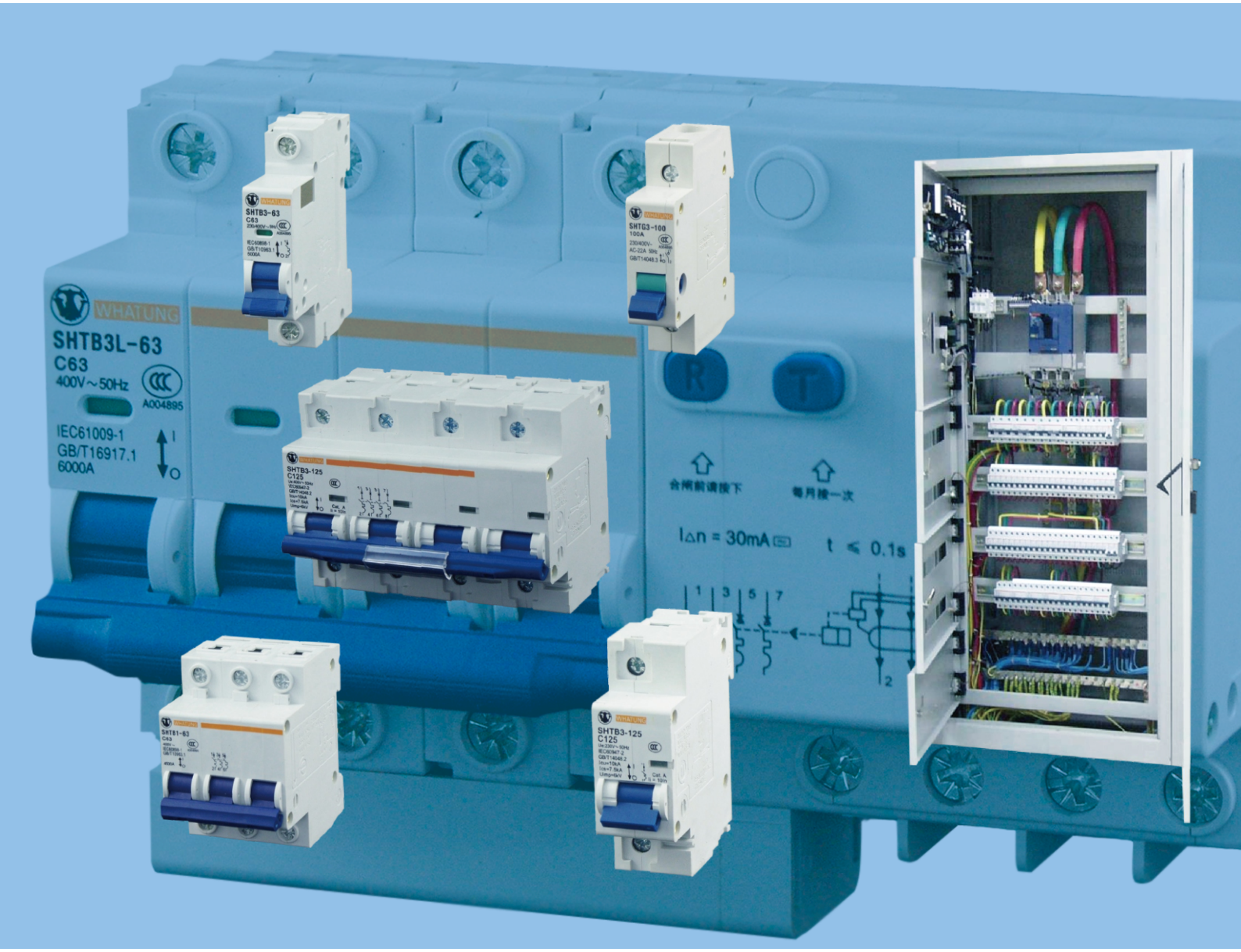
# 小型断路器汇总

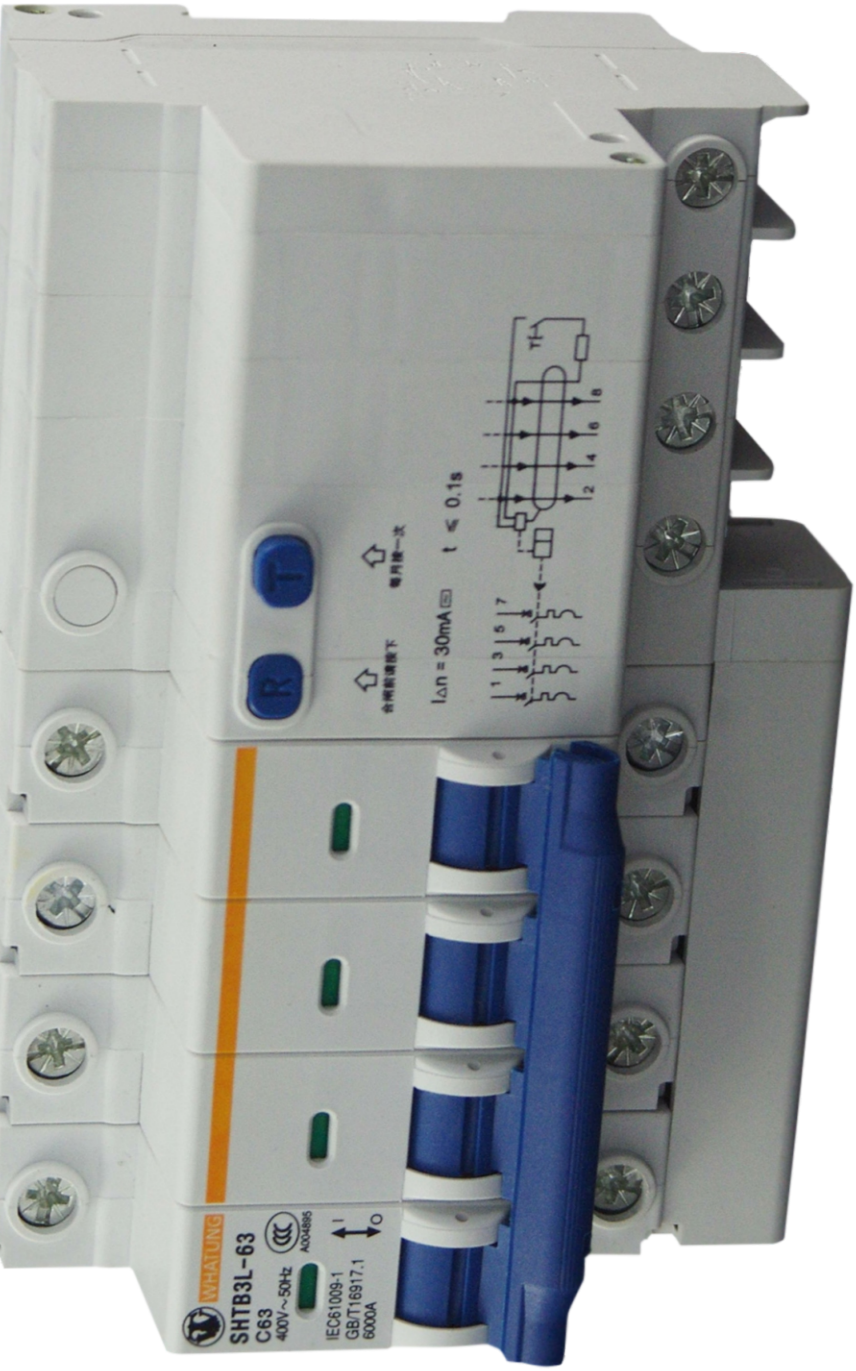
## Miniature Circuit Breaker Overview

SHTB3-63
SHTB3-125
SHTB3L-63
SHTB3L-100
SHTD3-32
SHTD3L-32
SHTG3-100
SHTA3




上海华通低压开关有限公司(原上海华通开关厂低空部)
SHANGHAI HUATONG LV ELECTRIC APPARATUS CO. LTD.
(SHANGHAI HUATONG SWITCHGEAR WORKS LV-DIVISION)

记事/NOTES




# 目 录
## Contents


SHTB3-63系列小型断路器 1
SHTB3-63 Series miniature circuit breaker

SHTB3-125系列小型断路器 3
SHTB3-125 Series miniature circuit breaker

SHTBL3-63系列小型断路器 5
SHTBL3-63 Series miniature circuit breaker

SHTBL3-100系列小型断路器 6
SHTBL3-100 Series miniature circuit breaker

SHTD3-32系列小型断路器 8
SHTD3-32 Series miniature circuit breaker

SHTD3L-100系列小型断路器 9
SHTD3L-32 Series miniature circuit breaker

SHTB3系列小型断路器附件 11
SHTG3-100 Series miniature circuit breaker

SHTG3-100系列小型断路器 12
SHTG3-100 Series miniature circuit breaker

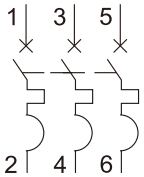
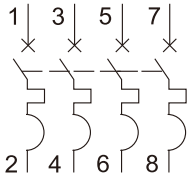
SHTA3系列小型断路器 13
SHTA3 Series miniature circuit breaker

SHTB3系列小型断路器选择性配合表 15
SHTB3 Series miniature circuit breaker selective matching table

Hua Tong Electric

# SHTB3-63 系列小型断路器
SHTB3-63 Series miniature circuit breaker

## SHTB3-63 系列小型断路器 SHTB3-63 Series miniature circuit breaker

| 极 数 Poles | 特 性 Features | 额定电流In(A) Rated current | 产 品 型 号 Product type |
|---|---|---|---|
| 1P | C、D | 1 | SHTB3-63 1/1 |
| | | 2 | SHTB3-63 2/1 |
| | | 3 | SHTB3-63 3/1 |
| | | 4 | SHTB3-63 4/1 |
| | | 6 | SHTB3-63 6/1 |
| | | 10 | SHTB3-63 10/1 |
| | | 16 | SHTB3-63 16/1 |
| | | 20 | SHTB3-63 20/1 |
| | | 25 | SHTB3-63 25/1 |
| | | 32 | SHTB3-63 32/1 |
| | | 40 | SHTB3-63 40/1 |
| | | 50 | SHTB3-63 50/1 |
| | | 63 | SHTB3-63 63/1 |
| 2P | C、D | 1 | SHTB3-63 1/2 |
| | | 2 | SHTB3-63 2/2 |
| | | 3 | SHTB3-63 3/2 |
| | | 4 | SHTB3-63 4/2 |
| | | 6 | SHTB3-63 6/2 |
| | | 10 | SHTB3-63 10/2 |
| | | 16 | SHTB3-63 16/2 |
| | | 20 | SHTB3-63 20/2 |
| | | 25 | SHTB3-63 25/2 |
| | | 32 | SHTB3-63 32/2 |
| | | 40 | SHTB3-63 40/2 |
| | | 50 | SHTB3-63 50/2 |
| | | 63 | SHTB3-63 63/2 |
| 3P  | C、D | 1 | SHTB3-63 1/3 |
| | | 2 | SHTB3-63 2/3 |
| | | 3 | SHTB3-63 3/3 |
| | | 4 | SHTB3-63 4/3 |
| | | 6 | SHTB3-63 6/3 |
| | | 10 | SHTB3-63 10/3 |
| | | 16 | SHTB3-63 16/3 |
| | | 20 | SHTB3-63 20/3 |
| | | 25 | SHTB3-63 25/3 |
| | | 32 | SHTB3-63 32/3 |
| | | 40 | SHTB3-63 40/3 |
| | | 50 | SHTB3-63 50/3 |
| | | 63 | SHTB3-63 63/3 |
| 4P  | C、D | 1 | SHTB3-63 1/4 |
| | | 2 | SHTB3-63 2/4 |
| | | 3 | SHTB3-63 3/4 |
| | | 4 | SHTB3-63 4/4 |
| | | 6 | SHTB3-63 6/4 |
| | | 10 | SHTB3-63 10/4 |
| | | 16 | SHTB3-63 16/4 |
| | | 20 | SHTB3-63 20/4 |
| | | 25 | SHTB3-63 25/4 |
| | | 32 | SHTB3-63 32/4 |
| | | 40 | SHTB3-63 40/4 |
| | | 50 | SHTB3-63 50/4 |
| | | 63 | SHTB3-63 63/4 |

Hua Tong Electric

# SHTB3-63 系列小型断路器
# SHTB3-63 Series miniature circuit breaker

## 用 途

- C型：照明配电电路
  D型：工业配电系统
- 短路及过载保护

## 技术参数

- 符合标准：IEC60898、GB10963
- 额定工作电压：AC230V/400V
- 额定工作频率：50/60Hz
- 机械电气寿命：4000次
- 额定运行短路分断能力：6kA

- 瞬时脱扣： C型 5～10In脱扣
  D型 10～14In脱扣
- 长延时脱扣：冷态 1.13In t≥1h不脱扣
  热态 1.45In t＜1h脱扣

## 使用环境

- 环境温度：-5℃～+40℃
- 海拔：≤2000m
- 空气相对湿度：≤95%

## 结构特点

- 具有短路限流结构—额定短路分断能力高
- 具有过载及短路保护装置—保护功能齐全
- 采用“框式”接线结构—接线安全可靠
- 可配多种附件:漏电脱扣器、辅助触头、报警触头、分励脱扣器、欠电压脱扣器、汇流排—功能扩展简便
- 模块化、模数化—任意组合，系列配套
- TH35mm标准安装轨安装，安装简捷方便

## 接线能力

- 25mm 及以下导线

## Application

- C: Illumination distribution system
  D: Industrial distribution system
- Short circuit and overload protection

## Technical specification

- Meet the criterion: IEC 60898、GB 10963
- Rated voltage:AC230V/400V
- Rated operating frequency: 50/60Hz
- Electrical endurance: 4000 times
- Rated service short circuit breaking capacity:6kA

- Instantaneous tripping characteristics:
  C curve instantaneous trip between 5 to 10 In
  D curve instantaneous trip between 10 to 14 In
- Long time delay tripping characteristics:
  Under 1.13 In the breaker will not trip within 1h from the cold state,then the current rise to 1.45 In, the breaker will trip within 1h.

## Operating environment

- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

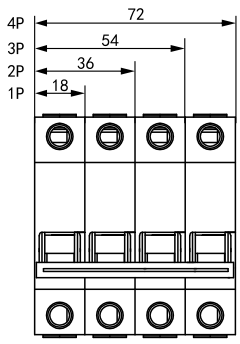
## Structural feature

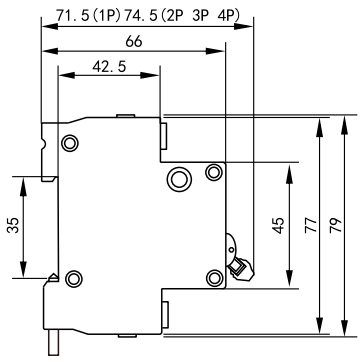
- With short circuit current limiting structure-highbreaking capacity of rated short circuit
- With overload and short circuit protection device-perfect protection function
- Adopt "Frame" connection structure-connection with safety
- Compatible with several kinds of accessories: Leakage release, auxiliary contact, alarm contact, shunt release, under-voltage release, collecting bar-easy function expansion.
- Modularization-random combination, series mating
- Installation with TH35mm standard installation track-easy and simple installation

## Connection capability

- 25mm$^2$ and the following conducting wire

## 外形尺寸
## Outline dimension

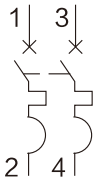
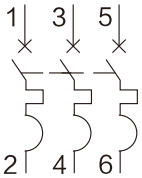
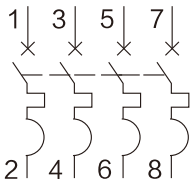


Hua Tong Electric

# SHTB3-125 系列小型断路器
SHTB3-125 Series miniature circuit breaker

## SHTB3-125系列小型断路器　SHTB3-125 Series miniature circuit breaker

| 极　数<br>Poles | 脱扣方式<br>Tripping mode | 额定电流In(A)<br>Rated current | 产 品 型 号<br>Product type |
|---|---|---|---|
| 1P | C、D | 63 | SHTB3-125　63/1 |
| | | 80 | SHTB3-125　80/1 |
| | | 100 | SHTB3-125　100/1 |
| | | 125 | SHTB3-125　125/1 |
| 2P  | C、D | 63 | SHTB3-125　63/2 |
| | | 80 | SHTB3-125　80/2 |
| | | 100 | SHTB3-125　100/2 |
| | | 125 | SHTB3-125　125/2 |
| 3P  | C、D | 63 | SHTB3-125　63/3 |
| | | 80 | SHTB3-125　80/3 |
| | | 100 | SHTB3-125　100/3 |
| | | 125 | SHTB3-125　125/3 |
| 4P  | C、D | 63 | SHTB3-125　63/4 |
| | | 80 | SHTB3-125　80/4 |
| | | 100 | SHTB3-125　100/4 |
| | | 125 | SHTB3-125　125/4 |

Hua Tong Electric

# SHTB3-125 系列小型断路器
## SHTB3-125 Series miniature circuit breaker

## 用 途
- C型：照明配电电路
  D型：工业配电系统
- 短路及过载保护

## 技术参数
- 符合标准：IEC60947-2、GB14048.2
- 额定工作电压：AC230V/400V
- 额定工作频率：50/60Hz
- 机械电气寿命：10000次
- 额定短路分断能力：Ics=7.5kA
  Icu=10kA
- 瞬时脱扣：C型 8 In(1±20%)脱扣
  D型 12 In(1±20%)脱扣
- 长延时脱扣：冷态 1.05In t≥2h不脱扣 (额定电流>63A)
  热态 1.30In t<2h脱扣
  冷态 1.05In t≥1h不脱扣 (额定电流≤63A)
  热态 1.30In t<1h脱扣

## 使用环境
- 环境温度：-5℃～+40℃
- 海拔：≤2000m
- 空气相对湿度：≤95%

## 结构特点
- 具有短路限流结构—额定短路分断能力高
- 具有过载及短路保护装置—保护功能齐全
- 采用“框式”接线结构—接线安全可靠
- 可配多种附件:漏电脱扣器、辅助触头、报警触头、分励脱扣器、欠电压脱扣器、功能扩展简便
- 模块化、模数化—任意组合，系列配套

## 接线能力
- 50mm 及以下导线

## 外形尺寸
## Outline dimension

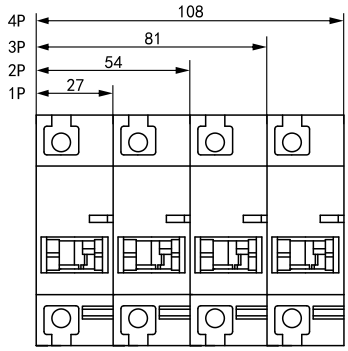
## Application
- C: Illumination distribution system
  D: Industrial distribution system
- Short circuit and overload protection

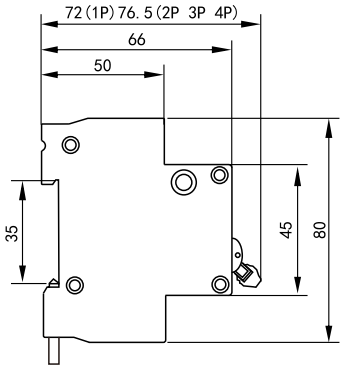
## Technical specification
- Meet the criterion: IEC 60947-2、GB 14048.2
- Rated voltage:AC230V/400V
- Rated operating frequency: 50/60Hz
- Electrical endurance: 10000 times
- Rated short circuit breaking capacity:Ics=7.5kA
  Icu=10kA
- Instantaneous tripping characteristics:
  C curve instantaneous trip: 8 In(1±20%)
  D curve instantaneous trip: 12 In(1±20%)
- Long time delay tripping characteristics:
  Under 1.05 In the breaker will not trip within 2h from the cold state,then the current rise to 1.30 In, the breaker will trip within 2h. (Rated current>63A)
  Under 1.05 In the breaker will not trip within 1h from the cold state,then the current rise to 1.30 In, the breaker will trip within 1h. (Rated current ≤63A)

## Operating environment
- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

## Structural feature
- With short circuit current limiting structure-highbreaking capacity of rated short circuit
- With overload and short circuit protection device-perfect protection function
- Adopt "Frame" connection structure-connection with safety
- Compatible with several kinds of accessories: Leakage release, auxiliary contact, alarm contact, shunt release, under-voltage release-easy function expansion.
- Modularization-random combination, series mating
- Installation with TH35mm standard installation track-easy and simple installation

## Connection capability
- 50mm² and the following conducting wire

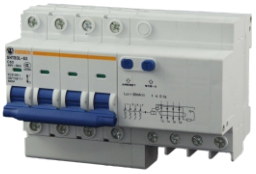


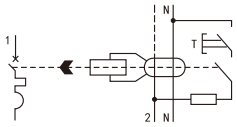
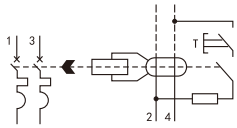
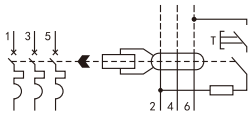
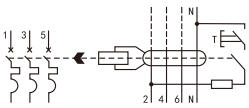
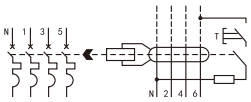



Hua Tong Electric

# SHTB3L-63、100 系列漏电断路器
SHTB3L-63、100 Series leakage circuit breaker

## SHTB3L-63系列漏电断路器 SHTB3L-63 Series leakage circuit breaker

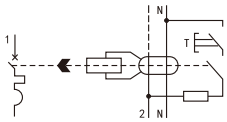
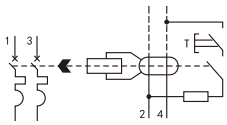
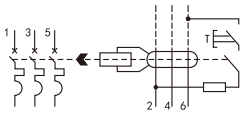
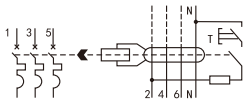
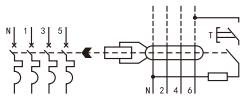


| 极数 Poles | 脱扣方式 Tripping mode | 额定电流In(A) Rated current | 额定剩余动作电流IΔn(mA) Rated leakage operating current | 产品型号 Product type |
|---|---|---|---|---|
| 1P+N  | C、D | 6 | 30 | SHTB3L-63 6/1N |
| | | 10 | | SHTB3L-63 10/1N |
| | | 16 | | SHTB3L-63 16/1N |
| | | 20 | | SHTB3L-63 20/1N |
| | | 25 | | SHTB3L-63 25/1N |
| | | 32 | | SHTB3L-63 32/1N |
| | | 40 | | SHTB3L-63 40/1N |
| | | 50 | | SHTB3L-63 50/1N |
| | | 63 | | SHTB3L-63 63/1N |
| 2P  | C、D | 6 | 30 | SHTB3L-63 6/2 |
| | | 10 | | SHTB3L-63 10/2 |
| | | 16 | | SHTB3L-63 16/2 |
| | | 20 | | SHTB3L-63 20/2 |
| | | 25 | | SHTB3L-63 25/2 |
| | | 32 | | SHTB3L-63 32/2 |
| | | 40 | | SHTB3L-63 40/2 |
| | | 50 | | SHTB3L-63 50/2 |
| | | 63 | | SHTB3L-63 63/2 |
| 3P  | C、D | 6 | 30 | SHTB3L-63 6/3 |
| | | 10 | | SHTB3L-63 10/3 |
| | | 16 | | SHTB3L-63 16/3 |
| | | 20 | | SHTB3L-63 20/3 |
| | | 25 | | SHTB3L-63 25/3 |
| | | 32 | | SHTB3L-63 32/3 |
| | | 40 | | SHTB3L-63 40/3 |
| | | 50 | | SHTB3L-63 50/3 |
| | | 63 | | SHTB3L-63 63/3 |
| 3P+N  | C、D | 6 | 30 | SHTB3L-63 6/3N |
| | | 10 | | SHTB3L-63 10/3N |
| | | 16 | | SHTB3L-63 16/3N |
| | | 20 | | SHTB3L-63 20/3N |
| | | 25 | | SHTB3L-63 25/3N |
| | | 32 | | SHTB3L-63 32/3N |
| | | 40 | | SHTB3L-63 40/3N |
| | | 50 | | SHTB3L-63 50/3N |
| | | 63 | | SHTB3L-63 63/3N |
| 4P  | C、D | 6 | 30 | SHTB3L-63 6/4 |
| | | 10 | | SHTB3L-63 10/4 |
| | | 16 | | SHTB3L-63 16/4 |
| | | 20 | | SHTB3L-63 20/4 |
| | | 25 | | SHTB3L-63 25/4 |
| | | 32 | | SHTB3L-63 32/4 |
| | | 40 | | SHTB3L-63 40/4 |
| | | 50 | | SHTB3L-63 50/4 |
| | | 63 | | SHTB3L-63 63/4 |

Hua Tong Electric

# SHTB3L-63、100 系列漏电断路器
SHTB3L-63、100 Series leakage circuit breaker

## SHTB3L-100系列漏电断路器 SHTB3L-100 Series leakage circuit breaker

| 极 数 Poles | 脱扣方式 Tripping mode | 额定电流In(A) Rated current | 额定剩余动作电流 ▵n(mA) Rated leakage operating current | 产 品 型 号 Product type |
|---|---|---|---|---|
| 1P+N  | C、D | 63<br>80<br>100 | 30、100 | SHTB3L-100 63/1N<br>SHTB3L-100 80/1N<br>SHTB3L-100 100/1N |
| 2P  | C、D | 63<br>80<br>100 | 30、100 | SHTB3L-100 63/2<br>SHTB3L-100 80/2<br>SHTB3L-100 100/2 |
| 3P  | C、D | 63<br>80<br>100 | 30、100 | SHTB3L-100 63/3<br>SHTB3L-100 80/3<br>SHTB3L-100 100/3 |
| 3P+N  | C、D | 63<br>80<br>100 | 30、100 | SHTB3L-100 63/3N<br>SHTB3L-100 80/3N<br>SHTB3L-100 100/3N |
| 4P  | C、D | 63<br>80<br>100 | 30、100 | SHTB3L-100 63/4<br>SHTB3L-100 80/4<br>SHTB3L-100 100/4 |

## 用 途

- 加装漏电脱扣器于SHTB3小型断路器右侧，组成漏电断路器，对地地漏电、人体直接或间接触电等故障进行保护。
- 短路及过载保护。

## Application

- Installed on the right hand of the SHTB3 miniature circuit breaker, protecting against current leakage, direct or indirect electrical shocks.
- Short circuit and overload protection.

## 技术参数

- 符合标准：SHTB3L-63 IEC61009-1、GB16917.1
  SHTB3L-100 IEC60947-2、GB14048.2
- 额定工作电压：AC230V（1P+N、2P）
  AC400V（3P、3P+N、4P）
- 额定工作频率：50/60Hz
- 机械电气寿命：4000次
- 额定运行短路分断能力：SHTB3L-63 6kA
  SHTB3L-100 7.5kA

## Technical specification

- Meet the criterion: SHTB3L-63 IEC61009-1、GB16917.1
  SHTB3L-100 IEC60947-2、GB14048.2
- Rated o perating voltage: AC230V（1P+N、2P）
  AC400V（3P、3P+N、4P）
- Rated operating frequency: 50/60Hz
- Electrical endurance: 4000 times
- Rated service short circuit breaking capacity: SHTB3L-63 6kA
  SHTB3L-100 7.5kA

Hua Tong Electric

# SHTB3L-63、100 系列漏电断路器
## SHTB3L-63、100 Series leakage circuit breaker

- 瞬时脱扣：
  SHTB3L-63　C型 5-10 In脱扣
  　　D型 10-14 In脱扣
  SHTB3L-100　C型 8 In(1±20%)脱扣
  　　D型 12 In(1±20%)脱扣
- 长延时脱扣：
  SHTB3L-63　冷态 1.13In t≥1h不脱扣
  　　热态 1.45In t<1h脱扣
  SHTB3L-100 冷态 1.05In t≥2h不脱扣 (额定电流>63A)
  　　热态 1.30In t<2h脱扣
  　　冷态 1.05In t≥1h不脱扣 (额定电流≤63A)
  　　热态 1.30In t<1h脱扣
- 漏电脱扣:漏电电流IΔ≥50%IΔn至IΔn时，t ≤0.1S脱扣

## 使用环境

- 环境温度：-5℃～+40℃
- 海拔：≤2000m
- 空气相对湿度：≤95%

## 接线能力

- SHTB3L-63：25mm2及以下导线
- SHTB3L-100：50mm²及以下导线

- Instantaneous tripping characteristics:
  For type SHTB3L-63 C curve instantaneous trip between 5 to 10 In
  D curve instantaneous trip between 10 to 14 In
  For type SHTB3L-100 C curve instantaneous trip: 8 In(1±20%)
  D curve instantaneous trip: 12 In(1±20%)
- Long time delay tripping characteristics:
  For type SHTB2L-32,SHTB3L-63 under 1.13 In the breaker will not trip within 1h from the cold state,then the current rise to 1.45 In, the breaker will trip within 1h.
  For type SHTB3L-100 under 1.05 In the breaker will not trip within 2h from the cold state,then the current rise to 1.30 In, the breaker will trip within 2h.(Rated current>63A)
  Under 1.05 In the breaker will not trip within 1h from the cold state,then the current rise to 1.30 In, the breaker will trip within 1h.
  (Rated current ≤63A)
- The breaker will trip within 0.1s when I△>50%I△n-I△n.

## Operating environment

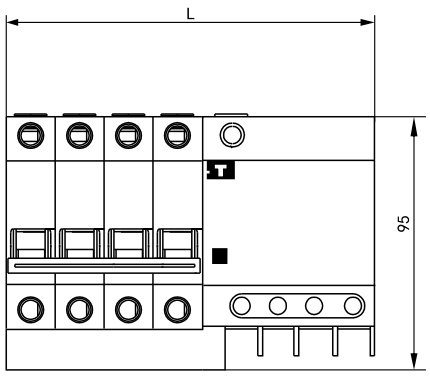
- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

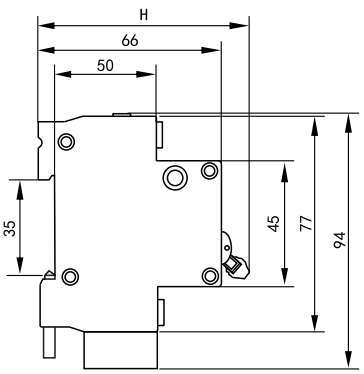
## Connection capability

- SHTB1L-63: 25mm²and the following conducting wire
- SHTB1L-100: 50mm²and the following conducting wire

## 外形尺寸
## Outline dimension

| | | 1P+N | 2P | 3P | 3P+N | 4P |
|---|---|---|---|---|---|---|
| L（mm） | SHTB3L-63 | 54±1.0 | 72±1.5 | 108±1.75 | 117±1.75 | 135±1.75 |
| | SHTB3L-100 | 81±1.0 | 108±1.5 | 153±1.75 | 171±1.75 | 198±1.75 |
| H（mm） | SHTB3L-63 | 71.5±1.5 | 74.5±1.5 | | | |
| | SHTB3L-100 | | | | | |



Hua Tong Electric

# SHTD3-32 系列小型断路器
SHTD3-32 Series miniature circuit breaker

## SHTD3-32系列小型断路器 SHTD3-32 Series miniature circuit breaker

| 极 数 Poles | 脱扣方式 Tripping mode | 额定电流In(A) Rated current | 产 品 型 号 Product type |
|---|---|---|---|
| 1P+N | C | 6 | SHTD3-32 6 |
| | | 10 | SHTD3-32 10 |
| | | 16 | SHTD3-32 16 |
| | | 20 | SHTD3-32 20 |
| | | 25 | SHTD3-32 25 |
| | | 32 | SHTD3-32 32 |

### 用 途

- TT、TN-S的接地系统中
- 短路、过载保护

### 技术参数

- 符合标准：IEC60898、GB/T10963
- 额定工作电压：AC230V
- 额定工作频率：50/60Hz
- 机械电气寿命：4000次
- 额定运行短路分断能力：4.5kA
- 瞬时脱扣：C型 5～10In脱扣
- 长延时脱扣：冷态 1.13In t≥1h不脱扣
  热态 1.45In t＜1h脱扣

### 使用环境

- 环境温度：-5 C～+40 C
- 海拔：≤2000m
- 空气相对湿度：≤95%

### 结构特点

- 断路器正常操作或故障保护使断路器处于分断位置时，相线、中性线都处在断开状态、避免中性线故障并带电
- 在进行接通和分断操作时，中性线接通超前，分断滞后
- 具有短路限流功能，额定短路分断能力高
- 具有过载保护及短路保护装置——保护功能齐全
- 接线方便可靠
- TH35mm标准安装轨安装

### 接线能力

- 10mm 及以下导线

### Application

- In TT, TN-S ground system
- Short circuit and overload protection

### Technical specification

- Meet the criterion: IEC 60898、GB 10963
- Rated Voltage: AC 230V
- Rated operating frequency: 50/60Hz
- Electrical endurance: 4000 times
- Rated operating service short circuit breaking capacity: 4.5kA
- Instantaneous tripping characteristics:
  C curve instantaneous tripbetween 5 to 10 In
- Long time delay tripping characteristics:
  Under 1.13 In the breaker will not trip within 1h from the cold state,then the current rise to 1.45 In, the breaker will trip within 1h.

### Operating environment

- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

### Structural feature

- When the breaker operates normally or the breaker is in the position OFF for failure protection, phase conductors and neutral wires are in the state OFF avoiding the neutral wires charged when in failure.
- During the operation of connecting and disjunction,the connection of neutral wires is in first and disjunction lagging behind.
- With short circuit current limiting structure-high breaking capability of rated short circuit
- With overload and short circuit protection device- perfect protection function
- Easy and safe connection
- Installation whih TH35mm standard installation track-easy and simple installation

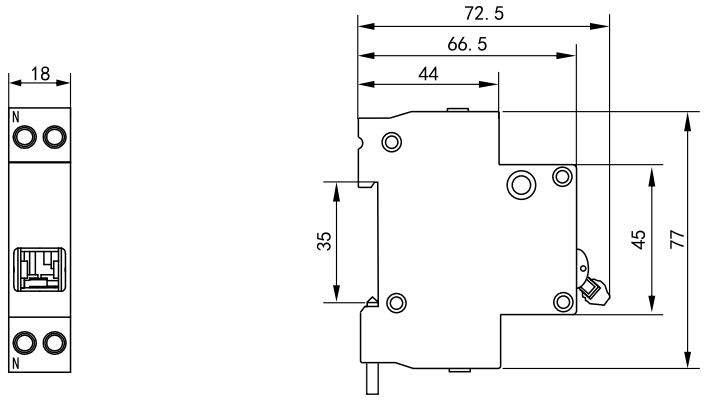
### Connection capability

- 10mm$^2$ and the following conducting wire

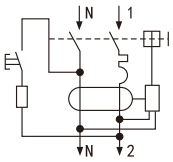
Hua Tong Electric

# SHTD3-32 系列小型断路器
SHTD3-32 Series miniature circuit breaker
# SHTD3L-32系列漏电断路器
SHTD3L-32 Series leakage circuit breaker

## 外形尺寸
Outline dimension




## SHTD3L-32系列漏电断路器 SHTD3L-32 Series leakage circuit breaker

| 极数 Poles | 脱扣方式 Tripping mode | 额定电流In Rated current | 额定剩余动作电流 Δ Rated leakage operating current | 产品型号 Product type |
|---|---|---|---|---|
| 1P+N  | C | 6 | 30 | SHTD3L-32 6 |
| | | 10 | | SHTD3L-32 10 |
| | | 16 | | SHTD3L-32 16 |
| | | 20 | | SHTD3L-32 20 |
| | | 25 | | SHTD3L-32 25 |
| | | 32 | | SHTD3L-32 32 |

## 用 途

- TT、TN-S的接地系统中
- 短路、过载及漏电保护

## 技术参数

- 符合标准：IEC61009-1、GB16917.1
- 额定工作电压：AC230V
- 额定工作频率：50/60Hz
- 机械电气寿命：4000次
- 额定运行短路分断能力:4.5kA
- 瞬时脱扣：C型 5～10In脱扣
- 长延时脱扣：冷态 1.13In t≥1h不脱扣
  热态 1.45In t＜1h脱扣
- 漏电脱扣:IΔ > 50%IΔn至IΔn时，t ≤ 0.1S脱扣

## Application

- In TT, TN-S ground system
- Short circuit overload and leakage protection

## Technical specification

- Meet the criterion: IEC 61009-1 GB 16917.1
- Rated Voltage: AC 230V
- Rated operating frequency: 50/60Hz
- Electrical endurance: 4000 times
- Rated service operating short circuit breaking capacity: 4.5kA
- Instantaneous tripping characteristics:
  C curve instantaneous trip between 5 to 10 In
- Long time delay tripping characteristics:
  Under 1.13 In the breaker will not trip within 1h from the cold state,then the current rise to 1.45 In, the breaker will trip within 1h
- The breaker will trip within 0.1s when IΔ ＞50%IΔn-IΔn.

Hua Tong Electric

# SHTD3L-32 系列漏电断路器
# SHTD3L-32 Series leakage circuit breaker

## 使用环境

- 环境温度：-5 C～+40 C
- 海拔：≤2000m
- 空气相对湿度：≤95%

## Operating environment

- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

## 结构特点

- 断路器正常操作或故障保护使断路器处于分断位置时，相线、中性线都处在断开状态、避免中性线故障并带电
- 在进行接通和分断操作时，中性线接通超前，分断滞后
- 具有短路限流功能，额定短路分断能力高
- 具有过载保护及短路保护装置——保护功能齐全
- 接线方便可靠
- TH35mm标准安装轨安装

## Structural feature

- When the breaker operates normally or the breaker is in the position OFF for failure protection, phase conductors and neutral wires are in the state OFF avoiding the neutral wires charged when in failure.
- During the operation of connecting and disjunction,the connection of neutral wires is in first and disjunction lagging behind.
- With short circuit current limiting structure-high breaking capability of rated short circuit
- With overload and short circuit protection device- perfect protection function
- Easy and safe connection
- Installation whih TH35mm standard installation track-easy and simple installation

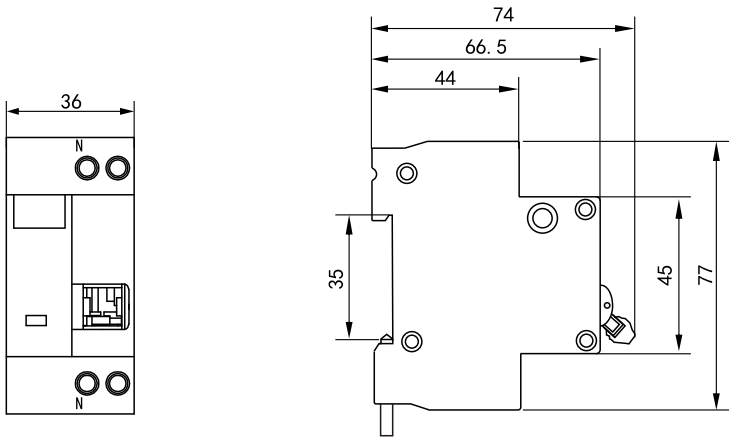
## 接线能力

- 10mm 及以下导线

## Connection capability

- 10mm$^2$and the following conducting wire

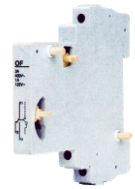
## 外形尺寸
## Outline dimension



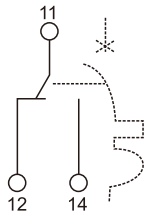
Hua Tong Electric

# SHTB3系列小型断路器附件
SHTB3 Series miniature circuit breaker accessories

## SHTB3系列小型断路器附件　SHTB3 Series miniature circuit breaker accessories



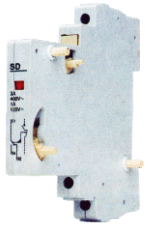
宽　度
Width
9 mm



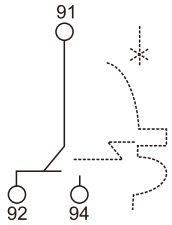

### OF辅助触头　OF Auxiliary contact

- 加装于SHTB3小型断路器左侧
  Intstalled on the left hand of the SHTB3 miniature circuit breaker
- 指示断路器通断状态
  Indicating the ON/OFF state of the breaker
- 额定工作电流（Rated operating current):

| | | | | | |
|---|---|---|---|---|---|
| AC | 230V | 6A | AC | 400V | 3A |
| DC | 24V | 6A | DC | 48V | 2A |
| DC | 110V | 1A | DC | 220V | 0.4A |



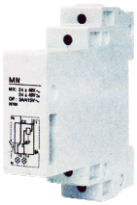
宽　度
Width
9 mm



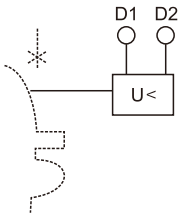

### SD报警触头　SD Alarm contact

- 加装于SHTB3小型断路器左侧
  Intstalled on the left hand of the SHTB3 miniature circuit breaker
- 指示断路器因故障脱扣的状态
  Indicating the dropout state of the breaker because of defect
- 额定工作电流（Rated operating current):

| | | | | | |
|---|---|---|---|---|---|
| AC | 230V | 6A | AC | 400V | 3A |
| DC | 24V | 6A | DC | 48V | 2A |
| DC | 110V | 1A | DC | 220V | 0.4A |

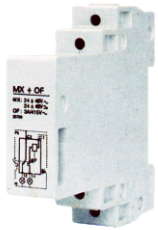


宽　度
Width
18 mm

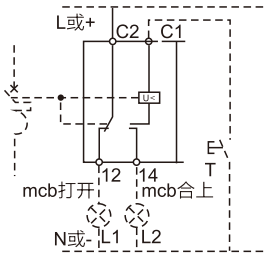



### MN欠压脱扣器　MN Under-voltage release

- 加装于SHTB3小型断路器右侧
  Intstalled on the right hand of the SHTB3 miniature circuit breaker
- 线路电压降至35%～70%时，触发断路器脱扣，直至电压恢复至85%以上断路器才可以手动接通
  When the circuit voltage drops to 35%~70%,activate the breaker to drop out,Not until the voltage resume to 85% above,can the breaker be connected manually
- 控制电压　(Control voltage):
  AC　230V　　DC　24V



宽　度
Width
18 mm




### MX+OF分励脱扣器　MX+OF Shunt release

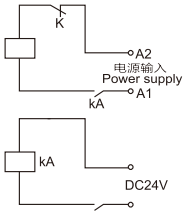
- 加装于SHTB3小型断路器右侧，对断路器脱扣进行远程控制
  Remote control of the breaker's dropout(fitted on right side)
- 指示断路器通断状态
  Indicating the ON/OFF state of the breaker
- 控制电压　(Control voltage):
  AC　230V　　DC　24V

注：控制回路电源为DC24V时，推荐采用右图进行分励控制回路设计。

Note: In case of DC24V power supply for control circuit, the shunt circuit design accrding to the following diagram.

kA：为DC24V中间继电器，触点电流容量为1A。

kA: intermediate relay of DC24V, the current capacity of its contact is 1A.



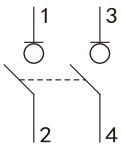
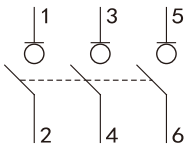
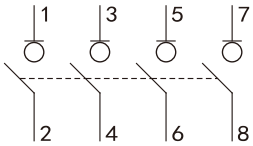

接线能力　Connection capability

- 单线（Single wire):2.5mm²
- 双线（Double wire):1.5mm²

Hua Tong Electric

# SHTG3-100 系列隔离开关
SHTG1-100 Series switch-disconnector

## SHTG3-100系列隔离开关 SHTG3-100 Series switch-disconnector

| 极 数 Poles | 宽度(mm) Width | 额定电流In(A) Rated current | 产 品 型 号 Product type |
|---|---|---|---|
| 1P | 18 | 32 | SHTG3-100 32/1 |
| | | 63 | SHTG3-100 63/1 |
| | | 100 | SHTG3-100 100/1 |
| 2P  | 36 | 32 | SHTG3-100 32/2 |
| | | 63 | SHTG3-100 63/2 |
| | | 100 | SHTG3-100 100/2 |
| 3P  | 54 | 32 | SHTG3-100 32/3 |
| | | 63 | SHTG3-100 63/3 |
| | | 100 | SHTG3-100 100/3 |
| 4P  | 72 | 32 | SHTG3-100 32/4 |
| | | 63 | SHTG3-100 63/4 |
| | | 100 | SHTG3-100 100/4 |

### 用 途

- 带负荷接通、分断或隔离电路

### 技术参数

- 符合标准：ICE60947-3、GB14048.3
- 额定工作电压：AC230V/400V
- 额定工作频率：50/60Hz
- 机械电气寿命：1500次
- 接通能力：20Ie
- 额定短时耐受能力：20Ie（1s）

### Application

- Load on ON/OFF or disconnection circuit

### Technical specification

- Meet the criterion: IEC 60947-3、GB 14048.3
- Rated Voltage: AC 230V/400V
- Rated operating frequency: 50/60Hz
- Electrical endurance: 1500 times
- Rated short-circuit making capacity: 20Ie
- Rated short-time withstand current: 20Ie（1s）

Hua Tong Electric

# SHTG3-100 系列隔离开关
SHTG3-100 Series switch-disconnector

# SHTA3系列模数化插座
SHTA3 Series modulus socket

## 使用环境

- 环境温度：-5 C～+40 C
- 海拔：≤2000m
- 空气相对湿度：≤95%

## Operating environment

- Ambient Temperature:-5℃～+40℃
- Altitude: ≤2000m
- Relative air humidity: ≤95%

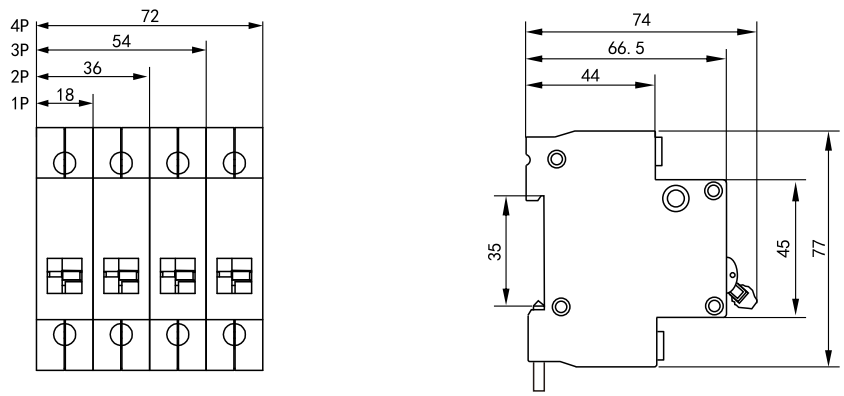
## 接线能力

- 50mm 及以下导线

## Connection capability

- 50mm²and the following conducting wire

## 外形尺寸
Outline dimension




## SHTA3系列模数化插座 SHTA3 Series modulus socket

| 标 志 Symbol | 宽度(mm) Width | 额定电流In(A) Rated current | 工作电压(V) Operating voltage | 名 称 Name | 产 品 型 号 Product type |
|---|---|---|---|---|---|
| | 18 | 10 | 250 | 单相二孔 Single-phase two holes | SHTA3-10/2 |
| | 18 | 16 | 250 | 单相二孔 Single-phase two holes | SHTA3-16/2 |
| | 36 | 10 | 250 | 单相三孔 Single-phase three holes | SHTA3-10/3 |
| | 36 | 16 | 250 | 单相三孔 Single-phase three holes | SHTA3-16/3 |
| | 54 | 25 | 250 | 单相三孔 Single-phase three holes | SHTA3-25/3 |
| | 54 | 16 | 440 | 三相四孔 Three-phase four holes | SHTA3-16/4 |
| | 72 | 25 | 440 | 三相四孔 Three-phase four holes | SHTA3-25/4 |

Hua Tong Electric

# SHTA3系列模数化插座
## SHTA3 Series modulus socket

## 型号及含义 Type and It's meaning

SHTA 3 - □ / □ □

- 宽度模数 Width Modulue
- 孔数 Number of holes
- 额定工作电流 Rated operating current
- 设计代号 Code of design
- 模数化插座 Modulus socket
- 工厂代号“上海华通低压开关有限公司” The code of the manufacturer Shanghai Huatong LV Electric Apparatus Co.,Ltd

## 结构特点

- 装于模数化终端配电箱和其他成套电器箱内,作为用电设备进行插接
- TH35MM标准安装轨安装
- IEC60884-1、GB2099.1

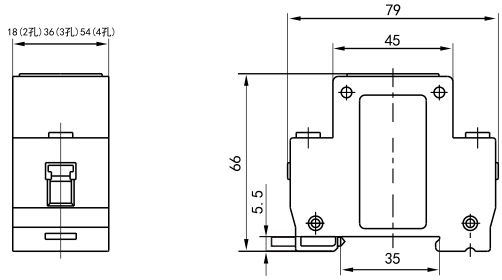
## Structural feature

- Installtion modulus terminal equipped with electric case and other serial electric cases,make socket joint of electrical equipment.
- Installation with TH35mm standard installation track.
- IEC60884-1、GB2099.1

## 外形尺寸
## Outline dimension

SHTA3-10/2、 3、SHTA3-16/2、SHTA3-16/3、SHTA3-16/4外形及安装尺寸

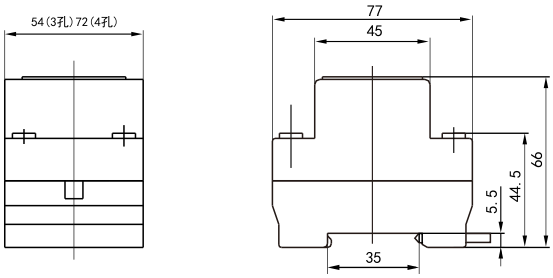
Overall and installation dimensions of SHTA3-10/2、SHTA3-10/3、SHTA3-16/2、SHTA3-16/3、SHTA3-16/4




| 型号 Type | 宽度 Width (mm) |
|---|---|
| SHTA3-10/2 | 18 |
| SHTA3-16/2 | |
| SHTA3-10/3 | 36 |
| SHTA3-16/3 | |
| SHTA3-16/4 | 54 |

SHTA3-25/3、SHTA3-25/4外形及安装尺寸

Overall and installation dimensions of SHTA3-25/3、SHTA3-25/4




| 型号 Type | 宽度 Width (mm) |
|---|---|
| SHTA3-25/3 | 54 |
| SHTA3-25/4 | 72 |

Hua Tong Electric

SHTB3系列小型断路器选择性配合表
SHTB3 Series miniature circuit breaker selective matching table

# SHTB3系列小型断路器选择性配合表
SHTB3 Series miniature circuit breaker selective matching table

## SHTB3-63/SHTB3-125

| | | C型特性上级断路器 | | | | | | | | | | | D型特性上级断路器 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 额定电流(A) | | 10 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 10 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
| 脱扣中间值( ) | | 75 | 120 | 150 | 188 | 240 | 300 | 375 | 473 | 600 | 750 | 937.5 | 120 | 192 | 240 | 300 | 384 | 480 | 600 | 756 | 960 | 1200 | 1500 |
| C型特性下级断路器(A) | 6 | | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ | ● | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 10 | | | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ | ● | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 16 | | | | | ● | ● | ● | ●■ | ■ | ■ | ■ | | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 20 | | | | | | ● | ● | ●■ | ■ | ■ | ■ | | | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 25 | | | | | | | ● | ●■ | ■ | ■ | ■ | | | | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 32 | | | | | | | ■ | ●■ | ■ | ■ | ■ | | | | | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 40 | | | | | | | | ■ | ■ | ■ | ■ | | | | | | ● | ● | ●■ | ■ | ■ | ■ |
| | 50 | | | | | | | | | ■ | ■ | ■ | | | | | | | ● | ●■ | ■ | ■ | ■ |
| | 63 | | | | | | | | | | ■ | ■ | | | | | | | | ● | ■ | ■ | ■ |

## SHTB3-63/SHTB3-125

| | | C型特性上级断路器 | | | | | | | | | | | D型特性上级断路器 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 额定电流(A) | | 10 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 10 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 100 |
| 脱扣中间值( ) | | 75 | 120 | 150 | 188 | 240 | 300 | 375 | 473 | 600 | 750 | 937.5 | 120 | 192 | 240 | 300 | 384 | 480 | 600 | 756 | 960 | 1200 | 1500 |
| D型特性下级断路器 | 6 | | | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ | ● | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 10 | | | | | ● | ● | ● | ●■ | ■ | ■ | ■ | | ● | ● | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 16 | | | | | | | ● | ●■ | ■ | ■ | ■ | | | | ● | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 20 | | | | | | | | ●■ | ■ | ■ | ■ | | | | | ● | ● | ● | ●■ | ■ | ■ | ■ |
| | 25 | | | | | | | | ■ | ■ | ■ | ■ | | | | | | ● | ● | ●■ | ■ | ■ | ■ |
| | 32 | | | | | | | | | ■ | ■ | ■ | | | | | | | ● | ●■ | ■ | ■ | ■ |
| | 40 | | | | | | | | | | ■ | ■ | | | | | | | | ●■ | ■ | ■ | ■ |
| | 50 | | | | | | | | | | | ■ | | | | | | | | | ■ | ■ | ■ |
| | 63 | | | | | | | | | | | ■ | | | | | | | | | | ■ | ■ |

✳ 在低压电器设备的使用中，保证供电连续性非常重要，因此从设计阶段就应考虑电器的选择性。对于每一个下级断路器均可从选择性配合表中找到与之相匹配的上级断路器。

1.在选择性配合表中，保证了对给定下级断路器时，应匹配的上级断路器的最小电流规格。

2.在选择性配合表中，“●”区域是以SHTB3-63为上级断路器时，上下级断路器的匹配范围；■“ ”区域是以SHTB3-100为上级断路器时，上下级断路器的匹配范围。选择性配合的界线是指在该项界线对就的上下级（电流）配合时，上级断路器不早于下级断路器跳闸。

记事/NOTES

鉴于样本中所涉及的标准，材料，技术要求，电气线路以及安装尺寸随着时间的推移都在不断地发展，因此这些技术条件均要以本厂最新的确认为准。

Due to the continuous development of Standards as well as of materials,the characteristics,electrical diagrams and reference only on confirmation from Hua Tong.

---


# 上海华通低压开关有限公司

SHANGHAI HUATONG LV ELECTRIC APPARATUS CO., LTD.

地址：上海市沪宜公路950号
电话：021-59124068
传真：021-59124068
邮编：201802
销售公司地址：上海市中江路388弄1号2303室（国盛中心）
电话：021-56771244
传真：021-56655132
邮编：200062
电子邮箱：1919693300@qq.com
技术支持电话：021-59124068,021-59127079
售后服务电话：021-62093036,021-56771244
网址：//www.huatong.net.cn , www.whatung.com

Address: No.950,HuYi Road,Shanghai
Tel: 021-59124068
Fax: 021-59124068
P.C.: 201802
Sales Company Address: Room 2303,No.1,Lane388,Zhongjiang Rd,Shanghai(Guosheng)
Tel: 021-56771244
Fax: 021-56655132
P.C.: 200062
Email：1919693300@qq.com
Technical Support Tel: 021-59124068,021-59127079
After-sales Service Tel: 021-62093036,021-56771244
Http: //www.huatong.net.cn , www.huatong.com


微信公众号

2019.12