	High Voltage Switchboard General Specification	on and Ratings
ltem	Specification and Ratings	
	JSB-2	JSB-5
Applicable standard	IEC62271-200: switchboard	IEC62271-200: switchboard
	IEC62271-100: circuit breaker	IEC62271-100: circuit breaker
	IEC62271-102: earthing switch	IEC62271-102: earthing switch
Applicable classification societies	NK, LRS, ABS, DNVGL, BV	NK, LRS, ABS, DNVGL, BV, CCS
Switchgear structure	Metal-clad structure	Metal-clad structure
Rated insulation voltage	AC 7.2kV	AC 12kV
Rated frequency	50/60Hz	50/60Hz
Rated frequency withstand voltage	20kV / min	28kV / min
Rated lightning impulse withstand voltage	62.5kV	75kV
Rated short-time withstand current	20kA 1sec	31.5kA 1sec
Rated peak withstand current	52kA	80kA
Internal arc current	20kA 1sec	31.5kA 1sec
Main bus bar current	1250A	2000A
Load bus bar current	630A, 1250A	630A, 1250A, 1600A, 2000A
External IP rating	IP43	IP43
Internal IP rating	IP4X	IP2X
Arc gas ducts	Optional	Standard
Insulated bus bars	Optional	Standard

STCW Certified Training

JRCS is proud to be the first company in Japan to offer a high voltage training course based on STCW requirements with a curriculum verified and approved by ClassNK. Maximize onboard safety and operability by training your crew at our fully-equipped training facility in Shimonoseki, Japan.



0000



JSB-5/JSB-2 High Voltage Switchboard

Fully **IEC-compliant**







*These specifications are current as of March 2025.

Supports 7.2 kV/12 kV 31.5 kA 1 sec. 2,000 A

> -----9

JSB-5/JSB





Features

Versatility to suit your unique needs

JSB-5 is flexible enough for vessels of all shapes and sizes, including large-scale electrical propulsion vessels, offshore platforms, container vessels and marine research vessels.

Safe in the most demanding conditions

Fully-compliant with IEC62271-200 standards, JSB-5 has passed the strict approval tests of leading classification societies worldwide, including NK, ABS, LRS, DNV-GL, BV, and CCS.

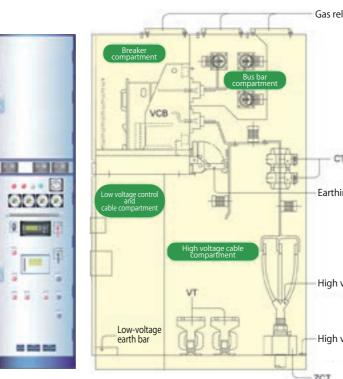


JSB-5 internal arc test (31.5 kA 1 sec)

Design and quality you can trust

Our successful delivery record speaks for itself: JSB-5's predecessor JSB-2 has been installed in over 100 vessels since 2002.

Construction



Main Components





Vacuum Circuit Breaker (VCB)

Manufactured to IEC62271-100 standards. JSB-5's VCBs combine AC 12 kV 31.5 kA 1 sec breaking capacity with a key interlock for maximum performance and safety.

Multi-function protection relay

These high-performance relays are not only easy to use but also easy to maintain. In addition to a full suite of protection functions, robust communication functionality allows for remote monitoring of each type of data.

	Metal-clad structure with IEC62271-200
- CT arthing switch	High voltage compa •Breaker compartment •Bus bar compartment •High voltage cable co
	Low voltage compar • Low voltage control and ca
igh voltage cables	User-friendly design compartment on to the more freque
igh voltage earth bar	low-voltage equipm

fully complies standards

rtments:

- mpartment

rtment:

able compartment

has the VCB op, making ntly-used ent easier to operate, access and maintain





Key interlock system

Satisfying the strict safety standards called for by IEC62271-200, the standard key interlock system provides a mechanical interlock between the VCB and earthing switch.

Fireproof filters

Every JSB-5 switchboard comes equipped with fireproof filters paired with arc gas ducts, ensuring that harmful high-temperature arc gas is safely released outside of the panel during an internal arc accident.