**B1G Speed Control series**

**Features**
- Great space saver
- Wide speed control range with stable torque (120 to 1000 rpm)
- Smooth run with sine wave drive
- Low noise, low vibration
- Fitting face is same as our geared motor
- Compatible with setup software PANATERM® for BL
  - For operation monitoring by graphic waveform displays and setting of parameters
  - (e.g., acceleration/deceleration time)
- Power voltage: Single phase 100-120 & 200-240V
- CE/UL rated & IP65 rated

**Product positioning (B1G)**

**System configuration**

1. **System configuration**

   - 1A: MBMC3A
   - 1B: MBMC3B
   - 2: Gear head
   - 3A: MBMC3A
   - 3B: MBMC3B
   - 4: Panel A
   - 5: Panel B

2. **Model number**

   - VIN: A + B
   - MBMC3A
   - MBMC3B

3. **Wiring**

   - DPV3520
   - DPV35910
   - DPV35950
   - DPV36010
   - DPV4150
   - DPV4531
   - DPV4611-5

4. **Specification**

   - **Model number**
     - MBMC3A
     - MBMC3B
   - **Rated output (W)**
     - 30
     - 50
     - 90
     - 130
   - **Control speed**
     - 30 ~ 3000 rpm (Speed ratio 1:100)
   - **Speed fluctuation**
     - 1% or less (Rated speed & 0 to rated torque)
   - **Speed change**
     - Voltage ±1% or less (Power source voltage ±10% & Rated speed)
     - Temperature ±1% or less (±40°C & Rated speed)
   - **Acceleration time**
     - 0.3 seconds (Time from 0 to 1000 rpm) or
       - Free run & Step III
   - **Accuracy of set speed**
     - 2% or less (Analog output ±0.5V)
   - **Protective function**
     - Under-voltage protection, Over-voltage protection, Over-current, Regenerative over-voltage, Parameter error, CPU error, Over-speed, Sensor error, Over-heat
   - **Insulation level**
     - E/ECD: UL certified A100C
   - **Rated time**
     - Continuous
   - **Overload warning level**
     - 100% or 80% of continuous rating
   - **Time limit at overload**
     - 60 seconds at 150% loading
   - **IP rating**
     - Motor is IP65 rated, excluding foot of shaft and end of lead wires
   - **Mass (kg)**
     - 1.1
     - 1.3
     - 2.3
     - 2.3

5. **Speed-Torque**

   - **Torque**
     - 3.5N.m
     - 6.5N.m
     - 13.5N.m
   - **Speed**
     - 1500 rpm
     - 3000 rpm
     - 1500 rpm

6. **Life time**

   - Motor alone: 10,000 hours
   - Motor with gear head: 5,000 hours

7. **Acceptable load on shaft**

   - Motor or gear head
   - Overload protection

8. **Acceptable torque with gear (N·m)**

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9. **Acceptable load inertia moment (x 10^2 kg·m^2)**

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10. **Motor**

    - 0.5kW: 1500 rpm
    - 3kW: 1500 rpm

11. **Motion control**

    - Motion control is also available with our other series.
Panasonic
ideas for life

Brushless Motor
with internal drive

2007/3

B1-G

Brushless Motor
Compatible with PANATERM® for BL

B1G series

Speed Control

Cautions for Proper Use

- This product is intended to be used with a general industrial product, but not designed or manufactured to be used in a machine or system that may cause personal death when it is failed.
- Install safety equipment or apparatus in your application, when a serious accident or loss of property is expected due to the failure of this product.
- Consult us if the application of this product is under such special conditions and environments as nuclear energy control, aerospace, transportation, medical equipment, various safety equipment, or equipments which require a clean air contamination.
- We have been making the best effort to ensure the highest quality of the products, however, application of exceptionally larger, external noise disturbance and static electricity, or failure in input power, wiring and components may result in unexpected action.
- It is highly recommended that you make a fail-safe design and secure the safety in the operating range.
- If the motor shaft is not electrically grounded, it may cause an electrolytic corrosion to the bearing, depending on the condition of the machine and its mounting environment, and may result in the bearing noise. Checking and verification by customer is required.
- Failure of this product depending on its content, may generate smoke of about one cigarette. Take this into consideration when the application of the machine is clean room related.
- Please be careful when using in an environment with high concentrations of sulphur or sulphuric gases, as sulphurization can lead to disconnection of the chip resistor or a poor contact connection.
- Take care to avoid inputting a supply voltage which significantly exceeds the rated range to the power supply of this product.
- Failure to heed this caution may result in damage to the internal parts, causing smoking and/or a fire and other trouble.
- Read and observe the instruction manual without fail for proper usage of the products.

Panasonic Electric Industrial Co., Ltd.

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