



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

E3

MY R. STAHL 8581A



R. STAHL Series 8581/31 sockets for Zone 1/21 in a 4- and 5-pole version have full AC-3 switching capacity up to 125 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 0 or I position, is an additional safety feature.

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

Selection Table								
Product Description Auxiliary contacts	Wall-mounting socket 125 A 2 (1 NO + 1 NC)							
Figure	Detailed number of poles	Coding (clock hour position)	Rated operational voltage AC	Colour code	Frequency range	Product Type	Art. No.	Weight
	3 P + N + PE	6	200/346 to 240/415 V AC	Red	50 / 60 Hz	8581/31-506	277857	20.5 kg
		7	277/480 to 288/500 V AC	Black	50 / 60 Hz	8581/31-507	277858	20.5 kg
	3 P + PE	6	380 to 415 V AC	Red	50 / 60 Hz	8581/31-406	277859	19.2 kg
		7	480 to 500 V AC	Black	50 / 60 Hz	8581/31-407	277860	19.2 kg
		9	200 to 250 V AC	Blue	50 / 60 Hz	8581/31-409	277861	19.2 kg

Technical Data	
Explosion Protection	
Scope of validity	European Union (ATEX) IECEX China (CQST)
Scope of validity Note	Other country markings available on request
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), China (CQST), IECEX (PTB), Korea (KGS), Taiwan (ITRI)

Technical Data

Explosion Protection

Declaration of Conformity ATEX (EGK), China (CCC)

Electrical Data

Rated operational current max. 125 A

Switching capacity main contacts AC-3: 690 V, 125 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 -45 °C to +60 °C

Ambient temperature note For further information, see the operating instructions.

Notes For further information, see the operating instructions.

Mechanical Data

IP degree of protection (IEC 60529) IP66

IP degree of protection (IEC 60079) IP66

Enclosure material Polyester, Glass fibre reinforced

Silicone-free No

Multiple conductor connection 2 x 35 mm² to 2 x 50 mm²

Finely stranded connection cross-section 1 x 50 mm² ... 1 x 150 mm²

Stranded connection cross-section 1 x 35 mm² ... 1 x 150 mm²

Impact strength (IEC 60079) 7 J

Impact strength (IEC 62262) IK10

Lockable in in 0- and I-position

Components

Cable entry note Entry 1: Lower left
Entry 2: Lower right

Entry 1 model 8161/7-M63-4828-LT

Entry 1 type Polyamide cable gland

Entry 1 M63 x 1.5

Entry 1 terminal area 28 – 48 mm

Metal entry possible 1 No

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

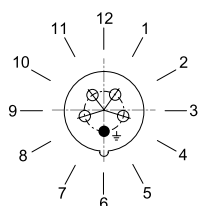
Entry 3 M25

Metal entry possible 3 No

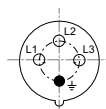
Notes Cable gland position: Bottom (standard); optionally also possible on the top or lateral

Arrangement of the Earth Contact Sleeves

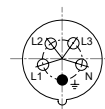
Time position
Example: 6h position



Arrangement of socket contacts and terminal markings






3 P + PE



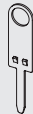

3 P + N + PE

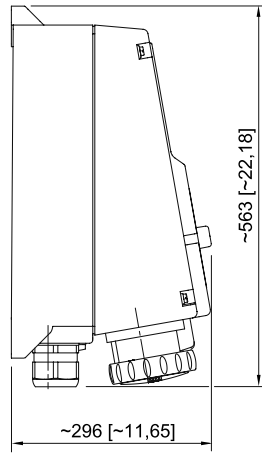
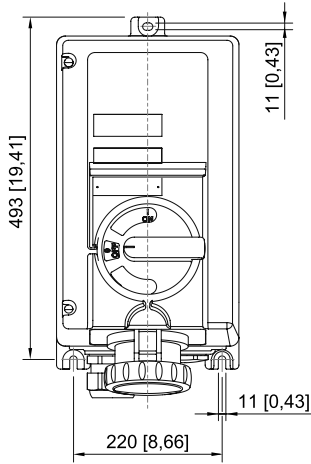
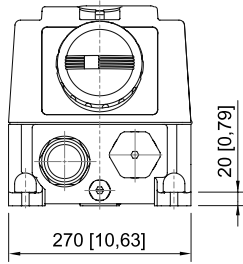
Arrangement of the socket contacts and terminal markings in the 6h position
(view from the front side of the socket to the socket contacts)

Accessories

Figure	Description	Art. No.	Weight
Auxiliary contact			
	2 NC contacts (8080/1-3) 250 V AC/DC max. 6 A 1.5 ... 2.5 mm ² 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 contact + 1 NO contact (8080/1-1) 250 V AC/DC max. 6 A 1.5 ... 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	168351	26 g
	2 NO contacts (8080/1-4) 250 V AC/DC max. 6 A 1.5 ... 2.5 mm ² solid / finely stranded The switching function of the auxiliary contact depends on the installation slot used. Left and right: synchronising	168353	26 g
Cable gland made of plastic			
	8161/7-M25-1707, Ex e Plastic, M25 x 1.5, cable outer diameter 7 to 17 mm Lot size 50 pieces	239157	19 g
Stopping plug			
	8290/3-M25 Plastic, M25 x 1.5 Lot size 1 piece	143524	10 g

Spare Parts

Figure	Description	Art. No.	Weight
Auxiliary contact key			
	for removing the mounted auxiliary contact	201909	35 g
Repair set for sockets series 8581			
	Repair kit 8581 hinged cover, black	275511	220 g
	Repair kit 8581 hinged cover, blue	275503	220 g
	Repair kit 8581 hinged cover, red	275510	220 g



Wall-mounting socket