

SWITCHES

STANDARD FAMILY CODE LPRC10001*A00

Type	LPRC 1000
Number of Poles	1 NO
Mounting Position	Horizontal - Vertical ¹
Control Voltage Rating [V ^{dc}]	24 - 36 - 48 - 72 - 110 ¹
Auxiliary Contact Blocks LTCH 1000	2 x (1 NO + 1 NC)
Auxiliary Contact Blocks LTCS 150	2 x 1 CO
Block Type	PBX
Arc chute Material LTCH 1000	Ceramic
Arc chute Material LTCS 150	Plastic
Contact tips material LTCH 1000	S6
Contact tips material LTCS 150	Cu
Electric Diagram	SC27404
Layout Drawing	D52629

¹ To be specified in order phase.



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Description

New modular integrated system LPRC1000 consisting of LTCH1000 line contactor associated with LTCS150 pre-charge contactor and pre-charge resistor. Reference standard IEC60077.

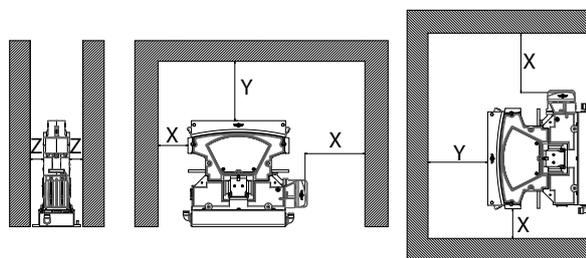
Electrical Characteristics	LTCH1000	LTCS150 2 Poles
Rated Operational Voltage [V_{ac} / V_{dc}]	900 / 1800 ¹	900 / 1800 ¹
Max Operational Voltage [V_{ac} / V_{dc}]	2000	2000
Rated Insulation Voltage [V]	2000	2000
Conventional Free Air Thermal Current [A] at 75°C ²	1000	50
DC-Rated Operational Current (t=15ms) [A]		
1800V	600	50
900V	1200	100
DC-Maximum Breaking Capacity [A]		
2000V	1000 @ 15 ms	80 @ 3 ms
1000V	2000 @ 15 ms	160 @ 3 ms
AC-Maximum Breaking Capacity (cosφ=0,8; 50Hz) [A]		
2000V	1200	90
1000V	2400	180
Component Category / Operational Frequency Class	A2 / C3	A2 / C3
Short Circuit Withstand Capacity for 100 ms[kA]	20	1
Critical Current Range [A]	None	None
Fault Making Capacity [kA]	20	1
Blow Out Circuit Type	Indirect with Arcing Contact	Permanent Magnets

² Device cabled according IEC 60947

Resistor	
Max operational voltage [V]	2000
Rated insulation voltage [V]	2000
Resistance at 20°C [Ω] @ 900 Vdc	10 ÷ 150 ± 10% ¹
Resistance at 20°C [Ω] @ 1800 Vdc	40 ÷ 150 ± 10% ¹
Power Consumption (continuous duty) [W] ³	150
Power with duty cycle Ton/Toff = 1s/119s [KW] ⁴	120 (5 cycles)
Protection degree (excl. main terminals)	IP54

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
1800V	Metal Parts	80	50	50
	Plastic Parts	30	30	20

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



Horizontal Mounting⁵ Vertical Mounting⁵

³ Maximum ambient temperature without derating 75°C

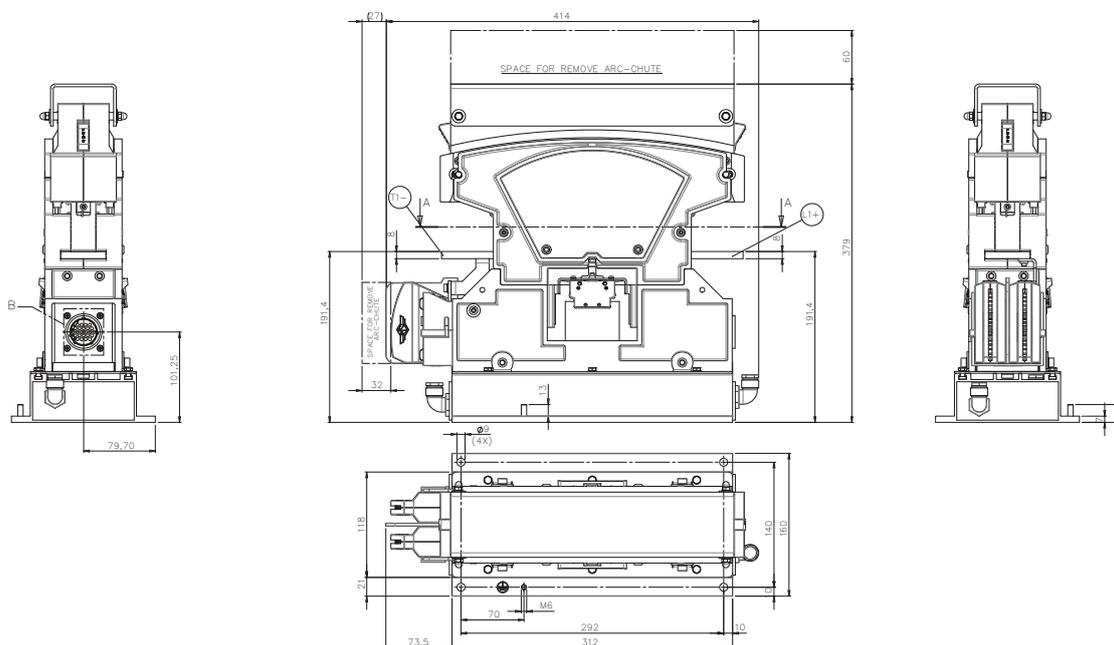
⁴ For further info see specific DS type GWK 312-160x56

⁵ Other mounting positions not allowed, reduced distances should be approved by Microelettrica.

Mechanical Characteristics		
Mechanical Endurance (cycles)	2x10 ⁶	
Shock and Vibrations (IEC61373)	Cat.1 - Class B	
Weight [kg]	15	
Control Circuit	LTCH1000	LTCS150 2 Poles
Control Voltage Range	0.7Uc ÷ 1.25Uc	0.7Uc ÷ 1.25Uc
Power Consumption (Uc and T = 20°C) at Pick Up - when Holding [W]	300 - 10	50 - 50
Mechanical Operation Time (Uc and T = 20°C) when Closing - Opening [ms]	150 - 40	60 - 50
Time Constant (L/R) at Pick Up - when Holding [ms]	5 - 30	5 - 30
Electrical Connections	AMP Connector	
Auxiliary Contacts	LTCH1000	LTCS150 2 Poles
Tips material	Silver Alloy (Optional: Golden Plated)	AgNi
Rated Operational Voltage [Vac / Vdc]	250	250
Rated Current [A]	10	10
Minimum Switching Current at 16Vdc [mA] ⁶	20(10)/15(7.5)/10(5)	100
Electrical Connections	AMP Connector	
Environmental Conditions		
Stock Temperature Range	-50°C ÷ +85°C	
Operational Temperature Range	Tx (-40°C ÷ +75°C) ⁷	
Pollution Degree - Overvoltage Category (EN 50124-1)	PD3 - OV3	
Max Altitude without Performance Derating [m]	2000	

⁶ In clean and dry conditions

⁷ In according to IEC50125-1



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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