



## LBS 12-52 kV Load switcher



### 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 Load switcher

The LBS is an outdoor switch-disconnector.

It provides visible isolating distance ("disconnector 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 designed for T&D networks, in the range between 12 and 52 kV, and can be combined with fuses; when combined with fuses, it provides the "protection function" too, thus becoming a "complete" apparatus

It is featured by simple design and easy mounting on either steel, concrete or wooden supports.

The LBS meets the IEC standard 62271-103.

Specific LBS meeting EN 50152-2 are designed for railway applications.

# 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 disconnector with fuse holders
- Extended ambient temperature range: -35 °C / +50 °C

## **Ratings**

The values in the table refer to IEC standards

Rated voltage (kV)		U <sub>r</sub> (kV)	12	24	36	52
Rated power-frequency withstand voltage	TE	U <sub>d</sub> (kV)	28	50	70	95
	AID	U <sub>d</sub> (kV)	32	60	80	110
Rated lightning impulse withstand voltage	TE	$\mathbf{U_p}(kV_p)$	75	125	170	250
	AID	$\mathbf{U_p}(kV_p)$	85	145	195	290
Rated continuous current		I <sub>r</sub> (A)	630	1250	2000	2000
Rated short-time withstand current		I <sub>k</sub> (kA)	25	40	40	40
Rated duration of short-circuit		t <sub>k</sub> (s)	3	3	3	3
Rated peak withstand current		Ip (kAp)	68	108	108	108
Rated short-circuit making current		I <sub>ma</sub> (kA <sub>p</sub> )	25	25	25	25
Rated mainly active load breaking current		I <sub>load</sub> (A)	630	1250	2000	2000
Rated distribution line closed-loop breaking current		I <sub>loop</sub> (A)	630	1250	2000	2000
Rated cable-charging breaking current		I <sub>cc</sub> (A)	10	16	20	20
Rated line charging breaking current		I <sub>Ic</sub> (A)	1	1.5	2	2
Rated earth fault breaking current		l <sub>ef1</sub> (A)	30	48	60	60
Rated cable-and line-charging breaking current under earth-fault conditions		I <sub>ef2</sub> (A)	17.3	27.7	34.6	34.6
Minimum mechanical and electrical endurance		(cycles)	5000			
Ambient temperature range		(°C)	up to - 25/+40			

TE: To Earth

AID: Across the Isolating Distance





