## MICROSWITCHES - SEALED, POSITIVE BREAK

## PBX - 8324

> Double-break snap-action mechanism with electrically separated circuits (form Zb)
> Positive opening action according to IEC 60947-5-1 Annex K
> Long overtravel, also after the positive opening position
> Protection of mechanism: IP67/IP65, or IP40 with sealed plunger
) Operating temperature $-50^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
) Ratings from $1 \mathrm{~mA} 4 \mathrm{~V}=$ to 6 A $250 \mathrm{~V} \sim$ - Rating codes: A300, Q150
Very long mechanical life
> Choice of connections - Mounting plates and roller lever (pre-assembled or retrofittable)
> cURus and CCC approved - Meet applicable railway standards

|  |  | Standard $83240$ | High force 83242 | Dual-current $83244$ | Dual-current High force 83245 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Degree of protection | Connections |  |  |  |  |
| IP40 | W3 (QC 6.3x0.8) | 83240000 | 83242000 | 83244000 | 83245000 |
| IP40 | W3/90B (QC 6.3x0.8, folded) | 83240010 | 83242010 | - | - |
| IP40 | W5 (screw + clamp) | 83240020 | 83242020 | 83244020 | 83245020 |
| IP40 | W5/IP20 (screw + clamp, protected) | 83240030 | 83242030 | 83244030 | 83245030 |
| IP40 | W1 (screw + washer) | - | - | - | - |
| IP67 | W3 (QC 6.3x0.8) | 83240200 | 83242200 | 83244200 | 83245200 |
| IP67 | W3/90B (QC 6.3x0.8, folded) | 83240210 | - | 83244210 | - |
| IP67 | W5 (screw + clamp) | 83240220 | 83242220 | 83244220 | 83245220 |
| IP67 | W5/IP20 (screw + clamp, protected) | 83240230 | 83242230 | 83244230 | 83245230 |
| IP 67 | W1 (screw + washer) | $\bullet$ | - | - | $\bullet$ |
| Electrical characteris |  |  |  |  |  |
| Positive opening action |  | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ |
| Rating nominal / 250 V |  | 6 | 6 | 6* | 6* |
| Rating nominal / 250 V |  | 0.6 | 0.6 | 0.6* | 0.6* |
| Rating thermal (A) |  | 10 | 10 | 10 | 10 |
| Mechanical character |  |  |  |  |  |
| Maximum operating for |  | 4.5 | 6.5 | 4.5 | 6.5 |
| Minimum release force |  | 0.6 | 2.5 | 0.6 | 2.5 |
| Minimum positive open | arce (N) | 28 | 28 | 28 | 28 |
| Maximum rest position |  | 8.9 | 8.9 | 8.9 | 8.9 |
| Operating position (mm) |  | $6.6 \pm 0.25$ | $6.6 \pm 0.25$ | $6.6 \pm 0.25$ | $6.6 \pm 0.25$ |
| Positive opening positio |  | 4.4 | 4.4 | 4.4 | 4.4 |
| Maximum total travel pos | n (mm) | 3.4 | 3.4 | 3.4 | 3.4 |
| Differential travel (mm) |  | $1 \pm 0.3$ | $1 \pm 0.3$ | $1 \pm 0.3$ | $1 \pm 0.3$ |
| Operating temperature |  | $-50 \rightarrow+85$ | $-50 \rightarrow+85$ | $-50 \rightarrow+85$ | $-50 \rightarrow+85$ |
| Mechanical life - IP40 v | ns (operations) | $10^{7}$ | $10^{7}$ | $10^{7}$ | $10^{7}$ |
| Mechanical life - IP67 | ns (operations) | $4 \times 10^{6}$ | $4 \times 10^{6}$ | $4 \times 10^{6}$ | $4 \times 10^{6}$ |
| Contact gap (mm) |  | $2 \times 1$ | $2 \times 1$ | $2 \times 1$ | $2 \times 1$ |
| Weight (g) |  | 22 | 22 | 22 | 22 |
| Additional specifications |  |  |  |  |  |
| - Case: PC GF (UL 94-V2 / GWFI $960^{\circ} \mathrm{C} /$ GWIT $775^{\circ} \mathrm{C}$ ) <br> - Button: PBT GF (UL 94-V0 / GWFI $960^{\circ} \mathrm{C}$ ) <br> - Membrane: silicone rubber <br> - Contacts: silver alloy, micro-profile gold alloy on silver alloy, micro-profile (dual-current) <br> - Terminals: brass (silver-plated brass : on request) <br> - Screws: stainless steel <br> - Levers: stainless steel, polyamide roller |  | - Degree of protection: IP65/IP67 or IP40 (mechanism) <br> - Recommended min actuating speed: $0.1 \mathrm{~mm} / \mathrm{s}$ <br> - Rated insulation voltage Ui: 400 V <br> - Impulse withstand voltage Uimp: 4 kV <br> - Pollution degree: 3 |  |  |  |
|  |  | - Protection against electric shock: Button and actuators of IP67 versions have reinforced insulation |  |  |  |
|  |  | - Dimensional conformity: DIN 41636 F <br> - Fire/smoke resistance: EN 45545 |  |  |  |
|  |  | - Certification marks: cin us (A300, Q150) / @c. EH[ |  |  |  |

## Product adaptations

> IP67 wire lead or cable outputs, EN 50306 halogen-free versions
, Special connections: W3 QC tabs with specific folding angles, double QC tabs, W5 without screws, ...

, Special levers: special shapes and lengths
AgPd contacts for infrequent switching in corrosive atmospheres up to 1A (83241/83243)
> Maintained action variant (bistable reset switch), with plunger or lever
) Two-pole DPDT assemblies with common lever
> IP40 protective cover/housing on connections

