Braking Devices VersiBrake L (LP) [6 – 30A]

Features:
- DC braking with one-way rectification
- suitable for all asynchronous motors and for mono phase motors
- controlled by microcontroller
- easy mounting, also for retrofitting into existing plants
- wear-resistant and maintenance-free
- integrated braking contactor
- printed circuit-board version with fault signaling contact
- for snap-on mounting onto 35mm DIN rail
- degree of protection: case version IP 20, printed circuit-board version IP 00
- meets trade assoc. requirements for PL = b, acc. to DIN EN ISO 13849-1

Function:
- start braking via detection of motor voltage and via motor contactor (double safety)
- braking current cutoff after motor standstill
- braking current control
- automatic remanence time optimization
- braking current infinitely adjustable 10-100%
- potential-free output for motor contactor interlocking during braking;
  also usable to energize the star contactor during braking
- standstill threshold adjustable, individual adaptable to different motor types

Typical Applications:
- saws
- conveyors
- woodworking machines
- grinding machines
- others

Type designation | VB 230-6L | VB 230-25L | VB 230-30L | VB 400-6L | VB 400-25L | VB 400-30L |
--- | --- | --- | --- | --- | --- | --- |
rated device current | 6A | 25A | 30A | 6A | 25A | 30A |
mains voltage according to DIN EN 50160 (IEC 38) | 220/240V ±10% 50/60Hz | 380/415V ±10% 50/60Hz |
order number case version (L) | 2B000.23006 | 2B000.23025 | 2B000.23030 | 2B000.40006 | 2B000.40025 | 2B000.40030 |
order number printed circuit-board version (LP) | 2B100.23006 | 2B100.23025 | 2B100.23030 | 2B100.40006 | 2B100.40025 | 2B100.40030 |

Please observe supplementary sheet with dimensioning rules!
### Technical Data

<table>
<thead>
<tr>
<th>mains voltage acc. to DIN EN 50160 (IEC 38)</th>
<th>230/240V ±10% 50/60Hz</th>
<th>380/415V ±10% 50/60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>power draw of electronics</td>
<td>3 VA</td>
<td></td>
</tr>
<tr>
<td>recommended for rated motor current up to</td>
<td>0.3 ... 3A 2 ... 12.5A</td>
<td>0.3 ... 3A 2 ... 12.5A</td>
</tr>
<tr>
<td>recommended for rated motor current on IE3 motors</td>
<td>0.3 ... 2A 2 ... 9A</td>
<td>0.3 ... 2A 2 ... 9A</td>
</tr>
<tr>
<td>rated device current</td>
<td>6A 25A 30A 6A 25A 30A</td>
<td></td>
</tr>
<tr>
<td>max. braking frequency at braking time of s</td>
<td>1/8s 1/60s 1/90s 1/8s</td>
<td>1/60s 1/90s</td>
</tr>
<tr>
<td>I²t-value of power semiconductors in A's</td>
<td>310 1250 1350 310 1250</td>
<td>1350</td>
</tr>
<tr>
<td>braking voltage</td>
<td>0 ... 110VDC</td>
<td>0 ... 220VDC</td>
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<tr>
<td>max. braking time</td>
<td>12s</td>
<td></td>
</tr>
<tr>
<td>contact rating (control relay)</td>
<td>3A/250VAC; 3A/30VDC</td>
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</tr>
<tr>
<td>delay time for reduction of residual e.m.f.</td>
<td>self-optimizing in the range between 0.2 ... 2s</td>
<td></td>
</tr>
<tr>
<td>max. cross-sectional area for connection</td>
<td>2x 2.5mm² per terminal</td>
<td></td>
</tr>
<tr>
<td>ambient / storage temperature</td>
<td>0°C ... 45°C / -25°C ... 75°C</td>
<td></td>
</tr>
<tr>
<td>weight / kg</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

### Note:

Please pay attention and consider for the operation of IE3 motors while dimensioning of softstarters and dc brakes the resulting higher starting and braking currents.

For the use of IE3 motors we highly recommend to dimension and design the needed softstarters and braking devices one size higher.

### Dimensions:

- **case version (L)**
  - Dimensions in mm:
    - Width: 122
    - Height: 45

- **printed circuit-board version (LP)**
  - Dimensions in mm:
    - Width: 105
    - Height: 58

### Connection Diagram:

- **Functional description**
  - Connection of X3, X4 will be needed if double security for the start of braking is required.
  - In case of a fault, the fault signaling contact K1 is available.
  - XT in the case of a fault, the fault signaling contact K1 is open.

- **Really ensure correct terminal-phase connections between input of braking device (L1,L2) and output of braking device (T1,T2).**

Subject to change without notice.