

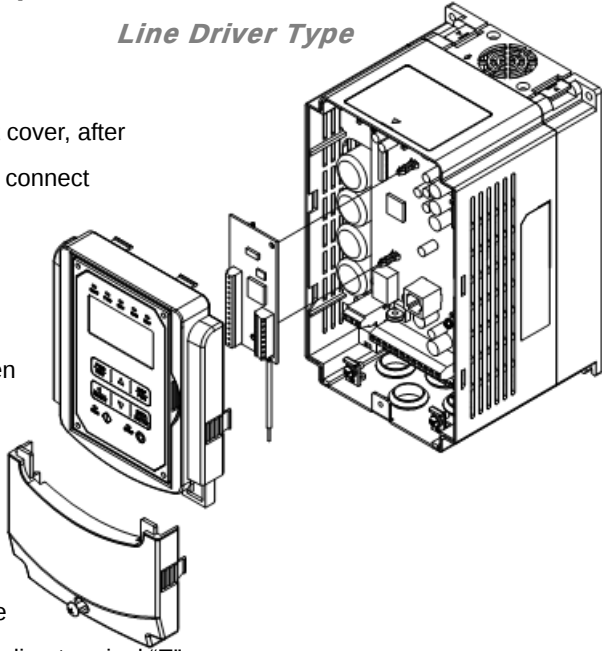


JN5-PG-L Encoder Feedback Option Card Installation Manual

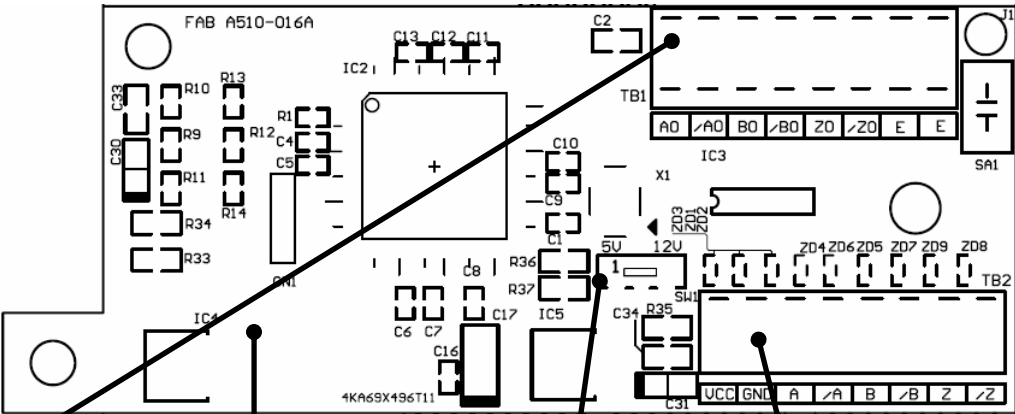
Line Driver Type

Installation

- ① Turn off the power and remove front cover, after Charge LED became dark, **Do NOT** connect the wire or install PG card while Charge LED is bright.
- ② Insert the JN5-PG-L card into **CN3** connector of control board and fasten the card by a plastic standoff. (The plastic standoff can penetrate the hole, which is located on the right side of PG card.)
- ③ Connect the grounding wire from the JN5-PG-L to the control board grounding terminal “E”.



JN5-PG-L Terminal Block Designation



Pulse Monitor

PG Power Supply

Output Terminal

Switch Jumper (5V/12V)

CN2 Connector  
(Connect to CN3)

PG Signal

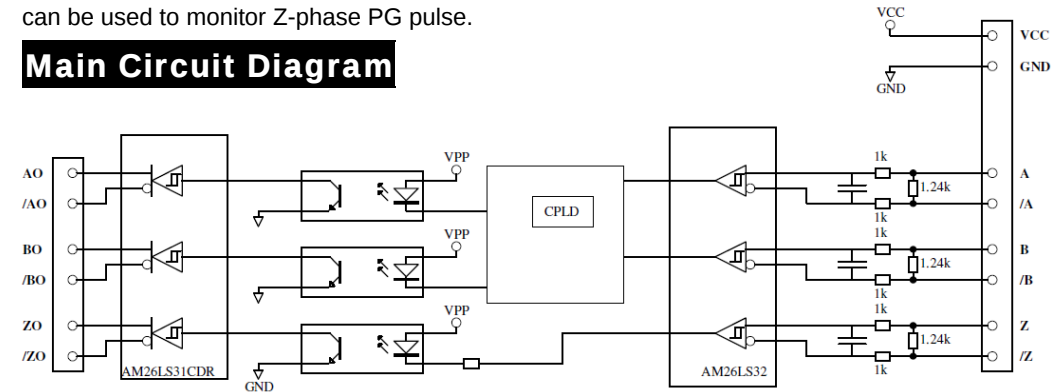
Input Terminal

Terminal Functions

| Terminal Symbols          | Function                                                        |
|---------------------------|-----------------------------------------------------------------|
| Vcc                       | Power Supply for PG : 12V/5V±5%, 200mA                          |
| GND                       | Power Source and Input Signal Common                            |
| A, A\, B, B\, Z, Z\       | PG Signal Input Terminal (Line Driver Type), RS-422 Level Input |
| AO, AO\, BO, BO\, ZO, ZO\ | Pulse monitor output* : Line Driver Type, RS-422 Level Output   |
| E                         | Grounding Terminal                                              |

\*Use 20-29 to set PG pulse output ratio for A/B-phase (AO-AO\, BO-BO\), the terminal “ZO-ZO\” can be used to monitor Z-phase PG pulse.

Main Circuit Diagram



Feedback Card Parameters

| Function Group |                        | Description                                                          |
|----------------|------------------------|----------------------------------------------------------------------|
| 00-00          | Control Mode Selection | Selects VF+PG or SV control mode for close loop control.             |
| 20-00~06       | Speed Control(ASR)     | Adjusts the speed control (ASR) to reduce speed fluctuation.         |
| 20-19~31       | PG Feedback Set up     | Sets the PG pulse resolution, output ratio and related PG functions. |

\* Please read the latest A510 instruction manual for detailed parameter setting.

Notices

- ① JN5-PG-L feedback card is designed for A510 series drive, please read through A510 instruction manual before installation.
- ② Use shielding cable to reduce noise effect, separate wiring the control cable and power cable
- ③ Support Line Driver type pulse (encoder) signal, the maximum wire length is 300m.
- ④ The maximum response frequency of JN5-PG-L is 300 kHz.

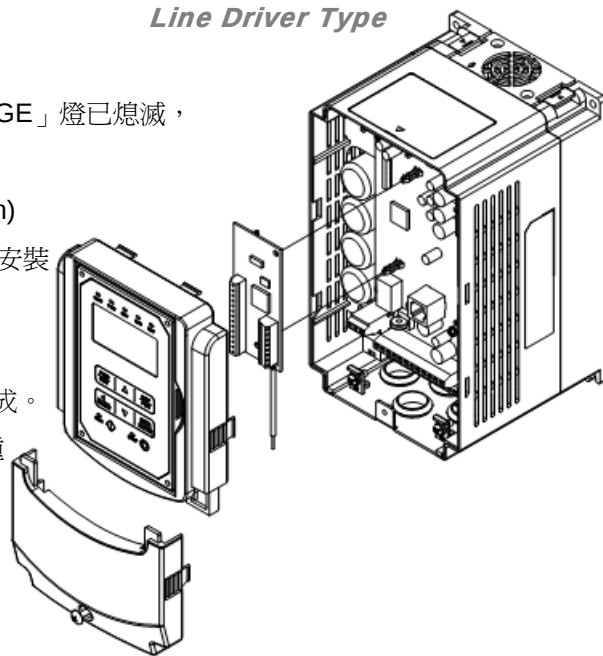


## JN5-PG-L 速度回授卡安裝說明書

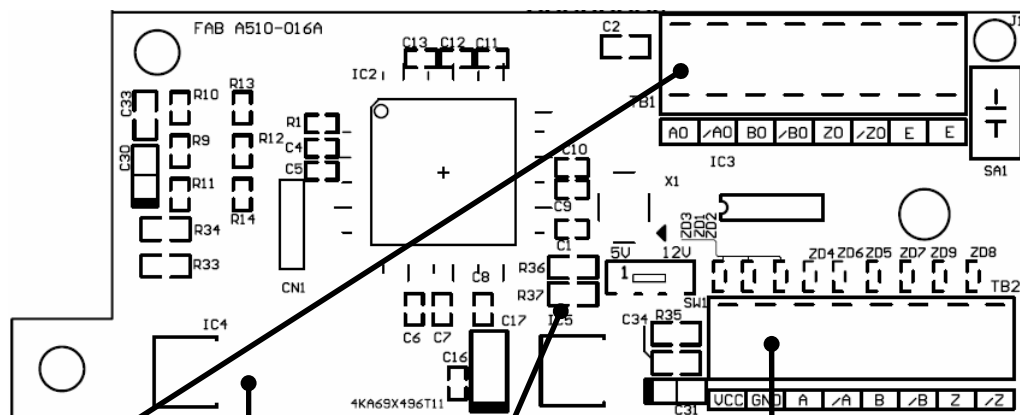
### Line Driver Type

#### 安裝說明

- ① 關閉主回路電源，並確認「CHARGE」燈已熄滅，打開變頻器前方上/下蓋。
- ② 將變頻器控制基板上的 **CN3**(36pin) 與回授卡(JN5-PG-L)的 **CN2** 直接安裝在一起，在控制基板的塑膠支撐柱穿入回授卡上的支撐孔，將其插入直到有“喀嚓”聲出現後才算固定完成。  
A510 2001~2002/4001~4003 機種僅需 2 個支撐柱即可固定。
- ③ 將回授卡上的綠色接地線連接至控制板端子臺上的接地端子“E”。



#### JN5-PG-L 回授卡



脈波監測  
輸出端子

CN2 端子  
(連接至 CN3)

編碼器電源  
選擇跳線(5V/12V)

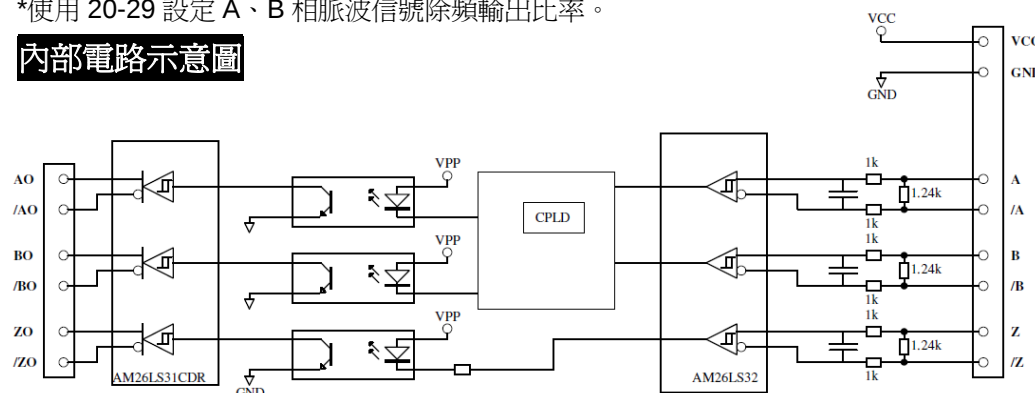
編碼器信號  
輸入端子

#### 端子說明

| 端子名稱                      | 說明                                                          |
|---------------------------|-------------------------------------------------------------|
| Vcc                       | 編碼器電源接點：12V/5V±5%, 200mA                                    |
| GND                       | 電源及輸入信號參考點                                                  |
| A, A\, B, B\, Z, Z\       | 編碼器信號輸入端子，需兩相輸入方可有正確之除頻比輸出，Line Driver 輸入型式：RS-422 Level 輸入 |
| AO, AO\, BO, BO\, ZO, ZO\ | A、B 相除頻輸出端子*，Z 相監視輸出端子<br>Line Driver 輸出型式：RS-422 Level 輸出  |
| E                         | 接地端子                                                        |

\*使用 20-29 設定 A、B 相脈波信號除頻輸出比率。

#### 內部電路示意圖



#### 參數設定

| 參數群組     |         | 說明                      |
|----------|---------|-------------------------|
| 00-00    | 控制模式選擇  | 設定變頻器為 VF+PG 或 SV 控制模式。 |
| 20-00~06 | 速度控制器   | 調整速度控制器(ASR)的響應與速度誤差。   |
| 20-19~31 | PG 回授設定 | 設定編碼器解析度、除頻比等回授卡參數值。    |

註：詳細參數設定說明，敬請參閱最新版 A510 操作手冊。

#### 注意事項

- ① JN5-PG-L 適用於東元 A510 系列變頻器，安裝前請務必研讀 A510 操作手冊。
- ② 為防止雜訊干擾請務必使用隔離線連接，並且與其他動力線分離配線。
- ③ JN5-PG-L 卡只能配合差動式編碼器(Line Driver Encoder)，最大配線長度為 300m。
- ④ 速度回授卡的最高響應頻率為 300kHz。