

# Switches

## Standard Family Code LTHS03201\*A02



### Description

Contactors with single interruption in air, electromagnetic control by full power coil. Single state functioning.

Reference Standard IEC 60077, IEC 61992 and IEC 60947.

Type	LTHS 320
Number of Poles	1 NO
Mounting Position	Vertical
Control Voltage Rating $U_c$ [Vdc]	24 - 36 - 48 - 72 - 110 <sup>1</sup>
Auxiliary Contact Blocks	2x (1 NO + 1 NC)
Block Type	SL
Arc chute Material	Ceramic
Main Contacts tips Material	S6
Arcing Contacts tips Material	S6
Electric Diagram	-
Layout Drawing	D52486

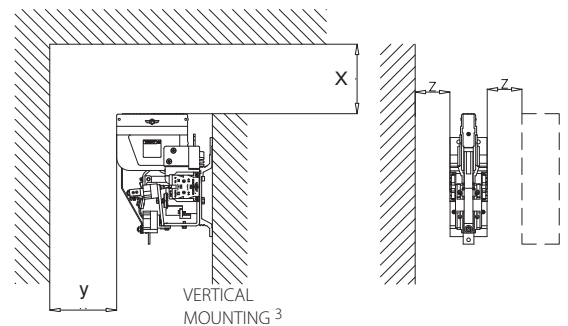
<sup>1</sup> To be specified in order phase.

### Electrical Characteristics

Rated Operational Voltage [ $V_{ac}$ / $V_{dc}$ ]	900
Max Operational Voltage [ $V_{ac}$ / $V_{dc}$ ]	1000
Rated Insulation Voltage [V]	2000
Conventional Free Air Thermal Current [A] at 40°C <sup>2</sup>	320
Conventional Free Air Thermal Current [A] at 75°C <sup>2</sup>	300
DC-Rated Operational Current ( $\tau=15ms$ ) [A]	
1000V	270
900V	300
DC-Maximum Breaking Capacity ( $\tau=5ms$ ) [A]	
1000V	360
900V	400
AC-Maximum Breaking Capacity ( $\cos\phi=0,8$ ; 50Hz) [A]	
1000V	500
900V	500
Component Category / Operational Frequency Class	A2 / C3
Short Circuit Withstand Capacity for 5ms [kA]	8
Critical Current Range [A]	NONE
Fault Making Capacity [kA]	4.8
Blow Out Circuit Type	Indirect coil with arcing contact

<sup>2</sup> Device cabled according IEC 60947

Minimum clearances [mm] from:				
Rated Operational Voltage	X	Y	Z	
900V	Metal Parts	100	50	30
	Plastic Parts	50	30	20



**Other mounting positions not allowed, reduced distances should be approved by MS.**

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## Mechanical Characteristics

Mechanical Endurance (cycles)	2x10 <sup>6</sup>
Shock and Vibrations (IEC61373)	Cat.1 - Class B
Weight [kg]	4.8

## Control Circuit

Control Voltage Range	0.7U <sub>c</sub> ÷ 1.25U <sub>c</sub>
Power Consumption (U <sub>c</sub> and T = 20°C) at Pick Up - when Holding [W]	25 - 25
Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]	110 - 30
Time Constant (L/R) at Pick Up - when Holding [ms]	60 - 80
Electrical Connections	Fast-On 6.35x0.8mm

## Auxiliary Contacts

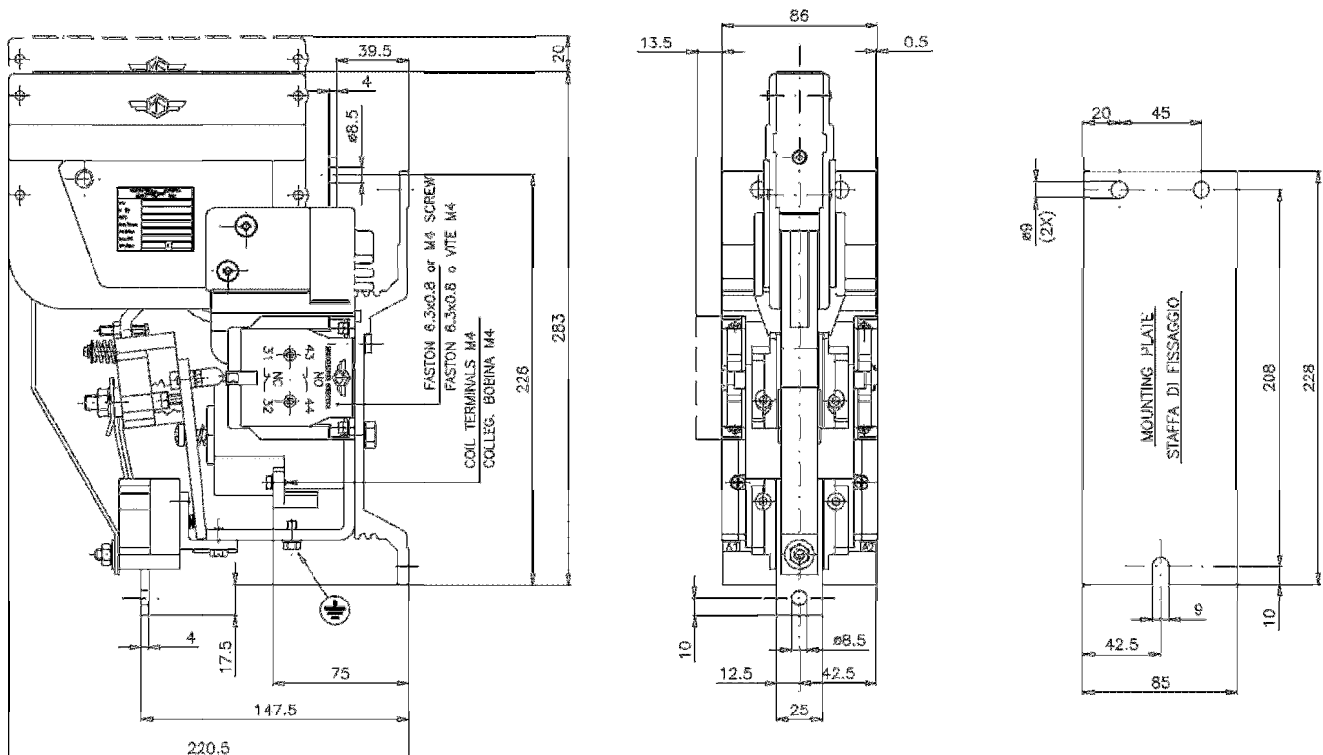
Rated Operational Voltage [V <sub>ac</sub> / V <sub>dc</sub> ]	250
Conventional Free Air Thermal Current [A] at 40° C	10
Tips material Rated Current [A]	Silver Alloy (Optional: Golden Plated)
Minimum Let-Through Current at 24/72/110V <sub>dc</sub> [mA] <sup>4</sup>	20(10)/15(7.5)/10(5)
Electrical Connections	Fast-On 6.35x0.8mm

## Environmental Conditions

Stock Temperature Range	-50°C ÷ +85°C
Operational Temperature Range	Tx (-40°C ÷ +75°C) <sup>5</sup>
Pollution Degree - Overvoltage Category (EN 50124-1)	PD3 - OV3
Max Altitude without Performance Derating [m]	2000

<sup>4</sup> Reference standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load. For different working conditions, please contact MS.

<sup>5</sup> In according to IEC50125-1



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