

## **Standard Family Code** LTC002501\*A02



## Description

Contactor with double interruption in air, electromagnetic control by full power coil. Single state functioning.

Reference Standard IEC 60077, IEC 61992 and IEC 60947.

Type	LTCS 250 or LTCH 250
Number of Poles	1 NO
Mounting Position	Horizontal - Vertical <sup>1</sup>
Control Voltage Rating Uc [Vdc]	24 - 36 - 48 - 72 - 110 <sup>1</sup>
Auxiliary Contact Blocks	2 (1 NO + 1 NC)
Block Type	SL
Arc chute Material	Polyester Resin - Ceramic <sup>1</sup>
Main Contacts tips Material	S6
Arcing Contacts tips Material	-
Electric Diagram	-
Ceramic Layout Drawing	D47610
Polyester Resin Layout Drawing	D46935
To be specified in order phase	•

Electrical Characteristics			
Rated Operational Voltage [Vac/Vdc]	440 / 900 / 1800 <sup>1</sup>		
Max Operational Voltage [Vac/Vdc]	200	2000	
Rated Insulation Voltage [V]	2000		
Conventional Free Air Thermal Current [A] at 40°C <sup>2</sup>	250		
Conventional Free Air Thermal Current [A] at 75°C <sup>2</sup>	200	200	
DC-Rated Operational Current ( $\tau$ =15ms) [A]	Polyester Resin arc chute	Ceramic arc chute	
1800V	16	20	
900V	65	100	
400V	130	200	
DC-Maximum Breaking Capacity (τ=5ms) [A]			
1800V	25	30	
900V	130	150	
400V	195	225	
AC-Maximum Breaking Capacity (cosq=0,8; 50Hz) [A]			
1800V	60	72	
900V	250	320	
400V	320	400	
Component Category / Operational Frequency Class	A2 / C3		
Short Circuit Withstand Capacity for 100ms [kA]	5		
Critical Current Range [A]	DC Reverse current		
Fault Making Capacity [kA]	2.4		
Blow Out Circuit Type	Permanent Magnet		

 $^{\rm 2}$  Device cabled according IEC 60947

Minimum clearances [mm] from:				
Rated Operational Voltage		Х	Y	Z
900V	Metal Parts	80	80	20
	Plastic Parts	50	50	0
Minimum clearances [mm] from:				
Rated (	Operational Voltage	Х	Y	Ζ
1800V	Metal Parts	120	120	30
	Plastic Parts	50	50	20







<sup>3</sup>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]	2
Control Circuit	
Control Voltage Range	0.7Uc ÷ 1.25Uc
Power Consumption (U <sub>c</sub> and T = 20°C) at Pick Up - when Holding [W]	32 - 32
Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]	50 - 20
Time Constant (L/R) at Pick Up - when Holding [ms]	25 - 50
Electrical Connections	Fast-On 6.35x0.8mm
Auxiliary Contacts	
Rated Operational Voltage [Vac / Vdc]	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 24/72/110Vdc [mA] <sup>4</sup>	20(10)/15(7.5)/10(5)
Electrical Connections	Low voltage connector AMP20Pins

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

 $^4$  Reference standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load. For different working condictions, please contact MS.

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





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