST), IECEX (PTB), Korea (KGS), USA (FM)

#### Electrical Data

Type of voltage	Low voltage
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### Electrical Data

AC rated operational voltage	480Y/277 V AC
Rated operational current	max. 100 A
Electrical service life	> 2x10 <sup>4</sup> switching cycles
Mechanical service life	> 2x10 <sup>4</sup> switching cycles
Auxiliary contacts	2 (1 NO + 1 NC)
Frequency range	50 / 60 Hz

### Device Specific Data

Back-up fuse with thermal protection	160 A gG
Back-up fuse without thermal protection	125 A gG

### Ambient Conditions

Ambient temperature	-30 °C ... +45 °C (T6, 100 A) -30 °C ... +60 °C (T5, 100 A) -22 °F ... +113 °F (T6, 100 A) -22 °F ... +140 °F (T5, 100 A)
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### Mechanical Data

Degree of protection IP (IEC 60529)	IP66
IP degree of protection (IEC 60079)	IP66
Enclosure type (NEMA250)	3, 4, 4X
Enclosure material	Polyester, Glass fibre reinforced
Silicone-free	No
Multiple conductor connection	2 x 35 mm <sup>2</sup> to 2 x 50 mm <sup>2</sup>
Multiple conductor connection AWG	2 x AWG 2 ... 2 x AWG 1/0
Finely stranded connection cross-section	1 x 50 mm <sup>2</sup> ... 1 x 150 mm <sup>2</sup>
Finely stranded connection cross-section AWG	1 x AWG 1/0 ... 1 x AWG 300 kcmil
Stranded connection cross-section	1 x 35 mm <sup>2</sup> ... 1 x 150 mm <sup>2</sup>
Stranded connection cross-section AWG	1 x AWG 2 ... 1 x AWG 300 kcmil
Width	270 mm
Width, inches	10.63 in
Height	296 mm
Height in inches	11.65 in
Length	560 mm
Length in inches	22.18 in
Impact strength (IEC 60079)	7 J
Impact strength (IEC 62262)	IK10
Colour code	Red
Coding (clock hour position)	7
Lockable in	in 0- and I-position
Series	SolConeX
Detailed number of poles	4-pole, 5 conductors
Weight	21.4 kg
Weight	47.18 lb

### Mounting / Installation

Connection	Screw terminal
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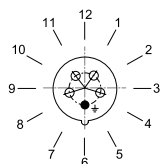


8581/41-507 Art. No. 209874

### Components

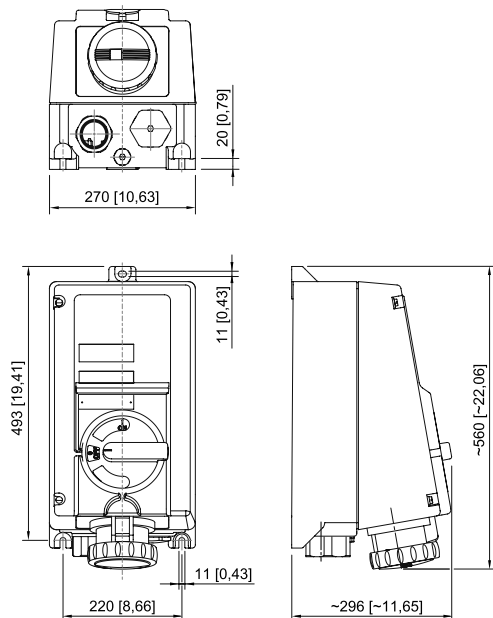
Cable entry note	Entry 1: Bottom left Entry 2: Bottom right
Entry 1 model	can be ordered as an accessory
Entry 1	NPT 2"
Metal entry possible 1	Yes
Entry 2 model	8290/3-M63
Entry 2 type	Polyamide stopping plug
Entry 2	M63 x 1.5
Metal entry possible 2	No
Entry 3 model	8290/3-M25
Entry 3 type	Polyamide stopping plug
Entry 3	M25
Metal entry possible 3	No

### Technical Drawings – Subject to Alterations



Position of clock hour position  
Example: 6 h position

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



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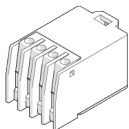
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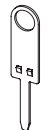
### Accessories

#### Auxiliary contact

		Art. No.
	2 NC (8080/1-3) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm <sup>2</sup> , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: Synchronising	168356
	1 NC + 1 NO (8080/1-1) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm <sup>2</sup> , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left: Delayed (ON), leading (OFF) Right: Synchronising	168351
	2 NO (8080/1-4) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm <sup>2</sup> , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: Synchronising	168353

### Spare Parts

#### Auxiliary contact key

		Art. No.
	For removing installed auxiliary contacts	201909

#### Repair set for Series 8581 sockets

		Art. No.
	Repair set 8581 hinged cover, red	275510

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.