

**DISTRIBUTION SOLUTIONS** 

# **UniGear ZS1**

# Air-insulated switchgear for power application



UniGear ZS1 is the ABB mainline global switchgear for primary distribution up to 24 kV, 4 000 A, 63 kA.

The switchgear is manufactured worldwide and there are more than 700 000 panels currently installed.

UniGear ZS1

UniGear ZS1 is used to distribute electric power in a variety of demanding applications such as on off-shore platforms, in container or cruise ships, in mines as well as in utility substations, power plants or chemical plants.

UniGear ZS1 is available as a single busbar, double busbar, back to back or double level solution.

#### **Features**

- Standards: IEC, CSA, GOST, GB/DL
- Most of panels classified as LSC2B, PM \*
- Accessibility type: A
- · Internal arc class: FLR
- · Highly customized versions available
- Switchgear can be back to wall installed

#### 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
- · Vacuum contactor
- Switch disconnector

#### 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

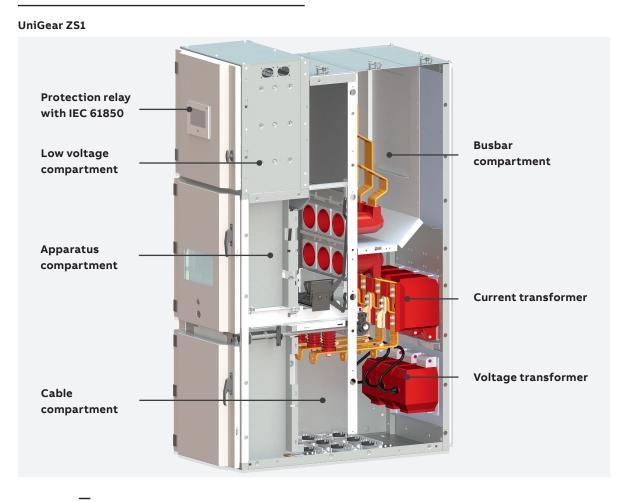
- · Optical arc fault protection
- Ultra Fast Earthing Switch UFES
- Surge arresters
- Is-limiter, advanced fault current limiter
- Smart solutions

<sup>\*</sup> UniGear ZS1 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 4) / 95	24 / 50 / 125
Rated frequency	[Hz]	50 / 60	50 / 60	50 / 60
Rated main busbar current (40°C)	[A]	4 000	4 000	3 150
Rated feeder current (40°C)	[A]	4 000	4 000	3 150
Rated short-time current	[kA x 3 s]	50	50	31.5
Rated short-time current	[kA x 1 s]	63	63	
Arc proof withstand current (IEC 62271-200)	[kA x 1 s]	50	50	31.5
Arc proof withstand current (IEC 62271-200)	[kA x 0.5 s]	63	63	
Height	[mm]	2 200 2 696 1)	2 200 2 696 <sup>1)</sup>	2 325 2 733 1
Width	[mm]	650 / 800 / 1 000 <sup>2)</sup>	650 / 800 / 1 000 <sup>2)</sup>	800 / 1 000 2)
Depth	[mm]	1 340 / 1 390 3)	1 340 / 1 390 3)	1 700
Technical catalog		1VCP000138	1VCP000138	1VCP000138

<sup>1)</sup> With installed gas exhaust duct

Note: 1 250 A - 40 kA available at 650 mm panel



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<sup>2)</sup> Depending on rated feeder current

<sup>3) 2 089 – 2 154</sup> mm for 63 kA

<sup>4) 42</sup> kV (63 kA version; GB/DL)