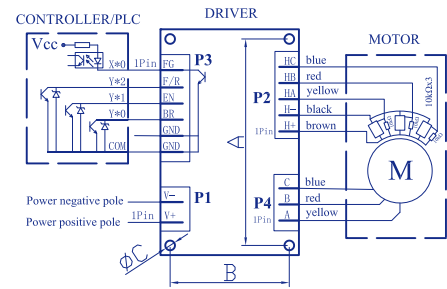


## AM-CDN-0305-LAAS (3 Amps)



| SYSTEM CHARACTERISTICS:           | INFORMATION:                                     | INSTALLATION NOTES:                                         |
|-----------------------------------|--------------------------------------------------|-------------------------------------------------------------|
| Input Voltage: 12~28V DC          | Dimension: Length: 34mm. width: 28mm             | a) Please install in dry and ventilated place               |
| Continuous Current: 3A            | Hole Size: A: 30.0mm; B: 24.0mm; C: 2.1mm        | b) Avoid vibration and collision                            |
| Temperature - Operation: 0 ~+45°C | Cooling Method: Natural Cooling                  | c) Do not let metal dust and iron cut falling on controller |
| Temperature - Storage: -20 ~+85°C | Protective Function: Current limit, Undervoltage | d) Fix installation is needed                               |
| Humidity: ≤85% (non-condensing)   | Weight: 8.5g                                     | e) Use quality connection cables                            |

### INTERFACE & CONTROL SIGNALS

#### P1: Electric Connections

| Number | Name    | Note      |
|--------|---------|-----------|
| 1      | M+      | Power Vcc |
| 2      | M-(GND) | Power GND |

#### P2: Motor Sensor Connections

| Number | Name | Note                         |
|--------|------|------------------------------|
| 1      | H+   | Hall sensor power supply Vcc |
| 2      | H-   | Hall sensor power supply GND |
| 3      | HA   | Hall Sensor Phase A          |
| 4      | HB   | Hall Sensor Phase B          |
| 5      | HC   | Hall Sensor Phase C          |

#### P3: Control Signal Connections

| Number | Name | Note (Low: 0~0.8VDC; High: 2.2~5.0VDC; Null: Not Connect)                                                                                                            |
|--------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | FG   | Motor Speed Signal Output (3 pul/turn)                                                                                                                               |
| 2      | F/R  | Direction port (Low-CW; High/Null-CCW); Direction defined when looking from motor front.                                                                             |
| 3      | EN   | Enable port (Low-Motor rotate; High/Null-motor stop). This port can be used as PWM control (PWM requirement: 20KHz, the lower the duty cycle, the higher the speed). |
| 4      | BR   | Brake port (Low-Brake; High/Null-Release)                                                                                                                            |
| 5      | GND  | Control GND                                                                                                                                                          |
| 6      | GND  | Control GND                                                                                                                                                          |

#### P4: Motor Electric Connection

| Number | Name | Note                |
|--------|------|---------------------|
| 1      | A    | Motor Winding A (U) |
| 2      | B    | Motor Winding B (V) |
| 3      | C    | Motor Winding C (W) |

### NOTE ON USAGE

- Controller should be installed with 20mm space for cooling. The environment should be ventilated
- When using the braking function, please calculate the braking speed. Ensure that the motor speed is lower than the braking speed to avoid high back EMF which will damage the components
- Change direction only when motor stopped completely to prevent damage of electronic components.
- The controller is a two-quadrant operation mode, it cannot be use when speed change is rapid.
- Please read this instruction carefully before installation. Whenever there is problem, please stop the current immediately.

### REMARKS

Data Tested at 25°.

Operation exceeds continuous limits of operating range will compromise the life of the device.

Download datasheet: <https://assunmotor.com/documents-download>

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