

LBS 25 kV Railway load switcher



HV Switching

We know how

Our range of switchers is designed to ensure the best performances and reliability, which are the result of our 70-year old experience in the field of high voltage.

LBS Railway load switcher

The LBS described in this brochure is an outdoor switch-disconnector specifically designed for railway applications.

It provides visible isolating distance ("disconnecter function", made by a vertical-break arm) and is capable of switching its rated continuous current as well as its rated short-circuit making current, without external arcs ("switch function", made by a vacuum interrupter).

It is featured by simple design and easy mounting on either supporting frames or catenary poles, in single- or bi-pole configuration.

This LBS meets the EN standard 50152-2.

LBS range is completed by the types intended for T&D networks, which meet IEC 62271-103.

Key features and advantages

- Compact design mechanism
- Normal current does not flow through the breaking device in closed position
- Visible isolating distance
- No external arc
- Long life performance
- No environmental pollution
- Gas free

Optional features

- Integrated earthing switch application
- Switch disconnecter with fuse holders
- Extended ambient temperature range: -40 °C / +50 °C

Ratings

Performance description and symbols are according to EN 50152-2, EN 50163 or when missing, according to IEC 62271 series.

Nominal voltage	U_n (kV)	25
Standards	EN 50152-2	
Number of poles	1 or 2	
Highest permanent voltage	U_{max1} (kV)	27.5
Highest non permanent voltage	U_{max2} (kV)	29
Highest long term overvoltage	U_{max3} (kV)	38.75
Rated continuous current	I_r (A)	up to 2000
Rated frequency	f_r (Hz)	50 or 60
Rated power-frequency withstand voltage	TE U_d (kV)	95
	AID U_d (kV)	110
Rated impulse withstand voltage	TE U_{Ni} (kV _p)	250
	AID U_{Ni} (kV _p)	290
Rated short-circuit making current	I_{ma} (kA)	12
Rated short-time withstand current	I_k (kA)	40
Rated duration of short-circuit	t_k (s)	3
Rated peak withstand current	I_p (kA _p)	100
Rated mainly active load-breaking current	I_{load} (A)	up to 2000
Rated closed-loop distribution circuit current	I_{loop} (A)	up to 2000
Opening time	(s)	~ 6
Closing time	(s)	~ 6
Rated mechanical endurance	(cycles)	10000
Ambient temperature range	(°C)	up to -25/+40

TE: To Earth
AID: Across the Isolating Distance

