# *AC DRIVE*

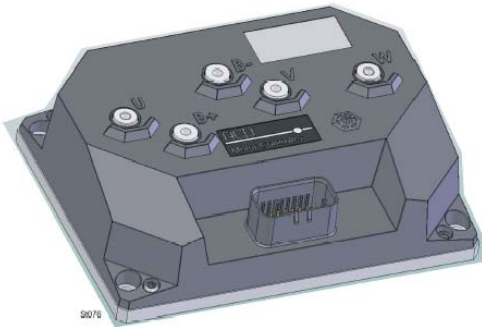## Controller for brushless permanentmagnet
## Synchronous Motors (PMAC Motor)



## DESCRIPTION

The *AC DRIVE* are designed to incorporate the features and requirements of smaller electric vehicles or specific applications. For example, class III lift trucks, golf cars, steering applications, handicap vehicles, electric boat applications and similar. The *AC DRIVE* is available in a 24/36V and 48 V version providing different power outputs and battery voltages.

## FEATURES

- The *AC DRIVE* is small, efficient and offers outstanding performance regardless if it is applied for traction, lift or steering applications

- The drive is designed to meet the demanding environments of electric vehicles

- A rugged design ensures protection against dust, water and physical demage

- Integral mounting flanges and the integrated connector ensure simple installation and reliable operation

- For safe and reliable vehicle operation the *AC DRIVE* communicates via the industry standard CANopen protocol, or directly from analogue/digital inputs

- Total software configurability eliminates all operator adjustments and assures absolutely reproducible performance of identically configured drives

- Programmable features are for example hillhold, rollback, braking and best performance curve (BPC)

**For more informations:**

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## OPERATING ENVIROMENT

| | |
|---|---|
| Operating temperature | -40°C to + 50°C |
| Storage temperature | -40°C to +70°C, ambient humidity of 95% |
| Humidity | 95% condensing according to IEC 68-2-3D, Db |
| Thermal resistance | 0,3 °C/W |
| Sealing | IP 65 |

## POWER Connections

| Terminal | Description |
|---|---|
| B+ | Supplies battery power for the power stage |
| B – | Battery return connection |
| U; V; W | Phase currents for the three-phase AC motor |
| | |

## I/O INTERFACE

**CONNECTOR**

- AMP SEAL 23-pin

**GENERAL I/O**

- UP to 6 digital inputs
- Up to 3 analog inputs
- Up to 4 Open drain outputs

**MOTOR SPEED INTERFACE**

- Two channel digital encoder
- Two (sin/cos) or three channel analog
- Six Step

**MOTOR TEMPERATURE SENSOR**

- KTY 84 series

**COMMUNICATION**

- CANopen protocol
- CAN to USB Adapter necessary to connect with PC

## ACD PRELIMINARY RATINGS

| Model | Voltage | Current 2 min | Current 1 hour |
|---|---|---|---|
| 2405 | 24/36 | 225 A | 100 A |
| 2402 | 24/36 | 90 A | 40 A |
| 4805 | 48 | 175 | 75 |
| 4802 | 48 | 70 | 30 |

## WEIGHT

| Model | Weight kg |
|---|---|
| ACD xx02 | 1,4 |
| ACD xx05 | 1,6 |