

SWITCHES

STANDARD FAMILY CODE LTPD20001SAT0

Type	LTPD
Number of Poles	1 NO
Mounting Position	Horizontal
Control Voltage Rating [V ^{dC}]	110
Customer Auxiliary Blocks	4 (1 NO + 1 NC)
Block Type	Schaltbau S847
Contact Material	Silver Coated Copper
Electric Diagram	SC27440
Layout Drawing	D52872

¹ To be specified in order phase.



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Description

The LTPD is an off-load switch, Motor Operated, and designed to be installed outdoors on the roof of electric traction vehicles. The LTPD is available as disconnect 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 creepage distance	690
Comparative 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]	50
Control Circuit	
Control Voltage Range	0.7U _c ÷ 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

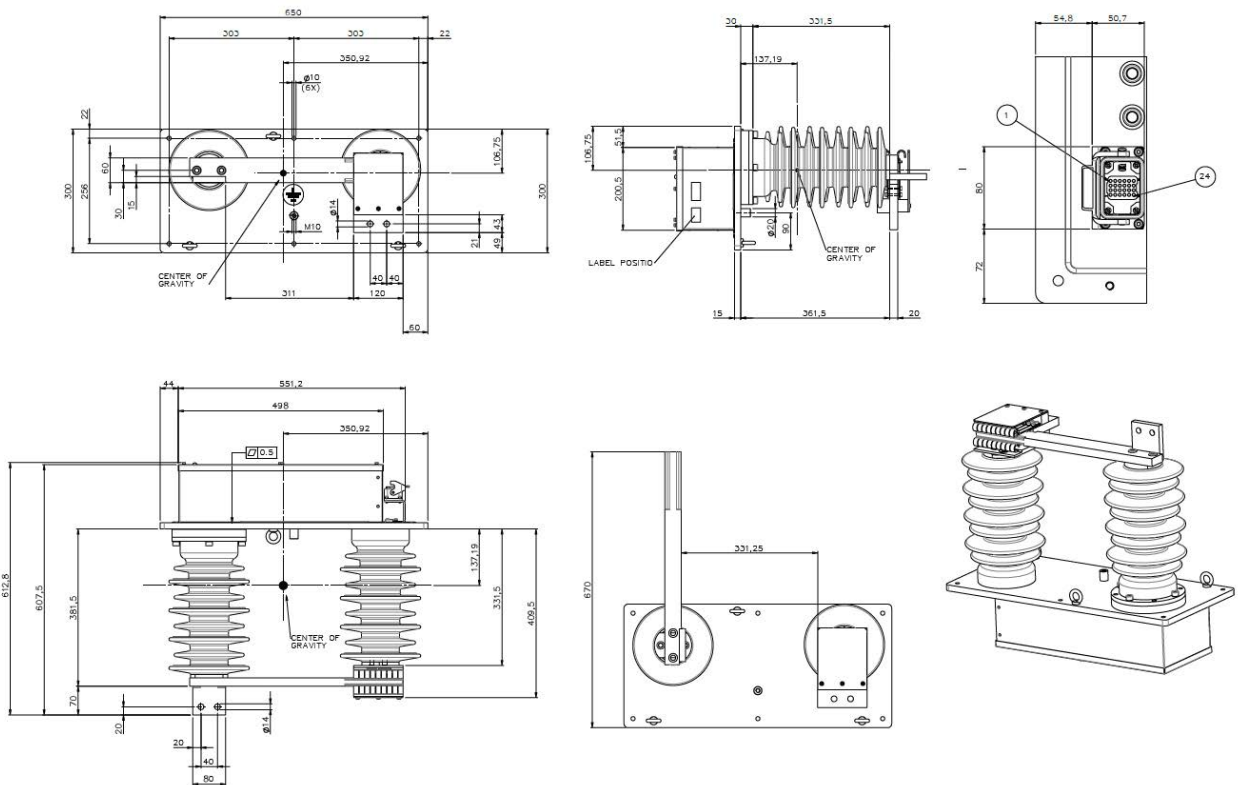
Environmental Conditions

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 conditions, 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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