

With Electronic \＆Electro－Magnetic Dual Protective Systems带电子和电磁双保护系统

## Application 应用

Along with our life style changing and high－tech development，we already started to know and enjoy the service produced by some electrical installations contain products which incorporate power electronics，such as inverters for PV installations，speed control in HVAC，some running machines，UPS，medical equipment and charge pole for electric vehicle etc．This type of equipment can produce，in addition to standard 50 Hz earth leakage currents，smooth DC and high frequency $A C$ residual current which would not be detected by a standard AC or A type RCCB．That＇s why B type RCCB was born and started to be used for above equipments protections of residual currents．

B type RCCB was design according to standard IEC／EN61008－1＋IEC／EN62423．In addition to normal AC，B type RCCB also can detect high frequency AC and smooth DC earth residual currents．So it is named as＂universal current sensitive RCCB＂，which means it could be used for the widest variety of applications，these are always also designed for use under harsh ambient conditions．

随着我们生活水平的提高和科技的发展，我们对电子电气产品的需求日益增长。而某些电气电力设备光伏逆变器，HVAC的速度控制器，UPS，医疗设备，汽车充电桩等等，会产生标准 50 Hz 之外的漏电，平滑的DC直流电和高频AC交流漏电等，这些电路故障是普通A型和AC型的漏电断路器无法探测到的。本产品MNL1－63就是为了解决这些电路问题而研发的。

B型漏电基于IEC／EN61008－1＋IEC／EN62423而研发生产的。除了常规的AC型型电路保护，B型漏电还能探测上文所述的DC直流漏电，高频AC漏电。因此，产品被称为是＂通用型电流感应漏电＂，也因此被最大范围地广泛应用，也可以在非常苛刻严格的环境下使用。

## Specification 规格

| Poles极数 | Rated Current额定电流 | Type Designation型号 | Article Number条码 |
| :---: | :---: | :---: | :---: |
|  |  |  | Type B B型 |
| 2 P | 25A／30，100，300mA | ML60－2B25／030／100／300 | L62B2530／100／300 |
| 2 P | 40A／30，100，300mA | ML60－2B40／030／100／300 | L62B4030／100／300 |
| 2 P | $63 \mathrm{~A} / 30,100,300 \mathrm{~mA}$ | ML60－2B63／030／100／300 | L62B6330／100／300 |
| 4P | 25A／30，100，300mA | ML60－4B25／030／100／300 | L62B2530／100／300 |
| 4P | 40A／30，100，300mA | ML60－4B40／030／100／300 | L62B4030／100／300 |
| 4P | 63A／30，100，300mA | ML60－4B63／030／100／300 | L62B6330／100／300 |

## Dimension 外形尺寸（单位mm）



## ML60－B B Type RCCB

B型漏电ML60－B

## Technical Date 技术参数

| Electrical电气 |  |
| :---: | :---: |
| Standard 设计标准 | IEC／EN 61008－1＋IEC／EN62423 |
| Tripping 脱扣方式 | instantaneous 瞬时 |
| Rated voltage Un 额定电压和频率 Un | $1 \mathrm{P}+\mathrm{N}: 230 / 240 ; 3 \mathrm{P}+\mathrm{N}: 400 / 415 \mathrm{~V}, 50 \mathrm{~Hz}$ |
| Rated Current 额定电流 | 25，40，63A |
| Rated residual operating current 额定漏电动作电流 | 30，100，300mA |
| Wave form 波形 | B type |
| Rated insulation voltage Ui 额定绝缘电压Ui | 500 |
| Rated impulse withstand voltage Uimp 额定脉冲耐受电压Uimp | 4000 V |
| Rated short circuit strength Im 额定短路能力 Im | $500(\ln =25 / 40 A) ; 600(\ln =63 \mathrm{~A})$ |
| Electro－mechanical endurance 电气寿命 | ＝4，000 operating cycles |


| Mechanical 机械 |  |
| :--- | :--- |
| Frame size 壳架尺寸 | 45 mm |
| Device height 设备高度 | 72 mm |
| Device width 设备宽度 | $54 \mathrm{~mm}(2 \mathrm{P}) / 72 \mathrm{~mm}(4 \mathrm{P})$ |
| Mounting 安装 | quick fasterning on DIN rail IEC／EN 60715 快速DIN导轨安装 |
| Degree of protection 保护级别 | IP20 |
| Upper and lower terminals 上下接线端 | open mouthed／lift terminals 扭式螺丝端子 |
| Terminal protection 接线端子保护 | finger and hand touch safe 手指和手安全接触 |
| Terminal capacity 接线端子容量 | rigid conductor up to $25 \mathrm{~mm}^{2}$ 导体直径上至25mm ${ }^{2}$ |
| Busbar specification 母线排规格 | $0.8-2 \mathrm{~mm}$ |
| Terminal fastening torque 接线端子扭矩 | $2.0 \mathrm{~N} . \mathrm{m}$ |
| Tripping temperature 脱扣温度 | $-25^{\circ} \mathrm{C}+40^{\circ} \mathrm{C}$ |
| Resistance to climatic conditions 气候条件电阻 | IEC／EN61008－1＋IEC62423 |

## Distinguishing Features 产品特点

1．Could detect not only normal $A C$ but also high frequency $A C$ and smooth $D C$ residual currents．
2．High breaking capacity up to 10 kA
3．With indication window for RCCB fault
4．With handle lock control system to protect from error operation
5．With protective cover for terminal screws for insulation and seal functions．
6．Auto Recloser is available to work with B type RCCB

1．能检测到普通AC型漏电，高频AC型漏电和平滑的DC型漏电
2．高分断能力到 10 kA
3．有漏电故障的指示窗
4．具有手动机械锁控制系统可以防止故障操作
5．具有保护盖能防护接线端子绝缘和密封保护
6．我公司的MT51和MT53自动重合闸都可以与本产品搭配使用；


