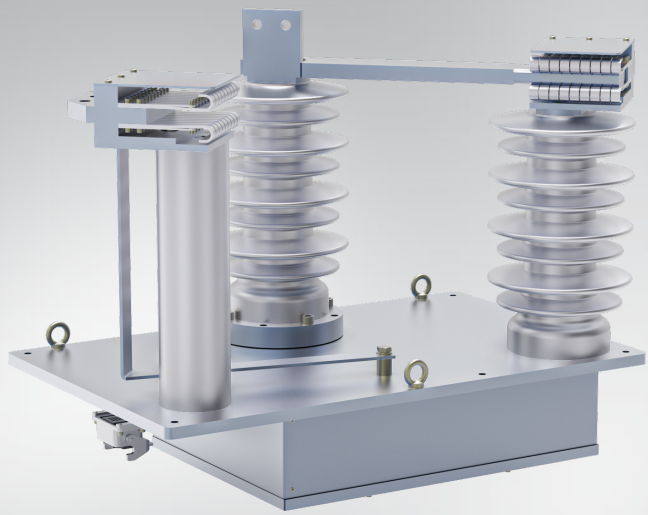


SWITCHES

STANDARD FAMILY CODE
LTSD20001SAT0

Type	LTSD
Number of Poles	1 CO
Mounting Position	Horizontal
Control Voltage Rating [V^{dc}]	24
Customer Auxiliary Blocks	4 (1 NO + 1 NC)
Block Type	Schaltbau S847
Contact Material	Silver Coated Copper
Electric Diagram	SC27440
Layout Drawing	D52873

[1] To be specified in order phase.

MICROELETTRICA

Description
The LTSD is an off-load switch, Motor Operated, and designed to be installed outdoors on the roof of electric traction vehicles. The LTSD is available as disconnect and earthing switch. It is suitable for single-voltage as well as for multi-voltage vehicles, covering all the usual line voltages (1,5 kVdc; 3 kVdc; 15 kVac and 25 kVac) as well as the different vehicle's currents rated up to 2000 A.

Electrical Characteristics	
Rated Operational Voltage [V_{ac}]	27500
Max Operational Voltage [V_{ac}] (semi-permanent)	32500
Conventional Free Air Thermal Current [A] at 40°C	2000
AC / DC - Maximum Making and Breaking Capacity [A]	0
DC- Short Circuit Withstand Capacity for 60 ms [kA]	70
AC - Short Circuit Withstand Capacity for 100 ms [kA]	30
Component Category / Operational Frequency Class	A4 / C3
Insulation Characteristics	
Rated Insulation Voltage [V]	27500
Pollution Degree - Overvoltage Category (EN 50124-1)	PD4/OV4
Rated impulse voltage [kV]	170
Rated Power Frequency Withstand Voltage (50Hz; 60")	
Between HV to LV circuit + Earth [V]	80000
Minimum clarence distance between power circuit to earth [mm]	320
Minimum creapage distance	690
Compartive Tracking Index (CTI) (IEC 60112) [V]	600
Mechanical Characteristics	
Mechanical Endurance (cycles)	$2.5x10^5$
Shock and Vibrations (IEC61373)	Cat. 1 - Class A
Weight [kg]	70
Control Circuit	
Control Voltage Range	$0.7U_c \div 1.35U_c$
Power Consumption (U_c and T = 20°C) peak - clamp insertion - during motion [W]	1000 (10 ms) - 500 (100ms) - 50
Mechanical Operation Time (U_c and T = 20°C) when Closing - Opening [ms]	1500 - 1500
Mechanical Operation Time (in the worst condition) [ms]	3000 - 3000
Electrical Connections	Connector Harting Han24DD

[2] Device cabled according IEC 60947 [3] In new and clean condition for power loss calculation only

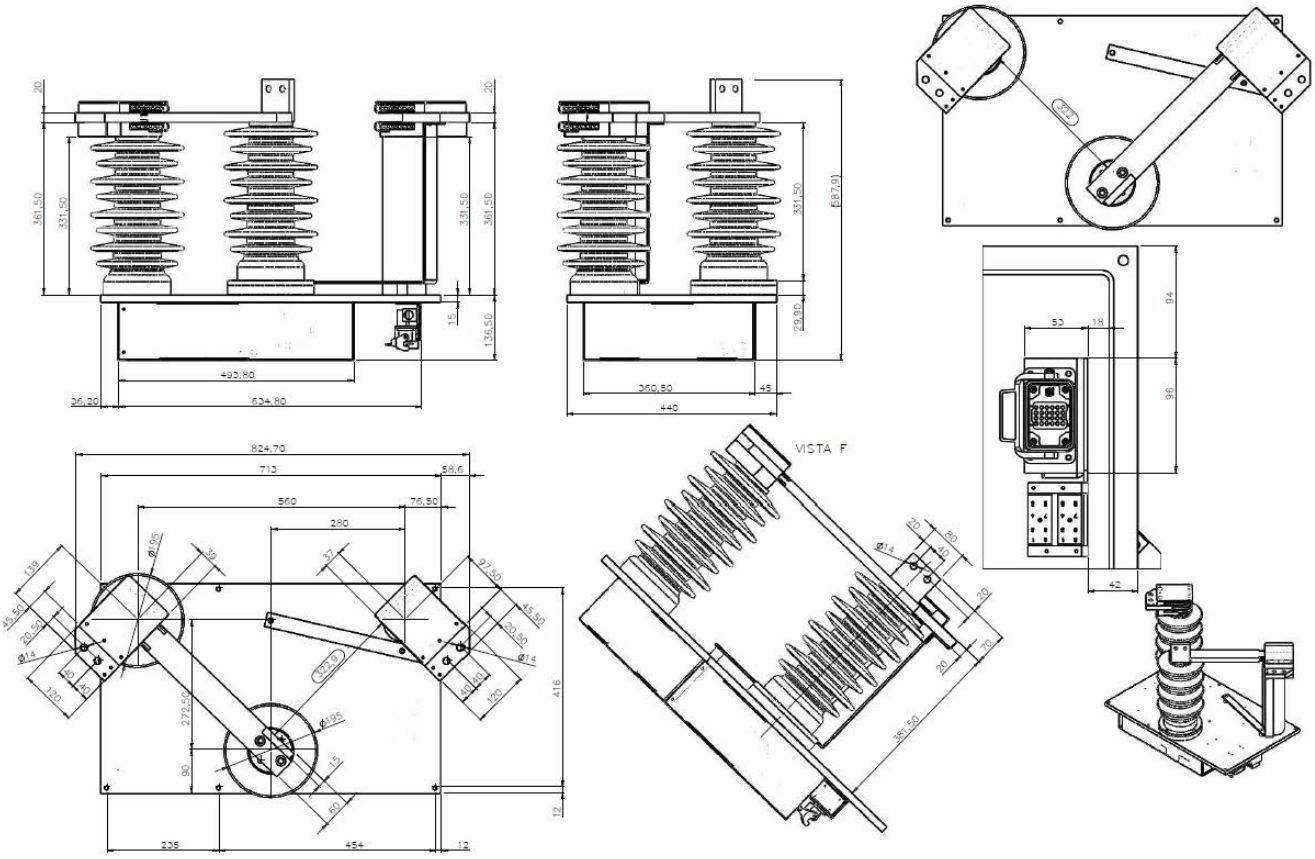
[4] Other mounting positions not allowed, reduced distances should be approved by Microelettrica

Auxiliary Contacts	
Rated Operational Voltage [V_{ac} / V_{dc}]	250
Conventional Free Air Thermal Current [A] at 40° C	10
Tips material Rated Current [A]	Silver Alloy (Optional: Golden Plated)
Minimum Let-Through Current at 24/72/110V_{dc} [mA][5]	20(10)/15(7.5)/10(5)
Electrical Connections	Connector Harting Han24DD
Environmental Conditions	
Stock Temperature Range	-50°C ÷ +85°C
Operational Temperature Range	T4 (-10°C ÷ +50°C)[6]
Max Altitude without Performance Derating [m]	2000

[4] Reference standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load.

For different working condiotions, please contact Microelettrica.

[5] In according to EN 50125-1



The technical specifications reported are not binding and they should be agreed in the contract.

For further technical information on our products visit www.microelettrica.com

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