



- Reliable, load-rated disconnect switch with easily visible, lockable handle and switching position display
- An integrated auxiliary contact for control and signaling purposes, can optionally be enhanced with pluggable, easily retrofittable Ex e or Ex i auxiliary contacts
- Wide temperature range
- High mechanical impact and shock resistance
- Perfect protection against the ingress of liquids and dust
- 3D data available to download from the website

MY R. STAHL 8581B



R. STAHL Series 8581/41 receptacles for Class I, Div. 2, Groups A, B, C, D and Zone 1/21 in a 4- and 5-pole version have full AC-3 switching capacity up to 100 A. The high degree of protection IP66 guarantees the highest level of protection against the penetration of dust and water in any application position. 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 mechanical locking device and a handle that can be locked in the ON (0) or OFF (I) position, is an additional safety feature.

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

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

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

Selection Table								
Product description		Wall-mounting receptacle 100 A						
Auxiliary contacts		2 (1 NO + 1 NC)						
Figure	Detailed number of poles	Coding (clock hour position)	Rated operational voltage	Color code	Frequency range	Product Type	Art. No.	Weight lb
	3-pole, 4 conductors	5	600 V AC	Black	50 / 60 Hz	8581/41-405	209876	47.18 lb
		7	480 V AC	Red	50 / 60 Hz	8581/41-407	209877	47.18 lb
		9	250 V AC	Blue	50 / 60 Hz	8581/41-409	209878	47.18 lb
	4-pole, 5 conductors	5	600Y/347 V AC	Black	50 / 60 Hz	8581/41-505	209873	47.18 lb
		7	480Y/277 V AC	Red	50 / 60 Hz	8581/41-507	209874	47.18 lb
		9	208Y/120 V AC	Blue	50 / 60 Hz	8581/41-509	209875	47.18 lb

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

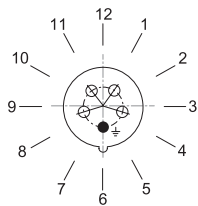
Technical Data	
Explosion Protection	
Marking FMus	Class I, Div. 2, Groups A,B,C,D; Class II, III, Div. 1, Groups E,F,G, Enclosure Type 3, 4, 4X Class I, Zone 1, AEx d e IIC T5 Gb;
cFM certificate	3050350
cFM certificate	3050350
Marking cFM	Class I, Zone 1, Ex d e IIC T5 Gb; Cl. I, Div. 2 per CEC J18-150, 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)
Electrical Data	
Rated operational current	max. 100 A
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)
Mechanical Data	
Enclosure type (NEMA250)	3, 4, 4X
IP degree of protection (IEC 60529)	IP66
IP degree of protection (IEC 60079)	IP66
Enclosure material	Polyester, Glass fiber reinforced
Silicone-free	No
Multiple conductor connection AWG	2 x AWG 2 ... 2 x AWG 1/0
Multiple conductor connection	2 x 35 mm ² to 2 x 50 mm ²
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 ² ... 1 x 150 mm ²
Stranded connection cross-section AWG	1 x AWG 2 ... 1 x AWG 300 kcmil
Stranded connection cross-section	1 x 35 mm ² ... 1 x 150 mm ²
Impact strength (IEC 60079)	7 J
Impact strength (IEC 62262)	IK10
Lockable in	in 0- and I-position
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

Technical Data

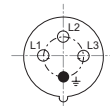
Components	
Metal entry possible 3	No
Notes	Cable gland position: Bottom (standard); optionally also on the top or side

Arrangement of the Ground Contact Sleeves

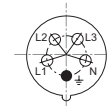
Time position
Example: 6h position



Arrangement of receptacle contacts and terminal markings




2 P + PE




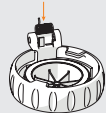
3 P + N + PE

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

Accessories

Figure	Description	Product Type	Art. No.	Weight lb
Auxiliary contact				
	2 NC (8080/1-3) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm ² , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: Synchronising	8544C0302-1-6 aux. contact 2NC	168356	0.06
	1 NC + 1 NO (8080/1-1) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm ² , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left: Delayed (ON), leading (OFF) Right: Synchronising	8544C0302-2-6 aux. contact 1NO 1 NC	168351	0.06
	2 NO (8080/1-4) 250 V AC/DC Max. 6 A 1.5 to 2.5 mm ² , solid/finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: Synchronising	8544C0302-3-6 aux. contact 2NO	168353	0.06

Spare Parts

Figure	Description	Product Type	Art. No.	Weight lb
Auxiliary contact key				
	For removing installed auxiliary contacts	Aux. Contact Key 8544	201909	0.08
Repair set for receptacles series 8581				
	Repair set 8581 hinged cover, black	Repair kit 8581 hinged cover BK	275511	0.49
	Repair set 8581 hinged cover, blue	Repair kit 8581 hinged cover BU	275503	0.49
	Repair set 8581 hinged cover, red	Repair kit 8581 hinged cover RD	275510	0.49

