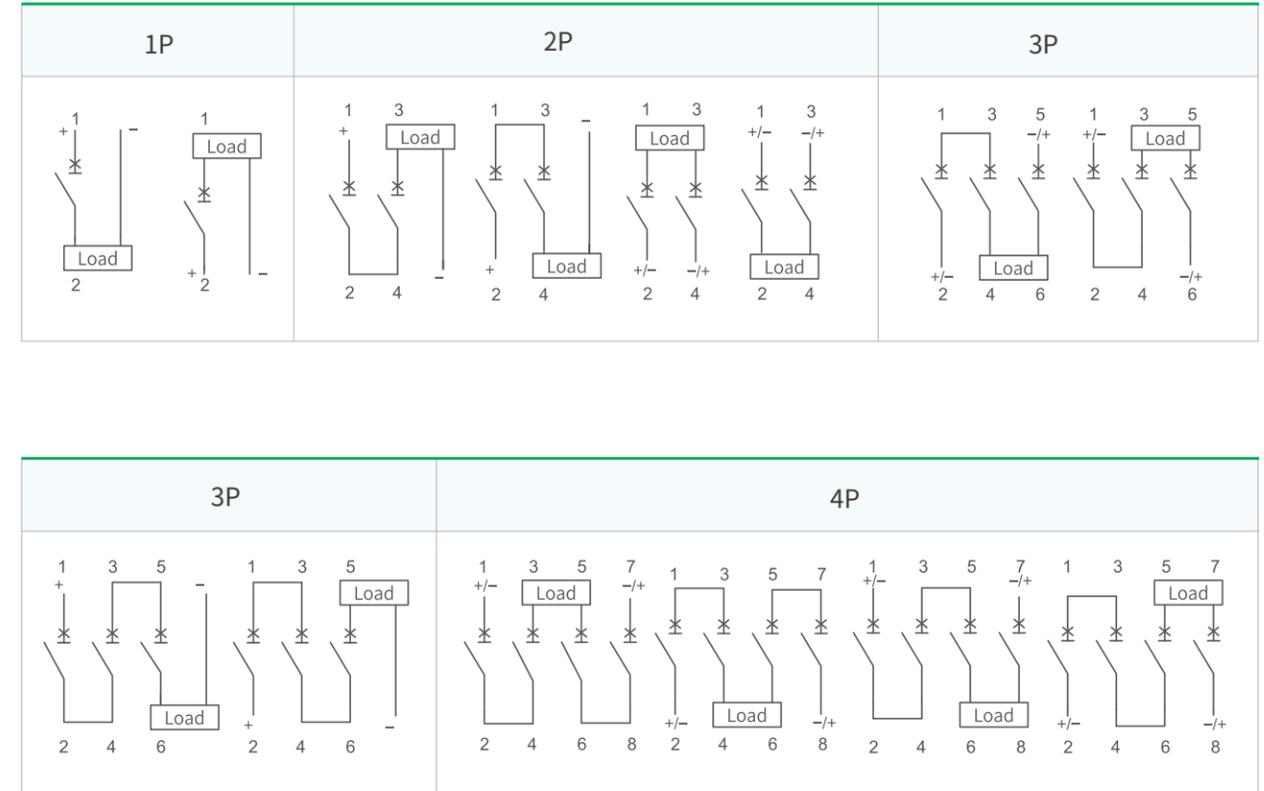


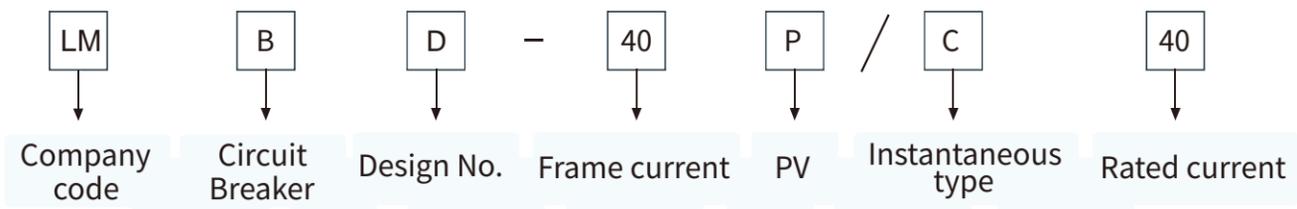
# LMBD-40P Series(DC)



## DC wiring diagram



## Specifications and model description

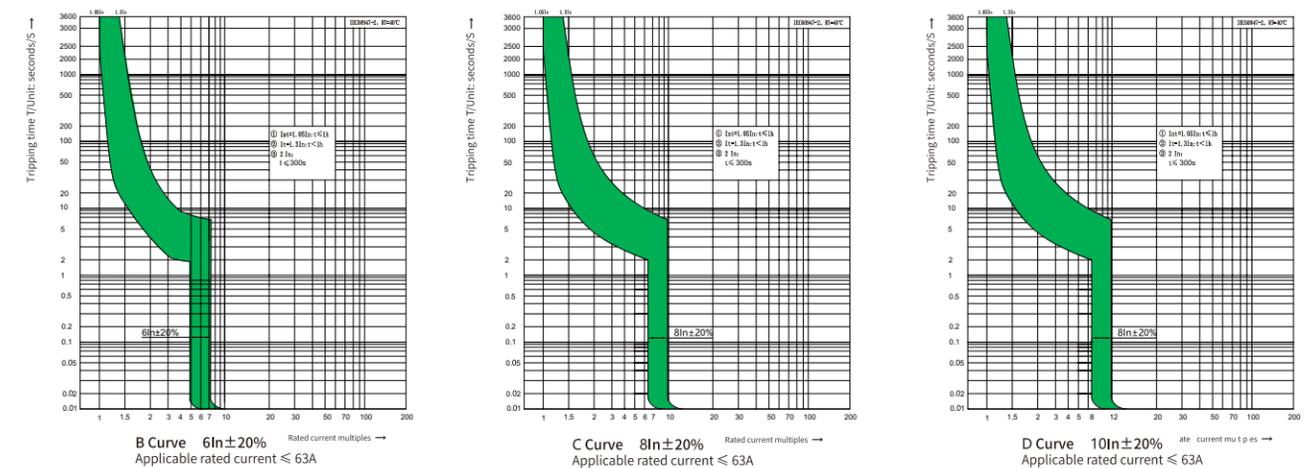


Exquisite craftsmanship High standards High requirements

Focus on details to achieve high quality

-   
Compact size
-   
Short circuit protection
-   
Overload protection
-   
Flame-retardant materials
-   
High segmentation
-   
Short arcing
-   
Complete attachments
-   
Multiple wiring options

## Tripping characteristics



## Technical Data

Standard:EN60947-2、AS/NZS IEC 60947.2 GB/T14048.2				
Pole	1P	2P	3P	4P
Rated Operational Voltage Ue	500VDC	1000VDC	1500VDC	1500VDC
Shell Level Rated Current	40A			
Rated Current In	6A, 10A, 16A, 20A, 25A, 32A,40A			
Rated Insulation Voltage Ui	1000V		1500V	
Rated Impulse Withstand Voltage Uimp	8kV			
Tripping Characteristic	B/C/D			
Tripping mechanism type	Thermal-magnetic			
Ultimate Breaking Capacity Icu	1.5 kA			
Operational breaking capability Ics	1.5 kA			
Electrical life	Actual Mean	Average 1000 times		
	Standard Reference Value	300 Times		
Mechanical life	Actual Mean	≥15000 Times		
	Standard Reference Value	9700 Times		
Overvoltage Category	III			
Pollution Degree	3			
Ingress Protection (IP) rating	IP40; Terminal IP20			
Damp Heat Resistance	Category 2			
Relative Humidity	≤95%			
Vibration Resistance	According to IEC60068-2-6			
Mechanical Shock Resistance Parameters	According to IEC60068-2-27			
Terminal capacity	2.5~35mm <sup>2</sup>			
Terminal Connection Torque	3.0Nm			
Operating Temperature Range	-30°C~+70°C			
Storage Temperature Range	-40°C~+85°C			
Installation Method	DIN35			
Altitude	≤2000m			
Dimension	Length: 108mm			
	Width: 72mm (4P), 54mm (3P), 36mm(2P), 18mm (1P)			
	Height: Max78mm			
Weight	0.13kg/Pole			

### Package & Storage

Current	No. of poles	pcs/box	box/carton	carton/holder	
40A	1P	12	10	80	Products should be stored in a ventilated warehouse. The relative humidity should not exceed 80%, and the ambient temperature should be between -40°C and +85°C, and there should be no acidic, alkaline and corrosive gases.
	2P	6	10	80	
	3P	4	10	80	
	4P	3	10	80	

## Accessory

### Shunt Release MX Technical Specifications

Rated Control Voltage Us	DC:24~48V AC:110~230V
Maximum Tripping Time	< 10ms
Coil Resistance	5Ω
Current Limiting	≥16A
Mechanical Life	10000 times
Electrical Life	4000 times
Terminal Torque	2.5~3.5 N·m
Terminal Capacity	1~35mm <sup>2</sup> (Rigid cable), 1~35mm <sup>2</sup> (Flexible cable, with crimp terminal lugs)
Operating Temperature Range	-30°C~+70°C
Environmental conditions	There shall be no medium that may cause an explosion hazard, and no harmful gases and conductive dusts that may corrode and damage the insulation.
Installation Location	The left side of the circuit breaker
Installation conditions	Mounting on DIN 35mm standard rail

### Auxiliary Contact OF Technical Specifications

Breaking Capacity	Ac13: Ie=3A;Ue=250V
	AC15: Ie=2A;Ue=250V
	AC12: Ie=0.5A;Ue=110V
Minimum Operating Voltage	5V
Minimum Operating Current	10mA
Rated Insulation Voltage	500V
Rated short-circuit current limiting I <sub>k</sub>	1000A
Conventional Thermal Current I <sub>th</sub>	4A
Mechanical Life	10000次
Electrical Life	4000次
Terminal Torque	0.3~0.8 N·m
Terminal Capacity	1x1.0 ~1x2.5 mm <sup>2</sup>
Number of contacts	1 normally open, 1 normally closed
Operating Temperature Range	-30°C~+70°C
Environmental conditions	There shall be no medium that may cause an explosion hazard, and no harmful gases and conductive dusts that may corrode and damage the insulation.
Installation Location	The left side of the circuit breaker
Installation conditions	Mounting on DIN 35mm standard rail

## Derating factor

Temperature Derating Factor Table

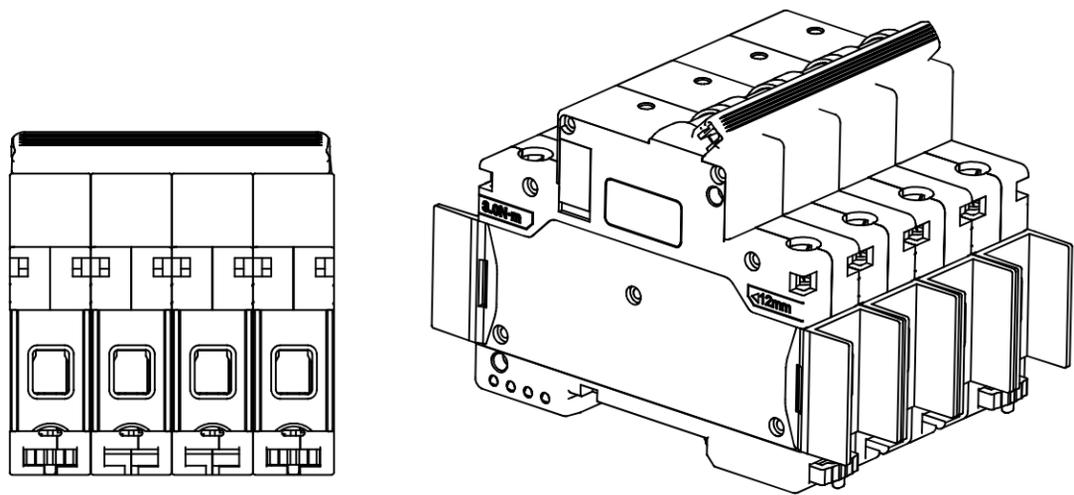
Temperature	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C
Rated Operating Current Coefficient	1.279	1.261	1.242	1.223	1.204	1.182	1.161	1.143	1.127	1.103
Temperature	20°C	25°C	30°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
Rated Operating Current Coefficient	1.079	1.063	1.047	1	0.984	0.968	0.952	0.922	0.904	0.891

Altitude derating factor table

Altitude /m	2000	3000	4000	5000
Rated working current coefficient	1	0.96	0.91	0.86
Rated operating voltage coefficient	1	1	1	1
Rated power frequency withstand voltage coefficient	1	0.9	0.82	0.71
Rated impulse withstand voltage coefficient	1	0.9	0.82	0.71
Rated limit short circuit segment capacity and electrical life coefficient	1	0.82	0.7	0.6

Derating factor table for side-by-side installation of MCBs

No. of MCB	1	2~3	4~5	6~8	9~10
$I_n \leq 25A$ Coefficient	1	0.96	0.9	0.8	0.7
$32A \leq I_n \leq 63A$ Coefficient	1	0.92	0.8	0.7	0.6



## Outline Overall And Installing Dinmensions

Unit:mm

