



- 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

E3

## 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.

	IECEX / ATEX					
	0	1	2	20	21	22
Zone						
Installation in	•	•		•	•	

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Installation in	•	•	•	•	•	•

	CE Code Section 18					
	NEC® 505			NEC® 506		
Zone	0	1	2	20	21	22
Installation in	•	•				

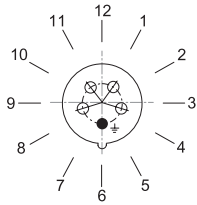
Selection Table								
Product Description	Wall-mounting socket 100 A							
Auxiliary contacts	2 (1 NO + 1 NC)							
Figure	Detailed number of poles	Coding (clock hour position)	Rated operational voltage	Colour code	Frequency range	Product Type	Art. No.	Weight
	3-pole, 4 conductors	5	600 V AC	Black	50 / 60 Hz	8581/41-405	209876	21.4 kg
		7	480 V AC	Red	50 / 60 Hz	8581/41-407	209877	21.4 kg
		9	250 V AC	Blue	50 / 60 Hz	8581/41-409	209878	21.4 kg
	4-pole, 5 conductors	5	600Y/347 V AC	Black	50 / 60 Hz	8581/41-505	209873	21.4 kg
		7	480Y/277 V AC	Red	50 / 60 Hz	8581/41-507	209874	21.4 kg
		9	208Y/120 V AC	Blue	50 / 60 Hz	8581/41-509	209875	21.4 kg

Technical Data	
Explosion Protection	
Scope of validity	European Union (ATEX) Canada IECEX USA
Scope of validity Note	Other country markings available on request
FMus certificate	OR6A2.AX
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

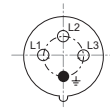
Technical Data	
<b>Explosion Protection</b>	
cFM certificate	3050350
Marking cFM	Class I, Zone 1, Ex d e IIC T5 Gb Cl. I, Div. 2 per CEC J18-150, Class II, Div. 1, Groups G; Enclosure Type 3, 4, 4X
IECEX gas explosion protection	Ex db eb IIC T6 ... T5 Gb
IECEX dust explosion protection	Ex tb IIIC T65 °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
Certificates	ATEX (PTB), Brazil (ULB), Canada (FM), China (CQST), IECEx (PTB), Korea (KGS), USA (FM)
<b>Electrical Data</b>	
Rated operational current	max. 100 A
<b>Device Specific Data</b>	
Back-up fuse with thermal protection	160 A gG
Back-up fuse without thermal protection	125 A gG
<b>Ambient Conditions</b>	
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)
<b>Mechanical Data</b>	
Enclosure type (NEMA250)	3, 4, 4X
Degree of protection IP (IEC 60529)	IP66
IP degree of protection (IEC 60079)	IP66
Enclosure material	Polyester, Glass fibre reinforced
Silicone-free	No
Multiple conductor connection AWG	2 x AWG 2 ... 2 x AWG 1/0
Multiple conductor connection	2 x 35 mm <sup>2</sup> to 2 x 50 mm <sup>2</sup>
Finely stranded connection cross-section AWG	1 x AWG 1/0 ... 1 x AWG 300 kcmil
Finely stranded connection cross-section	1 x 50 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
Stranded connection cross-section	1 x 35 mm <sup>2</sup> ... 1 x 150 mm <sup>2</sup>
Impact strength (IEC 60079)	7 J
Impact strength (IEC 62262)	IK10
Lockable in	in 0- and I-position
<b>Components</b>	
Cable entry note	Entry 1: Bottom left Entry 2: Bottom right
Entry 1 model	Can be ordered as accessories
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
Notes	Cable gland position: Bottom (standard); optionally also on the top or side

## Arrangement of earth contact sleeves

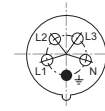
Position of clock hour position  
Example: 6 h position



## Arrangement of socket contacts and terminal markings



3 P + PE



3 P + N + PE

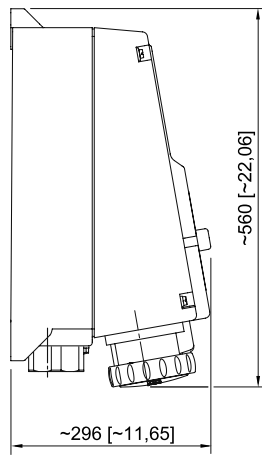
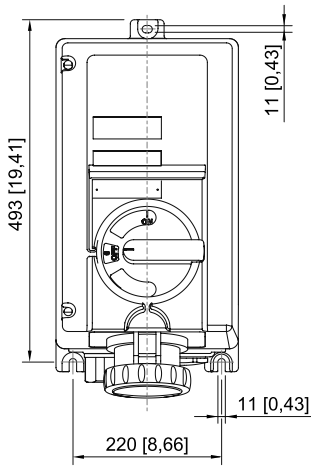
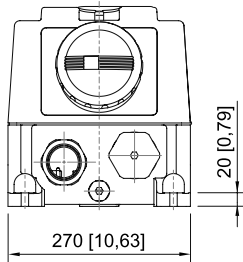
Arrangement of the socket contacts and terminal markings in the 6 h position  
(view from the front side of the sockets to the socket contacts)

## Accessories

Figure	Description	Art. No.	Weight
<b>Auxiliary contact</b>			
	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	26 g
	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	26 g
	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	26 g

## Spare Parts

Figure	Description	Art. No.	Weight
<b>Auxiliary contact key</b>			
	For removing installed auxiliary contacts	201909	35 g
<b>Repair set for Series 8581 sockets</b>			
	Repair set 8581 hinged cover, black	275511	220 g
	Repair set 8581 hinged cover, blue	275503	220 g
	Repair set 8581 hinged cover, red	275510	220 g



Wall-mounting socket