

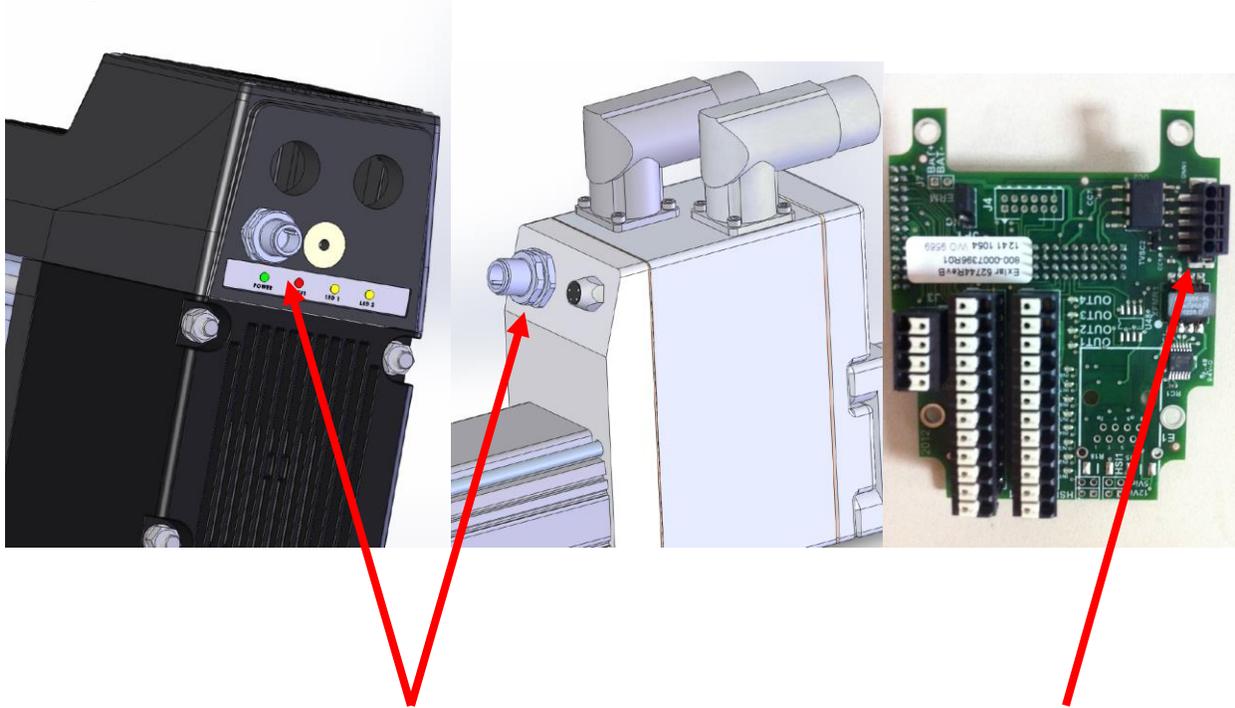
Tritex II CANopen

CANopen®

CANopen is now available on Tritex II AC and Tritex II DC actuators.

The Tritex II with the CANopen network is intended to perform as a slave with a CANopen Master. Setup and monitoring of the system is most easily achieved with the Expert software using the RS485 port. The latest revision of the Expert software supports all the Tritex products including CANopen and is available on the Exlar® website for download.

Customer connections for CAN are offered with either an M12 connector or wired directly to a terminal strip on the connection board with 75, 90 and 115 mm frame sizes.



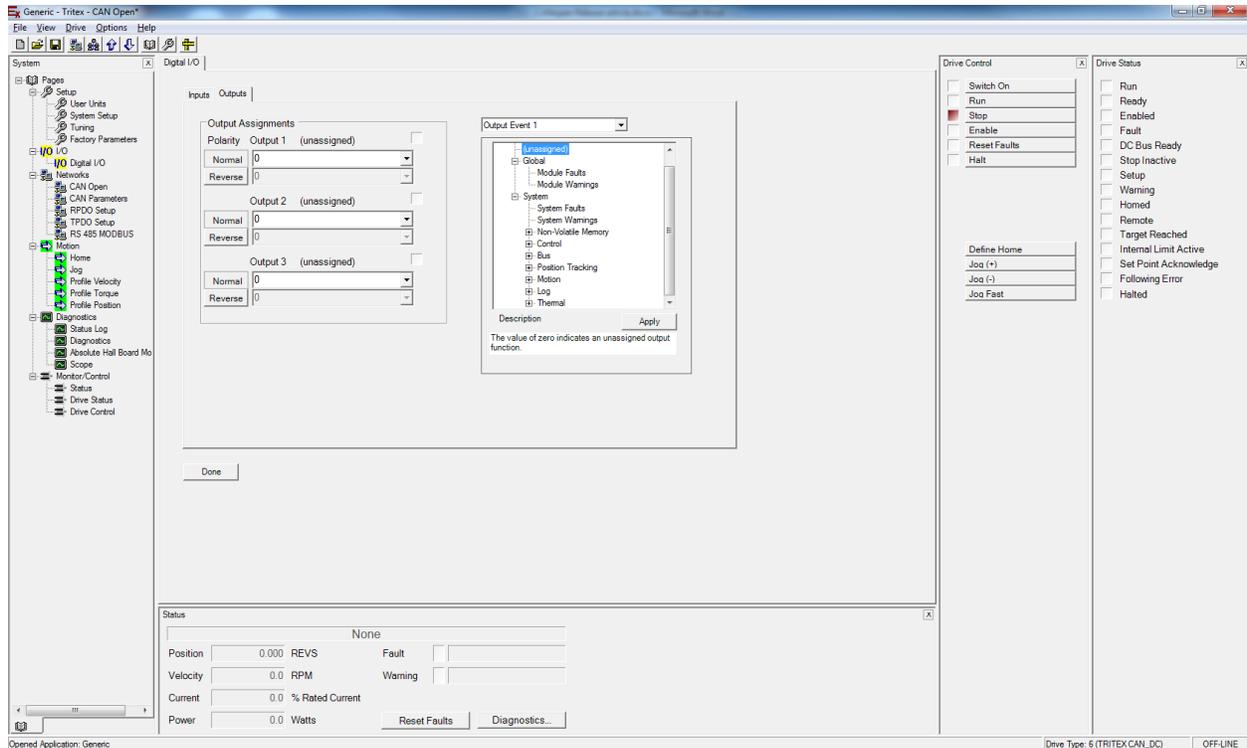
M12 Male CAN Connector (COP option)

User Wiring Connection (CON option)

CANopen Tritex II Hardware Features

- 8 Digital Inputs (AC) / 4 Digital Inputs (DC)
- 4 Digital Outputs (AC) / 3 Digital Outputs (DC)
- RS485 Communications (serial interface supporting Modbus RTU)
- Isolated CANopen Communication Port, available with an M12 connector or terminal connections on 75, 90 & 115 mm frame sizes.

3 Outputs available on DC models



CANopen Features

- CANopen Communication Protocol **DSP301**
- Network Management (NMT) Slave
- Baud Rates: 10K, 20K, 50K, 100K, 250K, 500K, 1M
- 4 Transmit Process Data Objects (TPDO)
- 4 Receive Process Data Objects (RPDO)
- Mapping of Tritex Variables to PDOs
- ASync, Sync, Cyclic and Event Driven PDO Modes
- 1 Service Data Object (SDO) Server
- Emergency Messaging
- Node Guarding
- Heartbeat Producer
- 1 Service Data Object (SDO) Server
- SDO access to all Tritex Parameters
- EDS file for easy interface with CAN masters

CANopen Motion Features

There are three **DSP402** motion types implemented in the Tritex

- Profile Torque
 - Included torque ramping, torque setting and torque max
 - Control and Status word bit maps
- Profile Velocity
 - Includes acceleration, deceleration and target velocity
 - Command and Status bit maps
 - At velocity window
- Profile Position
 - Includes acceleration, deceleration, target velocity, end velocity and target position
 - At velocity window and in position window
 - Following error limit and time
 - Current Limit Mode
- Home and Jog functionalities are also included.

RPDO

The screenshot displays the 'Generic - Tritex - CAN Open' software interface. The main window is titled 'RPDO Setup' and shows configuration for RPDO 1, RPDO 2, RPDO 3, and RPDO 4. The 'COB-ID' is set to 037F (hexadecimal). The 'Transmission Type' is 0, and the 'Prohibit transmission on RTR' checkbox is unchecked. The 'Disable PDO' checkbox is also unchecked. The 'Bytes available' is set to 4.

The 'Data to be added to translation table' section shows a table with the following parameters:

Parameter	Access
INT32	READ_ONLY
Modbus ID	2442
CAN Index	607A
CAN Subindex	0

The 'PDO Mapping' section shows a list of parameters to be mapped to the RPDO, including '1:GIDx System Motion Modes ProfilePosition Runtime', '3:open', '4:open', '5:open', '6:open', '7:open', and '8:open'.

The 'Status' window at the bottom shows the following values:

Parameter	Value
Position	0.000 REVS
Velocity	0.0 RPM
Current	0.0 % Rated Current
Power	0.0 Watts

The 'Drive Control' window on the right shows control buttons: Switch On, Run, Stop, Enable, Reset Faults, and Halt. The 'Drive Status' window on the right shows status indicators: Run, Ready, Enabled, Fault, DC Bus Ready, Stop Inactive, Setup, Warning, Homed, Remote, Target Reached, Internal Limit Active, Set Point Acknowledge, Following Error, and Halted.

TPDO

Generic - Tritex - CAN Open

File View Drive Options Help

System TPDO Setup

TPDO 1 | TPDO 2 | TPDO 3 | TPDO 4

COB-ID: 01FF (hexadecimal)

Transmission Type: 0 Transmit PDO on sync command and event.

Event Timer: 0

Inhibit Timer: 0

Prohibit transmission on RTR:

Disable PDO:

Bytes available: 4

Data to be added to translation table

Parameter	Access
INT32	READ_ONLY

Modbus ID: 762

CAN Index: 6064

CAN Subindex: 0

Buttons: Add Remove

PDO Mapping

Parameter	Access
1000System PositionTracking Status Posist	2-open
	3-open
	4-open
	5-open
	6-open
	7-open
	8-open

Navigation Tree:

- Pages
 - Setup
 - User Units
 - System Setup
 - Tuning
 - Factory Parameters
- I/O
 - Digital I/O
- Networks
 - CAN Open
 - CAN Parameters
 - RPDO Setup
 - TPDO Setup
 - RS 485 MODBUS
- Motion
 - Home
 - Log
 - Profile Velocity
 - Profile Torque
 - Profile Position
- Diagnostics
 - Monitor/Control

Status

Position: 0.000 REVS Fault:

Velocity: 0.0 RPM Warning:

Current: 0.0 % Rated Current

Power: 0.0 Watts

Buttons: Reset Faults Diagnostics

Drive Control

- Switch On
- Run
- Stop
- Enable
- Reset Faults
- Halt

Define Home

- Joq (+)
- Joq (-)
- Joq Fast

Opened Application: Generic

Drive Type: 6 (TRITEX CAN_DC) OFF-LINE