FLOHE

PRODUCT OVERVIEW

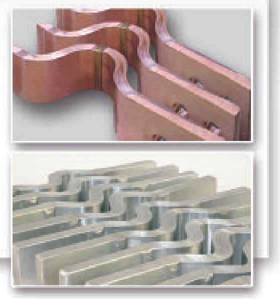
For more than 110 years:

Expertise in Engineering + Production

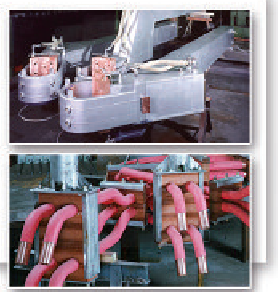
...from individual components through to complex high-current systems

High-Current Cables

EAF / LF / ESU



Flexible Connections



ESR / Reduction

Elektrolysis: Busbars

We will gladly advise you...

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PROspekt 09/2024 (en.)

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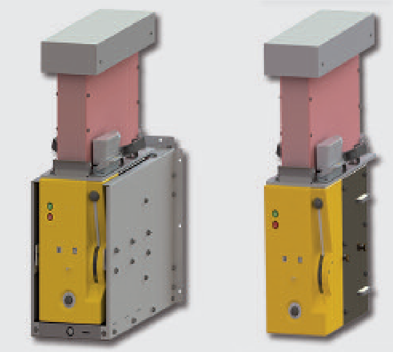
RAILWAY TECHNOLOGY

FGB

DC CIRCUIT BREAKER

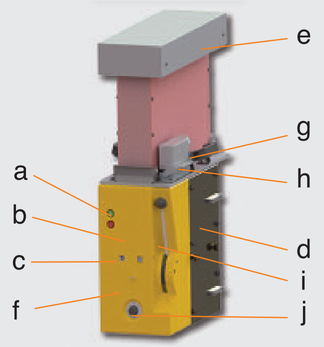
FGB

Function



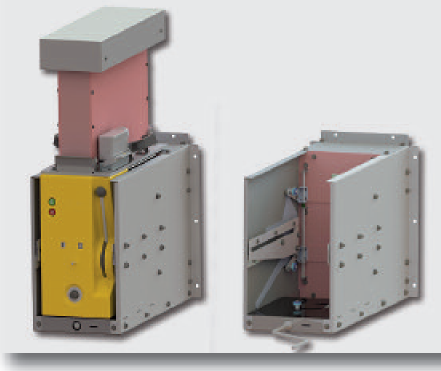
- DC Circuit breaker
- 750/1500V up to 2600A
- Storage drive
- Safe switching even without a power supply
- Integrated short-circuit release
- With visible disconnection position
- Compact dimensions

Description switch



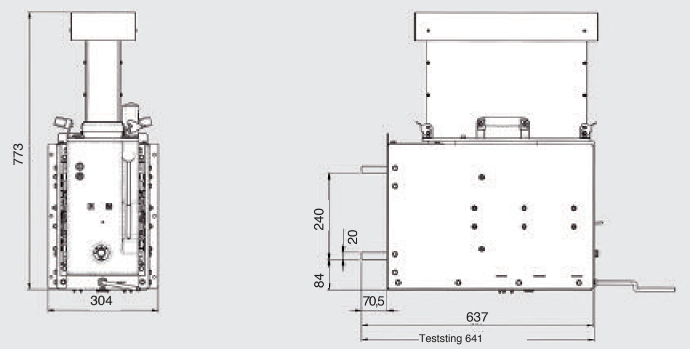
a) Mechancal on and off button
b) Mechanical drive
c) Position indicator 0/1
d) Switching energy storage 0/1
e) Deflection unit
f) Spring tensioned indicator
g) Transport handle
h) secondary connection with plug
i) Emergency drive
j) Setting for short-circuit trigger

Description slide-in frame



a) Automatic shutters
b) Lockable with padlock
c) Traversing drive
d) Telescopic rails for easy installation
e) Position limit switch for: Ready to go, disconnected, operation position

Dimensions



The FGB switch consistently expands the FLOHE product programme in the field of traction current applications.
The FGB circuit-breaker is the next step in the expansion of the BERG disconnector programme and the FGS load switch.
For traction power systems with a rated voltage of up to 1800VDC, the FGB can be used to switch currents of up to 2600A on and off. The device is characterised by a spring-loaded actuator. This makes it possible to switch the device on or off easily even without a power supply (OFF-ON-OFF cycle). Small line cross-sections, even over long distances, and short switch-on times are the major advantages of this actuator. The storage actuator is attached to the front of the switch and connected directly to the contact. The status of the actuator can be read at any time via the indicators on the front.
The switch can optionally be ordered with slide-in technology.
The slide-in unit offers the advantage of the fastest possible replacement of the switching unit.

Main circuit

Nominal voltage	U_n	V	750	1500
Rated voltage	U_{Ne}	V	900	1800
Rated insulation voltage	U_{Nm}	V	1800	3000
Overvoltage category	EN50124-1		OV 4	
Rated short-duration power-frequency withstand voltage	Ua			
between phases and to earth		kV	6.9	9,2
Via isolating distance		kV	8.3	11
Rated impulse voltage	U_{Ni}			
between phases and to earth		kV	15	20
Via isolating distance		kV	18	24
Rated operating current	I_{Ne}	A	2600	
Direct overcurrent release		kA	1.4-8	
Rated short-time current	I_{NSS}/T_{NC}	kA/s	60/1	
Rated making capacity	I_{cm}	kA		45
Rated breaking capacity	I_{CS}	kA	30	750V,(15ms)
Total switch-on time	ms		15	
Maximum arc voltage	V		< 2500	
Lifetime				
Mechanical swtiching cycles	10.000 (optional 20.000)			
Elektrical switching cycles	200 (optional 3000)			

Control

Control	V_{DC}	24 / 48 / 60 / 110 / 125 / 220
Control voltage	V_{AC}	110 / 125 / 230
Control variation	%	0.7-1.25
Power consumption tensioning	W	92
Power consumption on/off coil	W	20
Switch-on time	ms	20
Switch-off time	ms	20
Position switches		4NC+4NO