



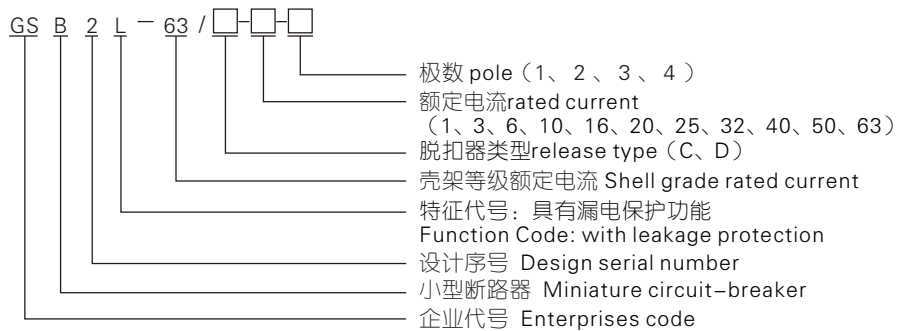
## GSB2L-63系列漏电断路器 GSB2L-63 Range Leakage Circuit Breakers

### 一、用途 APPLICATION

GSB2L-63系列漏电断路器是由GSB2系列小型断路器加装漏电模块组成，其适用于交流50Hz或60Hz，额定工作电压至415V,额定电流至63A及以下的电路中，除作为人身间接触电和设备绝缘故障引起的漏电保护之用外，还对线路的过载和短路起到保护作用。在正常情况下，亦作为线路的不频繁转换和电动机的不频繁启动之用。

GSB2L-63 range leakage circuit breakers by GSB2 range of miniature circuit-breaker modules to install residual current operated circuit breakers, which applies to the AC 50Hz or 60Hz, rated voltage to 415V, rated current between 63 and the following circuit , As an addition to the personal indirect electric and shock equipment failure caused by insulation protection leakage purposes, but also on the line overload and short circuit protection . Under normal circumstances, also as a line of non-frequent switching and motor does not start frequently used.

### 二. 型号含义 TYPE AND MEANS



### 三.工作条件与安装条件 WORKING CONDITION AND INSTALLATION CONDITION

- 周围空气温度不超过+40℃，并且在24h内的平均温度不超过+35℃，周围空气温度的下限是-5℃；  
Environment temperature : -5℃ ~ +40℃, the average hours of temperature exceeding +35℃ during 24 hours.
- △ 安装地点的海拔不超过2000m; Elevation: ≤2000m
- △ 安装地点大气相对湿度在周围空气温度为+40℃时不超过50%，在较低温度下可以有较高的相对湿度，最湿月平均最大相对湿度为90%，同时该月的月平均最低温度为+25℃，并考虑到因温度变化发生在产品表面上的凝露；  
No exceeding 50% at the maximum ambient temperature of 40℃.with lower temperature, higher humidity would be permitted, for example ,with temperature 20℃, the humidity can exceed 90%.Take the special measure to the dews on the surface, which would appear due to temperature change
- △ 污染等级为 2; Pollution protection: Grade 2
- △ 安装类别为 III ; Installing categories: Class III
- △ 安装位置的外磁场强度在任何方向都不应超过地磁场强度的5倍;

Installation location of the external magnetic field strength should not be in any direction to magnetic field strength of more than 5 times

△ 安装方式为35mm标准卡轨； Mounted by 35mm standard rail track

△ 无明显摇动和冲击振动的地方；

Products should be used in no significant impact and vibration place

△ 接线为螺钉式接线端子；

Wiring for the screw-type terminal block

△ 以主电源为辅助电源， $U_i \geq 50V$ 。

To the main power for auxiliary power,  $U_i \geq 50V$ 。

#### **四.结构及工作原理**

#### **THE STRUCTURE AND WORKING PRINCIPLE**

■ 漏电模块由零序电流互感器、电子功率放大模块和电磁脱扣器组成，其通过联动杆与GSB2小型断路器的脱扣机构相连。当被保护电路出现绝缘故障或发生人身触电事故时，零序电流互感器一次侧中瞬时电流的矢量和不为 $(I_A + I_B + I_C + I_N \neq 0)$ ，零序电流互感器二次绕组中便产生感生电压，该电压经电子功率放大模块放大后加在电磁脱扣器的脱扣线圈上，当泄漏电流达到整定的动作值时，电磁脱扣器吸合，拉动联动杆使断路器分闸，主电路分断，从而达到漏电保护的作用。

Leakage module by the zero sequence current transformers, electronic power amplifier module and electromagnetic release component, and its linkage rod through the small circuit breakers with GSB2 institutions linked trip. When the circuit appears to be the protection of insulation failure of electric shock or personal accident, zero sequence current transformer in one side of the instantaneous current vector and non-zero  $(I_A + I_B + I_C + I_N \neq 0)$  transformer secondary windings will produce induced voltage, the voltage by the electronic power amplifier module to enlarge after the release of the release of electromagnetic coils, when the leakage current setting to achieve the value of the action, the release of electromagnetic pull-in, so that the pull-bar linkage circuit Sub-gate, the main circuit breaking, so as to achieve leakage protection.

■ 注：漏电断路器可以按照用户的要求增加分励功能和过压保护功能。

Note: The leakage circuit breakers in accordance with the user's request to increase separation of functions and features over-voltage protection

△ 分励功能：漏电断路器可外接一组控制线路，实现产品的远程控制功能。

Separation of functions: leakage circuit breakers can be a group of external control circuit to achieve the remote control function products.

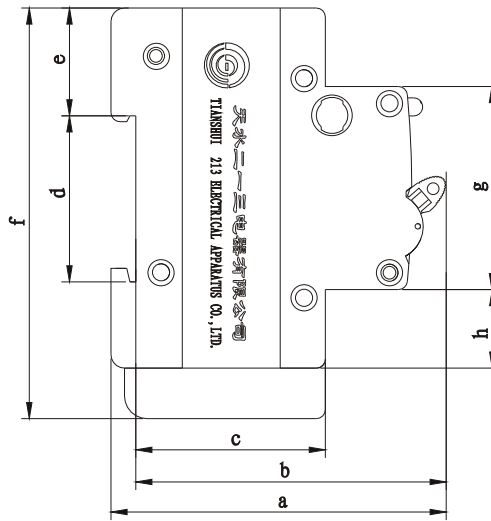
△ 过压保护功能：当电源电压上升到 $280V \pm 5\%$ 时，产品中过压感测元件导通，激励脱扣线圈，使脱扣器动作，带动联动拉杆，断开断路器，实现线路的过电压保护。

Over voltage protection function: When the supply voltage up to  $280V \pm 5\%$  of over-voltage sensing element conduction, incentive trip coil to release action, driven linkage rod, disconnect circuit breakers, the realization of cross lines voltage protection.

#### **五.主要技术参数 MAIN TECHNICAL PARAMETERS**

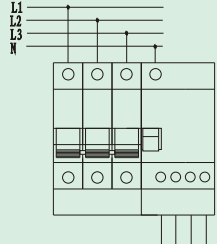
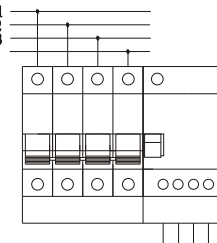
极数 Pole	额定电压 Rated voltage	额定电流 rated current (A)	分断能力 Breaking capacity (A)	机械电气寿命次数 Machine life span	额定漏电动作电流(mA) Rated leakage operating current	额定漏电不动作电流(mA) Rated leakage non-operating current	最大分断时间 The largest sub-off time (s)	连接导线截面积 Connecting wire cross-sectional area
1、2	240	1~40	6000	10000	30	15	0.1	适用于 25mm <sup>2</sup> 及以下的导线 Applicable to 25 mm <sup>2</sup> and below the wires
		50~63			50	25		
3、4	415	1~40			30	15		
		50~63			50	25		

## 六.接线及安装尺寸 WIRING AND INSTALLATION DIMENSIONS



编号 No.	a	b	c	d	e	f	g	h
尺寸 Size	75	69.5	42	37	22.5	91	45	17.4

极数 Pole	接线图示 Wiring picture	注意事项 Notice matters	组装后的宽度 After the width of the assembly (mm)
单极 Single pole		1.N线不能断开; N line can not be disconnected 2.相零线不可接错; Phase Zero line can not take the wrong 3.适用于240V电路中。 240V apply to the circuit	54
二极 Two poles		1.相零线可同时断开; At the same time, zero phase line can be disconnected 2.适用于240V电路中。 240V apply to the circuit	72

<p>三极 Three poles</p>		<p>1.电源端必须接零线; Supply-side must take a zero line 2.适用于415V电路中; 415V apply to the circuit 3.N线不能断开。 N line can not be disconnected.</p>	<p>117</p>
<p>四极 Four poles</p>		<p>1.相零线可同时断开; At the same time, zero phase line can be disconnected 2.适用于415V电路中。 415V apply to the circuit</p>	<p>135</p>

## 七.使用与维护 USE AND MAINTENANCE

- 用于变压器中性点直接接地的TT类供电系统。  
Transformer neutral point directly to the TT grounding type power supply system
- △ 漏电断路器的额定漏电动作电流，过载、短路特性均由制造厂整定，使用中不可任意调节。  
The leakage circuit breakers rated leakage action current, overload, short circuit characteristics by the factory setting, the use of non-arbitrary regulation
- △ 漏电断路器在新安装运行一定时期后（一般每隔一个月）需要在合闸通电情况下，按动试验按钮，断路器应可靠动作。  
The leakage circuit breakers installed in the new operation after a certain period of time (usually every month) the need to switch on power in the circumstances, the pilot pressed the button, and residual current operated circuit breakers should be reliable action
- △ 当漏电断路器因漏电动作后，复位手柄弹开，若再次合闸时需先将复位手柄复位。  
When the leakage circuit breakers due to leakage after the action, reset the handle bounce, if the switch again when the handle first reset.
- △ 漏电断路器因被保护电路发生故障而分闸后，需查明原因，排除故障后方可合闸。  
The leakage circuit breakers to be protected due to the malfunctioning of sub-gate, the need to identify the reasons for troubleshooting before closing.
- △ 漏电断路器对同时接触被保护电路的两根导线引起的触电危险，不能进行保护。  
The leakage circuit breakers contacts to be protected at the same time the two circuit wires caused by electric shock hazard and can not protect.
- △ 相、零线不可接反。Phase, the zero line should not take anti
- △ 在装设漏电断路器的配电系统中，除零线首端（即变压器中性点）外，在系统中不允许再将负载端零线接地。

In the installation of leakage circuit breakers in the distribution system, with the exception of zero-side line transformer that is neutral, then the system does not allow the load-side ground zero line.

- △ 每一漏电断路器保护的分支线路均须有自己的专用零线，且不允许再将负载端零线接地。

The leakage circuit breakers for each branch circuit protection required to have their own dedicated zero line, and do not allow the zero line and then load-side ground

- △ 在配电系统中，相邻带漏电保护器的负载不能同时接地或共用一个接地端。

In the distribution system, the adjacent band earth leakage protective device at the same time the load can not share a grounding or earthing terminal.

## 八.订货须知 ORDER NOTICE

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- 用户订货时，须指明如下内容：

Users orders should be specified in the following:

- △ 断路器名称、型号、规格； Breakers name, type and character;
- △ 订货数量； Order volume
- △ 交货日期； Delivery date
- △ 必要时指明货运方式及路线。

If necessary, to specify ways and freight routes

- △ 例如： Example

- △ 漏电断路器 GSB2L-63 C 25/3P 200台

Leakage circuit breaker GSB2L-63 C 25/3P 200sets

- △ 表示GSB2L-63系列漏电断路器，C型脱扣器 三极 25A 200台。

Mean GSB2L-63 range leakage circuit breaker, C type release three poles 200sets