# LQL7-PV

These circuit breakers are used for overcurrent protection and control in solar photovoltaic battery storage systems and DC circuits,They are available in various rated currents such. DC circuit breakers which accept customized provide functions for circuit interruption, short circuit protection, adjustment, and protection, effectively extending the lifespan of electrical equipment. They protect electrical equipment from damage caused by overloads, short circuits, or other electrical faults.

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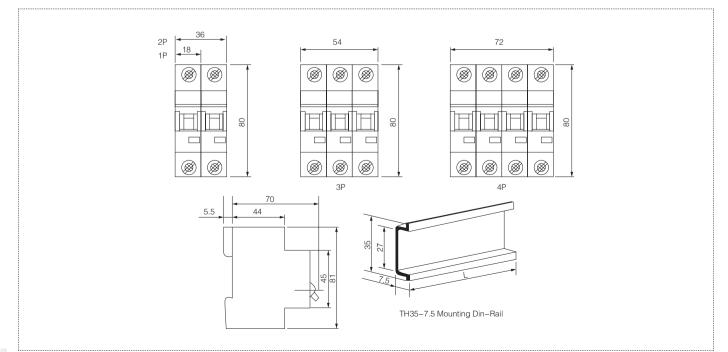
# Non-Polarity DC circuit breaker



### **TECHNICAL PARAMETERS**

LQL7-PV Series Circuit Breaker		LQL7-PV				
Frame degree rated current (A)		63				
		Electrical p	erformance			
Ue Rated operating voltage (V DC)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V				
Rated Current In (A)		6-10-16-20-25-32-40-50-63				
Rated insulation voltage Ui (V DC)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V				
ated Impact voltage Uimp (kV)		4				
Ultimate breaking capacity lcu (kA)		6	6	6	6	
Run breaking capacity lcs (%lcu)		75%	75%	75%	75%	
Curve type		С				
Trip type		Thermal-magnetic				
MECHANICAL	Actual average value	20000				
	Standard value	8500				
ELECTRIC	Actual average value	2500				
	Standard value	1500				
		Control and	lindication			
Shunt release (SHT)						
Undervoltage release (UNT)		Option				
Auxiliary contact (AX)		Option				
Alarm contact (AL)						
			and Installation			
Wiring capacity (mm <sup>2</sup> )		$\ln \le 32A, 1 \sim 25 \text{mm}^2, 1 \ge 40A, 10 \sim 35 \text{mm}^2$				
Ambient temperature (°C )		-20~70				
Altitude		≤ 2000				
Relative humidify		≤ 95%				
Pollution Level		3				
Installation Environment		No obvious shock and vibration				
Installation category		Class III				
Installation		DIN Standard rail				
	W	17.5	35	52.5	70	
Dimensions (W) $\times$ (H) $\times$ (Deep)	Н	80	80	80	80	
	Deep	71	71	71	71	
Weight (kg)		0.12	0.24	0.36	0.48	

### **Dimensions(mm)**



# LQB1-63Z

LQB1-63Z DC breaker supplementary protectors are designed to provide overcurrent protection within oppliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.

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Polarity DC circuit breaker



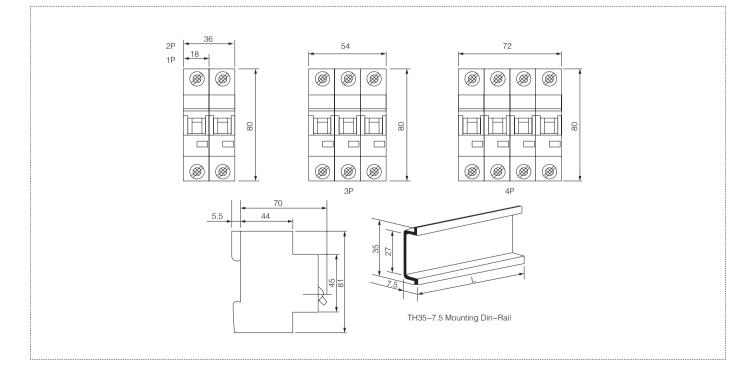


LQB1-63Z Series Circuit Breaker		LQB1-63Z				
Frame degree rated current (A)		63				
		Electrical performance				
Ue rated operating voltage (V DC)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V				
Rated Current In (A)		6-10-16-20-25-32-40-50-63				
Rated insulation voltage Ui (V DC)		800V				
ated impact voltage Uimp (kV)		4				
Ultimate breaking capacity lcu (kA)		6	6	6	6	
	Run breaking capacity lcs (%lcu)		75%	75%	75%	
Curve type		С				
Trip type		Thermal-magnetic				
Mechanical	Actual average value	20000				
	Standard value	8500				
Electric	Actual average value	2500				
Electric	Standard value	1500				
		Control and	lindication			
Shunt release (SHT)		Option				
Undervoltage release (UNT)						
Auxiliary contact (AX)						
Alarm contact (AL)						
		Connection and installation				
Wiring capacity (mm <sup>2</sup> )		$\ln \le 32A, 1 \sim 25 \text{ mm}^2, 1 \ge 40A, 10 \sim 35 \text{ mm}^2$				
Ambient temperature (°C )		-20-70				
Altitude		≤ 2000				
Relative humidify		≤ 95%				
Pollution level		3				
Installation environment		No obvious shock and vibration				
Installation category		Class III				
Installation		DIN Standard rail				

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### **Dimensions(mm)**



### LQM1-PV

DC Breaker Non-Polarity

- Reliable protection at high ambient temperatures
- Loadable:string protection up to
  - 125 size: 63A, 80A, 100A, 125A
  - 250 size: 160A, 200A, 225A, 250A

400 size: 315A, 400A

- Tested:Ultimate short circuit breaking capacity lcu of 25kA according to IEC IEC60947-2
- Fast: DC molded case circuit breakers effectively prevent arc faults and melting.
- Safe:DC molded case circuit breakers feature fast and accurate circuit interruption, short circuit protection, and adjustment functions, with good circuit interruption and short circuit performance.

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LQM1-PV

III;

Cat.A

IEC60947-2

250A

DC500V

1000V

8kV

10In

40°C

-

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DC1000V

1000V

8k\

40%

ON

LQM1-PV

UImp

Cat.A IEC60947-2

II:

-39

E

Icu:

20kA

15kA

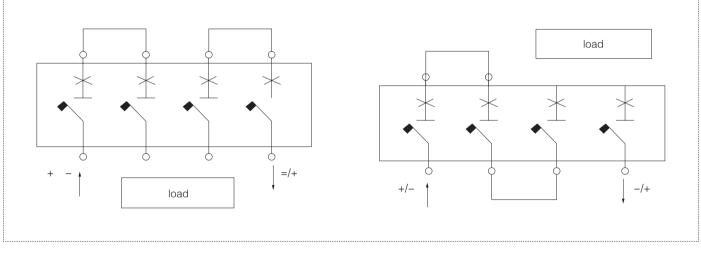
DC Breaker Non-Polarity



#### **EXAMPLE** Specifications

Rated Current In (A)	125:63A,80A,100A,125A; 250:160A,200A,225A,250A; 400: 315A,400A
Ue Rated operating voltage (VDC)	1P: DC250V 2P: DC500V 3P: DC750V 4P: DC1000V
Rated insulation voltage Ui (VDC)	DC1000V
Rated Impact voltage Uimp (kV)	8KV
Ultimate breaking capacity lcu (kV)	25KV
Trip type	Thermal-magnetic
Ambient temperature (°C)	-20°C~70°C
Alfifude	2000M
Instalation	Fixed,plug-in
Accessories	Auxiliary , Alarm, Shunt release Manually operated and electric operation

### **Wiring diagram**



- Protection and Isolation wiring
- The load should be ≤ DC1000V
  The connection considered for anetwork in which the middle point of the supply source is earthed
  In this case the breaker protects and isolates the load

- Protection and Isolation wiring
- The load should be ≤ DC 1000V The Negative pole (-) could be earthed, butin both cases the breaker protects and isolates the load

