

### Features

- Communications – CANOpen
- Baud rates supported – 1000,500,250,125 KB/s
- Interface Capacity – up to 10 sensors/ 4 brushless motors and includes these features:
  - Direct driving of four 3 phase brushless DC Rollers
  - Speed control of each zone
  - Rollers stop rotating when package is not present
  - Accumulate, transfer, singulate, train modes of operation
  - Motor error detection (overload, overheat, motor not present)
  - Jam detection photo sensor marginal gain diagnostic
  - Linear transfer, 2to1/3to1 merge, divert, RAT, FTU functions included
  - Full galvanic isolation



### Introduction

The CANopen Roller Speed Control (CRSC) provides integrated control solution for conveyor and motor control applications using CANopen communication technology. The module can be configured to act as linear transfer, merge, diverter, RAT... The benefits of such a conveyor system include:

- Reduced installation costs
- Reduced audible noise
- Reduced energy consumption
- High level of system modularity
- Simple system maintenance, diagnostic and repair
- Plug and Play installation
- Increased roller life
- E-stop functionality

The core of this system is the CANopen Roller Speed Control, which is designed using the CANopen Protocol to provide maximum system functionality. Smart functions are build into the Module that provides control of various operational modes of conveyor.

### Specification

#### Inputs

- Number of inputs:
  - 10 inputs - Sensor
  - 10 inputs - Sensor alarm
- Nominal Input Voltage: 11~ 35V DC
- Input Current - from 6 up to 30mA (IEC 61131-2 standard)
- Logic 1- from 11 up to 35V DC (IEC 61131-2 standard)
- Logic 0- from 0 up to 5V DC (IEC 61131-2 standard)

#### Outputs

- Number of outputs:
  - 4 outputs for direct drive of brushless DC motors

### General Specifications

- Power requirements:
  - Nominal: +24VDC/ 100mA (excluding motor power and current draw from photoelectric)
  - Voltage Range: 18V to 30VDC
- Maximum peak motor drive current: 10A
- Programmable average current protection
- Operating temperature: -20°C ~ +80°C
- Storage temperature: -40°C ~ +85°C
- Humidity: 5 ~ 95% RH, non-condensing
- Vibration: 2G, at 10 to 500 Hz
- Isolated voltage:
  - DC/DC converter from power supply – 1000VDC
  - CAN network – 1000VDC
  - Photo-coupler from Input/ Output – 5.3kVrms
- Mounting: DIN Rail or Flat with adhesives, rivets, screws, etc.
- Electromagnetic compatibility: IEC 801, Level3
- Dimension: 204mm x 90mm x 45mm
- Mounting requirements – vertical face forward
- Heat dissipation clearance required – 35 mm top and bottom

### CRSC – Terminals assignment

