2007-02-08

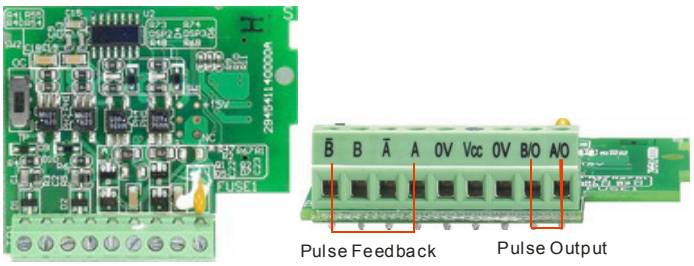
5011659700-TPG0

EME-PG01 Instruction Sheet

- **Please thoroughly read this instruction sheet before installing option cards and putting them into use.**
- **The content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the most updated version at http://www.delta.com.tw/industrialautomation.**

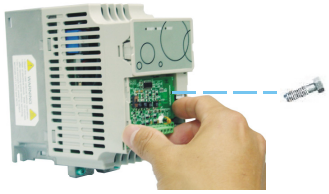
❶ Layout

PG Card (EME-PG01)



❷ Installation

- Make sure that the AC Motor Drive is powered off before operation. DO NOT insert or remove the card when the AC Motor Drive is powered on.
- Please mount the extension card as shown and fix it with the screw packed with the card.



Screw torque: Maximum 2kgf-cm

- Terminals Screw Torque: Maximum 2kgf-cm
- Wire Length

Types of Encoder Output	Maximum Length	Wire Gauge
Voltage	50m	14 ~ 24 AWG (2.1 ~ 0.2 mm^2)
Open Collector	50m	
Line Driver	300m	
Complementary	70m	

NOTE

- **EME-PG01 needs additional power source DC 5 ~ 24V, as to details please refer to table of terminals descriptions.**
- **Only when the extension card is correctly installed on the AC Motor Drive, the extension card will be automatically detected. The parameters can be set in Group 13. If extension card is not installed, only parameters Group 0 ~ Group 10 can be set. Refer to Chapter 5: Parameters in the user manual for further details.**

❸ Notes

- Please use a shielded cable to prevent interference. Do not run control wires parallel to any high voltage AC power line (200 V and above).
- The wire length and signal frequency are in inverse proportion.
- Always use this product in a clean indoor location free from dust, corrosive gas and liquid.
- When the relays are used to switch inductive loads (relays, contactors, motors, etc), connect an RC network or Varistor parallel to the load to suppress voltage spikes.
- For safety, it is recommended to use fuses for the circuitry that is switched by the relays. The fuse specification must be within the specified contact limits.
- The ends of wires must be tinned or crimped.
- To avoid interference, route the extension card wires separately and as far away (at least 15cm) as possible from other control wires, motor wires and power wires, etc. Where these wires must cross each other, please make sure they are at a 90° angle.
- Always use and operate this product within the limit of its specifications.

❹ Specification

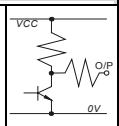
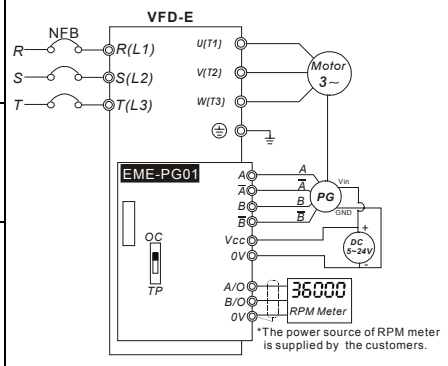
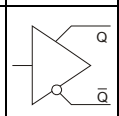
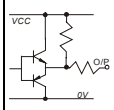
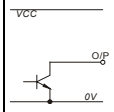
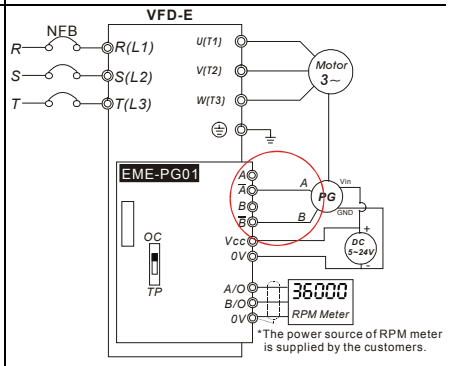
■ Environmental

Operating Temperature	-10°C to 50°C (non-condensing and not frozen)
Storage Temperature	-20° C to + 60°C
Ambient Humidity	Less than 90%RH (non-condensing)
Installation Altitude	Below 1000m
Vibration	Below 20 Hz: Maximum 9.81 m/s^2 (1G); 20 ~ 50Hz: Maximum 5.88 m/s^2 (0.6G)

■ Terminals Descriptions

Terminal Symbols	Descriptions
Vcc	Input Voltage: DC 5 ~ 24V **When the encoder output type is voltage output, input voltage is DC 12 ~ 24V**
0V	Power source and input signal common
A, $\overline{A}$ B, $\overline{B}$	Input signal from the encoder. Input type is selected by SW2. It can be 1-phase or 2-phase input. Maximum 300KP/sec
A/O, B/O	Output signal from the encoder. Open collector: max. output DC24V 50mA
⏚	Grounding

❺ Types of Encoder Output

Types of Encoder Output		SW2	Wiring Diagram
Voltage			
Line driver			
Complementary			
Open collector			

Note: Based on the design, the input signal terminals from the encoder should be connected to the terminals of $\overline{A}$ and $\overline{B}$ on EME-PG01 card, not the terminals of A and B, so as to avoid damage to the encoder.