



### Rotary handle operation device



Under-voltage release



Shunt release



Alarm contact



Auxiliary contact

# LM1L Series Earth Leakage Circuit Breaker

# **Rotary handle operation device**

The mechanism is used in moulded case circuit breaker to operate the draw-out panel. Power distribution panel and supply box outside the panel by turning the handle, and to ensure the door of panel would not be openned when the breaker being on.

The hand-drive mechanism can be equiped with two types of operation one is"A" model square handle, the other is "B" model round handle.

#### The internal accessories of the breaker

## Release pattern and accessories code see following table



SHT: Shunt release; AX: Auxiliary contact; UVR: Under-voltage release; AL: Alarm contact

Release pattern and accessories code	Type Name	LM1L-100,225	LM1L-400	LM1L-630
200,300	No accessories	200: Magnetic release (only short circuit protection) 300: Thermal magnetic release(both overload and short circuit protection)		
208,308	Alarm contact	AL	AL	AL
210,310	Shunt release	SHT	SHT	SHT
220,320	Auxiliary contact	AX	AX	AX
230,330	Under-voltage release	UVR	UVR	UVR
228,328	Auxiliary contact Alarm contact	AL AX	AL AX	AL AX

## The technical parameter and functions of the accessories

Accessory	Rated operating voltage(V)				
Accessory	AC50Hz		DC		
Shunt Release Us	220(230)	380(400)	110	220	
Under-voltage Release Us	220(230)	380(400)			

Auxiliary contact and Alarm contact: Auxiliary contact is as some as Alarm contact, the technical parameter see following table

Rated heating	Rated operating current le(A)		Suited Frame Inm(A)
current Ith(A)	AC380V	DC220V	Surrea Hame min(A)
3	0.3	0.15	100,225
3	0.4	0.15	400,630

Accessories name	Function	Wiring connection diagram
Alarm contact	Indicate circuit breaker at tripping	B14B12B11 B12B11 The position of breaker at opening and closing
Auxiliary contact	Indicate circuit breaker at opening or closing	B14F0F11 B12F0F11 The position of breaker at opening
Shunt release	The shunt release should make the breaker trip reliably when the operation voltage is 70%-110% of rated control voltage	The microswitch will $\Gamma$
Under-voltage	When Ue is 35%-70% of the rated control voltage, the under voltage release should make the breaker trip correctly When Ue is 85%-110% of the rated control voltage, the under voltage release should make the breaker close In case of Ue less than 35% of the rated control voltage should prevent the breaker from closing	P1 P2

