

# 产品参数表

规格



## Ø22 红色带灯按钮头 - 平头锁定 - 配套LED

ZB4BH043

### 主要信息

|          |               |
|----------|---------------|
| 产品系列     | Harmony XB4   |
| 产品类型     | 带灯按钮头部        |
| 产品适用范围   | Universal LED |
| 产品短名     | ZB4           |
| 边框材料     | 镀镍金属          |
| 操纵头类型    | 标准            |
| 安装直径     | 22.5 mm       |
| 每件单独销售数量 | 1             |
| 信号单元头部形状 | 圆形            |
| 操作头类型    | 按-按           |
| 操纵杆外形    | 红色 平头, 未标记    |
| 操作头或镜片颜色 | 红色            |

### 补充信息

|         |                                                                                                                       |
|---------|-----------------------------------------------------------------------------------------------------------------------|
| CAD 总宽度 | 29 mm                                                                                                                 |
| CAD 总高度 | 29 mm                                                                                                                 |
| CAD 总深度 | 30 mm                                                                                                                 |
| 净重      | 0.026 kg                                                                                                              |
| 高压垫圈阻抗  | 7000000 Pa 在...上 55 °C, 距离: 0.1 m                                                                                     |
| 机械寿命    | 500000 次                                                                                                              |
| 电气组成代码  | M5 适用 <2 触点 使用 单个 块 内 前端安装 和 集成 LED<br>M6 适用 <2 触点 使用 单个 块 内 前端安装 和 集成LED和变压器<br>M10 适用 <2 触点 使用 单个 块 内 前端安装 和 集成 LED |
| 设备简介    | 基本要素                                                                                                                  |

### 环境

|        |                                 |
|--------|---------------------------------|
| 保护处理   | TH                              |
| 贮存环境温度 | -40...70 °C                     |
| 电击保护级别 | 级别 I conforming to IEC 60536    |
| 运行温度   | -40...70 °C                     |
| 过电压种类  | Class I conforming to IEC 60536 |

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|          |                                                                                                                             |
|----------|-----------------------------------------------------------------------------------------------------------------------------|
| IP 保护等级  | IP66 符合 IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                  |
| NEMA防护等级 | NEMA 13<br>NEMA 4X                                                                                                          |
| IK 保护等级  | IK06 conforming to IEC 50102                                                                                                |
| 符合标准     | IEC 60947-5-5<br>UL 508<br>CSA C22.2 No 14<br>IEC 60947-1<br>JIS C8201-5-1<br>IEC 60947-5-4<br>IEC 60947-5-1<br>JIS C8201-1 |
| 产品认证     | CSA<br>LROS (Lloyds register of shipping)<br>BV<br>列出的 UL<br>DNV                                                            |
| 抗振动      | 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6                                                                            |
| 抗冲击      | 30 gn (持续时间 = 18 ms) 适用 半正弦冲击 符合 IEC 60068-2-27<br>50 gn (持续时间 = 11 ms) 适用 半正弦冲击 符合 IEC 60068-2-27                          |

## 包装单位

|            |          |
|------------|----------|
| 包装1：包装单位类型 | PCE      |
| 个/公斤       | 1        |
| 包装1：高度     | 4.5 cm   |
| 包装1：宽度     | 3.4 cm   |
| 包装1：长度     | 5.4 cm   |
| 包装重量       | 27.0 g   |
| 包装2：包装单位类型 | S02      |
| 包装2：包装单位数量 | 100      |
| 包装2：高度     | 15 cm    |
| 包装2：宽度     | 30 cm    |
| 包装2：长度     | 40 cm    |
| 包装2：毛重     | 3.011 kg |

## 合同保修

|     |           |
|-----|-----------|
| 保修单 | 18 months |
|-----|-----------|

施耐德电气希望通过不断开展的“使用更好、使用更长时间、再次使用”的宣传活动来建立供应链伙伴关系、降低材料的影响力并促进材料循环，从而到2050年实现净零排放。

环境数据说明 >

| 环境足迹        |                        |
|-------------|------------------------|
| 生命周期总碳足迹    | 1                      |
| 产品环境概况(PEP) | <a href="#">产品环境文件</a> |

Use Better

| 材料和包装                    |                            |
|--------------------------|----------------------------|
| 回收纸板包装                   | 是                          |
| 无塑料包装                    | 是                          |
| <a href="#">欧盟ROHS指令</a> | 主动合规性（超出欧盟 RoHS 法定范围的产品）   |
| 中国 ROHS 管理办法             | <a href="#">中国 ROHS 声明</a> |

Use Again

| 重新包装和再制造 |                            |
|----------|----------------------------|
| 流通资料     | <a href="#">产品使用寿命终期信息</a> |
| 回收       | 不支持                        |

Dimensions Drawings

Dimensions

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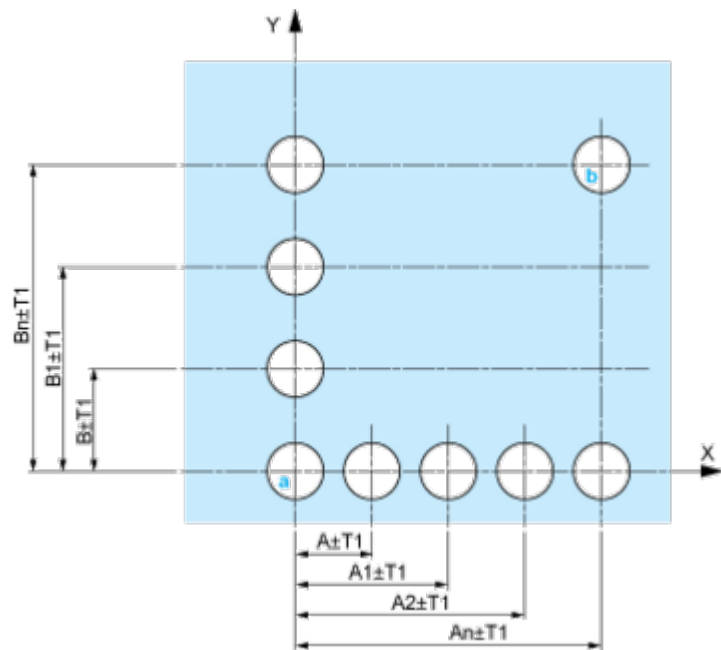
Mounting and Clearance

Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

| Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board                                                                                                                                                                                                                                       | Connection by Faston Connectors |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                                                                                                                                                                                                                                                                                                                             |                                 |
| <p>(1) Diameter on finished panel or support</p> <p>(2) 40 mm min. / 1.57 in. min.</p> <p>(3) 30 mm min. / 1.18 in. min.</p> <p>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}_0</math> / 0.88 in. <math>^{+0.016}_0</math>)</p> <p>(5) 45 mm min. / 1.78 in. min.</p> <p>(6) 32 mm min. / 1.26 in. min.</p> |                                 |

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

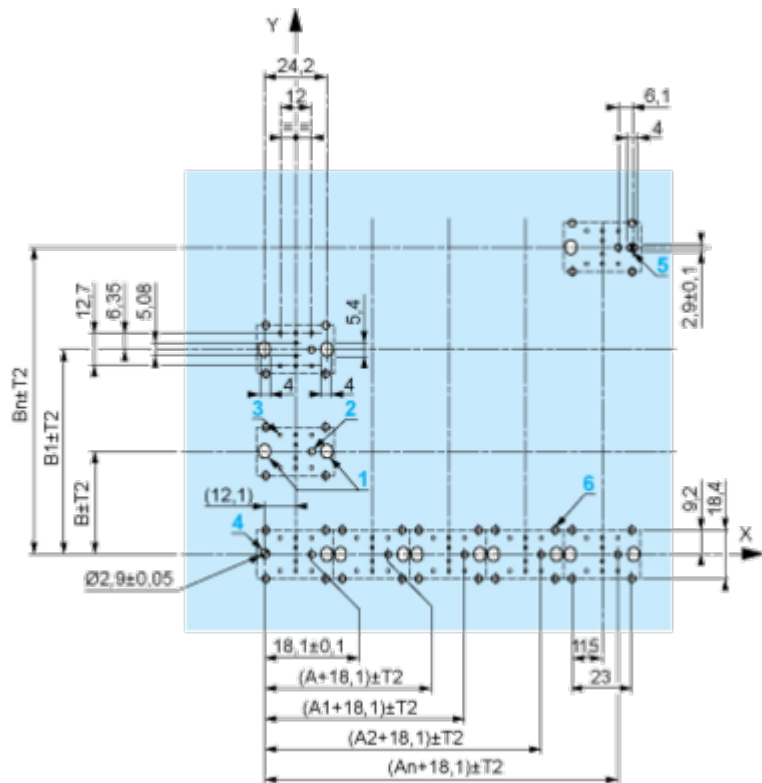
Panel Cut-outs (Viewed from Installer’s Side)



A: 30 mm min. / 1.18 in. min.  
B: 40 mm min. / 1.57 in. min.

Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



A: 30 mm min.  
B: 40 mm min.  
Dimensions in in.



A: 1.18 in. min.  
B: 1.57 in. min.

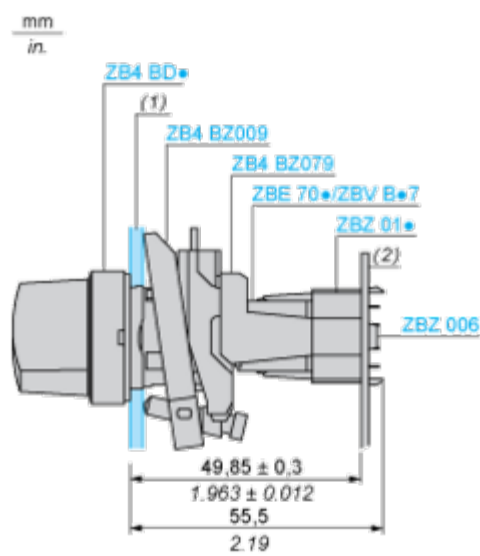
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 mm max.

Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^{\circ}30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB4 BD\*, ZB4 BJ\*, ZB4 BG\*).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



- (1) Panel  
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

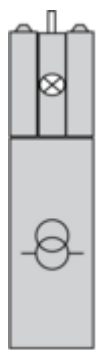
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

Technical Description

Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



Electrical Composition Corresponding to Codes M6 and P2



Legend

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Single contact



Double contact



Light block

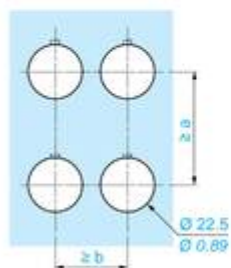
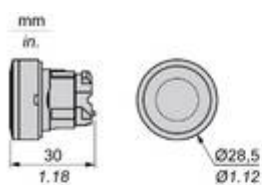


Possible location



### Technical Illustration

## Dimensions



|                                                                                     |                                                                                     | a (mm) | a (in.) | b (mm) | b (in.) |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|---------|--------|---------|
|    |    | 40     | 1.57    | 30     | 1.18    |
| ZBE.....                                                                            | ZBV.....                                                                            |        |         |        |         |
|    |    | 45     | 1.77    | 32     | 1.26    |
| ZBE.....3                                                                           | ZBV.....3                                                                           |        |         |        |         |
|    |    | 40     | 1.57    | 30     | 1.18    |
| ZBE.....4                                                                           | ZBV.....4                                                                           |        |         |        |         |
|    |    | 50     | 1.97    | 30     | 1.18    |
| ZBE.....5                                                                           | ZBV.....5                                                                           |        |         |        |         |
|    |    | 40     | 1.57    | 30     | 1.18    |
| ZBE.....9                                                                           | ZBV.....9                                                                           |        |         |        |         |
|  |  | 40     | 1.57    | 30     | 1.18    |
| ZBRT●                                                                               | ZBRV1                                                                               |        |         |        |         |

Image of product / Alternate images

Alternative

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