

Compax3



Compact, Intelligent and Powerful Industrial Servo Drives & Drive/Controllers

With its high-performance and modular design, the Compax3 family of industrial servo drives and drive/controllers offers a new level of servo performance and flexibility. The modular capacity of the Compax3 family allows options such as intelligent motion controllers, fieldbus interfaces, industry standard motor feedback as well as expansion I/O to be added to the base servo drive. This allows the user to customize the Compax3 to meet their specific needs.

Compax3 Features

- Available in both 120/240 VAC and 480 VAC input versions
- Current output from 2.5 A (rms) continuous to 30 A (rms) continuous
- Resolver or high-resolution SinCos Absolute encoder feedback (single- or multi-turn)
- Internal regeneration circuitry with external resistor connections
- Easy-to-use wizards-based configuration and programming via C3 ServoManager™
- Full diagnostic, tuning and 4-channel oscilloscope features provided in the standard C3 ServoManager™ software
- CE (EMC & LVD), UL and cUL



T10 Features

- Base servo drive
- ± 10 V analog
- Step and direction
- Torque/velocity control
- Position control
- Encoder tracking

T11 Features

- Base indexer drive
- Up to 31 stored profiles
- Profile select via digital inputs
- Multi-profile sequences
- Profibus
- CANopen

T30 Features

- Fully programmable drive/controller
- IEC61131-3 programming environment
- PLCopen motion function blocks
- Complex motion
- Profibus
- CANopen

T40 Features

- T30 programming capability
- Electronic camming
- Electronic gearing
- Position capture
- Profibus
- CANopen
- HEDA

Compax3 T10

Basic Drive

The Compax3 T10 technology level is a compact industrial digital servo drive available in six power levels producing up to 30 Arms continuous current and covering a broad range of input voltages. The T10 is the base drive model and is designed for use with an external motion controller in centralized motion control systems. This model accepts both ±10 V analog command signals and step-and-direction command signals for operating as a torque, velocity or position control drive.

The Compax3 is easily configurable via RS232/485 using Parker's ServoManager™ software running on a PC or by utilizing the optional BDM keypad interface module. Using the ServoManager software could not be easier. All setup is accomplished using intuitive Drive Configuration wizards and basic information of the application.

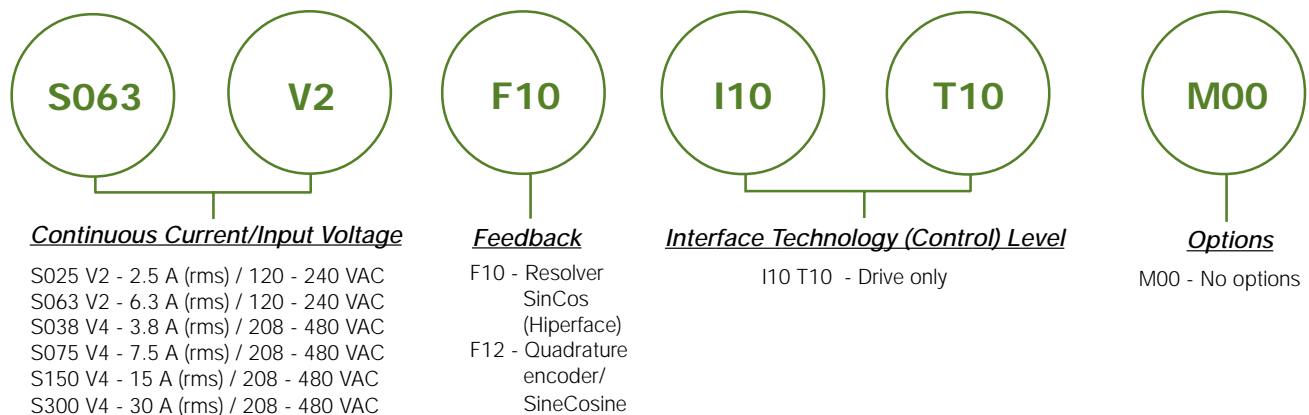
Although the Compax3 T10 uses standard resolver feedback, it can also be equipped with quadrature encoder or high-resolution SinCos encoder with single- or multi-turn absolute (Hiperface) feedback capability.

Compax3 T10 Features

- 120 - 480 VAC power input range
- Continuous current output from 2.5 Arms to 30 A (rms)
- Resolver, encoder or high-resolution SinCos Absolute encoder feedback (single or multi-turn)
- ±10 V analog command signals
- Step-and-direction command signals
- Torque, velocity or position control modes
- Encoder tracking capability
- CE (EMC & LVD), UL and cUL



Compax3 T10 Part Numbering System



Compax3 T11

Basic Indexer Drive

The Compax3 T11 technology level is a compact industrial digital servo drive available in six power levels producing up to 30 A (rms) continuous current and covering a broad range of input voltages. The T11 is a basic drive with indexing capability and can retain up to 31 motion profiles, allowing the T11 to act as a simple position controller via its eight onboard inputs and four onboard outputs. Acceleration, deceleration, target speed, target position and jerk (S-curve) are all user-configurable for each profile. Individual motion profiles are assigned a binary input mask and are triggered when the appropriate input pattern is set or via internal control bit manipulation from the optional fieldbus interfaces.

The Compax3 is easily configurable via RS232/485 using Parker's ServoManager™ software running on a PC or by utilizing the optional BDM keypad interface module. Using the ServoManager software could not be easier. All setup is accomplished using intuitive Drive Configuration wizards and basic information of the application.

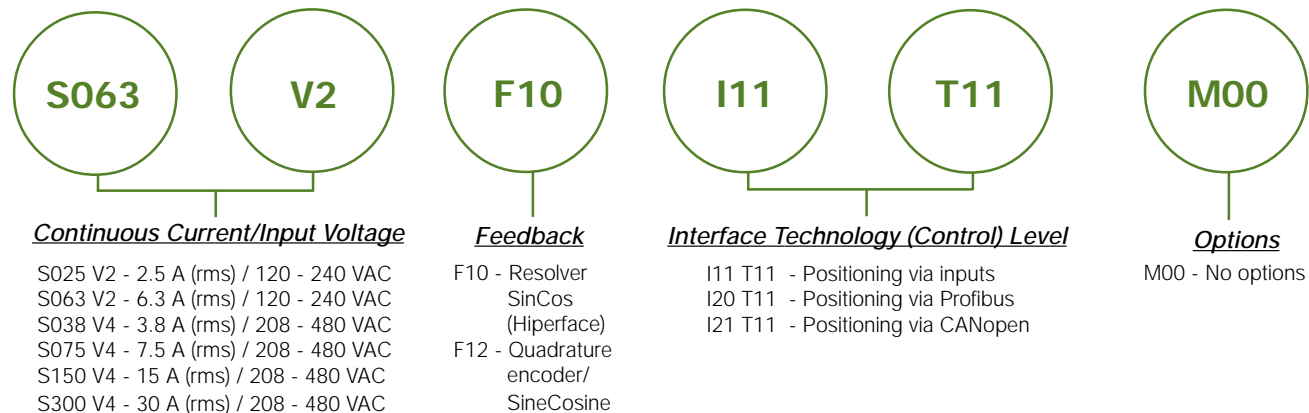
Although the Compax3 T11 uses standard resolver feedback, it can also be equipped with quadrature encoder or high-resolution SinCos encoder with single- or multi-turn absolute (Hiperface) feedback capability.

Compax3 T11 Features

- 120 - 480 VAC power input range
- Continuous current output from 2.5 A (rms) to 30 A (rms)
- Resolver, encoder or high-resolution SinCos Absolute encoder feedback (single- or multi-turn)
- Up to 31 move profiles in non-volatile flash memory
- Absolute or relative positioning
- Start, stop and quit
- "In position" output
- Jogging capability
- Dynamic positioning – changing target position during move
- Homing/Machine Zero capability
- Adjustable jerk (S-curve) limitation
- Optional fieldbus interfaces
- CE (EMC & LVD), UL and cUL



Compax3 T11 Part Numbering System



Compax3 T30

Drive/Controller

The Compax3 T30 technology level is a compact industrial digital servo drive available in six power levels producing up to 30 A (rms) continuous current and covering a broad range of input voltages. The T30 is a servo drive with fully programmable IEC61131-3 motion controller capability. The IEC61131-3 programming environment offers the ultimate in programming flexibility and power. The Compax3 user may choose from any of five graphical or text-based languages supported by the IEC61131-3 standard to develop their application in whichever programming style they are most comfortable. The motion capabilities of the Compax3 T30 are easily available to the user via PLCopen standard function blocks as well as more complex motion function blocks supplied by Parker Hannifin. Optional fieldbus interfaces allow simple and effective data exchange to higher-level systems.

The Compax3 is easily configurable via RS232/485 using Parker's ServoManager™ software running on a PC or by utilizing the optional BDM keypad interface module. Using the ServoManager software could not be easier. All setup is accomplished using intuitive Drive Configuration wizards and basic information of the application.

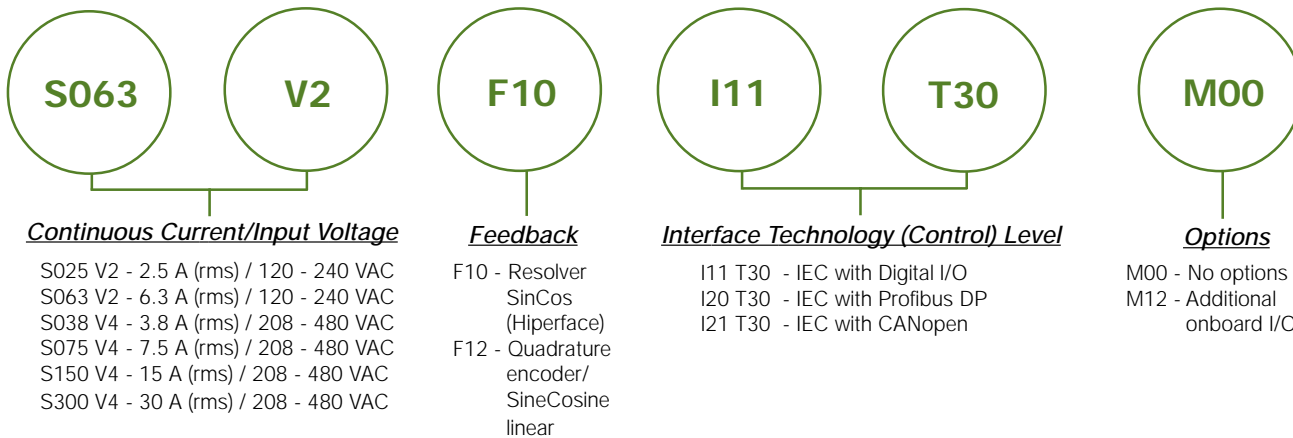
Although the Compax3 T30 uses standard resolver feedback, it can also be equipped with quadrature encoder or high-resolution SinCos encoder with single- or multi-turn absolute (Hiperface) feedback capability.

Compax3 T30 Features

- 120 - 480 VAC power input range
- Continuous current output from 2.5 A (rms) to 30 A (rms)
- Resolver, encoder or high-resolution SinCos Absolute encoder feedback (single- or multi-turn)
- Fully programmable IEC61131-3 single-axis drive/controller
- PLCopen motion function blocks
- 6 programming languages to choose from – CFC, LD, FBD, SFC, ST and IL
- Up to 3000 compiled instructions
- High-level motion capability and machine control capability in one package
- 8 digital inputs/4 digital outputs
- Optional expansion I/O – 12 digital I/O points configurable for inputs or outputs
- Optional fieldbus interfaces
- CE (EMC & LVD), UL and cUL



Compax3 Part Numbering System



IEC61131-3

Programming Environment

IEC61131-3 is a manufacturer-independent programming environment for industrial automation devices. This programming interface brings tremendous flexibility to the user as well as worldwide recognition and support. The IEC61131-3 programmer may choose from any of five graphical or text-based languages to develop the code for their application. The language they are most comfortable with may be the language they use to program their device.

The graphical languages include:

- Ladder diagram (LD)
- Function block diagram (FBD)
- Sequential function chart (SFC)

The text-based languages include:

- Structured text (ST)
- Instruction list (IL)

The standard IEC61131-3 programming language has gone beyond establishing itself in PLC systems in the last few years. Today it is also frequently used for PCs, SCADA systems and motion control systems. The intelligent drive/controller versions of the Compax3 family use the IEC61131-3 interface to provide users with new levels of flexibility and power in their motion application.

IEC61131-3 Features

- Five programming languages to choose from for ease of use
- Worldwide support for programming languages
- Program portability
- Multiple languages may be combined within a single project
- Minimal training and support effort



Compax3 T40

Drive/Controller with Camming and Gearing

The Compax3 T40 technology level is a compact industrial digital servo drive available in six power levels producing up to 30 A (rms) continuous current and covering a broad range of input voltages. The T40 is a servo drive with fully programmable IEC61131-3 motion controller and advanced electronic camming and gearing capabilities. The IEC61131-3 programming environment offers the ultimate in programming flexibility and power. The Compax3 user may choose from any of five graphical or text-based languages supported by the IEC61131-3 standard to develop their application in whichever programming style they are most comfortable. The motion capabilities of the Compax3 T40 are easily available to the user via PLCopen standard function blocks as well as more complex motion function blocks supplied by Parker Hannifin. Optional fieldbus interfaces allow simple and effective data exchange to higher-level systems.

The Compax3 is easily configurable via RS232/485 using Parker's ServoManager™ software running on a PC or by utilizing the optional BDM keypad interface module. Using the ServoManager software could not be easier. All setup is accomplished using intuitive Drive Configuration wizards and basic information of the application.

Although the Compax3 T40 uses standard resolver feedback, it can also be equipped with quadrature encoder or high-resolution SinCos encoder with single- or multi-turn absolute (Hiperface) feedback capability.

Compax3 T40 Features

- 120 - 480 VAC power input range
- Continuous current output from 2.5 A (rms) to 30 A (rms)
- Resolver, encoder or high-resolution SinCos Absolute encoder feedback (single- or multi-turn)
- Fully programmable IEC61131-3 single-axis drive/controller
- PLCopen motion function blocks
- 6 programming languages to choose from – CFC, LD, FBD, SFC, ST and IL
- Electronic camming and gearing
- Virtual master capability
- High-speed position capture
- 8 digital inputs/4 digital outputs
- Optional expansion I/O – 12 digital I/O points configurable for inputs or outputs
- Optional fieldbus interfaces
- CE (EMC & LVD), UL and cUL



Compax3 T40 Part Numbering System

