

BGE6050A Programmable Drive



The BGE6050A brushless motor drive is the largest Pittman 4-quadrant servo controllers designed for operation in speed, torque and position modes. The Drive can operate as a stand-alone motion controller or as a slave in a CANopen network.

■ Benefits

- 4-quadrant servo controller
- Fully programmable control unit
- CANopen interface (DSP402)
- Protection against over-voltage, under-voltage and over-temperature
- Also capable of driving brushed type DC motors

■ Characteristics

| Data | Units | Part No. |
|---------------------------|-------|-----------------|
| | | BGE6050A |
| Voltage Range | V DC | 10 to 60 V DC |
| Continuous Output Current | A | 20 A rms |
| Peak Output Current | A | 50.0 A rm |
| Digital Inputs | | 5 |
| Digital Outputs | | 1 |
| Analog Inputs | | 1 (0 to +10 V) |
| Communication | | CANopen |
| Torque Mode | | Yes |
| Speed Mode | | Yes |
| Position Mode | | Yes |
| Size | mm | 1 00 x 112 x 30 |

■ X2 Connector - Hall Sensors and Encoders

| PIN | Symbol | Description |
|-----|--------|---|
| 1 | H1 | Hall sensor 1 |
| 2 | H2 | Hall sensor 2 |
| 3 | H3 | Hall sensor 3 |
| 4 | A | Inc. encoder channel A |
| 5 | B | Inc. encoder channel B |
| 6 | INX | Inc. encoder index channel |
| 7 | +UH | Power supply hall/encoder +5V |
| 8 | /H1 | Hall sensor 1 inverted |
| 9 | /H2 | Hall sensor 2 inverted |
| 10 | /H3 | Hall sensor 3 inverted |
| 11 | /A | Inc. encoder channel A inverted |
| 12 | /B | Inc. encoder channel B inverted |
| 13 | /INX | inc. encoder index channel inverted |
| 14 | GND | Ground 0V for power supply hall/encoder |

■ X1 Connector - Power Supply and Motor

| PIN | Symbol | Description |
|-----|--------|----------------------------|
| 1 | PE | Earth |
| 2 | +UP | Power supply |
| 3 | GND | Ground 0V for power supply |
| 4 | Ma | Motor connection A |
| 5 | Mb | Motor connection B |
| 6 | Mc | Motor connection C |

■ X3 Connector - Analog and Digital I/O

| PIN | Symbol | Description |
|-----|-------------|---------------------------------|
| 1 | +UE | "Power supply electronic " |
| 2 | +AIN 0/DIN4 | + Analog input/ digital input 4 |
| 3 | DIN 0 | Digital input 0 |
| 4 | DIN 1 | Digital input 1 |
| 5 | DIN 2 | Digital input 2 |
| 6 | DIN 3 | Digital input 3 |
| 7 | res. | Reserved pin |
| 8 | -AIN 0 | Analog input |
| 9 | DOUT 0 | Digital output 0 |
| 10 | CAN_HI | CAN high |
| 11 | CAN_LO | CAN low |
| 12 | CAN_GND | CAN ground |

Dimensional Drawing: BGE6050A

