

# Powerbloc 36/40.5 kV

Air-insulated medium voltage switchgear module



ABB Power Distribution

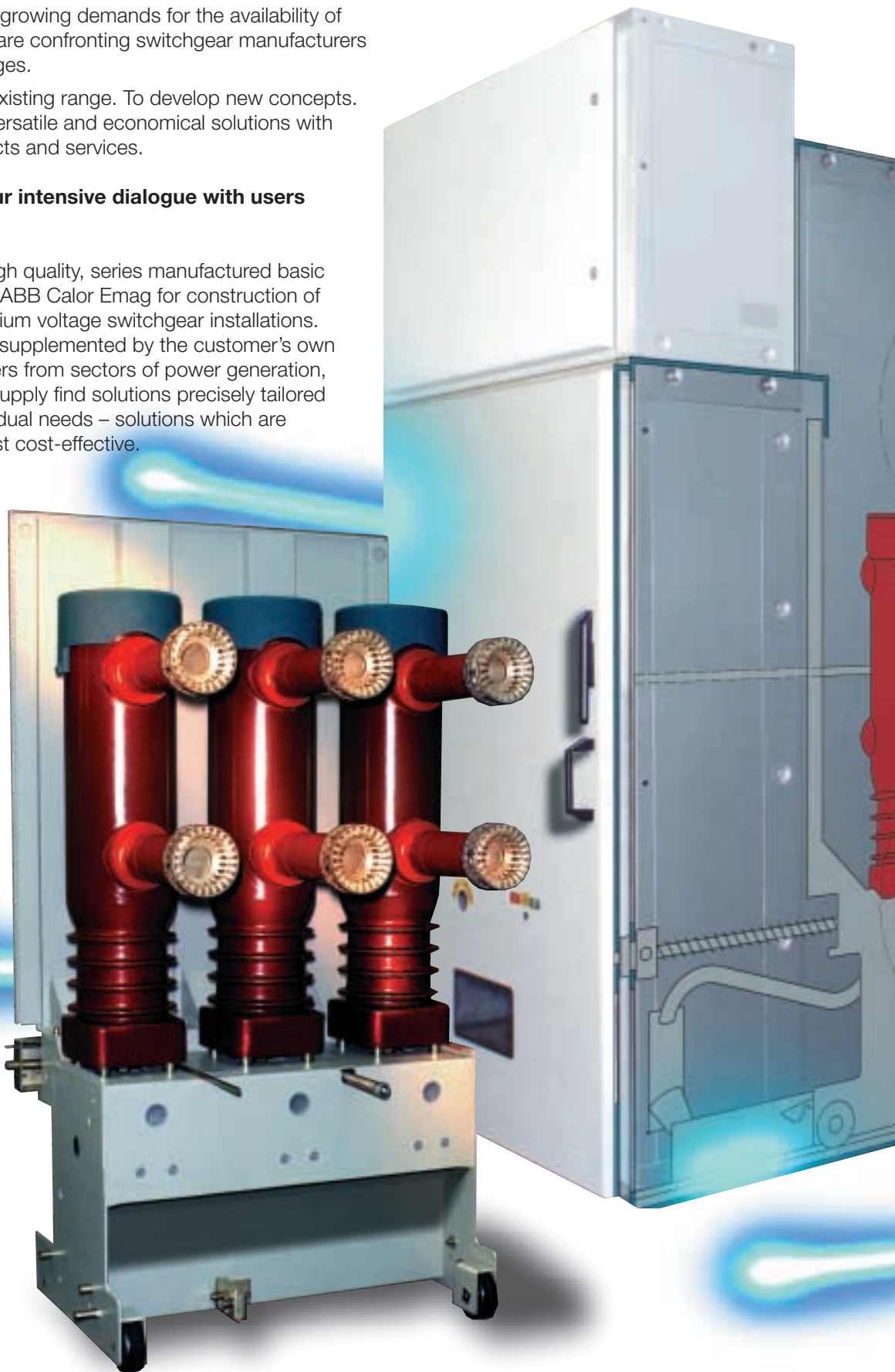


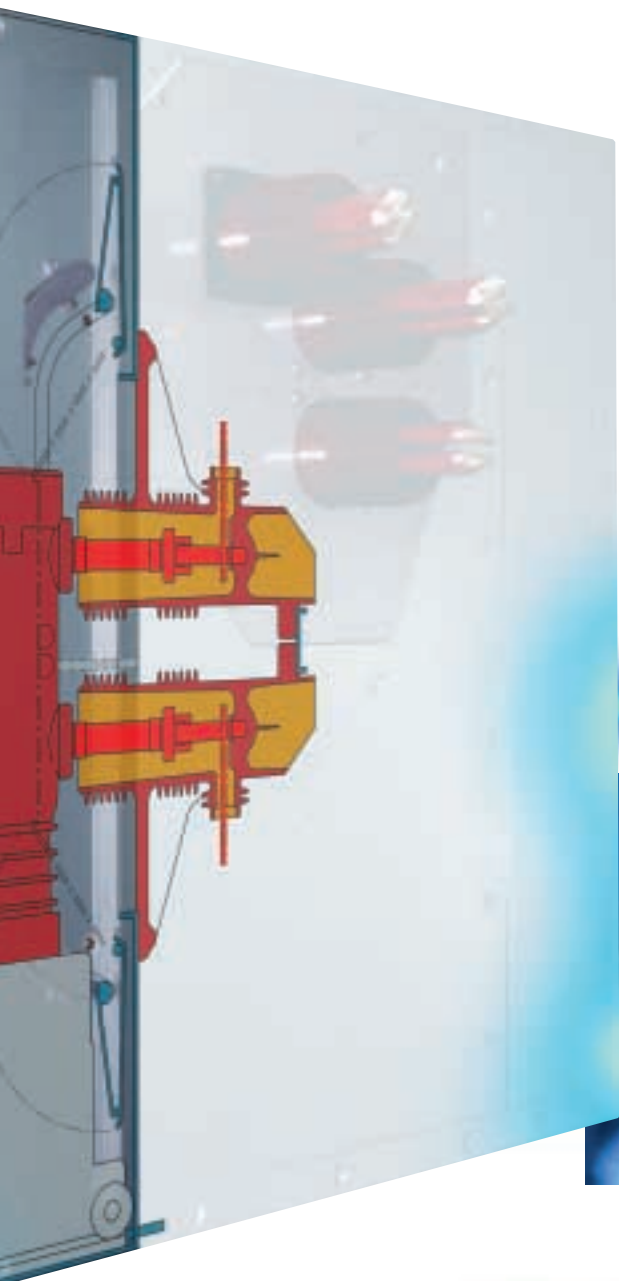
Competition and growing demands for the availability of electrical energy are confronting switchgear manufacturers with new challenges.

To optimise the existing range. To develop new concepts. To supply safe, versatile and economical solutions with innovative products and services.

**One result of our intensive dialogue with users is Powerbloc.**

Powerbloc – a high quality, series manufactured basic component from ABB Calor Emag for construction of air-insulated medium voltage switchgear installations. With Powerbloc, supplemented by the customer's own components, users from sectors of power generation, distribution and supply find solutions precisely tailored to suit their individual needs – solutions which are therefore the most cost-effective.





**Safe.**

- High resistance to internal arc faults
- Comprehensive robust interlocks
- Operation of all switching devices with the front door closed

**Versatile.**

- Customer supply of the busbar compartment, cable compartment and low voltage compartment as required
- Individually selectable use of conventional or modern secondary systems

**Economical.**

- Compact panel components from series production
- Maintenance-free withdrawable vacuum circuit-breaker
- High number of operating cycles



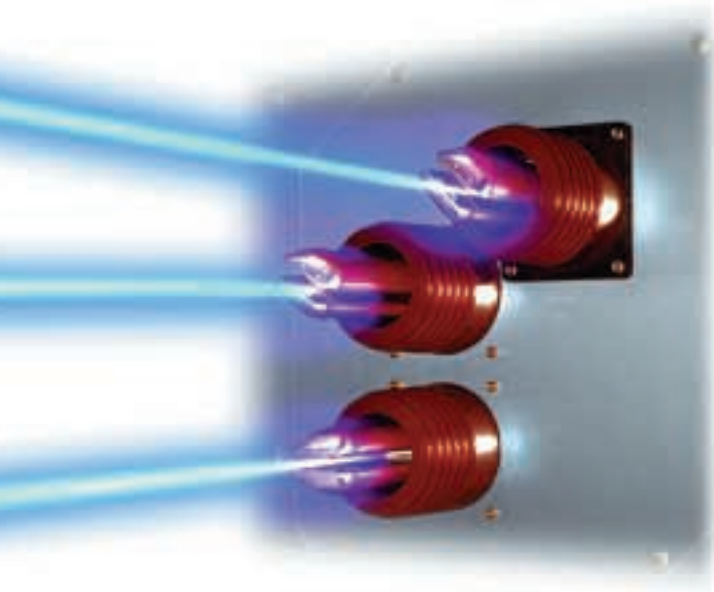




Terminal blocks for busbar and cable connection



Opened circuit-breaker compartment, withdrawable part in service position

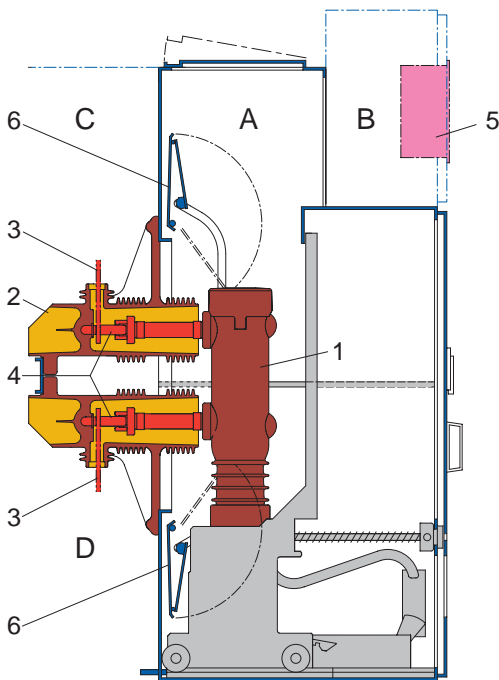


Busbar bushings



Earthing switch

# Performance features at a glance.



- A Circuit-breaker compartment
- B Low voltage compartment <sup>1)</sup>
- C Busbar compartment <sup>1)</sup>
- D Cable connection compartment <sup>1)</sup>

- 1 Vacuum circuit-breaker
- 2 Terminal blocks
- 3 Upper/lower busbar terminals
- 4 Upper/lower contact pins
- 5 Bay control and protection unit REF542 <sup>1)</sup>
- 6 Automatic shutters

<sup>1)</sup> Customer components

Rated voltage	kV	36	40.5
Rated power frequency withstand voltage	kV	70	80
Rated lightning impulse withstand voltage	kV	170	200
Rated current	A	3150 <sup>1) 2)</sup>	3150 <sup>1) 2)</sup>
Rated peak short-circuit current	kA	...80	...80
Rated short-time current, 3 s	kA	...31.5	...31.5
Rated short-circuit breaking current	kA	...31.5	...31.5
Rated short-circuit making current	kA	...80	...80
<b>Dimensions:</b>			
Height	mm	2200	2200
Depth	mm	1000	1000
Depth (including terminal blocks)	mm	1466	1466
Width	mm	1200	1200
Pole centres	mm	280	280
Weight	kg	870-950	870-950

<sup>1)</sup> 3150 A / 40 °C with forced ventilation  
2500 A / 55 °C with forced ventilation

<sup>2)</sup> 2500 A / 40 °C with natural ventilation  
2000 A / 55 °C with natural ventilation



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