

LBS 15-25 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

- Extended endurance: 10000 CO
- Integrated earthing switch application
- Switch disconnecter with fuse holders
- Extended ambient temperature range: -35 °C / +50 °C

Ratings

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

Nominal voltage	U_n (kV)	15	25
Standards		EN 50152-2	
Number of poles		1 or 2	
Highest permanent voltage	U_{max1} (kV)	17.25	27.5
Highest non permanent voltage	U_{max2} (kV)	18	29
Highest long term overvoltage	U_{max3} (kV)	24.30	38.75
Rated continuous current	I_r (A)	up to 2000	
Rated frequency	f_r (Hz)	16 2/3	50 or 60
Rated power-frequency withstand voltage	TE U_d (kV)	70	95
	AID U_d (kV)	95	110
Rated impulse withstand voltage	TE U_{Ni} (kV _p)	170	250
	AID U_{Ni} (kV _p)	195	290
Rated short-circuit making current	I_{ma} (kA)	16	25
Rated short-time withstand current	I_k (kA)	25	40
Rated duration of short-circuit	t_k (s)	3	
Rated peak withstand current	I_p (kA _p)	62.5	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)	5000	
Ambient temperature range	(°C)	up to -25/+40	

TE: To Earth
AID: Across the Isolating Distance

