

PIM2401 INTELLIGENT PLUG-IN CONTROL MODULE

25W

DIGITAL DRIVE FOR BRUSHLESS, DC BRUSH, LINEAR AND STEP MOTORS

The PIM2401 is a new Technosoft high-performance intelligent plug-in control module, combining motion controller, drive and PLC functionality in a single compact unit.

The PIM2401 drive is a flexible, cost effective and compact solution, particularly adapted for distributed and co-ordinated control of brushless, DC, linear or step motors of powers up to 25W, with voltages up to 24V.

Typical applications include distributed motor control with possibilities of gearing and electronic CAM functions in a CAN network operation (optional configuration).

The PIM2401 hardware structure is based on a cost optimised design integrating all the basic motor control functions and motion control functionality on a single module. A series of I/O signals, both digital and analogue, are available for easy interfacing with the application.

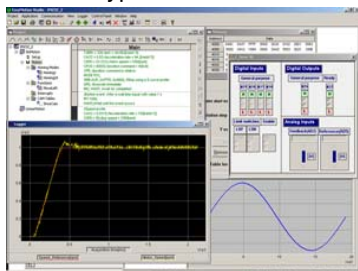
A complete set of high-level Technosoft Motion Language (TML) instructions permit to define and start complex motion sequences from your host, PC, or to execute pre-stored motion sequences selected from I/O lines, in a stand-alone mode.

The embedded intelligence of the PIM2401 facilitates its configuration and programming through a high level graphical interface as the EasyMotion Studio.

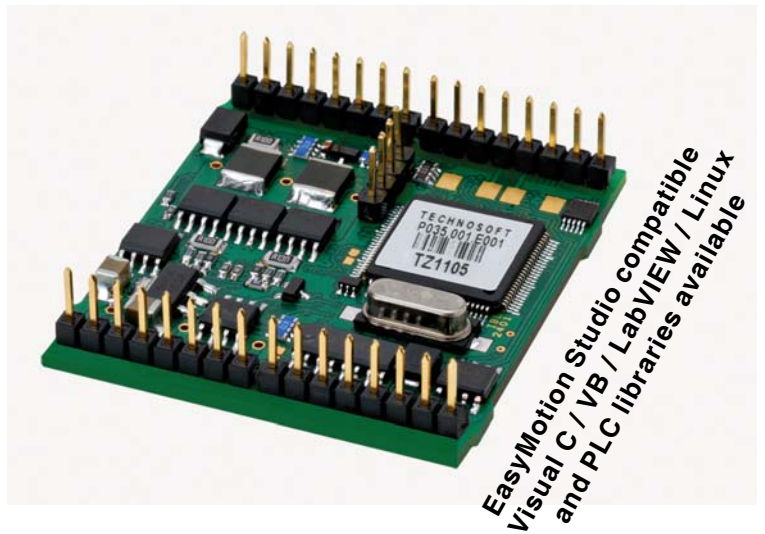
YOUR NEXT INTELLIGENT MOVE "MOTION CONTROL AT THE CLICK OF A MOUSE"

The configuration, tuning and programming of the PIM2401 intelligent drive is easy using the powerful graphical Technosoft EasyMotion Studio.

System **configuration** and **parameterization** are performed by the selection and test of system structure, motor and sensors type and control mode.



P091.035.PIM2401 LFT.0810



EasyMotion Studio compatible
Visual C / VB / LabVIEW / Linux
and PLC libraries available

FEATURES

- Fully digital servo drive with embedded intelligence and PLC functionality
- Suitable for brushless (sinusoidal or trapezoidal commutation), linear, step and DC brush
- Compact design (49x44x14 mm)
- Various control modes as:
 - Torque, speed or position control
 - Electronic gearing, contouring, profiling
 - Step motor emulation (step and direction input)
 - External variables control capabilities (pressure, flow, temperature etc.)
- Powerful Technosoft Motion Language (TML) instruction set for definition and execution of motion sequences in:
 - Single or multi axis control (master or slave mode)
 - Standalone operation with Stored Motion sequences
- RS-232 serial communication
- Optional CAN-Bus 2.0B up to 1 Mbit/s / CANopen
- Programmable digital input / outputs and analog inputs
 - 5 inputs, 5 or 24V compatible (Enable, Pulse and Direction, Limit Switches)
 - 2 outputs (open-collector), 5 or 24V compatible (Ready, GPO)
 - Differential quadrature encoder and digital Hall interface
 - Linear Hall sensors interface
 - 2 analog inputs, 0/+5V range (+/- 10V optional)
- 6-24V power supply and 5V logic
- High current capability (1A continuous, 3.6A peak current)
- Protection for over current, short circuit, earth fault, over- and under-voltage, I²t, control error
- 2.54 mm pitch header pins

TYPICAL APPLICATIONS

- Systems with distributed motor control intelligence
- Packaging equipment
- Printing
- Textile
- Automotive
- Pick and place
- Factory automation

Application notes with TML program examples available at www.technosoftmotion.com



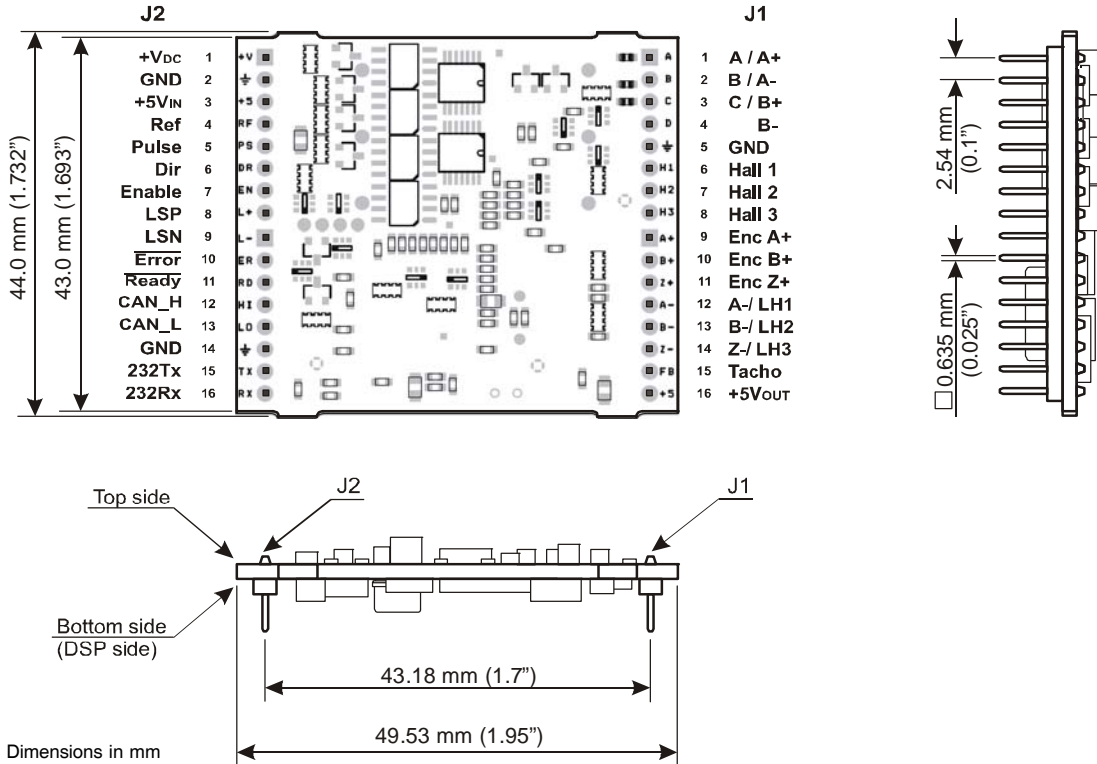
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TECHNO SOFT
MOTION TECHNOLOGY

DIMENSIONS, SPECIFICATION, ORDERING INFORMATION

PIM2401



EASYMOTION STUDIO
 The high level graphical development environment EasyMotion Studio, supports the configuration, parameterization and programming of the drive, through

- Motion system set-up wizard
- Tuning assistance with capture functions
- Definition, programming and testing of motion sequences

MOTION CONTROL LIBRARIES
 The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from Visual C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems. If a PLC is used as host, implementations of the TML_LIB observing the IEC 61131 standard are available for Siemens and Omron PLCs.

FLEXIBILITY
 Control schemes supported by the PIM2401 Drive

Motor Types	Torque control	Speed control	Position control
Brushless DC / AC	✓	✓	✓
DC Brush	✓	✓	✓
Linear	✓	✓	✓
Step	✓	✓	✓

PIM2401 INTELLIGENT PLUG-IN CONTROL MODULE

Electrical Specifications

DC supply voltage: motor and logic	6-24V
Maximum continuous current	1A
Peak current (1 sec.)	3.6A
Minimal load inductance	50 microHenry*
Nominal switching frequency	40kHz
Operating ambient temperature	0°C-40°C

*at 24V and 40kHz switching frequency

Ordering Information

P035.001.E102	PIM2401 Plug-in Control Module, 24V, 1A, CAN
P035.001.E112	PIM2401 Plug-in Control Module, 24V, 1A, CANopen
P034.001.E002	EasyMotion Studio software
P040.001.Exxx	TML_LIB Motion Library **

**ask for existing libraries types

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PIM2403 INTELLIGENT PLUG-IN CONTROL MODULE

75W

UNIVERSAL DRIVE FOR BRUSHLESS, DC BRUSH, LINEAR AND STEP MOTORS

The PIM2403 is a new Technosoft high-performance intelligent plug-in control module, combining motion controller, drive and PLC functionality in a single compact unit.

The PIM2403 drive is a flexible, cost effective and compact solution, particularly adapted for distributed and co-ordinated control of brushless, DC, linear or step motors of powers up to 75W, with voltages up to 24V.

Typical applications include distributed motor control with possibilities of gearing and electronic CAM functions in a CAN network operation (optional configuration).

The PIM2403 hardware structure is based on a cost optimised design integrating all the basic motor control functions and motion control functionality on a single module. A series of I/O signals, both digital and analogue, are available for easy interfacing with the application.

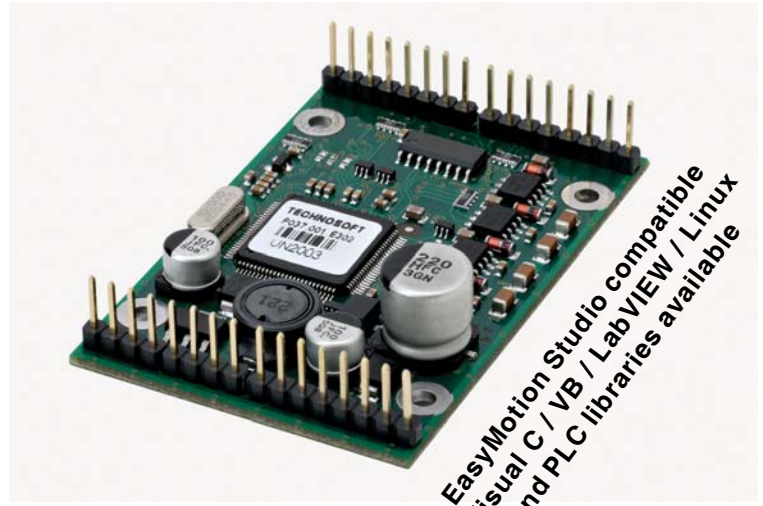
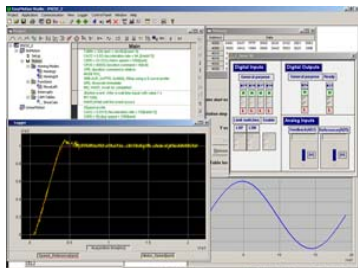
A complete set of high-level Technosoft Motion Language (TML) instructions permit to define and start complex motion sequences from your host, PC, or to execute pre-stored motion sequences selected from I/O lines, in a stand-alone mode.

The embedded Intelligence of the PIM2403 facilitates its configuration and programming through a high level graphical interface as the EasyMotion Studio.

YOUR NEXT INTELLIGENT MOVE "MOTION CONTROL AT THE CLICK OF A MOUSE"

The configuration, tuning and programming of the PIM2403 intelligent drive is easy using the powerful graphical Technosoft EasyMotion Studio.

System **configuration** and **parameterization** are performed by the selection and test of system structure, motor and sensors type and control mode.



EasyMotion Studio compatible
Visual C / VB / LabVIEW / Linux
and PLC libraries available

FEATURES

- Fully digital servo drive with embedded intelligence and PLC functionality
- Suitable for brushless (sinusoidal or trapezoidal commutation), DC brush, linear and two-phase step motors
- Compact design (59x42x20 mm)
- Various control modes as:
 - Torque, speed or position control
 - Electronic gearing, contouring, profiling
 - Step motor emulation (step and direction input)
 - External variables control capabilities (pressure, flow, temperature etc.)
- Powerful Technosoft Motion Language (TML) instruction set for definition and execution of motion sequences in:
 - Single or multi axis control (master or slave mode)
 - Standalone operation with Stored Motion sequences
- RS-232 serial communication
- Optional CAN-Bus 2.0B up to 1 Mbit/s / CANopen
- Programmable digital input / outputs and analog inputs
 - 5 inputs, 5 or 24V compatible (Enable, Pulse and Direction, Limit Switches)
 - 2 outputs (open-collector), 5 or 24V compatible (Ready, GPO)
 - Differential quadrature encoder and digital Hall interface
 - Linear Hall sensors interface
 - 2 analog inputs, 0/+5V range (+/- 10V optional)
- 12 - 28V power supply and 5V logic
- High current capability (3A continuous, 6A peak current)
- Protection for over current, short circuit, earth fault, over- and under-voltage, I²t, control error
- 2.54 mm pitch header pins

TYPICAL APPLICATIONS

- Systems with distributed motor control intelligence
- Packaging equipment
- Printing
- Textile
- Automotive
- Pick and place
- Factory automation

Application notes with TML program examples available at www.technosoftmotion.com



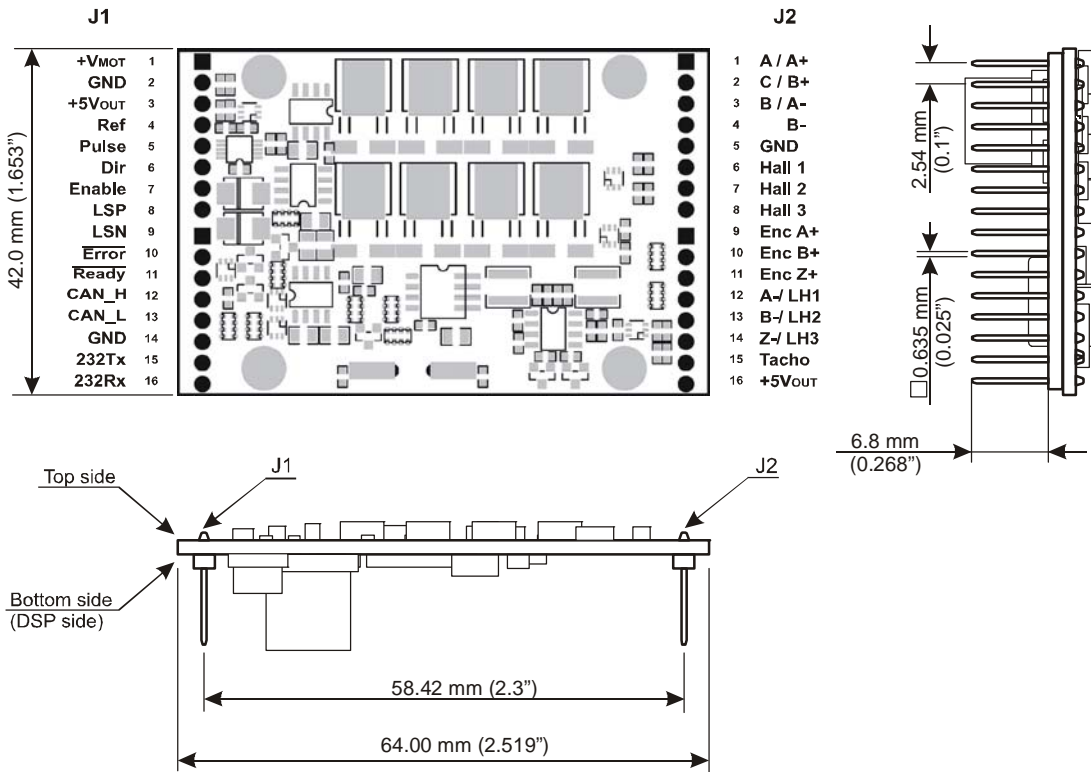
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DIMENSIONS, SPECIFICATION, ORDERING INFORMATION

PIM2403



Dimensions in mm
Drawings not to scale

EASYMOTION STUDIO

The high level graphical development environment EasyMotion Studio, supports the configuration, parameterization and programming of the drive, through

- Motion system set-up wizard
- Tuning assistance with capture functions
- Definition, programming and testing of motion sequences

MOTION CONTROL LIBRARIES

The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from Visual C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems. If a PLC is used as host, implementations of the TML_LIB observing the IEC 61131 standard are available for Siemens and Omron PLCs.

FLEXIBILITY

Control schemes supported by the PIM2403 Drive

Motor Types	Torque control	Speed control	Position control
Brushless DC / AC	✓	✓	✓
DC Brush	✓	✓	✓
Linear	✓	✓	✓
Step	✓	✓	✓

PIM2403 INTELLIGENT PLUG-IN CONTROL MODULE

Electrical Specifications

DC supply voltage: motor and logic	12-28V
Maximum continuous current	3A
Peak current (100 ms. max.)	6A
Minimal load inductance	100 microHenry*
Nominal switching frequency	20kHz
Operating ambient temperature	0°C-40°C

*at 24V and 20kHz switching frequency

Ordering Information

P037.001.E302	PIM2403 Plug-in Control Module, 24V, 3A, CAN
P037.001.E312	PIM2403 Plug-in Control Module, 24V, 3A, CANopen
P034.001.E002	EasyMotion Studio software
P040.001.Exxx	TML_LIB Motion Library**

**ask for existing libraries types

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PIM3605 INTELLIGENT PLUG-IN CONTROL MODULE

180W

UNIVERSAL DRIVE FOR BRUSHLESS, DC BRUSH, LINEAR AND STEP MOTORS

The PIM3605 is a new Technosoft high-performance intelligent drive, combining motion controller, drive and PLC functionality in a single compact unit.

The PIM3605 drive is a flexible, cost effective and compact solution, particularly adapted for distributed and coordinated control of brushless, DC, linear or step motors of powers up to 180W with 36V nominal voltage.

Typical applications include distributed motor control with possibilities of gearing and electronic CAM functions in a CAN network operation (optional configuration).

The PIM3605 hardware structure is based on a cost optimised design integrating all the basic motor control functions and motion control functionality on a single module. A series of I/O signals, both digital and analogue, are available for easy interfacing with the application.

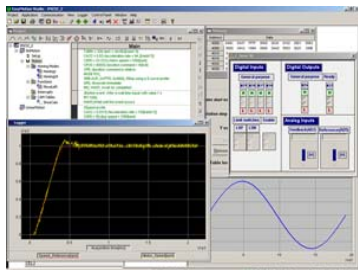
A complete set of high-level Technosoft Motion Language (TML) instructions permit to define and start complex motion sequences from your host, PC, or to execute pre-stored motion sequences selected from I/O lines, in a stand-alone mode.

The embedded intelligence of the PIM3605 facilitates its configuration and programming through a high level graphical interface as the EasyMotion Studio.

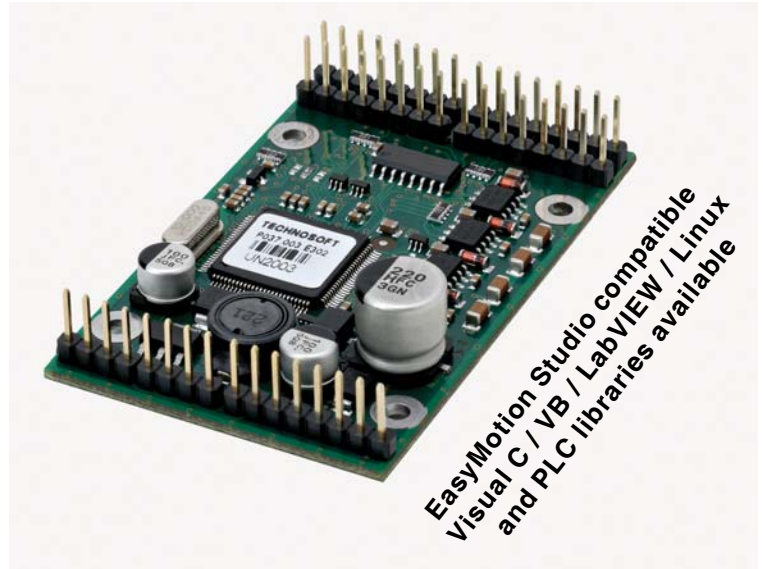
YOUR NEXT INTELLIGENT MOVE "MOTION CONTROL AT THE CLICK OF A MOUSE"

The configuration, tuning and programming of the PIM3605 intelligent drive is easy using the powerful graphical Technosoft EasyMotion Studio.

System **configuration** and **parameterization** are performed by the selection and test of system structure, motor and sensors type and control mode.



P091.037.PIM3605.LFT.0810



EasyMotion Studio compatible
Visual C / VB / LabVIEW / Linux
and PLC libraries available

FEATURES

- Fully digital servo drive with embedded intelligence and PLC functionality
- Suitable for brushless (sinusoidal or trapezoidal commutation), DC brush, linear and two-phase step motors
- Compact design (67x43x20 mm)
- Various control modes as:
 - Torque, speed or position control
 - Electronic gearing, contouring, profiling
 - Step motor emulation (step and direction input)
 - External variables control capabilities (pressure, flow, temperature etc.)
- Powerful Technosoft Motion Language (TML) instruction set for definition and execution of motion sequences in:
 - Single or multi axis control (master or slave mode)
 - Standalone operation with Stored Motion sequences
- RS-232 serial communication
- Optional CAN-Bus 2.0B up to 1 Mbit/s / CANopen
- Programmable digital input / outputs and analog inputs
 - 5 inputs, 5 or 24V compatible (Enable, Pulse and Direction, Limit Switches)
 - 2 outputs (open-collector), 5 or 24V compatible (Ready, GPO)
 - Differential quadrature encoder and digital Hall interface
 - Linear Hall sensors interface
 - 2 analog inputs, 0/+5V range (+/- 10V optional)
- Single power supply: 12 - 42V
- High current capability (5A continuous, 16A peak current)
- Protection for over current, short circuit, earth fault, over- and under-voltage, I²t, control error
- 2.54 mm pitch header pins

TYPICAL APPLICATIONS

- Systems with distributed motor control intelligence
- Packaging equipment
- Printing
- Textile
- Medical
- Automotive
- Pick and place
- Factory automation

Application notes with TML program examples available at www.technosoftmotion.com



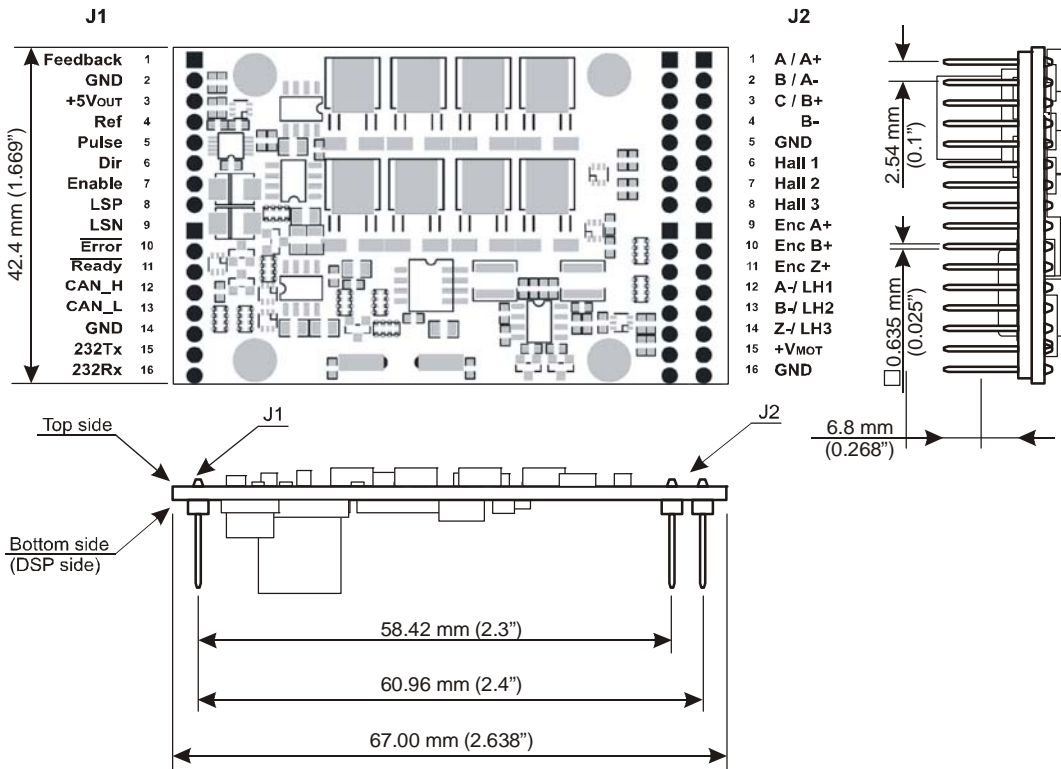
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DIMENSIONS, SPECIFICATION, ORDERING INFORMATION

PIM3605



Dimensions in mm. Drawings not to scale

EASYMOTION STUDIO

The high level graphical development environment EasyMotion Studio, supports the configuration, parameterization and programming of the drive, through

- Motion system set-up wizard
- Tuning assistance with capture functions
- Definition, programming and testing of motion sequences

MOTION CONTROL LIBRARIES

The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from Visual C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems. If a PLC is used as host, implementations of the TML_LIB observing the IEC-61131 standard are available for Siemens and Omron PLCs.

PIM3605 STARTER KIT

Complete evaluation packages for the PIM3605 drives, containing the servodrive, motor, I/O board, EasyMotion Studio software that are supported by a collection of application notes and documentation.

P091.037.PIM3605.LFT.0810

PIM3605 INTELLIGENT SERVO DRIVE

Electrical Specifications

DC supply voltage: motor and logic	36V
Maximum continuous current	5A
Peak current (2.4 sec. max.)	16A
Minimal load inductance	150 microHenry*
Nominal switching frequency	20kHz
Operating ambient temperature	0°C-40°C

*at 36V and 20kHz switching frequency

Ordering Information

P037.003.E302	PIM3605 Plug-in Control Module, 36V, 5A, RS232 / CAN
P037.003.E312	PIM3605 Plug-in Control Module, 36V, 5A, CANopen for Brushless / DC
P037.003.E313	PIM3605 Plug-in Control Module, 36V, 5A, CANopen for Stepper
P037.003.E314	PIM3605 Plug-in Control Module, 36V, 5A, CANopen for Linear Hall
P037.003.E380	PIM3605 Starter Kit W/O Motor
P037.003.E384	PIM3605 Starter Kit Brushless Motor
P037.003.E390	PIM3605 Starter Kit W/O Motor, CANopen
P037.003.E184	PIM3605 I/O Board
P034.001.E002	EasyMotion Studio Software
P040.001.Exxx	TML_LIB Motion Library**

**ask for existing libraries types

FLEXIBILITY

Control schemes supported by the PIM3605 Drive

Motor Types	Torque control	Speed control	Position control
Brushless DC / AC	✓	✓	✓
DC Brush	✓	✓	✓
Linear	✓	✓	✓
Step	✓	✓	✓

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PIM4806 INTELLIGENT PLUG-IN CONTROL MODULE WITH ETHERCAT 280W

UNIVERSAL DRIVE FOR ROTARY AND LINEAR BRUSHLESS, DC BRUSH AND STEP MOTORS

The PIM4806 is a new member of the Technosoft family of high-performance intelligent drives with **EtherCAT** communication support. PIM4806 is part of a new modular system that includes up to 3 plug-in modules: the PIM4806 board itself, the EtherCAT communication extension and the feedback extension.

PIM4806 is an intelligent drive, combining motion controller, drive and PLC functionality in a single compact unit. Having a CAN bus interface, PIM4806 provides a flexible, cost effective and compact solution, particularly adapted for decentralized / coordinated control of DC, step, brushless rotary and linear motors up to 280W. The module can be programmed to execute complex motion programs directly at drive level, using the built-in motion controller and the high-level Technosoft Motion Language (TML). This includes trapezoidal and S-curve motion profiles, PVT and PT interpolation, electronic gearing and camming, arithmetic and logic operations, program flow control via functions calls, interrupts or various events. TML programming enables to reduce both the development time of complex applications, and the master task, by calling complex motion functions, pre-stored in the drive memory, or by triggering their execution via I/O signals. PIM4806 supports both TMLCAN and CANopen protocols over the CAN bus.

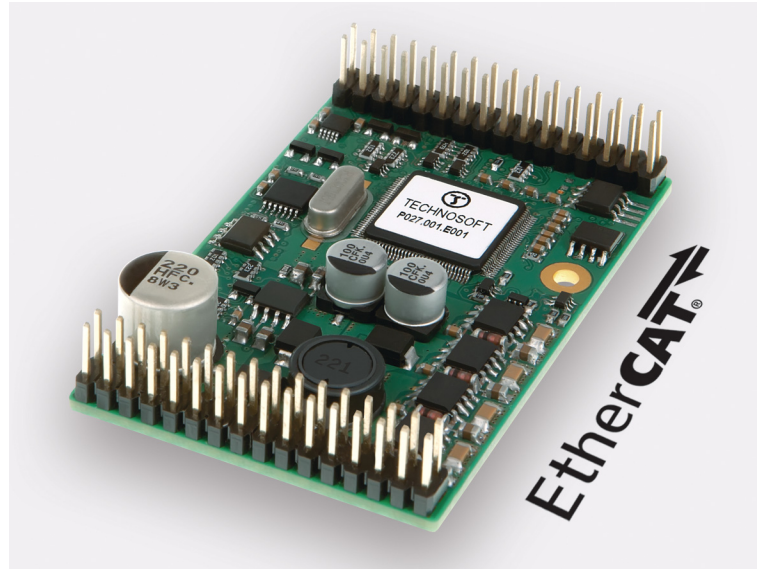
When the EtherCAT plug-in extension module is added, the PIM4806 operates as a standard EtherCAT slave drive with CANopen over EtherCAT (CoE) protocol.

If the feedback plug-in extension is added, the PIM4806 drive extends the list of accepted feedback devices to: SSI, BiSS, EnDAT absolute encoders, and resolvers.

APPLICATIONS

- Packaging and Printing
- Textile and Automotive
- Medical
- Pick and place
- Factory automation

P091.027.PIM4806.LFT.1110



FEATURES

PIM4806 without extensions:

- Fully digital servo drive with embedded intelligence and EtherCAT communication support
- Suitable for control of DC brush, 2 and 3-phase step and brushless rotary or linear motors
- Compact design: 66x41.9x22.2 mm
- Various operation and control modes: torque, speed or position control; electronic gearing or camming, contouring, profiling; step motor emulation (step and direction input); PVT and PT interpolation
- Powerful Technosoft Motion Language (TML) for definition of motion sequences for single or multi axis configurations (master or slave) or standalone operation with stored motion sequences
- RS-232 and CAN-Bus with TMLCAN or CANopen CiA402 protocols
- Digital and analog I/O: 5 digital inputs, 5/24 V compatible (Enable, Pulse and Direction, 2 Limit Switches); 2 digital outputs, open-collector, 5/24V compatible (Ready, Error); 5 analog inputs, 0-5V; 6 address inputs; up to 15 extra I/O 3.3V TTL compatible, when no extension is used*
- Feedback devices: RS-422 or single-ended incremental quad encoder; 1Vpp Sine/cosine encoder; digital or linear Hall sensors
- Single power supply: 12 - 48V
- High current capability (6A continuous, 16A peak current)
- Protections for over current, short circuit, over- and under-voltage, I2t, control error

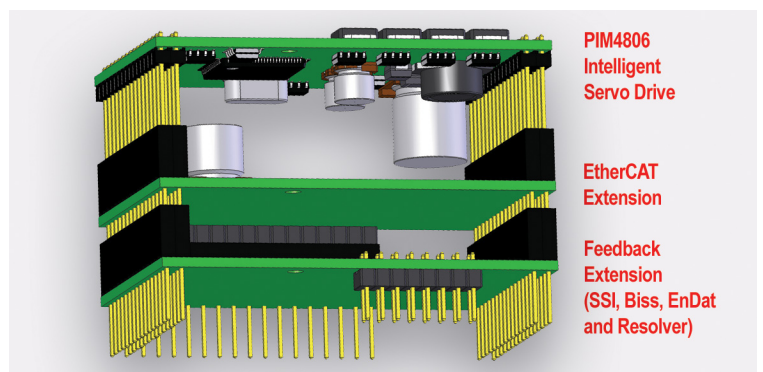
EtherCAT plug-in extension:

- CANopen over EtherCAT (CoE) protocol
- CANopen motion modes plus cyclic synchronous position/velocity/torque modes

Feedback plug-in extension:

- Absolute SSI, BiSS, EnDAT encoders and Resolver

PIM4806 MODULAR SYSTEM



*requires extra buffering

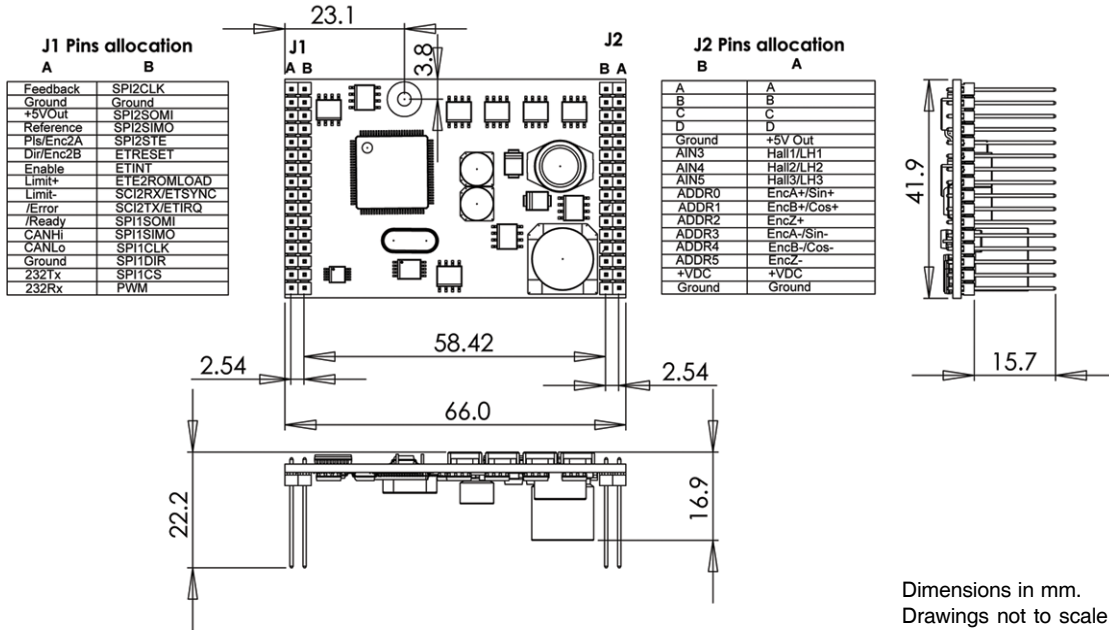
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DIMENSIONS, SPECIFICATION, ORDERING INFORMATION

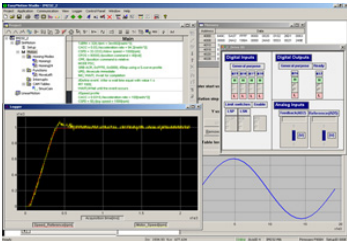
PIM4806



EASYSOFT STUDIO

The configuration, tuning and programming of the PIM4806 intelligent drive is done using Technosoft's powerful graphical platform, EasyMotion Studio. This software handles both system configuration, and parameterization and the TML motion programming. All TML instructions are generated starting from user-friendly dialogues, so there is no need to learn or write any TML code. EasyMotion Studio, supports the configuration, parameterization and programming of the drive, through

- Motion system set-up wizard
- Tuning assistance with capture functions
- Definition, programming and testing of motion sequences



MOTION CONTROL LIBRARIES (TMLCAN PROTOCOL)

The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from Visual C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems. If a PLC is used as host, TML_LIB versions implemented according with the IEC-61131 standard are available for Siemens, Omron and B&R PLCs.

PIM4806 INTELLIGENT SERVO DRIVE

Electrical Specifications

DC supply voltage: motor and logic	48V
Maximum continuous current	6A
Peak current (2.4 sec. max.)	16A
Minimal load inductance	150 microHenry*
Nominal switching frequency	20kHz
Operating ambient temperature	0°C-40°C

*at 48V and 20kHz switching frequency

Ordering Information

P027.001.E001	PIM4806 Plug-in Control Module, 48V, 6A, CAN/CANopen
P027.001.E011	PIM4806 Plug-in Control Module, 48V, 6A, with EtherCAT Extension
P027.001.E002	PIM4806 Plug-in Control Module, 48V, 6A, CAN/CANopen with Feedback Ext.
P027.001.E012	PIM4806 Plug-in Control Module, 48V, 6A, with EtherCAT & Feedback Ext.
P027.001.E184	PIM4806 I/O Board
P027.001.E080	PIM4806 Starter Kit with No Motor
P027.001.E084	PIM4806 Starter Kit with Brushless Motor
P027.001.E085	PIM4806 Starter Kit with Step Motor
P027.001.E090	PIM4806 Starter Kit with EtherCAT Extension and No Motor
P027.001.E094	PIM4806 Starter Kit with EtherCAT Extension and Brushless Motor
P027.001.E095	PIM4806 Starter Kit with EtherCAT Extension and Step Motor
P034.001.E002	EasyMotion Studio Software
P040.001.Exxx	TML_LIB Motion Library**

**ask for existing libraries types

FLEXIBILITY

Control schemes supported by the PIM4806 Drive

Motor Types	Torque Control	Speed Control	Position Control
Brushless DC / AC (Rotary or Linear)	✓	✓	✓
DC Brush	✓	✓	✓
Step	✓	✓	✓

PIM4806 STARTER KIT

Complete evaluation packages containing a PIM4806 drive, a motor, an I/O board, one or both extension modules and EasyMotion Studio software are available. These include a collection of application notes and documentation.

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P091.027.PIM4806.LFT.1110

ISCM4805 / 8005 INTELLIGENT SERVO CONTROL MODULES 200W

DIGITAL MOTOR CONTROL FOR BRUSHLESS, DC BRUSH, LINEAR AND STEP MOTORS

The ISCM4805 and ISCM8005 are new Technosoft high-performance intelligent servo modules, combining motion controller, drive and PLC functionality in a single compact unit.

The ISCM modules are flexible, cost effective and compact solutions, particularly adapted for distributed and co-ordinated control of brushless, DC, linear or step motors of powers up to 240W, with voltages up to 80V.

Typical applications include distributed motor control with possibilities of gearing and electronic CAM functions in a CAN network operation.

Targeted for medium to high volume applications, the ISCM hardware structure is based on a cost optimised design integrating all the basic motor control functions on one double-sided credit card format. A series of I/O signals, both digital and analogue, are available for easy interfacing with the application.

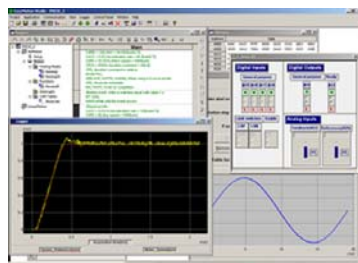
A complete set of high-level Technosoft Motion Language (TML) instructions permit to define and start complex motion sequences from your host, PC, or to execute pre-stored motion sequences selected from I/O lines, in a stand-alone mode.

The Embedded Intelligence of the ISCM facilitates the configuration and programming of the module through a high level graphical interface as the EasyMotion Studio.

YOUR NEXT INTELLIGENT MOVE "MOTION CONTROL AT THE CLICK OF A MOUSE"

The configuration, tuning and programming of the ISCM intelligent servo modules is easy using the powerful graphical Technosoft EasyMotion Studio.

System **configuration** and **parameterization** are performed by the selection and test of system structure, motor and sensors type and control mode.



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EasyMotion Studio compatible
Visual C / VB / LabVIEW / Linux
and PLC libraries available

FEATURES

- Fully digital servo drive with embedded intelligence and PLC functionality
- Suitable for brushless DC, brushless AC (vector control) DC brush, linear and two-phase step motors
- Compact open frame design (70x50 mm) credit card format; DIN-rail version also available
- Various control modes as:
 - Torque, speed or position control
 - Electronic gearing, contouring, profiling
 - Step motor emulation (step and direction input)
 - External variables control capabilities (pressure, flow, temperature etc.)
- Powerful Technosoft Motion Language (TML) instruction set for definition and execution of motion sequences in:
 - Single or multi axis control (master or slave mode)
 - Standalone operation with Stored Motion sequences
- RS-232 serial communication
- CAN-Bus 2.0B up to 1 Mbit/s / CANopen
- Programmable digital input / outputs and analog inputs
 - 5 to 8 programmable inputs / outputs
 - Differential quadrature encoder and digital Halls interface
 - Linear Hall sensors interface
 - 2 analog inputs, 0...5V; +/- 10V range
- Motor power supply 48V - ISCM4805, or 80V - ISCM8005
- High current capability (5A continuous, 16A peak current)
- Protection for over current, short circuit, earth fault, over- and under-voltage, I²t, control error
- 2.54 mm pitch edge connector
- Custom hardware and firmware options available (PMCM series)

TYPICAL APPLICATIONS

- Systems with distributed motor control intelligence
- Packaging equipment
- Printing
- Textile
- Medical
- Automotive
- Pick and place
- Factory automation

Application notes with ready to run Motion Language program examples are available at

www.technosoftmotion.com



Your
Next
Intelligent
Move

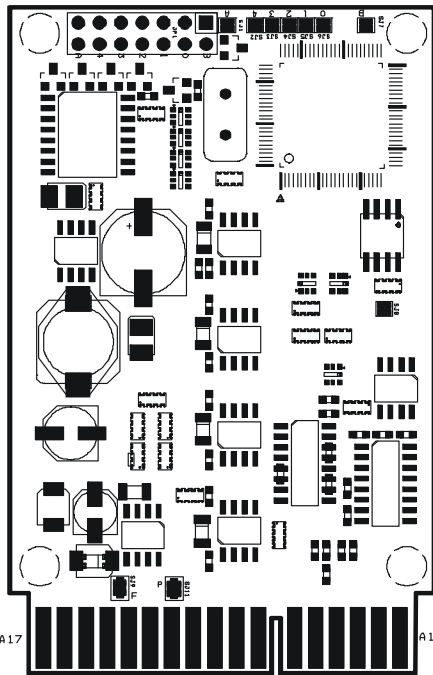


TECHNOSOFT
MOTION TECHNOLOGY

DIMENSIONS, SPECIFICATION, ORDERING INFORMATION

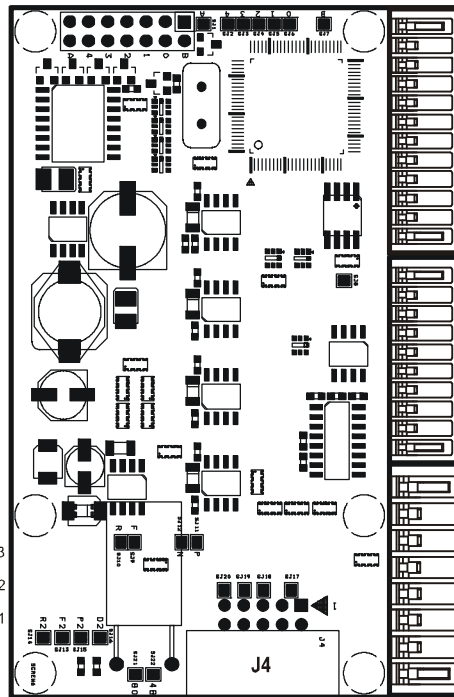
ISCM4805 / ISCM8005

ISCM4805 / ISCM8005 v1.3



- A1 +V_{MOT}
 - A2 A / A+
 - A3 B / A-
 - A4 C / B+
 - A5 BRAKE / B-
 - A6 +5V
 - A7 ENCA+
 - A8 ENCB+
 - A9 ENCZ+ / CAPI
 - A10 HALL_1
 - A11 PULSE / IO
 - A12 LSP
 - A13 ENABLE / AUTO
 - A14 FEEDBACK / IO
 - A15 GND
 - A16 CAN_H
 - A17 TX232
-
- B1 +V_{MOT}
 - B2 A / A+
 - B3 B / A-
 - B4 C / B+
 - B5 BRAKE / B-
 - B6 +V_{LOG}
 - B7 ENCA_ / LH1
 - B8 ENCB_ / LH2
 - B9 ENCZ_ / LH3
 - B10 HALL_2
 - B11 HALL_3
 - B12 LSN
 - B13 RESET
 - B14 REF / DIR / IO
 - B15 GND
 - B16 CAN_L
 - B17 RX232
-
- J4-10 ENCZ+
 - J4-9 ENCZ- / LH3
 - J4-8 ENCB+
 - J4-7 ENCB- / LH2
 - J4-6 ENCA+
 - J4-5 ENCA- / LH1
 - J4-4 +5V
 - J4-3 SJ17
 - J4-2 +5V
 - J4-1 GND

ISCM4805 / ISCM8005 - DIN v1.3



- J3-12 LSN
 - J3-11 LSP
 - J3-10 +5V
 - J3-9 ENCZ+
 - J3-8 ENCB+
 - J3-7 ENCA+
 - J3-6 HALL_3
 - J3-5 HALL_2
 - J3-4 HALL_1
 - J3-3 GND
 - J3-2 CAN_L
 - J3-1 CAN_H
-
- J2-10 Rx232
 - J2-9 Tx232
 - J2-8 +5V
 - J2-7 FEEDBACK / Out
 - J2-6 REF / Out
 - J2-5 GND
 - J2-4 DIR / OUT
 - J2-3 PULSE / OUT
 - J2-2 RESET
 - J2-1 ENABLE
-
- J1-8 GND
 - J1-7 +24V
 - J1-6 +V_{mot}
 - J1-5 GND
 - J1-4 BRAKE / B-
 - J1-3 C / B+
 - J1-2 B / A-
 - J1-1 A / A+

Drawings not to scale

EASYMOTION STUDIO

The high level graphical development environment EasyMotion Studio, supports the configuration, parameterization and programming of the drive, through

- Motion system set-up wizard
- Tuning assistance
- Definition, programming and testing of motion sequences

MOTION CONTROL LIBRARIES

The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from Visual C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems.

If a PLC is used as host, implementations of the TML_LIB observing the IEC 61131 standard are available for Siemens and Omron PLCs.

ISCM STARTER KIT

Complete evaluation packages for the ISCM drives, containing the servodrive, motor, I/O board, EasyMotion Studio software that are supported by a collection of application notes and documentation.

ISCM4805 / ISCM8005 INTELLIGENT SERVO MODULES

Electrical Specifications	ISCM4805	ISCM8005
DC supply voltage: logic	24V	
motor	12-48V	12-80V
Maximum continuous current	5A	
Peak current (100 ms. max.)	16A	
Minimal load inductance	200 microHenry*	330 microHenry*
Nominal switching frequency	20kHz	
Operating ambient temperature	0°C-40°C	

*at 48V (ISCM4805) / 80V (ISCM8005) and 20kHz switching frequency

Ordering Information

P047.001.E201	ISCM4805 Servo Module, 48V, 5A, CAN
P047.001.E211	ISCM4805 Servo Module, 48V, 5A, CANopen
P047.001.E301	ISCM8005 Servo Module, 80V, 5A, CAN
P047.001.E311	ISCM8005 Servo Module, 80V, 5A, CANopen
P052.001.E201	ISCM4805 Servo Module, 48V, 5A, DINrail, CAN
P052.001.E211	ISCM4805 Servo Module, 48V, 5A, DINrail, CANopen
P052.001.E301	ISCM8005 Servo Module, 80V, 5A, DINrail, CAN
P052.001.E311	ISCM8005 Servo Module, 80V, 5A, DINrail, CANopen
P047.001.E084	ISCM4805 Starter Kit for Brushless Motor
P047.001.E085	ISCM4805 Starter Kit for Stepper Motor
P047.001.E184	ISCM4805 I/O board
P034.001.E002	EasyMotion Studio software
P040.001.Exxx	TML_LIB Motion Libraries**

FLEXIBILITY

**ask for existing libraries types

Standard control schemes supported by the ISCM Drives

Motor Types	Torque control	Speed control	Position control
Brushless DC / AC	✓	✓	✓
DC Brush	✓	✓	✓
Linear	✓	✓	✓
Step	✓	✓	✓

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