

UniGear ZS1 - Double Busbar

Air-insulated switchgear for power application



UniGear ZS1 is also available in double busbar design. Each panel consists of a single unit equipped with circuit-breaker or contactor and two disconnectors, one for each busbar, to enable extension on both ends without putting out of service the switchgear itself. ¹⁾

UniGear ZS1 - Double Busbar is used to distribute electric power in a variety of demanding applications such as power utility substations, main substations and heavy industries. In any case the using of this product is highly recommended where there is a request to increase the service continuity. All the significant components are identical to those used for the single and double level units and therefore the same service and maintenance procedures are guaranteed.

Features

- Standards: IEC
- Design: LSC-2B, PM ²⁾
- Accessibility type: A
- Internal arc class: FLR
- Highly customized versions available
- All service operations carried out from the front
- Can be combined with other UniGear panels to meet different needs

Safety

- Fully type tested according to IEC 62271-200
- Fitted with safety interlocks
- Circuit breaker racking with closed doors

Switching devices

- Vacuum circuit breaker with spring actuator
- Vacuum circuit breaker with magnetic actuator
- SF6 circuit breaker with spring actuator

Current and voltage measurement

- Current and voltage sensors
- Conventional current and voltage instrument transformers

Protection and control

- Relion® protection and control relays

Optionally available with

- Optical arc fault protection
- Surge arresters
- Substation management unit COM600S

¹⁾ Contact ABB representative for specific details to enable extension on site.

²⁾ UniGear ZS1 - Double Busbar panel variants have the most common classification LSC2B, PM. Check other panel variants and their LSC classification in catalogue 1VCP000138.

Switchgear		12 kV	17.5 kV	24 kV
Internal Arc Classification (IAC)		AFLR	AFLR	AFLR
Rated voltage	[kV]	12	17.5	24
Insulation levels / power frequency / lightning impulse	[kV]	12 / 28 / 75	17.5 / 38 / 95	24 / 50 / 125
Rated frequency	[Hz]	50 / 60	50 / 60	50 / 60
Rated main busbar current (40°C)	[A]	...4 000	...4 000	...2 500
Rated feeder current (40°C)	[A]	...4 000	...4 000	...2 500
Rated short-time current ¹⁾	[kA x 3 s]	...31.5	...31.5	...25
Arc proof withstand current (IEC 62271-200) ¹⁾	[kA x 1 s]	...31.5	...31.5	...25
Height	[mm]	2 200 ... 2 595 ²⁾	2 200 ... 2 595 ²⁾	2400 ... 2 720 ²⁾
Width	[mm]	650 / 800 / 1 000 ³⁾	650 / 800 / 1 000 ³⁾	800 / 1 000 ³⁾
Depth	[mm]	2021	2021	2 570
Technical catalog		1VCP000138	1VCP000138	1VCP000138

1) A duplex back to back configuration can be used to cover applications at 40/50 kA - please contact the factory for further details

2) Height of low voltage compartment is 705 / 1 100 mm

3) Depending on rated feeder current

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