

DC Components

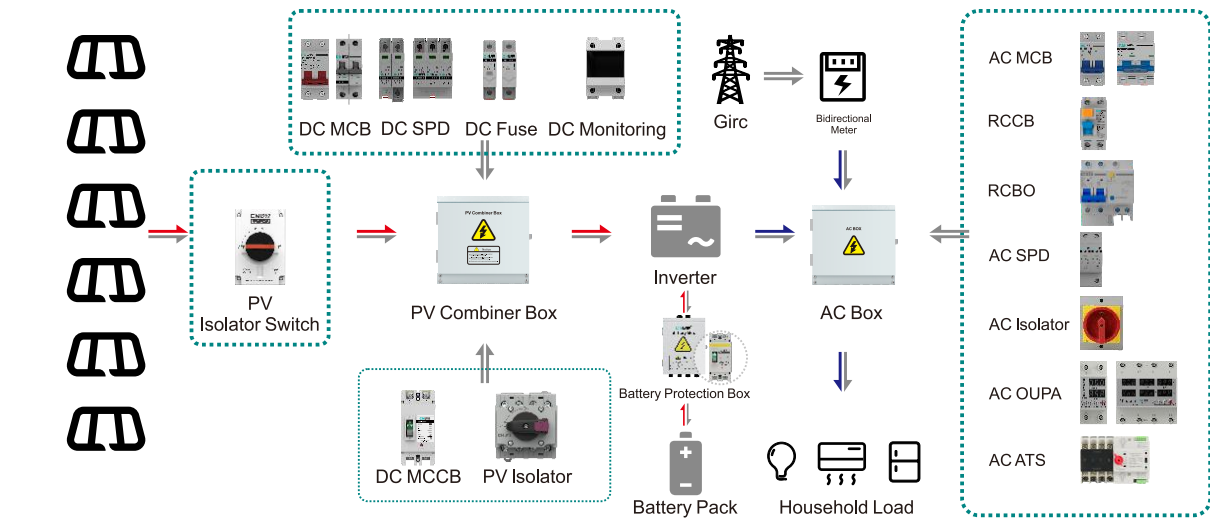
QS/MCB/MCCB/SPD/Fuse/Smart Monitoring

Company Profile

Wenzhou Longqi New Energy Co., Ltd. (Brand: CNLONQ)

Founded In 2010 And Headquartered In Yueqing, Wenzhou—China’S Electrical Capital—Wenzhou Longqi New Energy Co., Ltd. Is A Leading Innovator In Photovoltaic System Components And Electrical Protection Equipment. We Specialize In Designing, Manufacturing, And Globally Distributing High-Performance Products Essential For Efficient, Safe Solar Power Generation Systems.

The Company’S Main Factory Covers **10,000m²** With An Additional **2,500m²** Of Warehouse Space. We Support Oem/Odm And Custom Junction Box Solutions, Holding Over **100 Project Certifications And Patents With A Team Of More Than 50 Technical Personnel**. Driven By Innovation And Stringent Quality Control, We Welcome Your Partnership In Building A Cleaner Energy Future Together.



Contents

Isolator	01
Monitoring	05
MCB	07
MCCB	13
SPD	21
Fuse	23



- Lifetime Technical Support
- Short-circuit protection, overload protection, Isolation circuit
- Durable and sturdy UL94 V-0 flame retardant, corrosion resistant
- OEM/ODM Free Customization for PV Products

LONQ-40

TÜV Rheinland

CE

ISO 9001

RoHS

IEC

UKCA

CB

CN LONQ.com

IP66 DC Isolator Switch(QS)

DC 1200/1500V

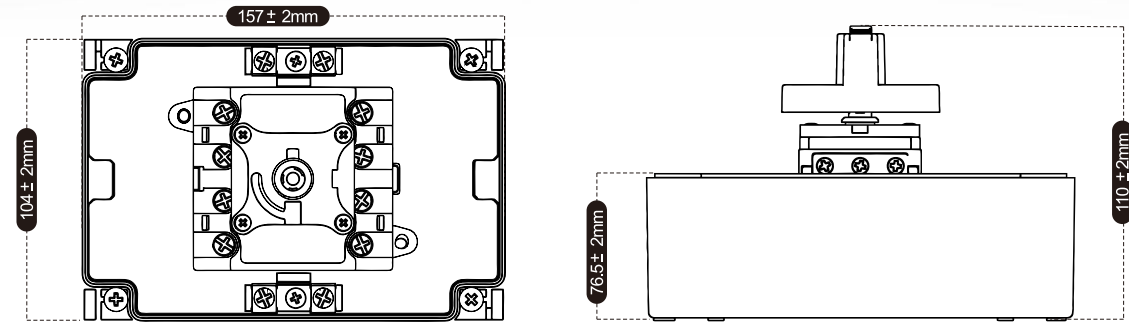


- Completely Disconnect
The Circuit
- Non-Polarized
- Flame-Retardant
Material
- Customizable logo
And Other Parameters

Technical data					
Model	LONQ-40.MC4	LONQ-40.2MC4	LONQ-40.2PVCNT	LONQ-40.M20	LONQ-40.2-2
Feature	Rapid circuit isolation				
String	1 input 1output	2 input 2output	2 input 2output	DIY 1 or 2 String	2 input 2output
Rated Current In(A)	32/23				
Rated Working Voltage Ue (V)	1200/1500				
Uimp (kV)	8				
Wiring Mode	No polarity, top in and bottom out or bottom in and top out				
Standard	IEC/EN60947-3 GB/T 14048.3				
Insolation Feature	Yes				
Levels of Protection	IP66				
Housing Material	PC				
Conductor Material	Thick copper with silver plating				
Mechanical Life (times)	20000				
Electrical Life (times)	6000				
Knob Positions	OFF at 9 hr ON at 12 hr				
Operating Temperature	-40°C to +85°C				
Humidity	95%				
Altitude	2000m				
Installation	Wall Mounting				
Product Size (mm)	230*104*110	180*157*110	230*104*110	213*104*110	213*104*110

Contact Wiring Diagram					
Connect Method Code	2P(A2)	2P(A4)	4P(4T)	4P(4B)	4P(4S)
Circuit Type	2 poles in series for one string, 1 load	2 poles in series for one string, total 2 loads	4 poles in series, for one string	4 poles in series, for one string	4 poles in series, for one string
Wining Diagram					
Load Diagram					

Product Dimension Drawing (mm)



LONQ-40

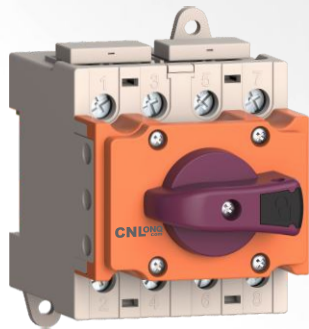


DC Isolator Switch(QS)

DC 1200/1500V



LONQ-40.X



LONQ-40.I



LONQ-40.F



Completely Disconnect
The Circuit



Non-Polarized

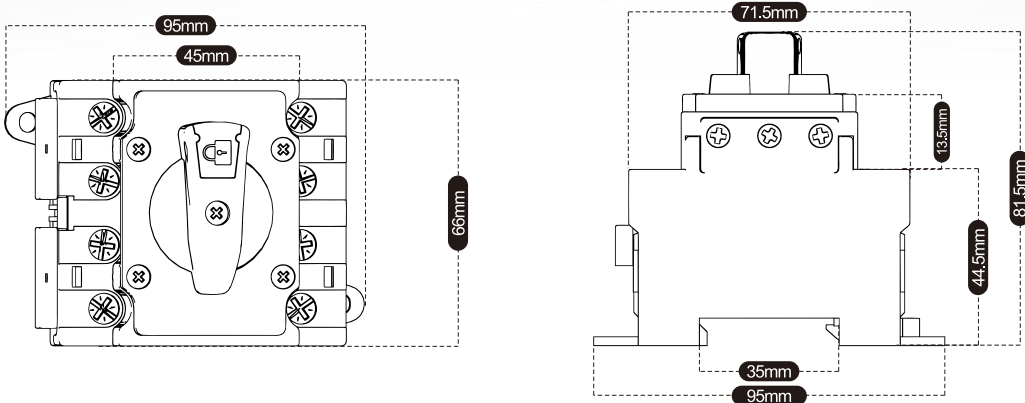


Flame-Retardant
Material



Customizable logo
And Other Parameters

Product Dimension Drawing (mm)



Technical data						
Model	LONQ-40.X, LONQ-40.I, LONQ-40.F					
Rated Current In(A)	32	32	32	32	32	23
Rated Working Voltage Ue (V)	300	600	800	1000	1200	1500
Pole	4P					
Rated Impulse Withstand Voltage Uimp (kV)	8					
Wiring Method	Non-polarized					
Standard	IEC/EN60947-3 GB/T 14048.3					
Insolation Feature	Yes					
Flame Retardant Grade	UL94V-0					
Housing Material	PA					
Conductor Material	Silver Plated Copper					
Mechanical Life (times)	20000					
Electrical Life (times)	6000					
Knob Positions	OFF at 9 hr ON at 12 hr					
Operating Temperature	-40°C to +85°C					
Humidity	≤95%					
Altitude	2000m					
Installation	35mm DIN Rail					

Contact Wiring Diagram					
Connect Method Code	2P(A2)	2P(A4)	4P(4T)	4P(4B)	4P(4S)
Circuit Type	2 poles in series for one string, 1 load	2 poles in series for one string, total 2 loads	4 poles in series, for one string	4 poles in series, for one string	4 poles in series, for one string
Wining Diagram					
Load Diagram					

LQJ-30



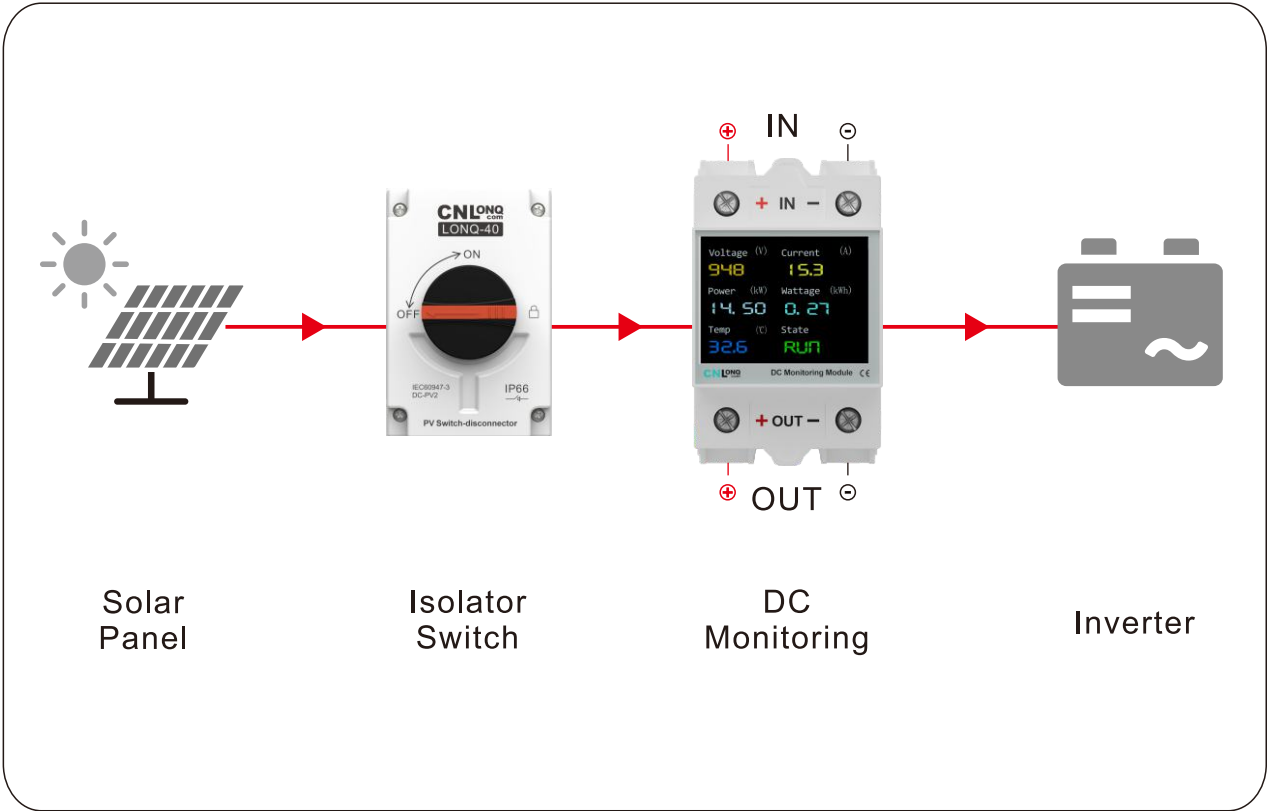
PV DC Smart Monitoring Module

DC1000V 30A



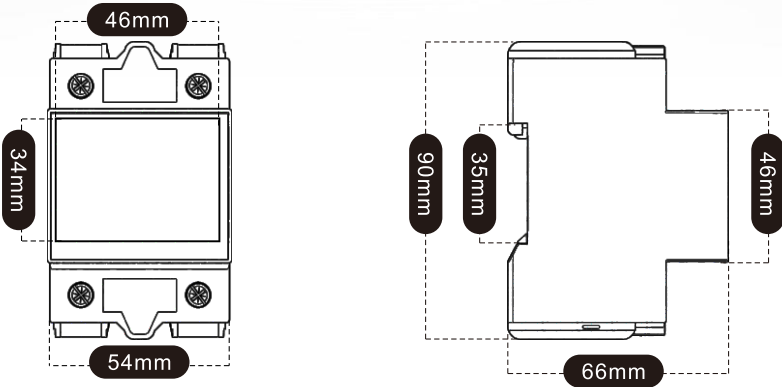
Technical data	
Model	LQJ-30
Feature	DC System Monitoring (Monitoring is not possible if no current is flowing through the DC circuit)
Voltage Monitoring Range (V)	45-1000
Current Monitoring Range (A)	1-30
Power Monitoring Range(kW)	0-30
Total Energy Monitoring (kWh)	0-999.99
Temperature Monitoring Range(°C)	-40 to +105
Operating Temperature(°C)	-25 to +70
Humidity	≤95% (non-condensing)
Altitude	≤2000 m
Mounting Method	35mm DIN Rail
Wiring capacity (mm²)	2.5-6
Quality Certificate	CE, ISO
Standard	EN 61010-1, 61010-2-030, 61000-6-1, 61000-6-3
Product Size L*W*H(mm)	90*54*66
Product Weight(kg)	0.186

Wiring diagrams



- Voltage, Current Temperature Monitoring
- PBT Housing Flame-Retardant
- High-Definition LCD Display
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



LQB1-63Z



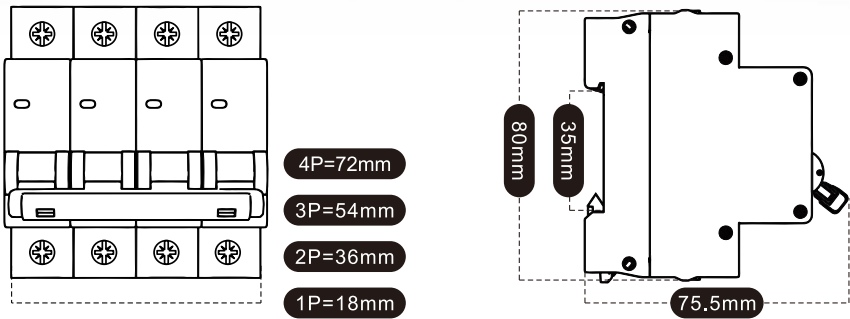
Miniature Circuit Breaker(MCB)

DC 250V~1000V 6~63A



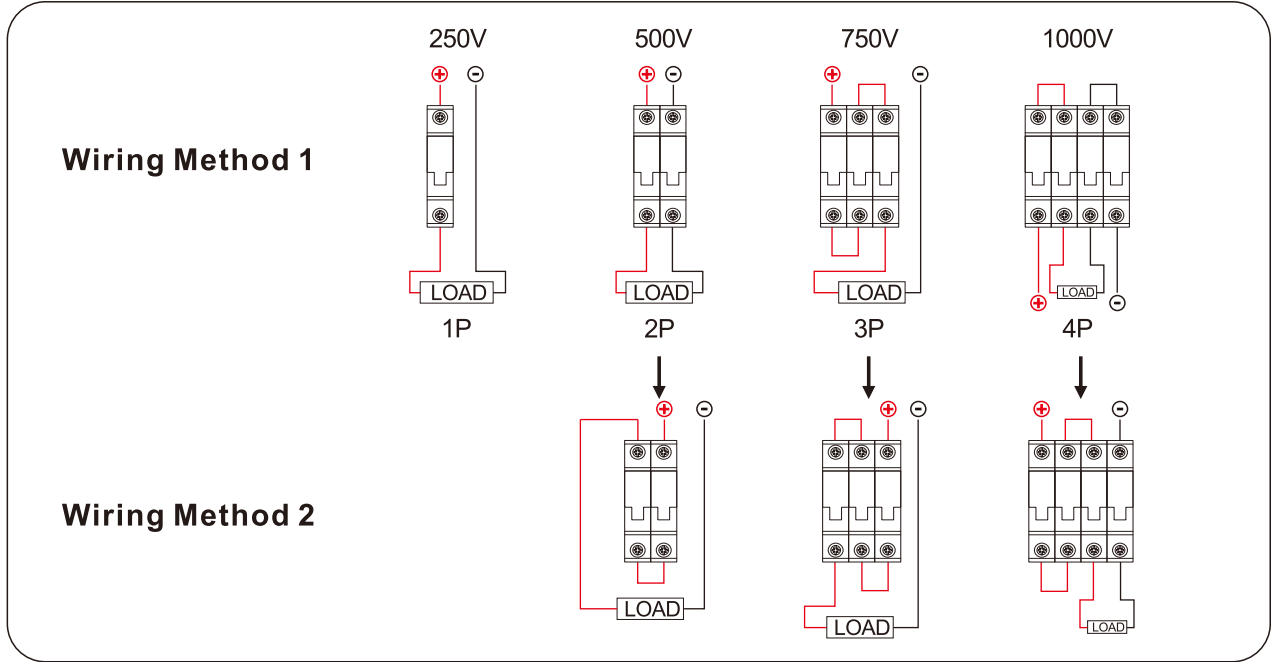
- Overload Protection
- Short-Circuit Protection
- Flame-Retardant Material
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data	
Model	LQB1-63Z
Feature	Short-circuit protection, overload protection
Pole	1P/2P/3P/4P
Rated Working Voltage Ue (V)	DC 250/500/750/1000, AC 230/400
Frame degree rated current (A)	63
Rated current In(A)	6/10/16/20/25/32/40/50/63
Rated Frequency (Hz)	50/60
Breaking Capacity Icu(kA)	6
impact voltage Uimp(kV)	4
Curve type	C
Trip type	Thermal-magnetic
Standard	IEC60947-2
Levels of Protection	IP20
Quality Certificate	CE,ISO9001,ROHS
Mechanical life (Maxtimes)	20000
Electrical life (Maxtimes)	6000
Operating Temperature	-20°C to +70°C
Humidity	≤95%
Altitude	2000m
Installation	35mm DIN Rail
Wiring capacity (mm²)	In ≤ 32A, 1~25mm² In ≥ 40A, 10~35mm²
Product Size L*W*H(mm)	75.5*18*80/75.5*36*80/75.5*54*80/75.5*72*80

Wiring diagrams

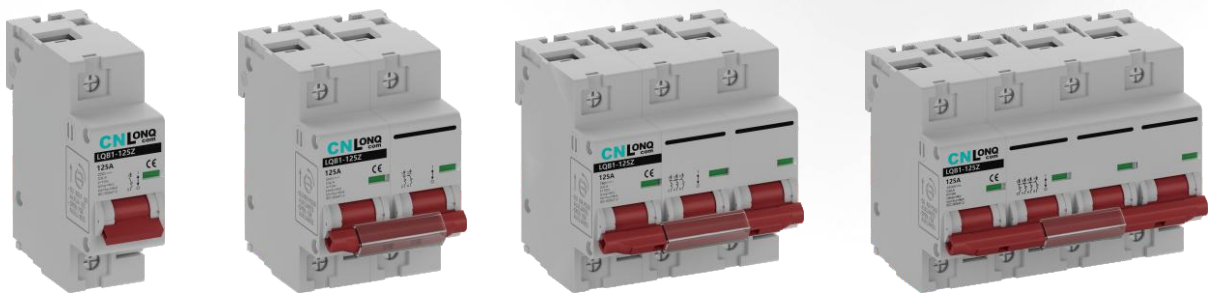


LQB1-125Z



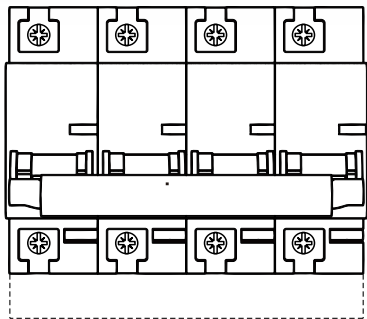
Miniature Circuit Breaker(MCB)

DC 250V~1000V 80~125A

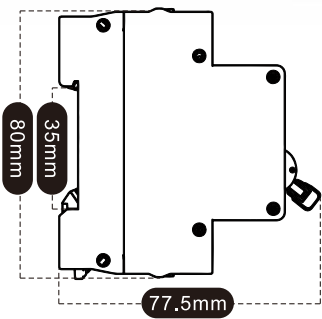


- Overload Protection
- Short-Circuit Protection
- Flame-Retardant Material
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)

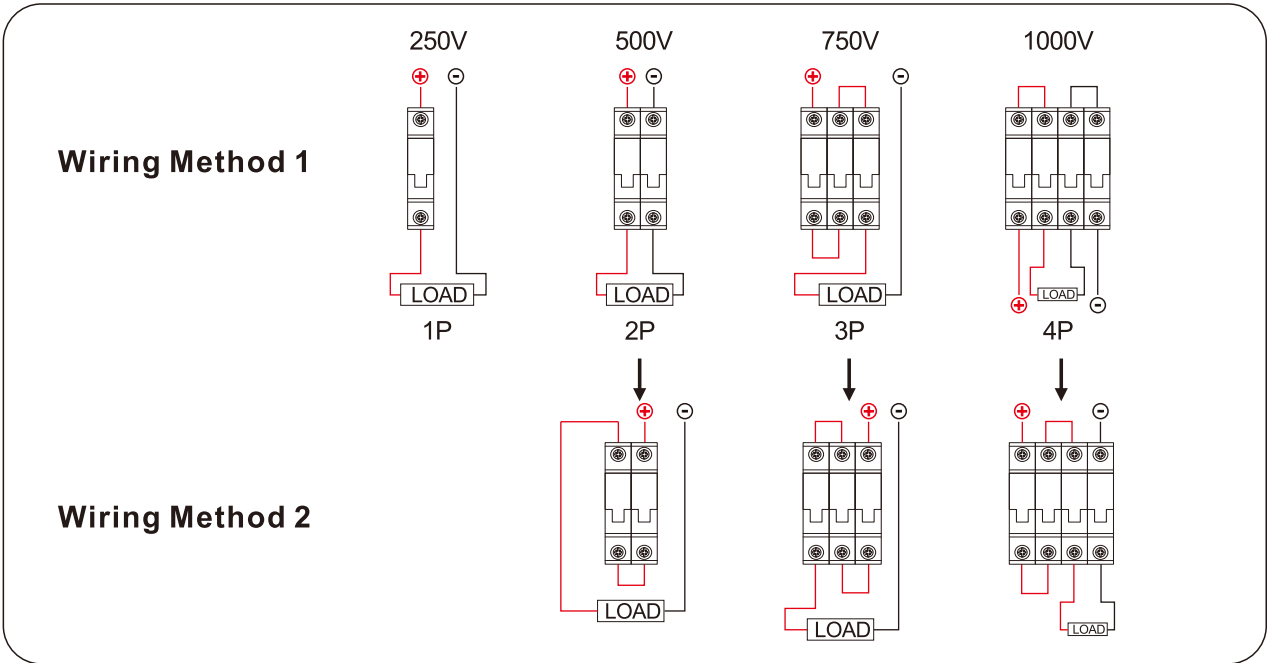


- 4P=108mm
- 3P=81mm
- 2P=54mm
- 1P=27mm



Technical data	
Model	LQB1-125Z
Feature	Short-circuit protection, overload protection
Pole	1P/2P/3P/4P
Rated Working Voltage Ue (V)	DC 250/500/750/1000, AC 230/400
Frame degree rated current (A)	125
Rated current In(A)	80/100/125
Rated Frequency (Hz)	50/60
Breaking Capacity Icu(kA)	6
impact voltage Uimp(kV)	4
Curve type	C
Trip type	Thermal-magnetic
Standard	IEC60947-2
Levels of Protection	IP20
Quality Certificate	CE,ISO9001,ROHS
Mechanical life (Maxtimes)	20000
Electrical life (Maxtimes)	6000
Operating Temperature	-20° C to +70° C
Humidity	≤95%
Altitude	2000m
Installation	35mm DIN Rail
Wiring capacity (mm²)	In ≤ 32A, 1~25mm², In ≥ 40A, 10~35mm²
Product Size L*W*H(mm)	81*27*77.5/81*54*77.5/81*81*77.5/81*108*77.5

Wiring diagrams



LQL7-PV



Miniature Circuit Breaker(MCB)

DC 300V~1200V 6-63A



Overload Protection



Short-Circuit Protection

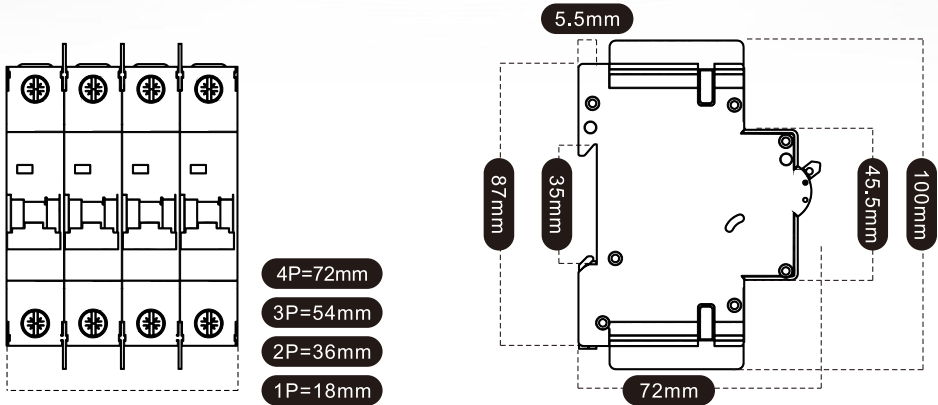


Flame-Retardant Material



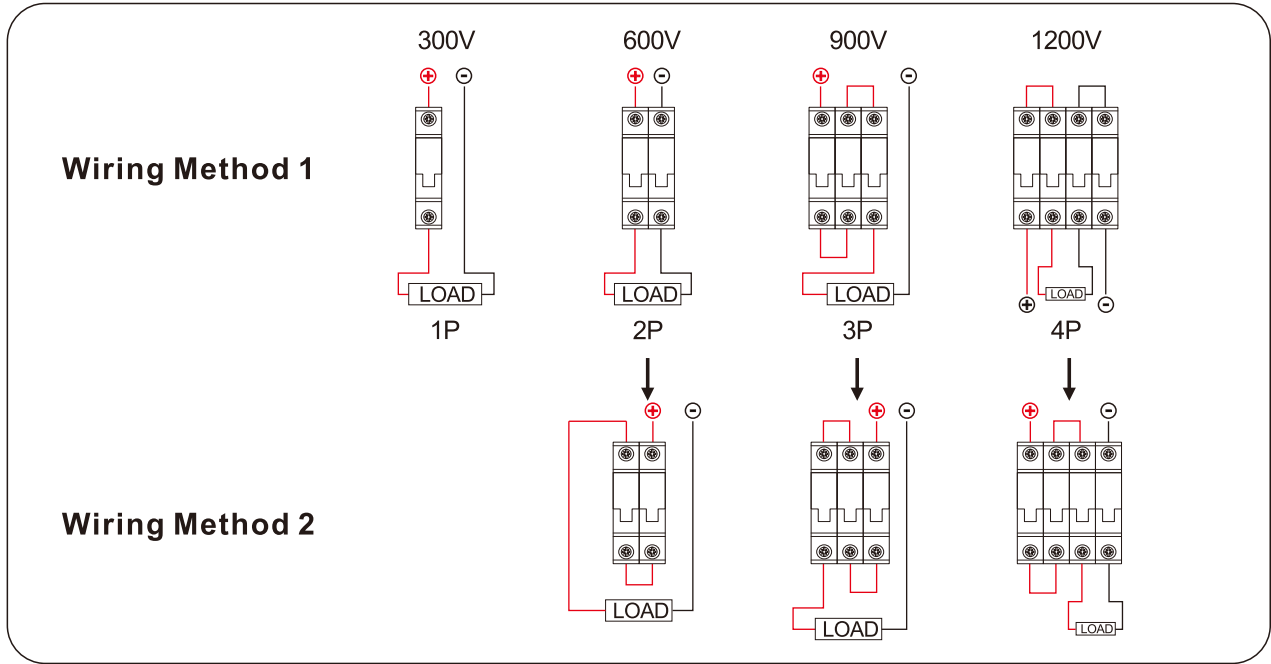
Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data	
Model	LQL7-PV
Feature	Short-circuit protection, overload protection
Pole	1P/2P/3P/4P
Rated Working Voltage Ue (V)	DC 300/600/900/1200, AC 230/400
Frame degree rated current (A)	63
Rated current In(A)	6/10/16/20/25/32/40/50/63
Rated Frequency (Hz)	50/60
Breaking Capacity Icu(kA)	6
impact voltage Uimp(kV)	4
Curve type	C
Trip type	Thermal-magnetic
Standard	IEC61643-1
Levels of Protection	IP20
Quality Certificate	CE,ISO9001,ROHS
Mechanical life (Maxtimes)	20000
Electrical life (Maxtimes)	6000
Operating Temperature	-20° C to +70° C
Humidity	≤95%
Altitude	2000m
Installation	35mm DIN Rail
Wiring capacity (mm²)	In ≤ 32A, 1~25mm², In ≥ 40A, 10~35mm²
Product Size L*W*H(mm)	75.5*18*80/75.5*36*80/75.5*54*80/75.5*72*80

Wiring diagrams



LQM1-125PV



Moulded Case Circuit Breaker(MCCB) DC 250V~1000V 63~125A



Completely disconnect
The Circuit



Overload
Protection

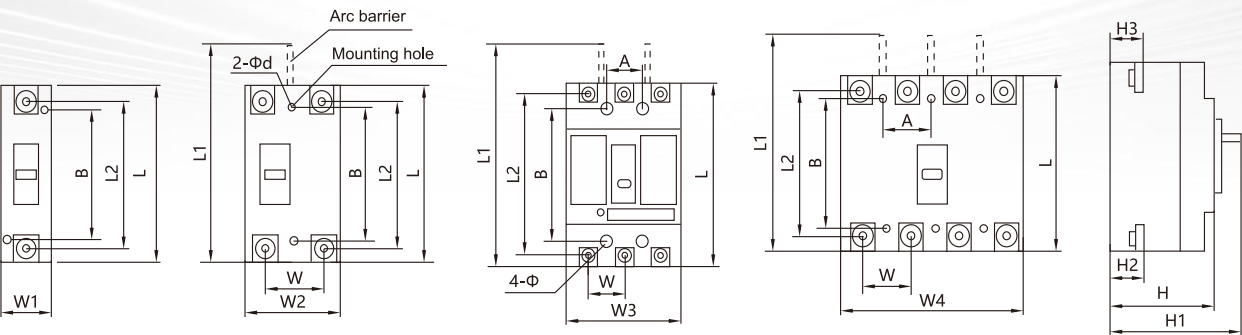


Short-Circuit
Protection



Flame-Retardant
Material

Product Dimension Drawing (mm)



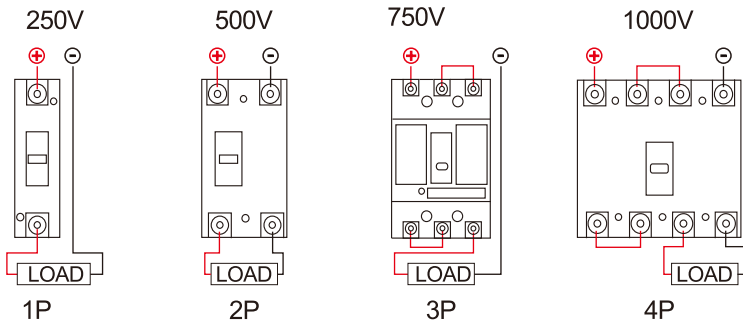
Model	External Dimensions(mm)													Installation Dimensions (mm)		
	Front panel connections															
	W1	W2	W3	W4	W5	L	H	W	L1	H1	H2	H3	L2	A	B	Φd
LQM1-125PV	38	65	92	120	23	150	86	30	200	104	24	24	132	30	129	4.5

Technical data

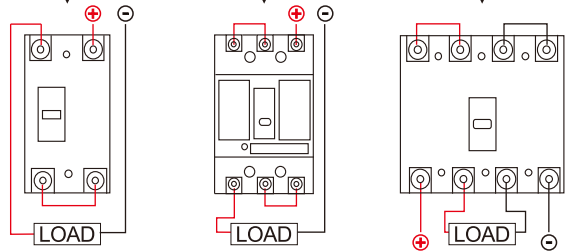
Model	LQM1-125PV			
Feature	Rapid circuit isolation, short-circuit protection, overload protection			
Pole	1P	2P	3P	4P
Rated voltage Ue (DC V)	DC 250/500/750/1000			
Rated voltage Ue (AC V)	12~690			
Rated Insulation Voltage Ui (V)	1600			
Rated Current In (A)	63/80/100/125			
Frame Degree Rated Current (A)	125			
Rated Frequency (Hz)	50/60			
Rated Impulse Withstand Voltage Uimp (kV)	8			
Breaking Capacity Icu (kA)	20			
Operating BreakingCapacity Ics (kA)	15			
Trip Type	Thermal-magnetic			
Standard	IEC60947-2/GB14048.2			
Mechanical Life (times)	20000			
Electrical Life (times)	3000			
Housing Material	Bakelite			
Conductor Material	Copper			
Quality Certificate	CE ISO9001 ROHS			
Operating Temperature	-35°C to +70°C			
Humidity	≤95%			
Altitude	≤2000m			
Installation	Fixed,plug			
Accessory Function	alarm contacts, shunt release, undervoltage release			
Product Size L*W*H mm	150*38*88	150*65*88	150*91*88	150*121*88

Wiring diagrams

Wiring Method 1



Wiring Method 2



LQM1-250PV

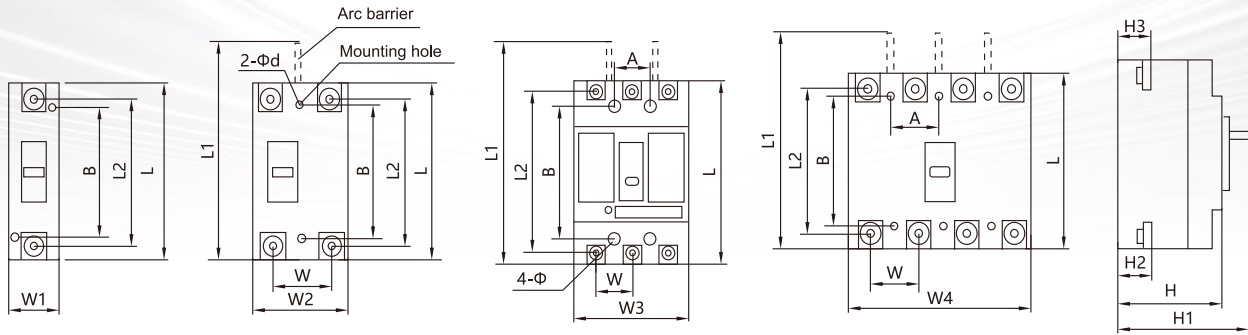


Moulded Case Circuit Breaker(MCCB) DC 250V~1000V 160~250A



- Completely disconnect The Circuit
- Overload Protection
- Short-Circuit Protection
- Flame-Retardant Material

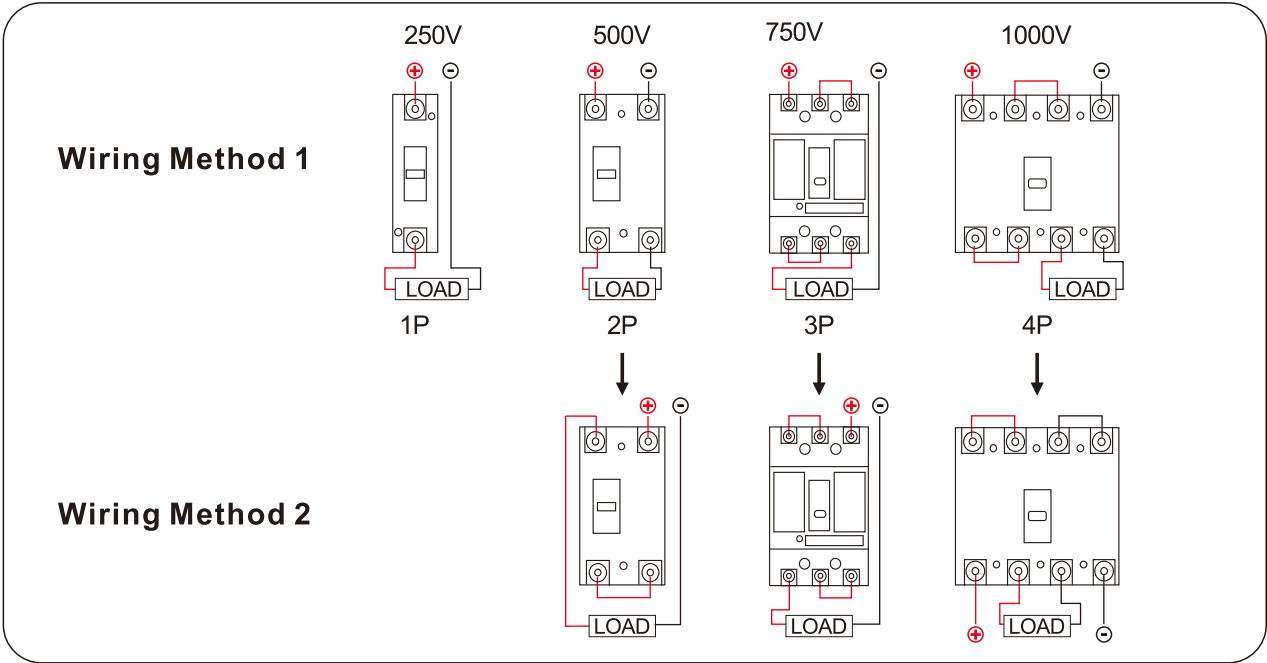
Product Dimension Drawing (mm)



Model	External Dimensions(mm)													Installation Dimensions (mm)		
	Front panel connections															
	W1	W2	W3	W4	W5	L	H	W	L1	H1	H2	H3	L2	A	B	Φd
LQM1-250PV	43	74.5	107	142	24	165	103	35	215	127	24	24	144	35	126	5

Technical data				
Model	LQM1-250PV			
Feature	Rapid circuit isolation, short-circuit protection, overload protection			
Pole	1P	2P	3P	4P
Rated voltage Ue (DC V)	DC 250/500/750/1000			
Rated voltage Ue (AC V)	12~690			
Rated Insulation Voltage Ui (V)	1600			
Rated Current In (A)	160/180/200/225/250			
Frame Degree Rated Current (A)	250			
Rated Frequency (Hz)	50/60			
Rated Impulse Withstand Voltage Uimp (kV)	8			
Breaking Capacity Icu (kA)	20			
Operating BreakingCapacity Ics (kA)	15			
Trip Type	Thermal-magnetic			
Standard	IEC60947-2/GB14048.2			
Mechanical Life (times)	20000			
Electrical Life (times)	3000			
Housing Material	Bakelite			
Conductor Material	Copper			
Quality Certificate	CE,ISO9001,ROHS			
Operating Temperature	-35°C to +70°C			
Humidity	≤95%			
Altitude	≤2000m			
Installation	Fixed,plug			
Accessory Function	alarm contacts, shunt release, undervoltage release			
Product Size L*W*H mm	165*43*108	165*75*108	165*106*108	165*141*108

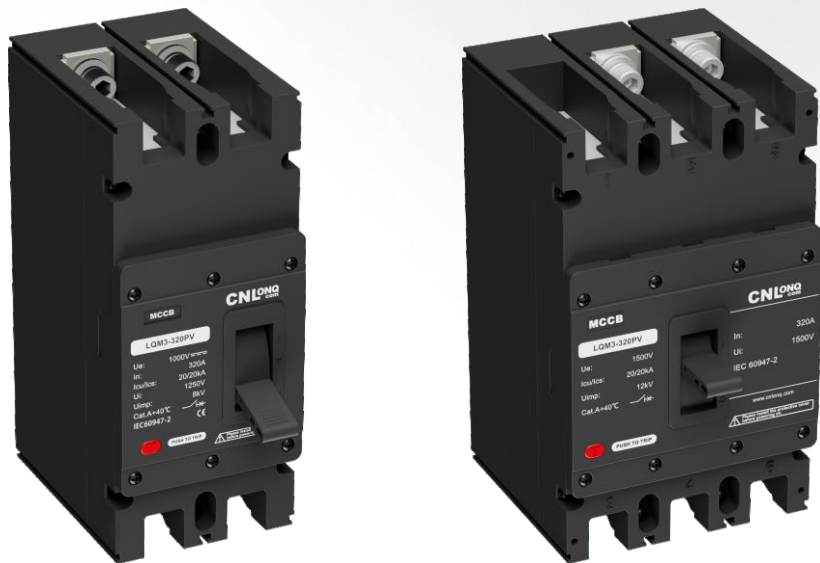
Wiring diagrams



LQM3-320PV



Moulded Case Circuit Breaker(MCCB) DC 1000V~1500V 63~320A



Completely disconnect
The Circuit



Overload
Protection

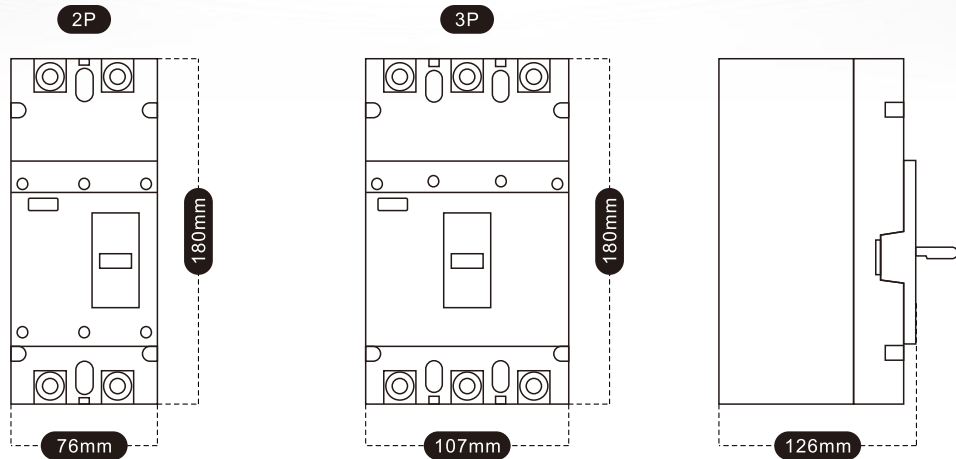


Short-Circuit
Protection



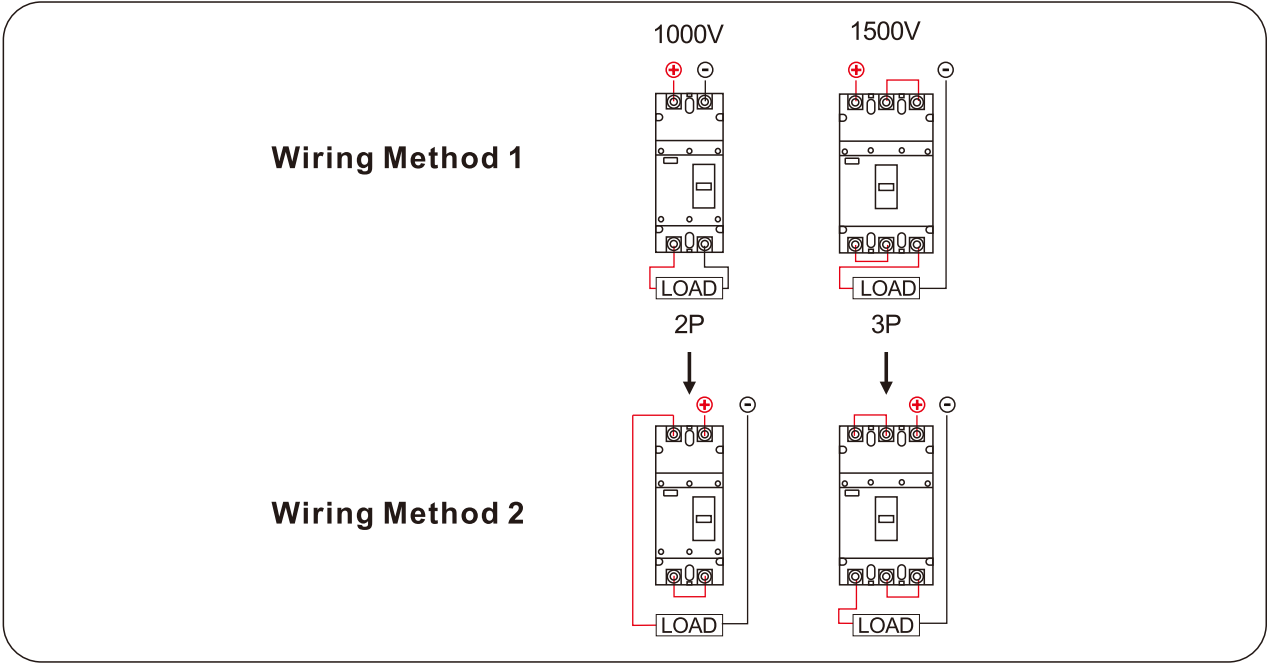
Flame-Retardant
Material

Product Dimension Drawing (mm)



Technical data	
Model	LQM3-320PV
Feature	Rapid circuit isolation, short-circuit protection, overload protection
Pole	2P/3P
Rated voltage Ue (DC V)	1000/1500
Rated Insulation Voltage Ui (V)	1250/1500
Rated Current In (A)	63/100/125/160/180/200/225/250/300/320
Frame Degree Rated Current (A)	320
Uimp (kV)	8
Breaking Capacity Icu (kA)	20
Operating BreakingCapacity Ics (kA)	20
Trip Type	Thermal-magnetic
Standard	IEC60947-2/GB14048.2
Mechanical Life (times)	20000
Electrical Life (times)	3000
Housing Material	Bakelite
Conductor Material	Copper
Operating Temperature	-35°C to +70°C
Humidity	≤95%
Altitude	≤2000m
Installation	Fixed,plug-in
Accessory Function	alarm contacts, shunt release, undervoltage release
Product Size L*W*H (mm)	180*76*126/180*107*126

Wiring diagrams



LQM3-800PV



Moulded Case Circuit Breaker(MCCB) DC 1500V 400~800A



Completely disconnect
The Circuit



Overload
Protection

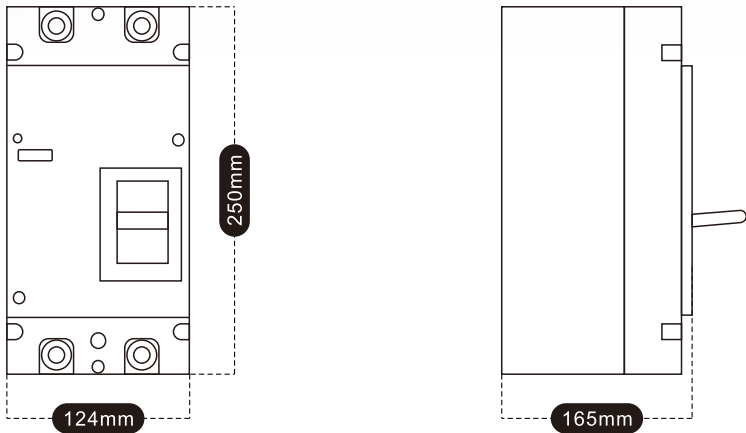


Short-Circuit
Protection



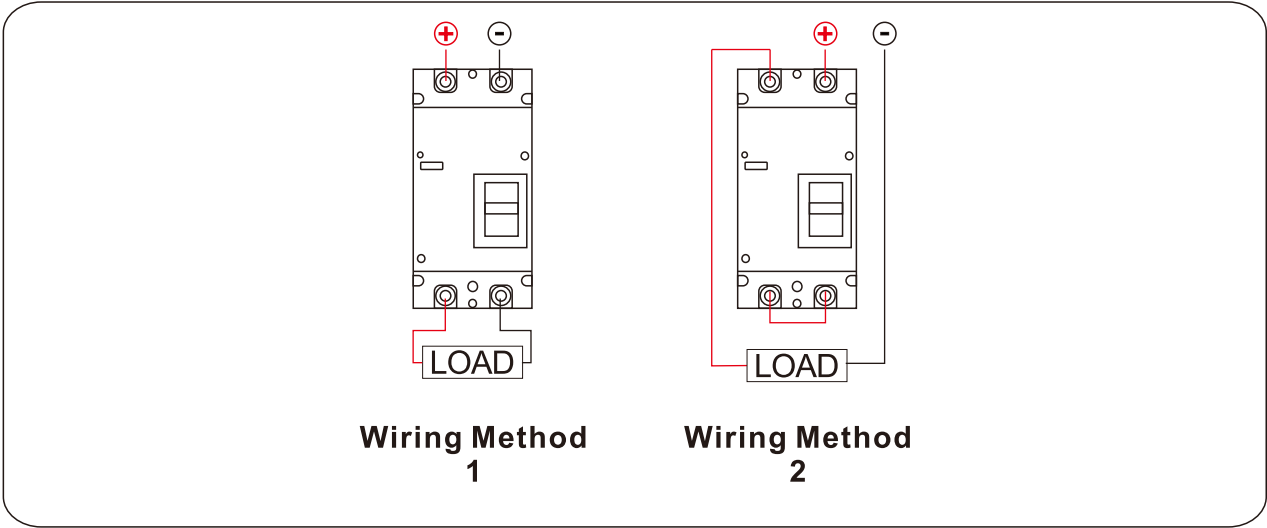
Flame-Retardant
Material

Product Dimension Drawing (mm)



Technical data	
Model	LQM3-8000PV
Feature	Rapid circuit isolation, short-circuit protection, overload protection
Pole	2P
Rated voltage Ue (DC V)	1500
Rated Insulation Voltage Ui (V)	1500
Rated Current In (A)	400/450/500/630/700/800
Frame Degree Rated Current (A)	800
Uimp (kV)	12
Breaking Capacity Icu (kA)	20
Operating BreakingCapacity Ics (kA)	20
Trip Type	Thermal-magnetic
Standard	IEC60947-2/GB14048.2
Mechanical Life (times)	5000
Electrical Life (times)	1000
Housing Material	Bakelite
Conductor Material	Copper
Operating Temperature	-35°C to +70°C
Humidity	≤95%
Altitude	≤2000m
Installation	Fixed,plug-in
Accessory Function	alarm contacts, shunt release, undervoltage release
Product Size L*W*H (mm)	250*124*165

Wiring diagrams



LD3-40PV



Surge Protection Device(SPD)

DC 500V~1500V



Lightning Protection



Surge Protection

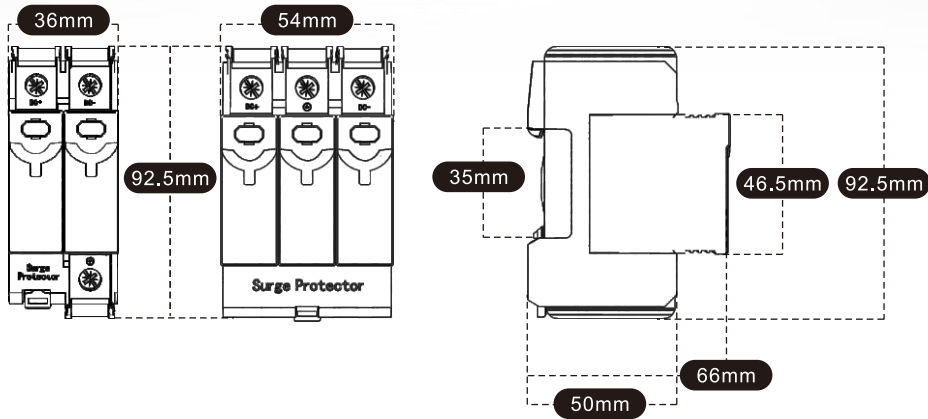


Instruction Window



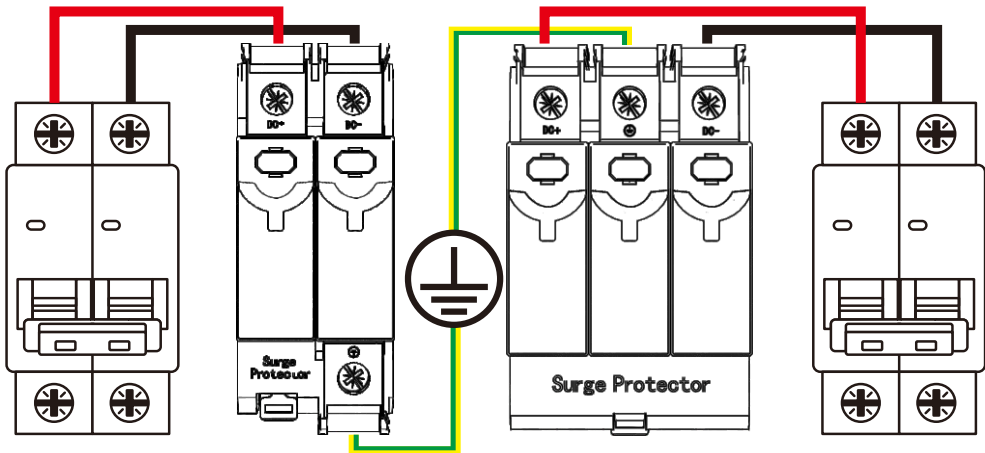
Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data	
Model	LD3-40PV
Feature	Lightning protection, surge protection
Pole	2P/3P
Rated Working Voltage Ue (V)	DC500/600/800/1000/1200/1500
Up(kV)	2.2/2.5/3.6/5.3
Classified Test	II
In (8/20)us (kA)	20
Imax (8/20)us (kA)	40
Standard	IEC61643-31
lightning Protection	Yes
Operating Temperature	-30°C to +70°C
Humidity	≤95%
Altitude	2000m
Installation	35mm DIN Rail
Product Size (mm)	92.5*36*66/92.5*54*66

Wiring diagrams



+ , - pole enters from above, 2P earth wire from below, The ground wire for the 3P is in the upper center.

LQR3-32/LQR3-32X



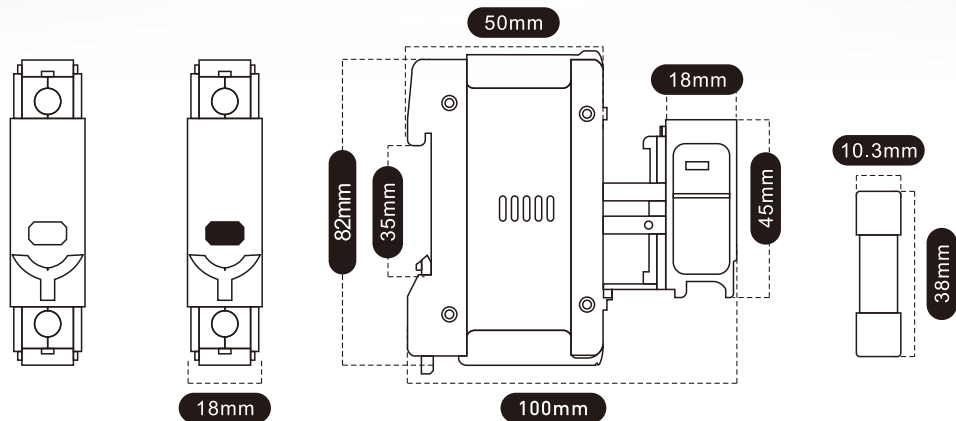
DC Fuse

DC 1000V 32A



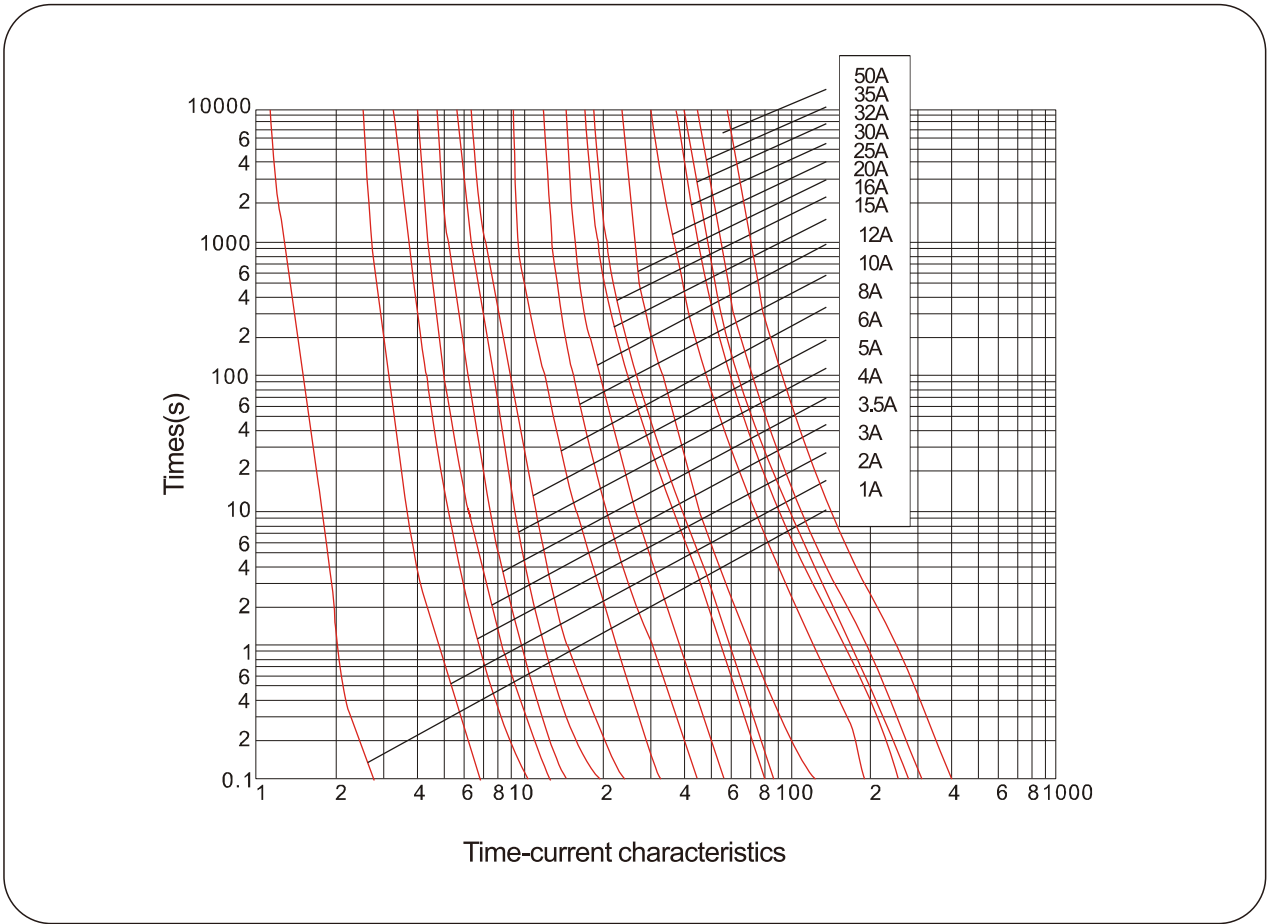
- PBT Fireproof and flame-retardant
- Overload Protection
- Short-Circuit Protection
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data		
Model	LQR3-32	LQR3-32X
Feature	Overload protection, short-circuit protection	
Pole	1P/2P	
Rated Current In(A)	1/2/3/4/5/6/8/10/12/15/16/20/25/30/32	
Rated Voltage Ue (V)	DC1000	
Indicator light	×	√
Flame Retardant Rating	UL94V-0	
Breaking capacity	33kA	
standard	IEC60269-6	
Fuse Size (mm)	10*38	
Housing Material	PBT	
Operating Temperature	-30°C to +70°C	
Humidity	≤95%	
Altitude	2000m	
Installation	35mm DIN Rail	
Product Size (mm)	68*18*82	

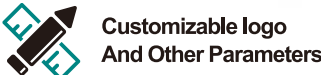
Melting Characteristics Graph



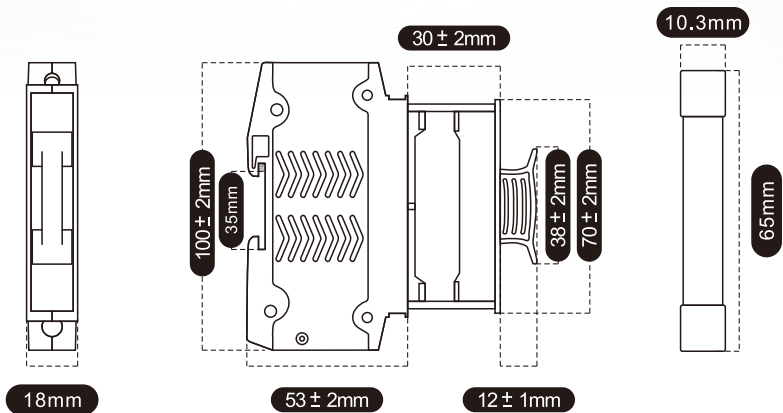
LQR6-35

DC FUSE

DC 1500V 35A

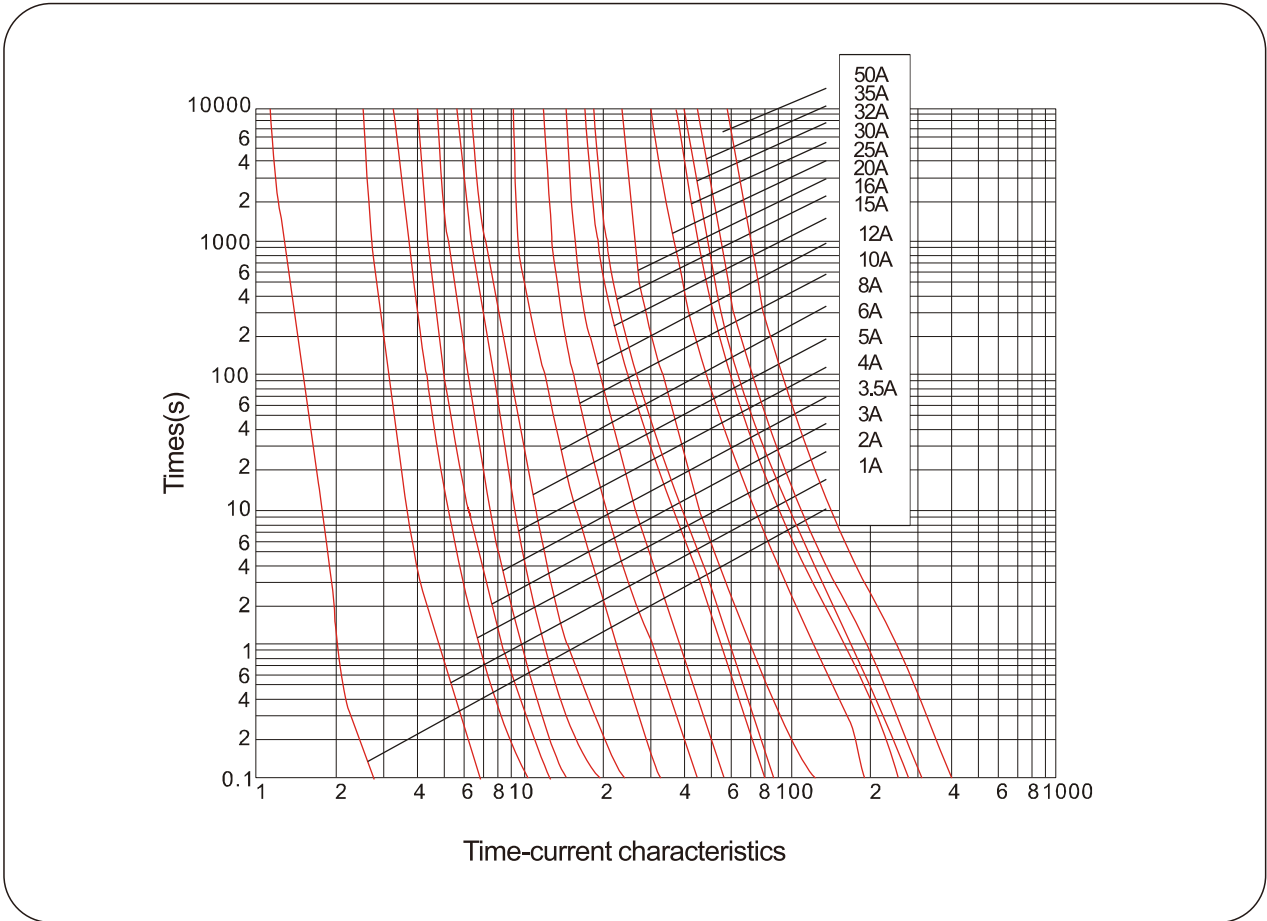


Product Dimension Drawing (mm)



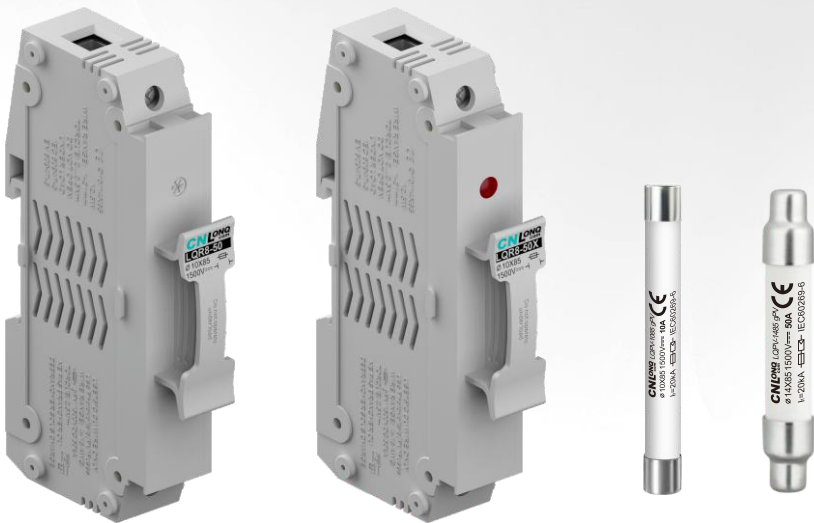
Technical data	
Model	LQR6-35
Feature	Overload protection, short-circuit protection
Pole	1P/2P
Rated Current In(A)	1/2/3/4/5/6/8/10/12/15/16/20/25/30/32/35
Rated Voltage Ue (V)	DC1500
Indicator light	×
Flame Retardant Rating	UL94V-0
Breaking capacity	40kA
standard	IEC60269-6
Fuse Size (mm)	10*65
Housing Material	PA
Operating Temperature	-30°C to +70°C
Humidity	≤95%
Altitude	2000m
Installation	35mm DIN Rail
Product Size (mm)	18*100*53mm

Melting Characteristics Graph



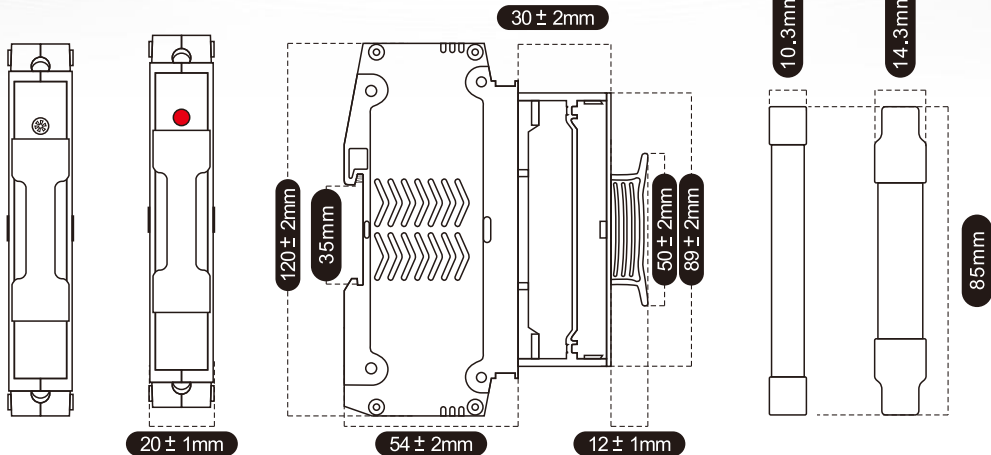
LQR8-50/LQR8-50X

DC FUSE
DC 1500V 50A



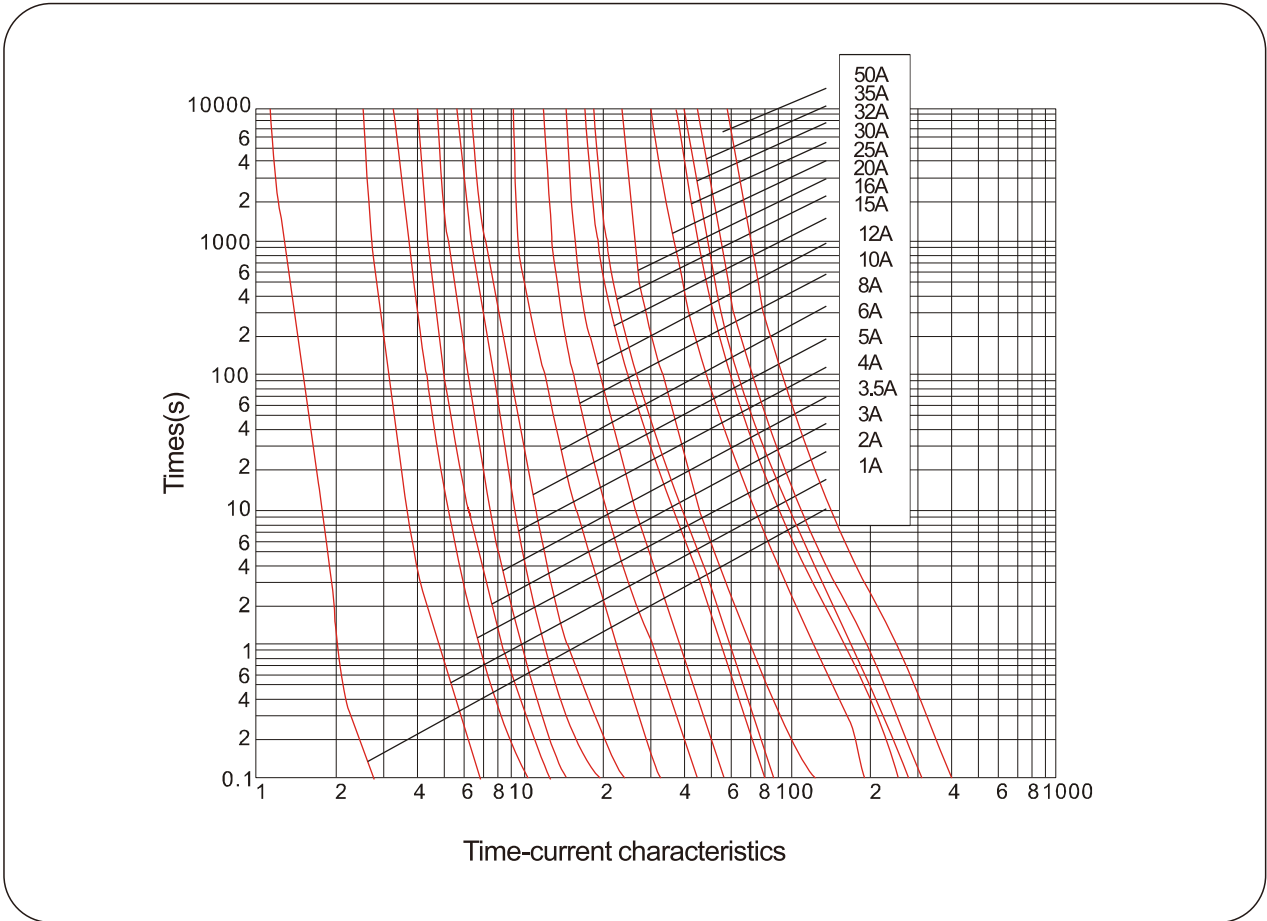
- PA Fireproof and flame-retardant
- Overload Protection
- Short-Circuit Protection
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



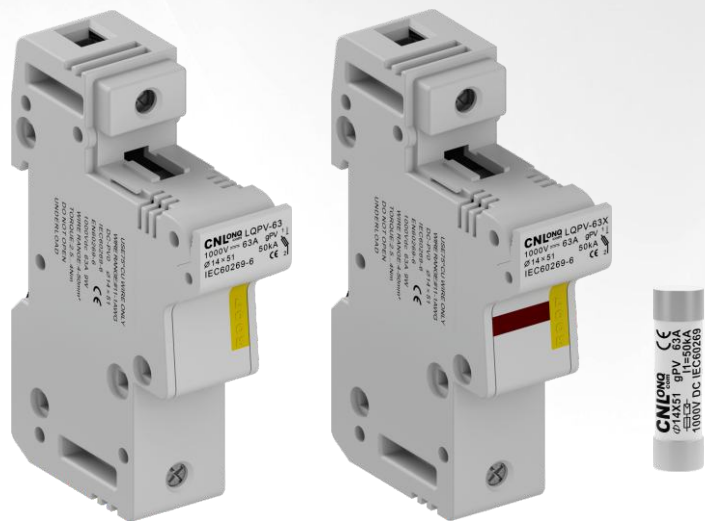
Technical data		
Model	LQR8-50	LQR8-50X
Feature	Overload protection, short-circuit protection	
Pole	1P/2P	
Rated Current In(A)	1/2/3/4/5/6/8/10/12/15/16/20/25/30/32/35/40/45/50	
Rated Voltage Ue (V)	DC1500	
Indicator light	×	√
Flame Retardant Rating	UL94V-0	
Breaking capacity	50kA	
standard	IEC60269-6	
Fuse Size (mm)	10*85/14*85	
Housing Material	PA	
Operating Temperature	-30°C to +70°C	
Humidity	≤95%	
Altitude	2000m	
Installation	35mm DIN Rail	
Product Size (mm)	20*120*54mm	

Melting Characteristics Graph



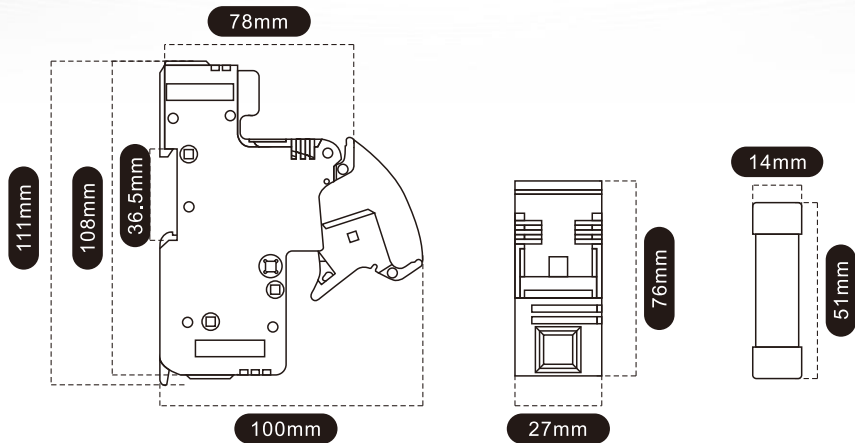
LQPV-63/LQPV-63X

DC Fuse
DC 1000V 63A



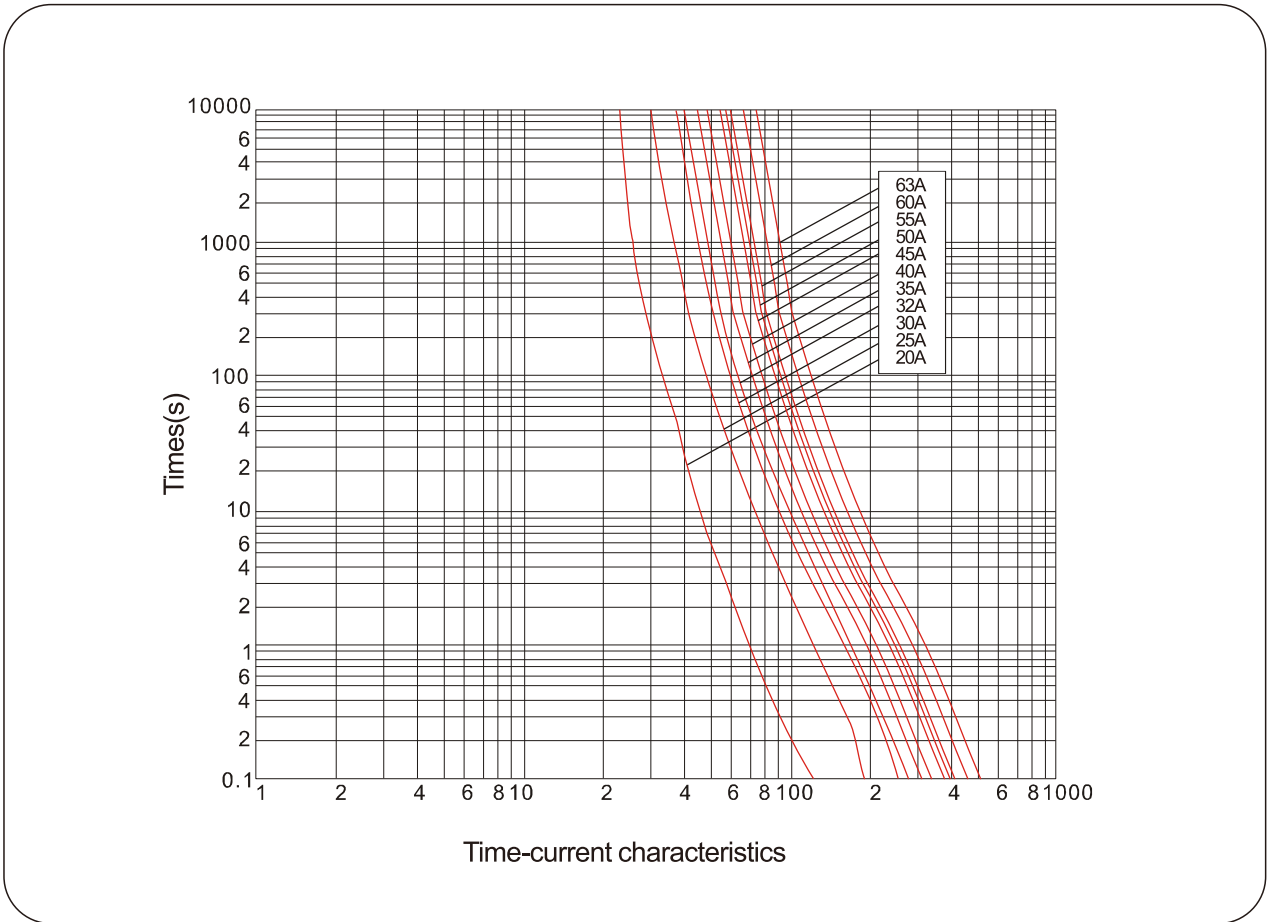
- PA Fireproof and flame-retardant
- Overload Protection
- Short-Circuit Protection
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data		
Model	LQPV-63	LQPV-63X
Feature	Overload protection, short-circuit protection	
Pole	1P/2P	
Rated Current In(A)	8/10/12/15/16/20/25/30/32/35/40/45/50/55/63	
Rated Voltage Ue (V)	DC1000	
Indicator light	×	√
Flame Retardant Rating	UL94V-0	
Breaking capacity	50kA	
standard	IEC60947-1 IEC60947-3	
Fuse Size (mm)	14*51	
Housing Material	PA	
Operating Temperature	-30°C to +70°C	
Humidity	≤95%	
Altitude	2000m	
Installation	35mm DIN Rail	
Product Size (mm)	76*27*108	

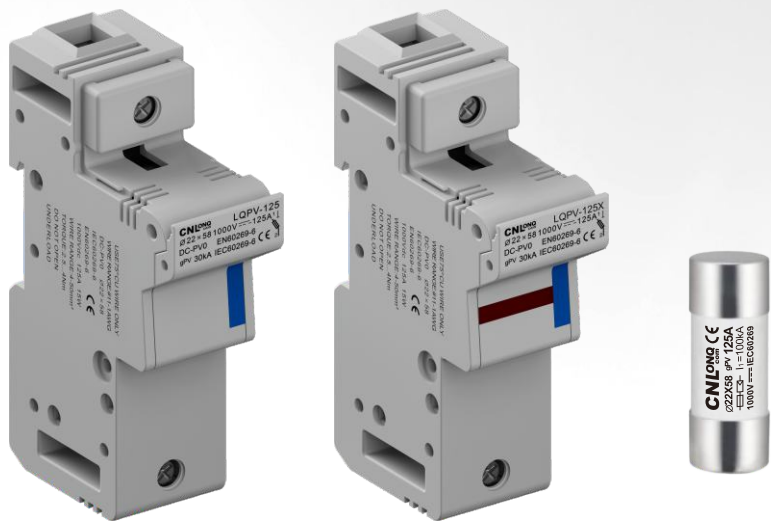
Melting Characteristics Graph



LQPV-125/LQPV-125X

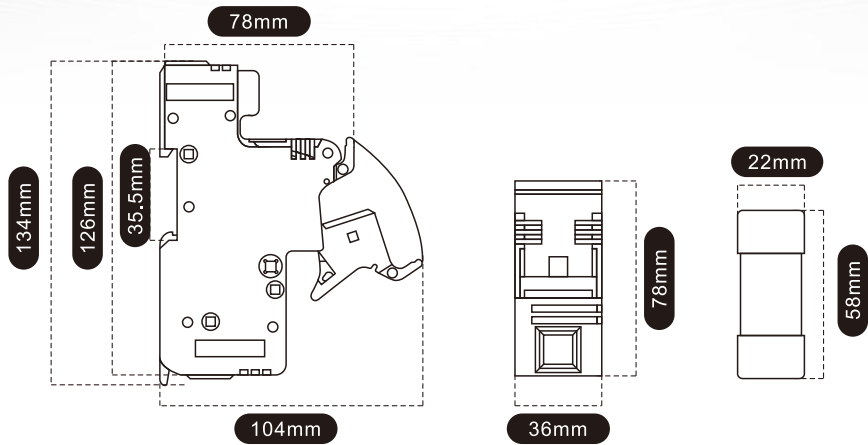


DC Fuse
DC 1000V 125A
DC 1500V 80A



- PA Fireproof and flame-retardant
- Overload Protection
- Short-Circuit Protection
- Customizable logo And Other Parameters

Product Dimension Drawing (mm)



Technical data		
Model	LQPV-125	LQPV-125X
Feature	Overload protection, short-circuit protection	
Pole	1P/2P	
Rated Current In(A)	8/10/12/15/16/20/25/30/32/35/40/45/50/55/63/65/70/75/80/90/100/110/125	
Rated Voltage Ue (V)	DC1000/1500	
Indicator light	×	√
Flame Retardant Rating	UL94V-0	
Breaking capacity	125kA	
standard	IEC60947-1 IEC60947-3	
Fuse Size (mm)	22*58	
Housing Material	PA	
Operating Temperature	-30°C to +70°C	
Humidity	≤95%	
Altitude	2000m	
Installation	35mm DIN Rail	
Product Size (mm)	78*36*126	

Melting Characteristics Graph

